

The Contextual Determinants of Urban Entrepreneurship: Institutions, Infrastructure and Networks in the City

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This thesis is dedicated to Stratton Bennett

who believed in me like no other

ABSTRACT

This research explores the role and rising importance of entrepreneurship as a mechanism for urban economic development. In the last two decades, urban economic development has shifted from a reliance on industrial sectors to a focus on intangible assets and innovation. This has led to the growing importance of entrepreneurship as a mechanism favourable for economic development through job creation, productivity, innovation and wealth production. It is the intent of this thesis to understand variations in entrepreneurship across urban scales and to understand how context, institutions and networks shape urban entrepreneurship. It is argued that the interplay between these concepts is a key determining factor of entrepreneurial efficiencies, and variations in economic development. Institutions can influence the association between entrepreneurial activity and economic development, determining the conditions governing entrepreneurial endeavours. Entwined within the theoretical framework, network dynamics are proposed to be a key consideration facilitating an entrepreneurial system of productive interactions, and the accumulation of innovation supporting entrepreneurship and ultimately urban economic development.

The research design is informed by a mixed method approach, which supports an understanding of the complexities of entrepreneurship and urban economic development. The thesis undertakes an in-depth exploration of the research phenomenon through a case study approach, analysing three UK Core Cities Birmingham, Bristol and Cardiff, which centres on a structured business survey and semi-structured stakeholder interviews. A multiple case study approach facilitates a wider exploration of the influence of contextual variations in entrepreneurial activity, institutional effectiveness, network dynamics and associated interactions.

The research highlights the significance of context in understanding the importance of the interdependencies between institutions, networks and entrepreneurship in the promotion of economic development. The empirical analysis stresses the influence of urban legacy and perceptions on entrepreneurial projections and demonstrates that a combination of “hard” and “soft” determinants influence entrepreneurship with the former fulfilling an operational requirement and the latter an entrepreneurial function. Both formal (e.g. regulatory setting) and informal (e.g. business community and community culture) institutions are perceived to have a key role impacting upon entrepreneurial activity, notably the rise of informal institutions in the presence of ineffective formal institutions (e.g. in particular, stimulating a cooperative

business community reinforcing entrepreneurial endeavours). Lastly, the reinforcing link between informal institutions and network dynamics is realised. Networks are identified as a crucial determinant of innovative entrepreneurship, and more specifically shared office spaces are identified as key network enablers facilitating entrepreneurial aspirations and behaviours.

This thesis concludes that there is a need for greater formal institutional support but not at the detriment of the development of informal institutions. It is recommended that public-private partnerships should be endorsed as a vehicle for a coordinated approach in the promotion of entrepreneurial business activities. Coworking spaces are crucial facilitative spaces reinforcing innovative entrepreneurship and informal institutional settings. Moreover, the presence of an informal institutional culture is a powerful force in establishing a self-reinforcing entrepreneurial business community. Overall, the research has demonstrated that entrepreneurship is a context-based phenomenon influenced by placed-based contextual variations in the formal and informal institutional setting and network dynamics.

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LIST OF ABBREVIATIONS

BAME	Black Asian and Minority Ethnic
CAQDAS	Computer-Assisted Qualitative Data Analysis Software
CBI	Confederation of British Industry
FAME	Forecasting Analysis and Modelling Environment
GBSLEP	Greater Birmingham and Solihull Local Enterprise Partnership
GDP	Gross Domestic Product
GEM	Global Entrepreneurship Monitor
GVA	Gross Value Added
HCT	Human Capital Theory
HE	Higher Education
IC	Intangible Capital
KBF	Knowledge Based Firm
KBI	Knowledge Based Industries
KBIs	Knowledge Based Industries
MEIF	Midlands Engine Investment Fund
OD	Organisation Development
OECD	Organisation for Economic Co-operation and Development
ONS	Office of National Statistics
R&D	Research and Design
REAP	Regional Entrepreneurship Acceleration Programme
SIC	Standard Industrial Classification
SMEs	Small and Medium-Sized Enterprises
UK	United Kingdom
UWE	University of the West of England
WMCA	West Midlands Combined
YES	Youth Entrepreneurship Strategy

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CHAPTER 1

INTRODUCTION

CHAPTER 1

Introduction

1.1 Research Context

1.1.1 *The research phenomenon*

Existing research on urban economic development has stressed the importance of varying contextual influences and their association with increased productivity and competitiveness (Aghion, et al. 2007; Storper, 2012; Huggins 2016). Scholars such as Storper (2012) seek to understand why some urban contexts prosper and others struggle. Building on this, and in order to acquire a greater understanding of variances in urban performance, the present study focuses on exploring the connection between entrepreneurial activity and contextual characteristics. It analyses the link between the contextual structure of entrepreneurship and how key theoretical concepts (contexts, institutions and networks) shape the performance of cities (Welter and Gartner, 2017; Williams, et al. 2017).

The research builds on three theoretical concepts that are found to have a crucial influence on urban economic development. First, studies have confirmed entrepreneurial activity is a central explanatory determinant able to explain variances in levels of economic activity across contexts (Audretsch and Lehmann, 2005; Williams, et al. 2017). Second, institutional quality is central to understanding the underlying mechanics behind rates of entrepreneurial activity and differences in development levels (Acemoglu and Robinson, 2008; Eakin, et al. 2010; Boettle and Fink, 2011). Third, networks are able to encourage entrepreneurial aspirations, behaviours and activity cultivating informal institutions to foster entrepreneurial outcomes and deliver economic development (Friedkin, 1980; Falk and Kosfield, 2003; Galeotti, et al. 2010). Lastly, this all takes place in context (Welter and Gartner, 2017).

1.2 Entrepreneurship and Cities

To date, cities and their regions are constantly expanding. The urbanisation process has transformed urban centers, caused changes in population numbers, the size and distribution of cities (Glaeser, *et al.* 1995; Eaton and Eckstein, 1997; Dobkins and Ioannides, 2001; Black and Henderson, 2003), while the technological forces behind the process of globalisation has shifted economic powers. Logan and Molotch (1987) presented the city as a growth machine wherein the conception of “place” is viewed as a market commodity capable of generating wealth and power: “*the city is a growth machine, one that*

can increase aggregate rents and trap related wealth for those in the right position to benefit” (Logan and Molotch, 1987:50). The production, distribution and use of entrepreneurship emerged as a crucial asset in the economic competitiveness of cities (Audretsch, *et al.* 2008).

In a global economy, entrepreneurial activity and microenterprise is a fundamental component of successful long-term economic development (Reynolds, *et al.* 1994). While rates of entrepreneurial activity vary across geographical contexts (Carlton, 1983; Bartik, 1985; Audretsch and Lehmann, 2005), current government efforts to realise the link between entrepreneurial-based activity and innovative outputs have been relatively positive (OECD, 2013). The scope and magnitude of programmes supporting entrepreneurship and microenterprise has increased significantly. Efforts to encourage entrepreneurship reflect a universal concern for progressive long-term economic development. The creation of entrepreneurial activity is understood to help achieve important economic and social objectives and has added value to innovative business activity, increasing a strong presence of small businesses (Audretsch and Stephan, 1999). Entrepreneurial activity is thought to (directly or indirectly) have the capacity to enhance or support innovation, productivity, employability, economic activities, and reduce social inequalities (Mayo, 2000; Baptise, 2001). Entrepreneurship is thus considered to have a powerful and beneficial impact on organisations and economic development (Shultz, 1961; Becker, 1964; Rastogi, 2000). Consequently, as we move into knowledge- and competence- based economies the value of entrepreneurship has become more significant than ever.

Often central to metropolitan economic development are arguments linked to specialisation (Duranton and Puga, 2005). Urban planners, consultants, policymakers and economic development authorities, at a regional and national level, have acknowledged and endorsed the economic benefits that come from the specialisation in a particular set of activities. The debate is explored within “new regionalism”, whereby having a high share of an activity has been theoretically and empirically posited to improve the competitive advantage of a sector within the regional economy (Storper, 1997; Morgan, 1997; Fieldman and Zoller, 2012). The agglomeration of producers within a sector is commonly associated with: heightened innovation and competitiveness across a wide variety of actors from different organisations; a strong context for specialised knowledge production, exchange and spillovers; presence of an interactive and functioning ecosystem; and for having a supportive R&D environment, exerting a favourable influence on urban development (Storper, 1997).

Although it must be noted that claims as to whether or not the specialisation or the diversification of an economy is positively linked to performance improvements are often conflicting (Kemeny and Storper, 2014). Too much of a reliance on a specialised area has been posited to be risky. Jacobs (1961, 1969) marked the ‘virtues of diversification’ in the production of innovations, whereas Frenken, *et al.* (2007) argued that, “*a variety of closely related activities offer seedbeds of interaction, leading to gains in*

productivity and innovation” (Kemeny and Storper, 2014: 11-12). To further elaborate, *“having activities that are too distant from one another [and their] excessive diversity inhibits recombination and “filling in the missing “product spaces”* (Kemeny and Storper, 2014:12). The evident ambiguities of urban specialisation and diversification are both conceptual and empirical. Further to this, institutional differences are a fundamental cause of different patterns of economic outcomes (Rodrik, *et al.* 2004, 2007; Glaeser, *et al.* 2004). They shape the incentives and organisation of key economic actors in society (Hausmann and Rodrik, 2003; Pritchett, 1997; Acemoglu, *et al.* 2004),

“...they influence investments in physical and human capital and technology, and the organisation of production. Although cultural and geographical factors may also matter for economic performance, differences in economic institutions are the major source of cross-country differences in economic growth and prosperity” (Acemoglu, *et al.* 2005: 389).

Institutions and the organisation of their internal decision-making are recognised within the literature to be the architects of long-run economic development (Hausmann and Rodrik, 2003), the ways in which knowledge and capitals are transmitted and distributed among economic agents requires shaping by public policies (Rodrik, 2007). Societies and their microeconomic environment are often economically prosperous as a result of ‘good’ economic institutions that shape problem solving, to facilitate appropriate resource allocations to incentivise and not impede growth and development (Jones and Baumgartner, 2005). Presently, there has been an increased focus on the regional and local dynamics of economies and their institutional efficiencies in facilitating economic activity and wellbeing, and the trade-offs between the efficiencies and losses caused by juristic powers (Alesina and Spolaore, 2003; Aghion, *et al.* 2005; North, 2005).

The literature suggested that the process of urban economic development is positively influenced by the interaction between entrepreneurship, institutions and networks, with increasing globalisation these are key assets considered to form the capacity to generate entrepreneurial activity (Gallup, *et al.* 1998; Vazquez-Barquero, 2002; Glaeser, *et al.* 2010; Gilles, *et al.* 2014). It is important to understand how this interaction or link between entrepreneurship, institutions and networks determines economic behaviour and shapes growth differentials (Vazquez-Barquero, 2002; Huggins and Izushi, 2007; Huggins and Thompson, 2015; Welter, *et al.* 2017). The role of intellectual capital alongside a supportive environment has been highlighted as a key asset underpinning city competitiveness and in aiding effective economic development (Volkov, *et al.* 2007; Huggins and Williams, 2011). In particular, the entrepreneurial economy typifies the findings of the endogenous growth theory whereby human capital, knowledge and innovation are identified as key forces that shape the growth of cities (Andretsch and Lehmann, 2008; Ghio, *et al.* 2014).

The key research themes are discussed below, highlighting the importance of context and the influence of the institutional environment, institutional arrangements and network dynamics in shaping entrepreneurship and urban economic development.

(i) *Contextual Perspective*

The term "context" in this study applies Storper (2013) and Welter's (2011) understanding, which refers to situations, conditions and environments able to explain the research phenomenon. The relationship between geography and development is a complex and highly debated topic among economists (Gallup, et al. 1998; Black and Henderson, 1999; Desmet and Henderson, 2014). The term 'geography' is used in reference to the locale, while the use of the term 'development' within this context refers to an increase in the size of the population, its urban distribution and productivity. The geography of place, as a factor of economic development, involves both the direct and indirect means in which forces of differentiated geography has an effect on policy choices, institutions, human capital and developmental rates of a locality (Black and Henderson, 1999). Historians have long detailed the evolving and at times unpredictable nature of geographical advantages over time and their affiliation with the development of knowledge, entrepreneurship, innovations, connectivity and technological change (Porter, 1990). In early civilization, urban centres formed around crucial geographical advantages such as agricultural surpluses, ports and regions where the state of technology and expertise permitted cultivators to thrive and produce surpluses (Brunn, *et al.* 2008:25). This facilitated a strong feedback effect on the future progression of mechanisms of growth, specialisation and commercial exchanges (Jacobs, 1969). Rodrik, *et al.* (2004) placed a profound weight on the geographical advantages of place as a crucial determinant of economic growth and development. That said, although geography continues to be an important aspect shaping economic development it is not to be considered in isolation. The principal traits, considerations and drivers of past urban development can have an influence on the 'success' and 'development' of cities.

(ii) *Institutional Perspective*

More recently a further strand of literature has focused on the interplay between the geography of place and the role and power institutions hold in the production of enhanced economic activity. Easterly and Levine (2001:205) suggested that geography affects institutions, more precisely they found that: "*favourable geography promotes good institutions; good institutions then promote development*". An assertion that accords with Gallup, et al. (1998:8) who stated: "*geography is not everything. Even geographically favoured countries and locations have failed to thrive*". Ultimately, it is an amalgamation of the cultures, regulations, politics, human and social capital, and the identities of a

locale that influence how city development is shaped. Institutional economics maintains the quality of institutional structures are able to explain spatial distributions of entrepreneurial behaviours, aspirations and endeavours (Boettke, 2009; Muralidharan and Pathak, 2017). Indeed, the role of institutions and the varying affect they have on entrepreneurship across spatial contexts has received limited attention, a phenomenon often investigated in isolation. There are a number of empirical studies concerning the link between entrepreneurship and institutions, as well as entrepreneurship and economic development that have used proxies to represent the concepts with varied success (Frank, et al. 2016).

This research makes a distinction between formal institutions, which consists of the written rules such as the regulatory setting and the impact this can have on entrepreneurial activities, and informal institutions that embody the unwritten cultural norms and social structures (North, 2005; Rodriguez-Pose, 2013). The informal institutional setting is often long-lasting and can have a significant influence of business practices and entrepreneurial behaviours. The distinction between formal and informal institutions is essential as the two can constrain and support entrepreneurial activity and economic development in considerably different ways (Acemoglu, et al. 2008). Institutional economists have found informal institutions to prosper in locations where formal institutions are ineffective, emerging spontaneously as societal solutions to urban challenges (Boettke, 2008; Huggins, 2016). Resultantly, the introduction of new formal institutions must be embedded and align with existing informal structures to ‘stick’ and be adhered to (Williams, 2000:598). Moreover, scholars have stressed that entrepreneurial outputs are sensitive to the influence of institutional contexts, institutional research has shown that variations in formal and informal institutions can have a significant influence on entrepreneurial behaviours, aspirations and endeavours (Williams and Vorley, 2015; Estrin et al. 2016). In general, scholars maintain that short, medium-and long-term economic development is largely associated with the quality of the institutional setting (Huggins and Williams, 2011).

(iii) Network Perspective

Networks have become increasingly recognised as crucial determinants of entrepreneurial activity, they are stressed to instigate improved urban competitiveness and economic development, dispersing advantages across spatial networks. Networks constitute a central mechanism for entrepreneurs and businesses to assist collaboration and knowledge spillovers to enable businesses to assuage their resource incapacity and access new knowledge. For this reason, it is particularly important for entrepreneurs to access networks to, “...create synergies and increase productivity that leads to economic advantages... They are therefore more than market-oriented forms of exchange, and require a subtle net of social, political, and cultural ties, a certain ‘milieu’” (Steiner, 1998). The intangible assets cultivated within network dynamics demonstrate an important source of innovation and

knowledge-based development through the circulation and diffusion of knowledge amongst entrepreneurs and businesses, thus a critical policy incentive (Steiner, 1998; Glaeser *et al.* 1992). Audretsch and Feldman (1996) found knowledge spillovers to play a decisive role in individual's capacity to innovate, it is argued that local knowledge flow routes are able to stimulate innovative advancement through trustful knowledge sharing, "*...if one man starts a new idea, it is taken up by others and combined with suggestions of their own; and thus it becomes the source of further new [better] ideas*" (Marshall, 1898:350; Mueller, 2006). This concerns the capacity to develop a collective community capital of intelligence within a local context (Huggins and Thompson, 2014). This suggests that despite technological progressions asserting the death of distance in the ability to transmit information, knowledge transfer among entrepreneurs and businesses is reliant on the value of face-to-face informal (repeated) interactions within a geographical concentration (Huggins and Izushi, 2007). This concerns the capacity to transfer tacit knowledge and build "trust" relations within communication corridors (Feldman, 1994; Steiner, 1998). The transfer of tacit knowledge is dependent upon the involvement of individuals within a similar working environment maintaining face-to-face relations, to form the critical relationship of trust (Feldman, 1994:4; Steiner, 1998:111; Gertler, 2001). The value of face-to-face interactions enhances exchanges of profound and complex discussions concerning the development of new inventions, procedures, innovation activities, problem solving and trial and feedback (Wellman, et al. 1996; Steiner, 1998:111).

In this sense, the localised environment acts as an enabling space facilitating the diffusion, accumulation and coordination of innovative knowledge and 'know how' (Porter, 1998; Steiner, 1998). Markedly, they are able to increase the productivity of a company base within a locality, through the provision of commonalities and complementarities which offer access to institutions, suppliers, collaborators and the opportunity to exploit yet unarticulated prospects (Porter, 1998; Huggins and Izushi, 2007:60). It has been recognised that firms located within proximity are able to take advantage of the 'socio-economic business culture' they possess to facilitate a competitive advantage (Huggins and Izushi, 2007:60; Porter, 1998).

1.3 Research Objective

The research seeks to inform current theoretical debates regarding the contradictions, nuisances and quandaries held in the restricted understandings as to why some urban contexts prosper, to understand the determinants that facilitate entrepreneurship in an urban context. In order to achieve this, it is the intention to explore the relationship between entrepreneurship and the city. As such, this study is structured around three central issues. The first sets out to clarify how contextual determinants influence entrepreneurial activity, the second considers the role formal and informal institutions play in the

development of entrepreneurship and the third considers networks as institutions and the role they play in entrepreneurship.

1.3.1 Research Aim and Questions

The research endeavours to understand how context, institutions, infrastructure and networks shape urban entrepreneurship, in a study of three Core Cities in the UK. In order to satisfy the research aim, the subsequent research questions have been established:

- Question 1: How do contextual factors influence urban entrepreneurship?

There is growing recognition that entrepreneurship can be better understood within its contextual setting, accordingly this thesis recognises the importance of the influence of contextual variations in the performance of entrepreneurship in urban contexts.

- Question 2: How do institutions (moderate) constrain or enable the relationship between entrepreneurship and context?

Institutions and the interplay between the formal and informal (either supporting or undermining) are considered to have implications for the effectiveness of institutions, recognised as key mechanisms in urban economic development (Baumol, 1990; North, 1990; Estrin and Prevezer, 2011). The thesis considers the formal and informal institutional environment and how it interacts and impacts on entrepreneurial behaviours, aspirations and activities.

- Question 3: How do networks influence entrepreneurship in an urban context?

The thesis recognises network dynamism is an important source of innovative entrepreneurialism and explores the presence of network interactions, and the implications they have for urban entrepreneurship and wider economic development.

1.3.2 Multiple Case-Study Approach

To explore the relationship between the contextual conditions under study, the research phenomenon is contextualised within three UK Core Cities. This facilitates an exploration of the formal and informal institutional quality and networks at play in varying contextual settings, to ultimately understand how the undercurrents shape entrepreneurial activity. The intent is not to compare but to explore and evaluate

best practices in the promotion of entrepreneurship, to identify effective strategies able to nurture and enhance entrepreneurial activity and urban economic development.

1.4 Research Design

The research approach is based on the epistemological approach of Critical Realism specifically selected to comprehensively inform the research questions. The approach is typically adopted in exploratory studies to uncover the different mechanisms, experiences and events that contribute to understandings of the interplay between the key concepts to understand how their dynamics, both observable and unobservable, shape urban entrepreneurship. As discussed earlier, a multi case study method allows the researcher to intensively investigate a diversity of contextual settings to examine and understand operational characteristics. It is the intent to understand the phenomenon and interpret the data to support or challenge existing assumptions surrounding determinants of entrepreneurship and urban economic development more widely. Accordingly, a structured business survey questionnaire was undertaken to allow the researcher to gain a general picture of the institutional setting, network dynamics, current practices, and the role and effectiveness of policy in the promotion of entrepreneurship in its contextual setting. The exploratory nature of semi-structured interviews provided an advantage in the collection of rich explanations and meanings (Remenyi, 2002), more so than their structured alternative. It allowed the researcher to delve into the theoretical framework within which the research is situated, to acquire stakeholder's experiences of the research phenomenon, in this case understanding the influence of contributing factors on urban economic development.

1.5 Summary of Findings

This study seeks to argue that context matters. There is a substantial connection between the characteristics of the urban context and entrepreneurial activity. In particular, the urban legacy of a city can influence perceptions and the economic trajectory of cities. In terms of contextual determinants of entrepreneurship, the empirical data found that the performance of "hard" and "soft" determinants are intrinsically linked. Hard determinants (e.g. access to finance, office space) were considered crucial operational requirements that enable a business destination to operate effectively, while soft determinants (e.g. culture of entrepreneurship, business community) are crucial elements found to foster entrepreneurship and unable to be replicated due to their intangible nature.

The presence of both formal and informal institutional dynamics was found to have an influential role in the promotion of entrepreneurship and urban economic development. The formal regulatory setting

was found to be unsupportive of entrepreneurial business activity, thus the informal institutional setting cultivated a strong business culture supportive of entrepreneurial business activity. The findings demonstrated in the absence of supportive formal institutions the embeddedness of informal institutions and local network pipelines promote entrepreneurship and the economic performance of an urban context (Baumol, et al. 2009).

The thesis argues that an entrepreneurial business community underpins local aspirations and enterprise. Business interactions were largely perceived to be contractual business relationships but conducive to characteristics that incite entrepreneurial activity and business growth. A strong presence of community capital reinforces the business community and its networks. Moreover, enabling spaces were considered crucial to the performance of entrepreneurial networks, as such coworking spaces (used as a collective term for hubs, incubators, accelerators and shared office spaces etc.) were considered crucial forms of enabling infrastructure.

1.6 Research Structure

The thesis has been organised into eight chapters. The literature review (Chapter 2) presents a critical and comprehensive synthesis of academic literature encompassing the role and influence of institutions, networks and the urban context to understand how they have an impact on entrepreneurship, and the role the concepts play in stimulating urban economic development. The review exercised a critical perspective to identify key literature themes that underpin the research phenomenon. Finally, the chapter identifies the research gap in existing knowledge to form the research questions and provide a unique contribution to the urban entrepreneurship debate. The methodological choices (Chapter 3) and the research philosophy is discussed, and justification is made for the nature of the research design and its suitability to appropriately answer the research questions. The limitations of the research are acknowledged, and ethical considerations are considered.

The first empirical chapter 'Entrepreneurship in the City' (Chapter 4) discusses the pursuit of entrepreneurship and associated risk. This leads the analysis to identify key contextual (soft and hard) determinants of entrepreneurship, which address the first research question to assess how contextual determinants in each of the three case studies have an enabling or impeding influence on entrepreneurial activity. The second empirical chapter 'Formal and Informal Institutions' (Chapter 5) examines the role and influence of formal and informal institutions addressing the second research question to understand how institutions (moderate) constrain or enable the relationship between entrepreneurship in three urban context contexts. The final empirical chapter 'Networks as Institutions in an Urban Context' (Chapter 6) explores the presence and influence of networks as an institutional determinant of

entrepreneurship in three urban contexts, it is the intent to acquire an insight into varying network dynamics and the influence of informal institutions and the influence this can have on entrepreneurial activity.

The discussion (Chapter 7) provides a summary of the key empirical findings of the research and reflections that are assessed and contrasted alongside the literature addressing the overarching research aim. To conclude, a series of general and case specific recommendations and contributions are made which are indicative of future urban policy, highlighting some of the key empirical findings and the limitations of the generalisability of the findings.

CHAPTER 2

LITERATURE REVIEW

CHAPTER 2

Literature Review

2.1 Introduction

The key aim of this chapter is to investigate the growing importance of entrepreneurship and how it plays an influential role in the economic development process across urban economies. The significance of entrepreneurship in economic development has been found in the work of Schumpeter (1934), Parson and Smelser (1956), Harbison (1965) and Sayigh (1962). Entrepreneurship was identified as a prime mover and necessary force of innovative competitiveness and serves as a catalyst of economic development. In short, this study explores how entrepreneurship operates and interacts within an urban context, recognising the relevance of context specific conditions such as the institutional context and networks of urban areas that have an influential role to play in stimulating an environment that contributes to entrepreneurship and ultimately urban economic development (Sassen, 2002). Teasing out the links between institutions, networks, entrepreneurship, further advocating the significance of contextual factors as having an influential impact on the promotion of entrepreneurship.

Within an academic setting of economic geography, it is widely accepted that entrepreneurship can help to explain the economic advancement of economies (Corrado, et al. 2009; Gorzig, et al. 2010; Crass, et al. 2015; Chun, et al. 2015). Over time, economic theory has progressed to account for the changing conditions that have played a key role in the triumph and decline of economies. While it has been widely recognised that economic developmental success is possible, it is not inevitable. Research on entrepreneurship has largely involved studies that have accounted for the production and dissemination of knowledge and entrepreneurship at a firm level (Bresnahan, et al. 2002; Dreger, et al. 2009). This has provided limited insight into the role entrepreneurship can play in context. Thus, it has been identified that further research is required to expand on the productivity and growth literature to move beyond associations that have been made to establish vigorous, causative relationships as to how entrepreneurship influences the generation of economic development in context.

Entrepreneurship is acknowledged as a crucial factor of contemporary economic development, a critical component for the diversification and capacity building of economies (Vorley and Williams, 2014). The literature demonstrates that institutions matter (Williamson and Kerekes, 2008; Acemoglu, Johnson, and Robinson 2001). The formal and informal institutional make-up of city's shapes economic activities in important and often unexpected ways influencing entrepreneurial environments (Storey,

and Thurik, 2006). It is invaluable to understand the consequences of the entrepreneurial economy and the implications this can have on the development of cities and its individuals. Scholars have provided extensive discussions on the relationship between the promotion of entrepreneurship and economic development yet conflicting evidence can be found (Scott, 2007; Rodríguez-Pose and Storper, 2006; Pike, Rodríguez-Pose and Tomaney, 2006; Boschma, 2005). The key aim of this chapter is to acquire a greater understanding of the role and influence of entrepreneurial activity in contemporary urban economic development.

In order to fulfil the aim of this thesis the chapter is structured as follows: (1) The link between entrepreneurship and the urban context is explored, the review argues that entrepreneurship is a context-based phenomenon. Accordingly, recognising the importance of understanding entrepreneurship within its contextual setting to unpack how contextual factors can enable or impede urban entrepreneurship. (2) The review develops an argument through the exploration of literature demonstrating the importance of entrepreneurship as a contemporary influence in urban contexts. (3) Institutions and the interplay between formal and informal are recognised as key mechanisms of entrepreneurship, (4) networks as institutional enablers of entrepreneurship, and; (5) contextual and capital determinants of entrepreneurship. Accordingly, it is intended that this study will review some of the most prominent theories, studies, explanations, arguments, and shortcomings of the literature surrounding the theory of economic development to highlight the significance of entrepreneurship to identify and understand some of the internal dynamics of cities. The underlying premise of this study is that entrepreneurship is a fundamental asset for urban economies on the basis that it can lead to economic development.

2.2 Entrepreneurship in the City

One of the central questions in the discipline of economic geography concerns the theoretical and empirical research into the long-term determinants of economic development, an area that has seen a revival of interest over the past decades (Rodrik, et al. 2004; Glaeser, et al. 2004; North 2009). Economists and development experts have long sought to uncover and pinpoint the major determinants responsible for the competitiveness of urban areas (Knack and Keefer, 1995; Mauro, 1995; Clague, 1997; Alesina, 1998; La Porta *et al.* 1998; Knack, 2003; Feng, 2003), and fluctuations in the economic performance of cities and regions (Storper, 2010). With increasing recognition and interest among economists and across social science disciplines (including geography, politics and economic sociology), many advances have been made, and a wide range of factors have been recognised to be key to the process of economic development (Levine and Renelt, 1992; Storper, 2015).

2.2.1 Significance of Context in Entrepreneurship

The role of contextual conditions offered by locations are particularly important for entrepreneurial activity and as an explanatory force of urban development (Hudson, 2001). There is a growing consensus in academic debate that entrepreneurship is not merely an economic process but a spatial dimension (Jack & Anderson, 2002; Kalantaridis and Bika, 2006:110; Hudson, 2001, 2010; Welter, 2011). Accordingly, the natural and material environment has been found to provide opportunities as well as set boundaries acting as both an asset and a liability to the entrepreneurial process (Kalantaridis and Bika, 2006). It is likely that different contextual settings facilitate localised practices, unique interactions and contextual structures to create and nurture diverse entrepreneurial behaviours, processes and outcomes (Julien, 2007; Fischer and Nijkamp, 2009), which can influence the way urban development unfolds across regions (Mueller, 2006, 2013:2). In particular, an empirical study conducted by Reynolds, Miller, and Maki (1993) examining the regional characteristics influencing business vitality in the U.S. context found that: (1) the presence of economic diversity, (2) population growth, (3) greater personal wealth, and (4) lower unemployment had the most influential impact on firm births (Taylor, 2006:2). Furthermore, a more recent exploration of spatial issues relating to entrepreneurship conducted by Welter (2011:165) identified four core contextual conditions of entrepreneurship: (1) business context (market, industry), the (2) social context (networks, family), the (3) spatial context (geographical environments), and (4) institutional contexts (culture, society, political system) (Wright, 2012).

More specifically, drawing on Schumpeter's notion of resource combination and Anderson's (1998: 106) characterisation of entrepreneurship as the "extraction of value from the environment", a new level of understanding has highlighted the importance of environmental conditions in entrepreneurial development. In this regard past studies have largely centred on issues of concentration in space: the agglomeration of economic, entrepreneurial or innovative activities, or factors potentially supporting new firm formation within particular spaces (Davidsson, Lindmark, and Olofsson, 1994; Audretsch, 2003). Accordingly, much attention has been given to clusters (Feldman, 2001) and agglomerations (Scott and Storper, 2003), industrial milieus (Maillat, 1998) and learning or innovative regions (Florida, 2007; Morgan, 1997). While more recent concerns have focused on uncovering the complex interrelations between the social and material characteristics of a location. Entrepreneurs are influenced by and engage with the spatial conditions offered by a location such as the social, spatial and institutional contexts, which in turn shapes the entrepreneurial process, behaviours, complex interrelations and outcomes (Jack and Anderson, 2002; Welter, 2011; Mueller, 2013:2). Therefore, understanding the relation between entrepreneurship and the socio-spatial context and structures requires insight into how spatially bound resources (of the socio-material context) are recombined to create value and opportunities (Mueller, 2013:3). Accordingly, as indicated above the spatial context of

a location is crucial for understanding entrepreneurial activity, an area of study that is as of yet underdeveloped and has been given relatively limited attention in the field of entrepreneurship (Trettin and Welter, 2011). As a consequence, there is a call to look at the role and environment of locational contexts in entrepreneurship and the conditions offered by locations to see how this influences the development of urban areas. Therefore, it is the intention of this research to acquire a detailed understanding as to how entrepreneurs interact with their local environment, make use of its innate local resources and enrich this environment through value-creating activities that go beyond job creation and growth. (Mueller, 2013:4).

The concept of context as a field of study is a highly complex and contested notion within economic geography (Felski, 2011; Zahra, Wright, Abdelgawad, 2014; Zahra, 2007). This thesis argues and proposes that entrepreneurship is a context-based phenomenon, where it is imperative to understand the theoretical framework within the context of each location (Davidsson, 2003). Scholarly studies have often overlooked the significance of contextual influences, which this study argues are essential for obtaining a deeper understanding of a set of unique factors that influence entrepreneurial activity (Chalmers and Shaw, 2015; Wright and Abdelgawad, 2014). Although there is limited agreement as to what constitutes context, Brown and Mason, (2017), Zahra, et al. (2014) and Welter (2011) stressed the importance of the role of contextual conditions as a considerable explanatory determinant of entrepreneurship. Therefore, it is crucial entrepreneurial activity is not observed in separation from historical, temporal, institutional, spatial and social contexts (Welter, 2016). Spedale and Watson (2013) and Welter (2011) supported the need to move away from the separation of context and entrepreneurial conditions, to present a more accurate understanding of the interplay between a range of contextual influences that act as a supportive ecosystem for entrepreneurship (Mason and Brown, 2014; Isenberg, 2010). According to Bruyat and Julien (2000) we are unable to understand entrepreneurship in isolation from the environment it exists as contextual factors often play a unique role in each setting. This suggests that contextual settings can undertake a facilitative or stimulating role in eliciting entrepreneurial opportunities, whilst also capable of inducing distinctive trajectories into entrepreneurial practices (Powell, et al. 2012; Bettignies and Brander, 2007; Harper, 1998; Shane, 1996). Previous research by Welter (2011) highlighted the importance of undertaking a contextual perspective, on the basis that the entrepreneurial environment varies from location to location. Further emphasise on the importance of the role of context in entrepreneurial studies was presented by Frese (2009) and Welter and Gartner (2006) who stressed the need to consider variations in context as an influence on individuals' entrepreneurial mindsets, behaviours and productivity.

Given the above, context as defined by Storper (2013) refers to "situations" embedded in urban environments. Thus, within this study context refers to characteristics that engender unique geographical situations which are themselves embedded in the social situations of an environment

(Storper, 2013). Similarly, Welter (2011:167) provided a comparable explanation of the term ‘context’ and defined it as the, “*circumstances, conditions, situations, or environments that are external to the respective phenomenon and enable or constrain it*”. For the purpose of this study the focus is on capturing the situational context (within which something exists or happens) to explain the research phenomenon.

This leads the research to explore context as it is manifested in three forms which will be the focus of this research: (i) the institutional context (Williams, 2015; Stam 2014; Acemoglu, Johnson, and Robinson 2001; North, 1990;), (ii) the nature of the social context and the networks in which entrepreneurship takes place (Zahra and Dess, 2011; Drakopoulou Dodd and Anderson, 2007; Baker, Gedajlovic and Lubatkin, 2005; Hall, 1973; Kroeber and Parsons, 1958), and; (iii) physical environment and infrastructure (Davidsson, 2017; Spiegel, 2017; Ramoglou and Tsang, 2016; Miller, 2013; Dimov, 2011). The interrelated nature of contextual conditions is often presented as an ecosystem that promotes entrepreneurial activity, a system that involves highly complex interrelations among physical, social, and institutional conditions.

The institutional context plays a significant role and can either facilitate or constrain entrepreneurship, contextual disparities are acknowledged to cause variations in entrepreneurial activity and productivity (Stam 2014; North, 1990;). The institutional structure and quality (efficiency) can incentivise or de-incentivise entrepreneurial behaviour and activities, resulting in entrepreneurial variances across locations (Williamson and Kerekes 2008; Acemoglu, Johnson, and Robinson 2001). The economic literature claims stable and supportive institutions are pertinent to the availability of entrepreneurial opportunities, innovative output, business creation and the exploitation of entrepreneurial processes (Williams, 2015; Schumpeter, 1934). The institutional context can influence and orient entrepreneurial behaviours, opportunities, market confidence and associated risk-taking (Welter, 2010; North, 1991). Informal institutions refer to the cultural norms, behaviours, social capital and social networks embedded in the social-cultural context, whereas formal institutions are entrenched in the rules and regulations. Variations in the level of entrepreneurial activity and productivity is often a function of the institutional context, arising as a resultant force stemming from the interaction between formal and informal institutions (Williams, 2015; North, 1990).

The formal institutional context refers to the governance and regulatory framework. According to Xheneti and Bartlett (2012) and Salimath and Cullen (2010) in the context of a weak, unproductive and unstable formal institutional structure the pursuit of entrepreneurial practices and associated opportunities are limited. While the informal institutional context refers to the socio-cultural conditions, which can influence the legitimacy and social desirability of the pursuit of an entrepreneurial endeavour

where entrepreneurship is promoted and celebrated (Puffer, et al. 2010; Scott, 2002). The organisation of context specific institutional governance and conditions can enable or impede entrepreneurial endeavours. Variations in context specific institutional structures are considered to play a significant role in shaping entrepreneurial behaviours, risk perceptions, career paths and innovative opportunities that facilitate urban economic development (Storey and Thurik, 2006; Sarasvathy, et al. 2003).

The *physical environment and infrastructure* are directly associated with facilitating entrepreneurial business practices (Davidsson, 2017). According to the literature, location-related factors such as physical environment and infrastructure, otherwise known as hard factors, are considered operational requirements to undertake business practices and entrepreneurial endeavours (Audretsch, et al. 2015). These comprise the availability of raw materials that acts as operational resources to ensure functional efficiency, such as the supply of office space, transport and technical infrastructure and connectivity, understood to attract talent and contribute to enhanced productive capacities in a direct and fundamental way (Ramoglou and Tsang, 2016; Dimov, 2011). Infrastructure shapes the physical environment, where a suitable supply of infrastructure is capable of increasing productivity and having a positive effect on the uptake of entrepreneurial ventures (Stam, 2015). The availability of suitable resources varies from location to location and are considered a necessary resource for entrepreneurs and businesses to function (Fritsch and storey, 2014; Audretsch, et al. 2015). Based on the opportunity enabling function of supportive physical resources studies have found an association between the operational requirement of physical support infrastructure (firm resources) and positive externalities able to ensure the optimal efficiency entrepreneurial performance (Spigel, 2017; Miller, 2013). Bennett (2019) and Audretsch, et al. (2015) found the quality of contextual resources to influence the entrepreneurial capacity and urban economic development of a context. It was found that without adequate supportive physical infrastructure businesses are likely to be constrained and struggle to succeed and compete (Fritsch and Storey, 2014; Miller, 2013).

The *social context in which entrepreneurship takes place* refers to the interpersonal relationships and associated customs and norms embedded in specific contextual culture(s); that shapes the characteristic of informal institutional features such as network dynamics (Zahra and Dess, 2011; Baker, Gedajlovic and Lubatkin, 2005). As locations are endowed with a variety of physical environments, resources and socio-cultural values individuals adopt context specific patterns of behaviour which influence individuals' decisions, aspirations, behaviours, interactions and career choices. The socio-cultural context in which these dynamics and values are embedded effects the ways in which social behaviour and knowledge are organised within networks (Hall, 1973; Kroeber and Parsons, 1958). Strategic and competitive entrepreneurial advantages are developed through cooperative and collaborative advantages through access to resources, knowledge and capabilities, network externalities and

knowledge spillovers (Porter, 1990). The socio-cultural context is closely linked to individual traits and characteristics of network dynamics that facilitate the transmission of tacit knowledge, know-how, entrepreneurial opportunities and network resources. An individual's entrepreneurial agency or their ability to acquire entrepreneurial ideas and resources to progress is embedded in implicit social systems or cultures (Cohendet, 2014; Hassink, and Klaerding, 2012; Burt, 1992). Indeed, dynamics of entrepreneurial or economic exchange are socially embedded comprising multiple assemblages, affinities, disconnections and reconnections of ongoing activity between actors (Felski, 2011:578; Granovetter, 1985). Characteristics deduced from the socio-cultural context such as norms, values, trust and social capital are embedded in specific patterns of behaviours and interactions evident in network dynamics, a key factor of economic development. This can be reflected in the embeddedness of shared meaning and the richness of interaction and synergy in social networks (Mueller and Thomas, 2000; Granovetter, 1985; Amin and Thrift, 1994:15), which is heavily intertwined with opportunity recognition and exploitation. Several studies have stressed the presence of social cultural contexts in networks and their influence on entrepreneurship, emphasising that entrepreneurs are, '*neither passive receptors of cultural norms nor heroic change agents that throw off cultural influences, but rather, skilled cultural actors who may navigate their cultural environments to obtain needed and valued resources*' (Rao, 1994; Überbacher, et al. 2015). Research demonstrates the importance of context and culture in shaping how mindsets and social attitudes can influence human behaviour and network interactions (Hayton, et al. 2002). Individual preferences are often shaped by context, both the immediate and historical, which has a demonstrable influence on an individual's mindset, behaviours, network activities, perceived accessibility and ambitions. While economic conditions may explain some discrepancies in entrepreneurial activity, entrepreneurial variations are better understood by taking account of the social context (Drakopoulou Dodd and Anderson, 2007).

This leads the review onto an emerging area of literature that emphasises the importance of context and looks at the performance of entrepreneurship within its wider environment. The model presents a shift towards a more holistic approach in understanding how key conditions of the urban context are able to enable or impede entrepreneurship (Isenberg, 2011). The ecosystem-based approach incorporates the institutional context, the physical environment and availability of infrastructure, and the social context in which entrepreneurship takes place.

2.2.2 Entrepreneurial Ecosystems

Entrepreneurial studies have experienced a shift in thinking from an individualistic (direct value chains) to a broader collective perspective (indirect value) that has seen the rise of entrepreneurial ecosystems (Iansiti and Levien, 2004; Moore; 1993;1997). A concept that refers to the establishment of an

environment with the interaction of economic actors and the presence of factors conducive to entrepreneurship and value creation (Isenberg, 2010; 2014). The concept considers not just actors and factors directly influencing value creation; it considers all factors that enrich the environment and contribute to a strong entrepreneurial culture that supports the creation and growth of entrepreneurial activities (Spigel, 2017; Feldman, 2001). Critiques have challenged the inconsistent application of the term “ecosystem” with it having no precise definition, instead declaring vague puzzling factors stated to contribute to value creation (Deog-Seong, et al. 2016; Oh, et al. 2016). Condemnations have argued the literature reflects cluster, incubators/coworking spaces and triple-helix dynamics, thus offering no extension of value (Brown and Mason, 2017). However, Isenberg (2010) and Moore (1997) contend entrepreneurial ecosystems enable insights into the dynamics of the entrepreneurial phenomenon, demonstrating the value in the creation of a cohesive social economic ecosystem.

Recent developments in the entrepreneurial literature contained a shift towards a new contextual view, identifying the importance of rethinking entrepreneurship to situate the phenomenon in its broader context to incorporate the temporal, spatial, historical, social (cultural elements) and institutional dimensions of context (Woolley, 2017; Mack and Gian, 2016; Zahra, et al. 2014; Spigel, 2015; Isenberg, 2010; 2011; Welter, 2011; 2016; Zahra, 2007). Scholars acknowledged entrepreneurial activity does not occur in isolation from the context it occurs but is embedded within its local context (Acs, et al. 2014; Wright and Stigliani, 2012). For entrepreneurship to flourish it requires the coordination of a combination of supportive actors and contextual factors to create an environment that promotes innovation and is conducive to entrepreneurship. This conducive environment has been conceptualised by Isenberg (2011) and Feld (2012) as an ‘entrepreneurial ecosystem’ a physical environment containing a set of context specific conditions that can promote and impede entrepreneurial activity and growth dynamics within a particular context. The entrepreneurial ecosystem literature identifies a number of conducive conditions which are deemed to enable innovative productive entrepreneurship, the creation and development of new ideas, processes and beneficial combinations which satisfy demand and requirements (Baumol, 1990).

The entrepreneurial ecosystem literature identifies a key list of conditions considered to be crucial components of a self-sustaining ecosystem. Approaches such as Isenberg (2010) stressed there was no exact formula in the conception of an entrepreneurial ecosystem but emphasised the importance of formal institutional leaders. However, Isenberg did focus on nine key principles of an effective entrepreneurial ecosystem centred on local contextual conditions that ensure approaches are tailored to local circumstances. Similar to studies on innovation, urban creativity and growth, significant emphasis was placed on the crucial function of the conditions of the local context and the need to adopt a bottom-up approach that focused on the specific underpinnings of an environment (Boschma and Martin, 2010;

Cooke, et al. 2011; Henrekson and Johansson, 2009; Florida, 2012; Stam, et al. 2012). A further perspective presented by Fled (2012) elaborated on the beneficial effects of the concept and discussed importance attributes a successful ecosystem should encompass. The majority of conceptions stressed that the presence and interdependence between these attributes had proven fundamental in the pursuit of economic development (Woolley, 2017; Acemoglu, et al. 2005). These attributes centred on the interaction between key actors within the ecosystem (networks) (Malecki, 1997), suitable access to resources (physical environment and infrastructure) (Audretsch, et al. 2015) and the presence of supportive governance structures (formal institutions) (Feldman, 2014; Feld, 2012). At the heart of Feld's attributes, which were targeted at policymakers and posited to be key to a successful entrepreneurial ecosystem, was the quality of institutional support (leadership and government), linkages and bridging assets (intermediaries, network density and engagement), supportive actors (talent, companies and support services) and availability of finance (Feld, 2012; Sweeney, 1987). Which are notably attributes strongly akin to Isenberg's (2011) six domains of an entrepreneurial ecosystem characterised as formal and informal institutional support (enabling policies, leadership and a conducive culture), accessible market (availability of finance and friendly markets), infrastructural supports and human capital, a dominant narrative that overlaps with existing distinctions (Feld, 2012; Cohen, 2006; Neck, et al. 2004). Moreover, the academic discourse on entrepreneurial ecosystems identified people to be of critical importance and explicates the presence of three fundamental ecosystem dynamics based on: (1) **resource** (physical, human, and financial capital) (Audretsch, et al. 2015; Mason and brown, 2014:5; Kerr and Nanda, 2009), **culture** (informal institutions and the socio-cultural setting) (Acs, et al. 2017), and; (3) **governance** (formal institutions and the regulatory framework) that are able to increase entrepreneurial performance (Brown and Mason, 2017; Feldman, 2014; Lawton Smith, 2013; Levie, et al. 2013; Feld, 2012; Isenberg, 2011; Bathelt, et al. 2004). The principles, attributes and domains listed earlier demonstrate the development of the entrepreneurial ecosystem approach from a traditional economic approach, to a new contextual turn that identifies people, resources, and institutions to be common denominators of facilitators of entrepreneurship. The common components of an entrepreneurial ecosystem identified reflect the interdependence between formal institutions, informal institutions and the availability of supportive resources required to sustain entrepreneurship. This demonstrates the growing recognition of the importance of contextual variations in the performance of entrepreneurship in urban contexts, crucial in unpacking how contextual factors influence (constrain or enable) urban entrepreneurship.

Stam (2015) and Isenberg (2011) claimed each ecosystem emerges as a result of its own unique set of conditions. The components of the system include a number of actors and preconditions that interact in different and distinctive ways, which determines the success of the ecosystem as a result of the contextual setting of entrepreneurship. Although the combinations are always unique Foster et al.

(2013) reported the interaction of resources (talent, infrastructure and office space), culture (entrepreneurial spirit, behaviours and social norms) and enabling governance (strong government support) are able to foster a virtuous circle of effective spillovers, that strengthen the composition of the system. However, Fuentelsaz, et al. (2015) and Lerner (2009) identified that a ‘tipping point’ existed where government involvement should be significantly reduced once the pre-conditions within the ecosystem become strong enough to be mutually supportive and self-reinforcing. The literature on entrepreneurial ecosystems stressed that a context is set within unique geographical boundaries that cultivate the preconditions conducive to secure self-sustaining entrepreneurship. Notably each entrepreneurial ecosystem has distinctive components shaped around local conditions which interact within the system embedded in the institutional environments (Sternberg, 2007; Ylinenpa`a`, 2009; Acs, et al. 2014; Levie, et al. 2014). The entrepreneurial ecosystems literature demonstrates contextual conditions have a crucial role to play in the promotion of innovative entrepreneurship. More specifically, the composition of the ecosystem can have a stimulating or harmful impact on the process of entrepreneurship, identifying three fundamental factors crucial in facilitating the process of entrepreneurship, the presence of strong government support, culture and resources (Stam, 2015; Isenberg, 2010:43-50).

A healthy entrepreneurial ecosystem ensures there is *strong leadership and a supportive government* that delivers effective strategies and support mechanism for innovation and entrepreneurial based activities (Aidis et al. 2008, 2012; Bruton, Ahlstrom and Li, 2010). Formal institutions that actively promote entrepreneurial behaviours, aspirations and a stable business environment are conducive to innovative endeavours (North, 1990). Moreover, institutional arrangements can regulate, legitimate and incentivise entrepreneurship to address market failures, remove barriers and obstacles limiting entrepreneurial uptake to increase investor confidence and lower risk perceptions (Audretsch and Lehmann 2016; Isenberg 2010). Consistent with North’s (1990) notion of the ‘rules of game’ and ‘players’, an efficient bureaucratic and regulatory framework and allocation of government resources is positively associated with a strong ecosystem conducive to entrepreneurial investment and entry (business start-up), innovative productivity and urban economic development (Korosteleva and Belitski 2015; Estrin et al. 2013; Stenholm et al. 2013; Baumol, Litan and Schramm 2009) (Audretsch et al. 2015).

The culture and informal institutional setting in which the ecosystem and its interactions are rooted nurture individuals’ motivations, aspirations, diversity of innovative activities, trust, network culture and community capital are embedded in the cultural traits of a context (Szerb, et al. 2013). Stam (2014) identified the cultural norms and embedded culture as a crucial condition that can influence the collaboration and cooperative nature of the local community. Spigel (2017) and Mack and Mayer (2016)

found the combination of a strong and cohesive entrepreneurial culture and supportive public policies to assist the creation of business activity and growth orientated entrepreneurship. The cooperative and collaborative nature of actor behaviour is considered to reside in the cultural setting, producing an accumulation of knowledge, experiences, resources and complementary benefits (Estrin, et al. 2013; Holmes, et al. 2013; Linan, et al. 2013). Indeed, the presence of a strong culture of cooperation and collaboration between actors can aid the development of community capital and trustful network interactions in turn aiding the vitality of the system (Acs et al. 2014; Estrin et al. 2013; (Beinhocker 2007). The characteristics of concentrations of human capital and resources builds on broader concepts of the effects of agglomerations, and the ability to develop a geographical community of like-minded individuals able to further enrich an ecosystem (Porter, 1990). Alternatively, cultural traits and behaviours can lead to competitive settings with minimal cooperative interactions that can obstruct the entrepreneurial process.

The *physical infrastructural* requirements of entrepreneurs are highlighted as a fundamental condition of an ecosystem. Van de Ven's (1993) studies focused on the resource endowment components of infrastructure provisions for example, entrepreneurial opportunities can be as a result of the availability and quality of enabling resources and infrastructure (Stam 2014). The presence of enabling infrastructure components can facilitate the capacity of an ecosystem. For example, transportation links aid connectivity to opportunities and actor networks, good working spaces promote productivity, and the availability of talent can enhance entrepreneurial discovery and knowledge creation, which demonstrates a link between strong physical infrastructure and the operational requirements of entrepreneurs (Glaeser et al. 2001; Audretsch, et al. 2015; Belitski and Desai, 2015; Audretsch and Belitski 2013, 2015). While substantial research has explored the value of physical infrastructure and amenities (Audretsch, et al. 2015; Glaeser, 2001; Saxenian 1994), limited work has provided an insight into how the configuration of infrastructure resources interacts with the other elements through systemic coevolution (Woolley 2014). The interactive nature of ecosystem dynamics is key to realising entrepreneurial success, each factor is crucial to entrepreneurship but insufficient to sustain it in isolation. Hence, the entrepreneurial ecosystem concept identifies the existence and interdependence of multiple contextual pre-conditions required to support the development of a sustainable ecosystem (Woolley, 2017).

Context is shaped as an entrepreneurial domain in which entrepreneurial ecosystems form (Brown and Mason, 2017; Acs, et al. 2014; Welter, 2011). The entrepreneurial ecosystems contribution emphasises the importance of contextual conditions and how they connect, mediate and govern the process and uptake of entrepreneurship (Shwetter, et al. 2019; Mason and Brown, 2014; Steinerowski and Steinerowska-Streb, 2012). As Welter and Gartner (2016) note context determines the structure and

formation of the institutional environment, the socio-cultural construct of networks which influence the presence and nature of entrepreneurial behaviour, mindset and processes (Alvedalen and Boschma, 2017; Spigel, 2017; Stam, 2015). Ultimately context impacts upon the characteristics of the ecosystem and its entrepreneurial uptake. Although there is limited consensus on the conditions considered the most important to the success of entrepreneurial ecosystems. The literature identified three reoccurring pre-conditions necessary for entrepreneurial ecosystems. Specifically, the availability of quality resources, a facilitative cultural setting and government support. The research identifies that a favourable combination of components are able to interact to identify and exploit entrepreneurial opportunities (Audretsch and Belitski, 2017: 1031). The literature demonstrates how entrepreneurial ecosystems facilitate entrepreneurship, associated behaviours and subsequent economic development (Tsvetkova, 2015; Autio, et al. 2014; Fritsch, 2013).

2.3 Entrepreneurship and Urban Economic Development

Entrepreneurship has long been a feature of economic development, a concept widely influenced by contextual efficiencies that shapes the performance of cities (Storper, 2012; Bosma and Schutjens, 2011; Thompson, 2010). This section acknowledges entrepreneurship as a contemporary driver of economic development in urban contexts. To do so the literature unpacks the connection between entrepreneurial dynamics and variances in the performance of urban contexts, whilst recognising crucial determinants of entrepreneurial value that stimulate urban economic development.

In the past, former industrial cities struggling to restructure their economic base sought to revitalise urban areas through entrepreneurialism, policymakers and analysts recognised that entrepreneurship was key to attracting and retaining an economically active population to build and sustain urban economies (Thompson, 2010; Huggins, et al. 2011; Storper, 2013; Williams, et al. 2017). In the global economic world, the subsequent spread of capitalism and the intensification of inter-city competition triggered a widespread change in the governance of cities (OECD, 2007:1-2; Smith, 2010). Under such circumstances, entrepreneurialism has become a dominant urban policy approach to economic development, and the extent to which an urban area can achieve high levels of entrepreneurial activity is theorised to determine the creation of new opportunities through innovation and its competitiveness in the global market (Shane and Venkataraman, 2000:218; OECD, 2007:1). Entrepreneurship is considered to make a unique contribution to economic development and has become a widely acknowledged feature in the more buoyant and successful world cities with growing industries (Lundstrom and Stevenson, 2005; Audretsch, et al. 2006; Bosma and Schutjens, 2011). There has been a profound interest and increasing focus, among academic and policy circles, on the eminent function of entrepreneurs as contributory instruments of potential economic and social outcomes (European

Commission, 2003; Audretsch and Keilbach, 2004; OECD, 2004; Wennekers, 2006). Such a shift is concerned with the recognition that the traits and opportunities of today's market success are not guaranteed to endure the next; entrepreneurship explores knowledge as a fundamental source of opportunity able to overcome the accelerated development and thus insecurity of economies (Hayek, 1945; Gartner, et al. 2003; Andersson and Karlsson, 2007; Antonelli, et al. 2011). With the irreversible trend of global economic integration, the entrepreneurship field has grown extensively to become a legitimate field of research, development and managerial practice worldwide (Audretsch, et a. 2006; Acs, et al. 2009). The Global Entrepreneurship Monitor (GEM) indicates that there is a significant relationship between nations and city-regions with higher levels of entrepreneurial activity and strong economic development (Rwigema & Venter, 2004; GEM 2002; Henderson, 2006:1). Indeed, there has been a growing recognition among analysts, economic theoreticians, policy, planners, business-related disciplines, and marketing as well as other fields that for cities to build, sustain and secure competitive advantages they must actively pursue and develop entrepreneurial strategies (OECD, 2007:1; Bosma and Schutjens, 2011).

Over the last decades, entrepreneurs and entrepreneurial activity has been widely recognised as having a profound function in shaping, reshaping and in inducing progress and development in society and the wider economy both historically and from the early twentieth century onwards (Audretsch, et al. 2006; Hoskisson, et al. 2011). There is a growing focus on entrepreneurship as a principle source of employment, innovation, productivity, competitiveness and economic development. Many economic development practitioners and public policymakers at local and state level are endorsing entrepreneurship as an essential source of innovation, and as a tool to deliver urban development, reflecting this growing importance for the presence of entrepreneurship (Marshall, 1920; Smith, 2010; Glaeser, Rosenthal, and Strange, 2010). To illustrate, a study directed by the Kauffman Foundation in Kansas City in 2007 found,

“70% of respondents believe entrepreneurship is the answer to getting America out of its present financial calamity. [While] eighty per cent are in favour of government allocating resources that would strongly support entrepreneurship to develop and grow in the United States” (Pearl, 2007:12).

Subsequently, entrepreneurship has become a significant part of economic policy and national development strategies. However, despite an increasing pursuit and development of the entrepreneurship research field, empirical information relating to the mobilisation and understanding of the concept are still limited (Parker, 2003; Harris, 2011).

In the modern economy, entrepreneurial activity is widely argued to make a unique contribution to economic dynamism (Wennekers, 2006; Acs, et al. 2009), while the entrepreneurial capacity of an

economy is seen to play a significant role as the basis for productivity improvements (Audretsch and Keilbach, 2004). The combination of existing resources alongside the application of innovative ideas is an important focus to commercialise knowledge and ideas to in turn: increase productivity, the contribution of SMEs (Small and Medium Enterprises), wealth creation (GEM, 2002), job creation (GEM, 2002), innovation and technical transfer, socio-economic transformations (Tustin, 2001) and competitiveness (Acs et al. 2004; Praag and Versloot, 2007). Despite the increasingly common rhetoric of entrepreneurship as a vital force in economies, the discipline is not well defined. It is characterised as having a broad array of definitions, having generated many complex theories and frameworks (Bula, 2012). This undoubtedly reflects its underlying multidimensional function. However, the most recognised definition was provided by the OECD (2007), the body disregards the concept of social entrepreneurship to reflect a business related perspective of entrepreneurship to suit the specifics of the OECD's domain, as such its focus considers three core components: (1) entrepreneurs, (2) entrepreneurial activity, and; (3) entrepreneurship.

The objective of this section 'Entrepreneurship' is not to provide an exhaustive review of all the theorists, concepts and literature that has been developed relating to entrepreneurship, but to recognise the strongest and most important contributions made by key economists in the field. This thesis recognises the role of entrepreneurs as an explanatory force of urban development, concentrating on the characteristics of entrepreneurs and entrepreneurial activities that facilitate urban development. To reach this point, however, a deeper understanding of the link between entrepreneurship and economic growth will be provided.

2.3.1 Entrepreneurship: Core Theorists

The focus of this section is centred around understanding the role of contextual factors in influencing entrepreneurship in the urban environment. Before the review progresses, it is important to understand what is meant by the term entrepreneurship from a historical perspective and how the concepts meaning has evolved. Accordingly, this section demonstrates the evolution of theoretical knowledge to understand what is meant by entrepreneurship to comprehend variances in the performance of entrepreneurship.

Entrepreneurship is fairly complex and has been influenced by a diverse field, originally conceptualised as an economic phenomenon. Richard Cantillon (1755), a renowned economist, has been accredited with the development of the first economic theory of entrepreneurship. Though, Jean-Baptiste Say (1845) was the original thinker to introduce the term "entrepreneur", Cantillon was the first to acknowledge the crucial role of the entrepreneur as a key economic factor in economic theory. Between

1730 and 1734 he studied the pivotal role and activity of the entrepreneur in the economy and devised a theory of entrepreneurship that fully considered the economic function of the entrepreneur, an insight presented in his posthumous work '*Essai sur la Nature du Commerce en General*' published in 1755 (Cantillon, 1959). His theories specifically centred on the economic function of the entrepreneur as an individual responsible for all exchange and circulation in the economy, ultimately distinguishing the entrepreneur as a central economic actor. Cantillon stressed 'the economic features of human action' (Hébert and Link, 1988:19-26; Rothbard, 1995: 348) and saw the entrepreneur to be motivated by entrepreneurial activities, capable of foresight who would equilibrate supply and demand in the economy, willingly taking risks to secure profit (Hebert and Link, 1988; Bula, 2012: 82). Cantillon constructed a novel perspective from which to view, understand and approach economic problems.

Despite Cantillon's emphasis on entrepreneurship as an economic function there is little consensus. Anne-Robert Jacques Turgot (1727-1791) a leading economist who held an interest in social dynamics, social change, development, evolution and progress advanced Cantillon's theory of the entrepreneur to realised capital as a necessary component of the market economy. Thus, he considered that the main influential force of economic development was not necessarily the entrepreneur but the capitalist entrepreneur. The next significant contributor to the theory of the entrepreneur is found in the theories of Francois Quesnay (1718-1778) who established that the entrepreneur plays an important function as a supplier of capital. His theories emphasised the organisational and innovation related aspects of an entrepreneur's ability and established the distinguished notion of 'entrepreneurial behaviour' (Quesnay, 1759). In addition, Jeremy Bentham conducted research that observed and developed an understanding of the entrepreneur as a creative agent and established the incentive driven association between compensation and performance (Trincado, et al. 2018).

In 1803, the work of Jean-Baptiste Say (1767-1829) on the theory of entrepreneurship established the importance of entrepreneurial success as not just being beneficial for the entrepreneur but for the organisation and success of all industrial sectors, and for the economy as a whole. He sees entrepreneurs as the 'adventurers', managers, forecasters and project appraisers with traits that include farsightedness, risk taking abilities and analytical expertise (Say, 1845). Regarding the entrepreneur as the main agent of production in the economy, stating that: "*the entrepreneur shifts economic resources out of an area of lower and into an area of higher productivity and greater yield*" (Say, 1845). Unlike Cantillon, rather than stressing the risk-bearing characteristic of the entrepreneur he emphasised the economic value of an entrepreneur's good judgement (Hebert & Link, 1988: 38 cited in Bula, 2012: 82). Alternatively, Adam Smith (1723-1790) disregards the role of the entrepreneur from his works (Hebert and Link, 1988) instead he considers the self-interest of individuals to be the fundamental driver behind economics. Similarly, David Ricardo (1772-1823) failed to include the entrepreneurial decision-maker or use the term 'entrepreneur' in any of his works.

Table 2.1: The rise of the entrepreneurial role at different eras in economic theory
 adapted from Ruta Aidis (2003)

Year	Main Contributor	Entrepreneurial Attributes
Classical Era of Entrepreneurship Concept		
1755	R.Cantillon	First to attach economic meaning to the actions of an entrepreneur and as such introduced the entrepreneur as an arbitrageur and speculator in uncertain environments.
1800	J.B.Say	Stresses that an entrepreneur has a central role as a manager of acts, coordinator, supervisor and having a lead decision making role in production and distribution activities.
Early Neoclassical Era of Entrepreneurship Concept		
1890	A.Marshall	Distinguishes the entrepreneur as an innovator and arbitrageur who carries out a coordinating role.
1907	F.B.Hawley	Recognises the entrepreneur's essential function to be a bearer of uncertainty and risk for the expectation of profit.
1911	J.Schumpeter	Perceives the ER to be more than a risk-bearer, firm manager and capitalist. His reasoning is that, the ER is as a leader and an innovator, engine of economic growth who introduces new opportunities and more efficient combinations.
1921	F.Knight	Stresses the strong link between entrepreneurship and risk, uncertainty and risk-taking and productivity. He considers entrepreneurs to be bearers of risk (insurable and non-insurable) from which they acquire profit.
1925	F.Edgeworth	Sees the entrepreneur as the coordinator and decision maker in uncertain environments.
Mature Neoclassical Era of Entrepreneurship Concept		
1925	M.Dobb	An active and creative agent who conducted innovations and is consequently a key cause of economic developments.
1927	C.Tuttle	Recognised the entrepreneur to play an active role as a responsible agent in uncertain environments.
1956	F.Harbison	Sees the entrepreneur as having the ability to create organisations through the use of innovations to then stimulate economic development.
1968	H.Libenstein	Stresses the ability of the entrepreneur to fulfill a managerial function and to carry out gap filling.
Modern Neoclassical Era of Entrepreneurship Concept		

1973	I. Kirzner	An exploiter and negotiator who is 'alert' to and reacts to new profitable opportunities rather than a creator of opportunities.
1982	M.Casson	An individual with distinctive and particular set of skills that enable specialised judgmental decisions to co-ordinate scarce resources in an uncertain environment.
1993	W.Baumol	The entrepreneur has two key functions: (1) to create and innovate economically viable ideas to then (2) organise, manage and operates acts.
1994	Kirchoff	Entrepreneurship is the process of innovation in new and independent organisations.
21st Century Developments		
2000	Shane and Venkataraman	Entrepreneurship is a process that discovers, evaluates and exploits future opportunities.

Essentially, the evolution of the entrepreneurship research and the growing research arena around the field has played an essential role in **deepening the understanding of the entrepreneurial figure**. In the broadest sense, an entrepreneur is someone who is viewed to exercise initiative and innovation by organising, operating and assuming the risks of a venture to seek the benefits of an opportunity (Cantillon, 1931; Kirzner, 1973; Baumol, 1993; Reisman, 2004). Hebert and Link (1989) posits that the economic foundations of entrepreneurial theories can be traced back to the work of Richard Cantillon and are able to be summarised to comprise of three distinct categories of intellectual contributions: - (1) the German, (2) Chicago and, (3) Austrian contribution:

(i) The German Contribution

Credited with the most notable contribution to the economic study of entrepreneurship Joseph Alois Schumpeter (1911) constructed a theory for the nature of entrepreneurship in which he expressed the entrepreneur as a source of creative innovation, foresight and new economic opportunities (Kahalil, 2007). An entrepreneur, under Schumpeter, is an “*extraordinary and heroic person, an individual of great energy, a revolutionary, and innovator*” (Acs and Audretsch, 2003). His basic observation was that the entrepreneur plays an innovative and creative role in all business activity and is a source of dynamic change and “new combinations” (Landstrom, 2005). Traits Schumpeter declared often lead to new markets and the introduction of novel ideas, technologies, inventories and resources, such as sources of supply and production and the emergence of new industries in the market (Schumpeter, 1934, 1975), contributing to the improvement and expansion of existing goods and services, while at the same time causing others to become obsolete (Schumpeter, 1975; Montanye, 2006). Moreover, the Schumpeterian entrepreneur identifies opportunities and forms “clusters of innovations” in a changing

system that leads to the creation and re-organisation of business cycles, as their activities and “gap filling” identifies entrepreneurial ventures and discoveries that can often be a source of continuous progression and displacement (Schumpeter, 1939; Montanye, 2006). Schumpeter saw the entrepreneur as not just an inventor or an imitator but as a leader in innovation and source of economic change (Schumpeter, 1911, 1939; Hebert and Link, 2006). Naturally innovations are unpredictable, spontaneous and involve a discontinuous process as such they could often be a disruptive, disequilibrating force to economic development, for which Schumpeter introduced the phrase “creative destruction” in reference to the sudden advances and changes (caused by entrepreneurial activity) in business activity, the organisation of industries and the market economy (Schumpeter, 1912; 1939). He saw the entrepreneur as a necessary component of a strong, healthy and innovative market (Schumpeter, 1942:84), in Holcombe’s words: “*without development there is no profit, without profit no development*”. *While this sentiment captures the way in which entrepreneurship leads to growth*” (Holcombe, 1998:46). In summary, Schumpeter’s argued theory of economic development (1934) identifies the concept of innovation to be a central mechanism of entrepreneurial activity and vitality.

This implies that the entrepreneur plays a crucial role in the creation of new markets within an urban economy through sources of creative innovation and revolutionary activity to deliver sources of dynamic change. Moreover, these attributes are considered to be a prerequisite and an economic resource that can facilitate, guide and contribute to an environment of competitiveness, new economic opportunities, and sustained long-term economic development (Acemoglu, et al. 2003). It is the intent to contribute to the current literature and economic thought focusing on the realisation that economic development results from innovative capabilities, dynamic change, creativity and ‘new combinations’, key characteristics attributable to the entrepreneur (Landstrom, 2005).

(ii) The Chicago Contribution

After Schumpeter, later in 1921 Frank Knight’s writings of “Risk, Uncertainty and Profit” adopted Cantillon’s theory of uncertainty and risk. He discusses the limitations of human knowledge and uncertainty alongside the economy and extends the theory of entrepreneurship to emphasise the importance of uncertainty, risk and the dimension of risk-taking as a factor of production (Hebert and Link, 2006). In this case, uncertainty referred to the capacity of the entrepreneur to make decisions through their experiences, skills, specialised knowledge and judgment in the midst of uncertainty, often having no relevant previous experience in such ventures (Knight, 1921). Knight argues that risk-taking and acting in anticipation of future events is a central feature of entrepreneurship (Parker, 1996; Montanye, 2006). In partial disagreement with Knight’s theory, Friedrich Hayek (1945) provides a strong contribution for the significance of information and knowledge in economic development. His economic theories are concerned with the impact of entrepreneurial activity within the market, in which

he emphasises the fundamental significance of the availability of information and knowledge in the competitive advancement of individuals, firms and the economy (Audretsch, 2007; Acs, 2008). A common feature presented in the Government's increasing actions towards entrepreneurial policies and the emphasis on the level of available research and development. In support, Hans Pitlik's (2002) theory, presented in 'The Path of Liberalisation and Economic Growth', demonstrates how effective government policy can act as an important source of productivity and subsequently economic development. The research presented a number of empirical cases whereby positive government policies towards new enterprise, research and development were able to heighten rates of entrepreneurship and stimulate complementary factors of economic development (Pitlik, 2002).

Theodore Schultz' (1975, 1979, 1982) work in economic development also drew emphasis on the economic theory of entrepreneurship in which he stressed the importance of the entrepreneur as a mechanism able to deal with disequilibria and restore the economic system back to equilibrium. He stated that, "*the demand for entrepreneurialism is created by the manifestation of disequilibrium in the system, creating an opportunity for entrepreneurs*" (Cassia, et al. 2006:45). In Schultz's formulation, he notes the necessity and embedded economic value of entrepreneurial behaviour. He sees entrepreneurial activity as an endowment of human capital an aptitude based on the characteristics (knowledge and skills) that each individual possesses, whilst he envisages entrepreneurship as the competency to efficiently coordinate, adjust, or reallocate resources to achieve a higher level of satisfaction, in response to a sequence of changes in economic conditions or altering circumstances (Schultz, 1982). For Knight, entrepreneurship is ingrained in all human behaviour and is not an inimitable role executed by an exclusive set of specialists: "*no matter what part of the economy is being investigated, we observe that people are consciously reallocating their resources in response to changes in economic conditions*" (Schultz, 1979: 2). Schultz argues that entrepreneurial action has a dynamic economic value that has the potential to be enhanced either by experimentation or through the investment in key knowledge-building variables such as education, cultural insights and so on (Schultz, 1975; Cassia, et al. 2006:46). Moreover, he extends his characterization of entrepreneurial activity, "*to non-market activity such as allocation of personal time and household activities. Furthermore, it is based on the characteristics of each individual, with everybody with different abilities successfully allocating resources*" (Cassia, et al. 2006:46). A peculiarity of Schultz work is that, unlike Knight, Schultz does not attribute the bearing of risk as a unique and distinctive trait of entrepreneurs instead he considers risk to be a natural part of market activity, therefore he does not relate risk to profit (Cassia, et al. 2006:45).

According to this contribution, entrepreneurship influences the economic development of place through economically favourable behaviours and decision-making within contexts of uncertainty and risk. However, a deeper knowledge as to how the characteristics of an entrepreneur and entrepreneurial

activities can contribute to economic development, with specific regards to decision-making amongst uncertainty and the significance of knowledge, skills and efficiency in improving the performance of a context is still lacking in empirical literature.

(iii) The Austrian Contribution

Ludwig von Mises (1949) sees the entrepreneur as an agent of economic progress who aims to take advantage of profit opportunities by exercising judgment in the most profitable way, as agents of change, an entrepreneur is receptive and acts on perceived profitable opportunities (Mises, 1949: 253). Friedrich Von Hayek's (1945) view of entrepreneurship is based on the notion that an individual's entrepreneurial insight, receptiveness or rather 'alertness' can stem from the experiences, discoveries and values discerned from their social network, situation learning and 'information-transforming' opportunities, or occupational proficiencies and so on, to offer a dynamic that can be used to acquire a competitive advantage and secure profit opportunities (Hayek, 1948; Gray, 1982; Kirzner, 1997). Indeed, Israel Kirzner (1973, 1979, 1982, 1985) who has written extensively on entrepreneurship and has advanced Mises' and Hayek's theories of human action to view an entrepreneur as an individual who is alert enough to take advantage of the imperfect distribution of information and perceive previously unseen profit opportunities. As Kirzner describes, the role of an entrepreneur is to act with the intent to profit from the superior knowledge and insights they pose, to function as an urban engine to improve economic development and promote growth. It is widely acknowledged that the development of the economy is a complex process characterised by 'entrepreneurial discovery' and 'spontaneous learning' (Kirzner, 1973; Cosgel, 1996), and can consequently become more productive as a result of entrepreneurial insight to produce and identify profitable opportunities (Hayek, 1948). Professor Holcombe published his article 'Entrepreneurship and Economic Growth' in 1998 and emphasised that Kirznerian entrepreneurial alertness enables market actors to identify otherwise unnoticed entrepreneurial ventures. A source understood to open new profit opportunities, unexploited markets and result in a more productive, and in turn competitive economy. According to Kirzner (1973:47) it is the function of the entrepreneur within the market economy to have an attitude of receptiveness or preparedness to bridge the gap and exploit otherwise unexploited opportunities to discover and produce entrepreneurial profit. Professor Holcombe (1973:51) emphasises that, "*when entrepreneurs take advantage of profit opportunities, they create new entrepreneurial opportunities that others can act upon. Entrepreneurship creates an environment that makes more entrepreneurship possible*". In this environment Holcombe suggests that the Kirznerian entrepreneur enhances economic development through the cultivation of entrepreneurial elements within an environment that leads to economic coordination and the more efficient allocation of resources suitable for growth, in which, innovations are built on themselves, leading to a state of continually increasing productivity (Schumpeter, 1934:154; Holcombe, 1973).

It is crucial to acknowledge the nature of entrepreneurialism as an uneven process, it is a competitive process of discovery driven by those individuals who are in a position to recognise undiscovered profit opportunities and follow subconscious hunches (Storr and Arielle, 2010). In this regard, the past activities and experiences of an individual, according to Kirzner, has been found to influence an individual's aptitude to identify opportunities when one presents itself (Kirzner, 1973). Kirzner points out that individuals are able to transfer spontaneous learning into conscious knowledge, he states: "*of course knowledge does not create entrepreneurial insight, but it does create the opportunity to notice things that could not be noticed without that knowledge*" (cited in Holcombe, 1998:50). For instance, it is postulated an individual's life experience has an influential role, those who are well travelled could be considered more alert and have acquired a superior insight that could encourage them to notice opportunities. Thus, there is an identifiable connection between Hayekian knowledge concerning the use of knowledge in society and Kirznerian entrepreneurship characterised by entrepreneurial alertness and the process of discovery and learning (Hayek, 1945; Holcombe, 1998:49-50).

In light of the above, entrepreneurship is considered to play a crucial role in the vitality of the market. In this case, entrepreneurial characteristics are seen to provide otherwise unseen profit opportunities through the ability to demonstrate an alertness and receptiveness to unexploited profit opportunities in a dynamic market economy. The economic importance of the entrepreneur is therefore demonstrated through their ability to convert uncertainty into the creation of profitable opportunities in turn increasing productivity, the creation of novel ideas and business strategies driving economic development. Further to the three influences highlighted above an important contribution was made to the entrepreneurship research by William Baumol (1990) who distinguishes between a productive entrepreneur and an unproductive entrepreneur.

(iv) The role of incentives and institutions

Baumol's (1990, 1996) work on the entrepreneur as an innovator and a manager is recognised as being highly influential, he maintains that entrepreneurs do not appear and disappear from society but that the entrepreneur is ubiquitously present in all societies. Instead he points out that the numbers of productive and unproductive entrepreneurs change, often with regards to the existing socio-economic context and incentive structures in place. As such, he states that entrepreneurship in itself is not sufficient for economic development but that the socio-economic context, cultural setting, and institutional environment provides the incentives necessary to lead to more productive entrepreneurial endeavours, necessary for societies to advance and flourish (Davidsson and Henrekson, 2002). Sobel (2008) carried out a cross

sectional study to assess Baumol's theory, the research demonstrated that high quality institutions (that deliver impartial legal systems, limit heavy regulation, and protect private property etc.) bring about productive entrepreneurial activities (for example business formation, venture capital investments, and patents per capita etc.). The evidence sufficiently corroborates Baumol's suppositions that quality institutions offer entrepreneurial incentives. In addition, a study carried out by Sauka and Welter (2008) to operationalise and empirically test Baumol's work found an association between stable environments and so-called productive entrepreneurship. In essence, it is argued that (productive) entrepreneurship is a manifestation of positive environmental incentives, quality institutions (for providing the incentives for entrepreneurial activity) and the 'innovative spirit' that is reinforced by the social, economic, legal and political conditions of a location, to contribute to urban economic development and personal livelihood. In sum, his works have identified a need for further empirical studies to explore the socio-economic contexts and institutional environments in which (productive) entrepreneurship can flourish to advance societies, and to understand the contexts in which entrepreneurship falters.

The above evidence suggests that it is not just the presence of entrepreneurial activity that has a positive influence on the economic output of the market economy but the number of productive entrepreneurs. It is therefore crucial to acknowledge that there is a substantial distinction between unproductive and productive entrepreneurialism and economic development. This raises the question; how do you operationalise and measure entrepreneurial productivity for empirical assessment? What are the main factors influencing productive and unproductive entrepreneurship? In order to address this, it is crucial to look at environmental influences such as the socio-economic context, cultural setting, and the institutional environment as determinants or influences on the entrepreneurship processes (Smallbone and Welter, 2006).

This section has provided a historical review of the literature on entrepreneurship and how the concept has evolved. The review has emphasised the development of the entrepreneurial concept and how researchers have progressed key components of entrepreneurship. The research endeavours to understand the influence of contextual variations in the performance of entrepreneurship in urban contexts, to do so it is imperative to understand what is meant by entrepreneurship.

2.3.2 Entrepreneurship and Value Creation

Numerous studies and many economists have claimed there is a substantial relationship connecting the level of entrepreneurial activity and improved firm efficiency, industrial dynamics, small businesses

and employment (Schumpeter, 1934; Acs and Audretsch, 1988), demonstrating the link between the roles of entrepreneurship in stimulating urban development, innovation, enhancing rivalry and economic progress.

Although at present there is limited availability of substantial empirical data (to back up these claims), the impact of entrepreneurs and entrepreneurial activity is widely considered to have a significant contribution to the development and economic wellbeing of an area (Wennekers and Thurik, 1999; Baumol, 2002). The literature identifies various ways in which entrepreneurial actions may affect economic development; in its narrowest sense the literature captures three core roles of entrepreneurship (Rocha, 2012). First, as emphasised by Schumpeter the entrepreneur takes on the role of an innovator, a valuable and specialist capability that demonstrates the aptitude to quickly introduce and carry out new combinations to exploit change and pursue opportunities to enter markets with new products, industries, pioneering innovation and production processes (Acs and Audretsch, 1990; Schumpeter 1934, p. 74). Second, according to Kirzner (1997) the entrepreneur perceives profit opportunities to seize and strengthen a competitive advantage by obtaining an exclusive means of premium value in the market (Lazear, 2002; Acs and Armington, 2003). A third concerns a tacit competence to assume the risks that are associated with uncertainty, an important facet of competition (von Mises, 1949; Shane, 2000). Ultimately the entrepreneur's role is a multidimensional reality.

This overview of economic thought on entrepreneurship and associated value creation shows that the economic performance of a place can be boosted through 'innovative spirit' increasing competitiveness and heightening efficiency (Rocha, 2012; Naude, 2013). The importance of entrepreneurship and innovation is further acknowledged in the impact entrepreneurship may exert on an economy through the ability to capture knowledge and speed up the processes of discovery and accelerate structural change (Kritikos, 2014). Entrepreneurs often challenge incumbent firms with unique selling propositions that said, it must be noted that entrepreneurs can contribute to both advantages and disadvantages in the economy (Stel, et al. 2004:4; Baumol and Schilling, 2008). The formation of new business and radical innovations can indirectly trigger a competition-enhancing stimulus which can often contribute to economic progress however, an increase in competitiveness could cause leading enterprise to cannibalise the market and cause struggling firms to fail (Valliere and Peterson, 2009; Helmers and Rogers, 2010; Kritikos, 2014). In essence, innovative activity under uncertainty can play an important role in economically productive businesses, yet on the other hand it could widen the opportunity gap for the least responsive firms (Wennekers and Thurik, 1999).

The review has demonstrated the invaluable significance of the entrepreneurial economy and the implications it can have on the development of cities and its individuals. The scholarly works considered

the importance of entrepreneurship for innovation, productivity and economic development, demonstrating the influence of variances in the performance of entrepreneurial efficiencies.

2.4 Entrepreneurship and Institutions

2.4.1 Contemporary Debates

The importance of institutions in economic activity was initially led by the pioneering work of Barro (1991) and North (1991), in which attention was drawn to spatial settings and the effect of institutional factors on economic growth and development. More recently, new growth theories have suggested that additional factors, such as institutional quality may affect incentives to accumulate, invest, innovate and accommodate change and may further constitute a possible cause of good results in terms of the variation of competitiveness and performances between urban areas (Acemoglu, et al. 2003; Easterly, et al. 2004; Rodriguez-Pose and Storper, 2010). In other words, a sound institutional setting has been found to have a direct effect on the efficiency of institutions, productivity, the accumulation of capital and provides a positive climate that encourages investment. Hence, attention has been drawn to there being a close link, direct and indirect, between good governance and the economic performance of a location.

On-going research has demonstrated that the role of institutions in how they shape and influence economic development is a critical yet controversial area (Acemoglu, et al. 2005; Boettke, et al. 2011; Williams, et al. 2014; 2015). However, as noted by Getler (2010) and Tomaney (2014) the role the institutional environment plays in determining the prospects and pathway of economic development is an area that has been studied but never fully understood. In particular, economic geographers have often overlooked this theoretical tradition and, as a result, they have been criticised for '*standing on the side lines of the social science*' (Getler, 2010:12; Tomaney, 2014). In light of this claim, and in an attempt to respond to this knowledge gap, there has been a recent surge of research on the effects of institutions on economic development. This has made important advances and established a broad agreement in academia that institutions play a fundamental role in urban economic development however, as highlighted above, this connection is not yet fully understood. There is currently an on-going debate in the literature drawing attention to the relative importance of institutions and institutional factors in achieving strong economic performances, and as a leading determinant of economic development. Though this theoretical link between institutions and development has provided many insights in terms of the mechanics of economic development, it has been unable to offer an elucidation of the specific mechanisms that are central for the explanation of economic and socio-cultural development. Indeed,

as North and Thomas (1973: 2) report, various arguments have been put forward as to why institutions can lead to improved urban performance but those presented (innovation, entrepreneurship, economies of scale, education, capital accumulation, and so forth) are acknowledged as (the effect of) development and *not* the mechanisms or causes of development. This argument is supported by the assertion made by North and Thomas, that is the central explanation of comparative development and improved performance is accounted for in variances in institutional environments (Acemoglu, *et al.* 2005: 388). In this context, economists, development experts and international policymakers are increasingly recognising the importance of responsive systems, good governance and institutions as a pre-requisite for sustained socio-cultural and economic development (Kaufmann, *et al.* 2000; Knack 2003). It can be said that there is a broad consensus that institutions matter for economic development (Rodriguez-Pose, 2013:1037; Tomaney, 2014: 133). However, there is a pressing need for greater clarity on the uncertainty that surrounds how, what and why institutions matter for sustained successful development.

In relation to economic development the principal aim of this section is to offer a critical review of the current understandings as to how, what and why institutions foster or inhibit particular kinds and degrees of economic development in different settings. This section seeks to clarify and understand the meaning of institutions. To then recognise the differences in the types and quality of institutions that in turn result in differences in social, cultural and economic development patterns (Keefer and Knack, 1997; Acemoglu, *et al.* 2001, 2002, 2004; Easterly and Levine, 2003; Rodrik, *et al.* 2004), with the view to develop more satisfactory answers to questions of why some areas develop at a faster rate than others. To critically analyse evidence of the connections and relationships between economic development and institutions, to identify whether a causal effect runs from institutions to economic and social development. The results from this study will therefore contribute to the debate in the development of institutions literature.

2.4.2 What are “Institutions”?

The last decade has seen the use of the term *institution* receive greater attention and become widely accepted. This reflects a growing acceptance for the idea and use of the institution concept in an array of disciplines, including economics, geography, philosophy, sociology and politics in which the term is used in a variety of ways. The term has a long history of usage in the social sciences, dating back to at least Giambattista Vico in his *Scienza Nuova* of 1725 and Adam Smith in his *An Enquiry into the Nature and Causes of the Wealth of Nations* of 1779. The concept of “institutions” is broadly defined as: “humanly devised behavioural rules that govern and shape the interactions of human beings, in part by helping them to form expectations of what other people will do” (Lin and Nugent, 1995:2306-2307; Rodrik, 2000). However, the term has been used along a wide spectrum and even today, there is no

unanimity in the definition of this concept, that said, the most commonly used definition was provided by the economic historian Douglass North (1990:3).

“Institutions are the rules of the game in a society or, more formally, are the humanly devised constraints that shape human interaction... Conceptually, what must be clearly differentiated are the rules from the players. The purpose of the rules is to define the way the game is played. But the objective of the team within that set of rules is to win the game. . . Modelling the strategies and skills of the team as it develops is a separate process from modelling the creation, evolution, and consequences of the rules”.

Since the conception of North’s approach, the role of institutions in the promotion of economic development has received vast attention from scholars (Acemoglu, et al. 2005; Boettke, et al. 2011; Williams, et al. 2014; 2015). It is not the purpose of this study to offer a comprehensive review of the extensive body of research concerning institutional theories, but to focus attention on influential works in the development of this study. The predominant institutional paradigm in urban and regional development builds on the theories of North, whose work is widely considered to provide the most succinct development in institutional thinking (Rodriquez-Pose, 2013; Vorley and Williams; Amin and Thrift, 1995; Rodriquez-Pose and Storper, 2006; Tomaney, 2013).

Although this review is unable to assess all theoretical developments in this field, some key works are emphasised to demonstrate an awareness of the wealth of knowledge that has brought interesting insights and perspectives to the theory of institutions. Indeed, some scholars argued institutions to be crucial in coordinating interactions between actors (Paul, 1994). Whilst Thelen and Steinmo (1992) Powell and DiMaggio (1991) have taken it further to claim institutions determine societal preferences and how human behaviour is interpreted (Figstein, 2001; Hall and Taylor, 1996). Notably, Powell and DiMaggio (1991) challenge North’s (1990) assertion that institutions are the product of human design and state they evolve from the historical and cultural context. More so Amin and Thrift (1995) proposed the value of “institutional thickness’ and its strong association with economic development. However, this was not without criticism with scholars condemning performance was linked to their institutional quality, not their density (Farole, et al. 2011). It is worth noting a number of prominent approaches within the institutional literature progressed to distinguish between cognitive, regulative and normative institutions (Scott, 2007), four types of institutional approaches (rational choice, historical, sociological and discursive institutionalism) (Schmidt, 2010), and the existence of institutions across four levels of society (informal, institutional environment, governance, and resource allocation). Although a further approach documents the absence of an institutional presence or ‘institutional voids’ and the knock-on effects this can have on the interaction between informal and formal institutions, and the performance of business, innovation and entrepreneurial activities (Kostova, Roth, and Dacin, 2008; Khanna and

Papepu, 1997). Whilst there is merit in exploring some of these key concepts there remains a need to focus and extend North's approach to institutional thinking, to consider the formal and informal institutional environment and how it interacts and impacts on entrepreneurship.

North's conception distinguished between three significant characteristics: (1) institutions are "humanly devised," that is, they are not caused by factors which are outside human control; (2) that institutions are composed of "the rules of the game" that is, that they have the means to set "constraints" and boundaries to modify the behaviour of people and groups, for example, status law, common law and regulations; and (3) that their major effect will be through the ability to create appropriate incentives for desirable behaviour, for example, institutions may encourage education, capital or investment (North, 1981). In sum, according to North (1990) an institution is defined as restrictions devised by human beings to shape rules of behaviour and human interactions, these can both permit and prohibit certain activities and choices. Stated to be the core determinant of the sustainable performance of economies structuring "incentives in human exchange, whether political, social or economic" (North, 1990:3).

Following on from North's (1990) seminal work, Acemoglu, Johnson and Robinson (2005) share the same essential idea in that economic institutions have an underlying role on the basis that they influence and establish the structure of incentives and constraints on the behaviour of economic actors in society, shaping the way individuals interact and the economic outcomes of a location. They go onto unravel the concept of "institutions" to incorporate three interrelated notions to the definition of institutions as aspects that govern the growth and development of urban areas (IMF, 2005): (1) economic institutions; (2) political power, and; (3) political institutions (see Figure below) (Docquier, 2014:2).

Various institutional economists and analysts have different definitions of institutions, and while essential similarities in later reformulations of the 'institution' can be traced, ultimately institutions can differ between societies and cultures to both constrain and enable behaviour. Veblen's understanding proposed that, "*the concept of institutions is prevalent habits of thought with respect to particular relations and functions of the individual and society*" (Parada, 2002: 47). Often conceptual differences are understood to be as a result of the collective decision-making procedures (political parties, rules of and limits of a government or state, whether there is democracy versus dictatorship) and the nature of the economic institutions (security of property rights, legal system, entry barriers, the set of contracts available to businessmen and women) wherein these institutions reside (cited in Acemoglu and Robinson, 2006:2). Consequently, there is good reason to believe that the question as to why some societies develop and perform at different rates is more broadly, at least in parts, associated with society and the quality of institutions in place.

2.4.3 Formal and Informal Institutions

North (1990), Amin (1999) and Hodgson (2007) go further and highlight how an economy is shaped by ‘enduring collective forces’ of socially ingrained rules and their interactions such as formal and informal institutions, as observed by Martin (2000: 77-94) and Farole, et al. (2011). Who distinguished between institutions consisting of both formal also known as ‘society’ or ‘hard’ entities embodied in particular organisations and laws (common law, transferable rules, property rights, or patent law) (North, 1992; Fukuyama, 2000). As well as informal also known as ‘community’, ‘tacit’ or “soft” entities such as shared values, social conventions and norms, informal networks, cultures and traditions, interpersonal contacts, relationships, group routines, and ethics that evolve over time as well as the institutional environment (Di Maggio and Powell, 1991; Rodriguez-Pose and Storper, 2006:1; Pike, et al. 2006; Rodriguez-Pose, 2013). Theoretical work by Putnam, (1993), Rodrik, (2003), and Getler (2010) among others, has found that both formal and informal institutions interact and work in a range of ways facilitating dialogue and negotiation among key actors so as to coordinate, integrate and mobilise actors into the development process (Rodrik, 2003; Getler, 2010). They tend to design, develop and deliver effective strategies and priorities to create multi-level and multi-actor systems that strengthen the individual and collective choices and behaviours of economic actors (Getler, 2010; OECD, 2012:25 cited in Pike, et al. 2013:7).

Rodriguez-Pose (2013) contends that the presence of formal and informal institutions has become a must, a prerequisite for those regions dealing with or seeking to adjust and react to transformations. It is argued that the presence of formal and informal institutions encourages a degree of adaptive variety that allows social actors to mediate interests and facilitate the generation of strategies, shape and adjust behaviour to develop context-specific approaches to respond to challenges and opportunities (Agrawal, 2010; Eakin and Lemos, 2010; Gupta et al., 2010). The ‘adaptive efficiency’ of a place is seen as the capacity and willingness of a society to learn, acquire new knowledge, induce innovation, undertake risk and creative activities (North, 1990). Adaptive efficiency, therefore, reflects the institutional capacity that will allow societies to explore problems and resolve bottlenecks to achieve efficiency over the long term (North, Wallis and Weingast, 2009:133-134).

Indeed, growing empirical literature has shown that it is fair to assert that “institutions matter” more than any other factor, with a few exceptions, are the ‘root cause’ of development (World Bank, 2002; Gregersen, et al. 2004; Williams, et al. 2014). It is now increasingly recognised that institutions have connections to improve learning capabilities through improved innovation and interactive learning determine the learning capacity of any region (Morgan, 1997). The viewpoint taken here is that place-based habits, conventions, norms, cultures and routines are reliant on the institutional fabric of that society in which an institutional capacity is produced. A distinguishing characteristic, that governs the learning and adaptive capacity of a region (Morgan, 1997: 496) (cited in Rodriguez-Pose, 2013:1038).

Thus, formal and informal institutions are widely believed to determine the incentives and disincentives which contribute to the presence of an 'adequate' balance and interaction amongst the cooperative coordination and competitive behaviour between economic actors within any given territory, in order to enable and promote new contributions and learning process (Deiottati, 1994; North, 1995; Williams, et al. 2014). However, despite there being a general belief that institutions matter for urban economic development a better understanding supported by vast empirical evidence of the role of institutions as proximate sources of urban development has shown that institutions have a greater significance than just that of simple regulators of economic activity (Williams, et al. 2014). It becomes clear that successful institutional arrangements involve more than designing institutions to be just "right" it concerns a continuous process of institutional evolution, adaptations, reflections and innovations. To improve economic efficiencies and the formation of the necessary conditions (Vázquez-Barquero, 1999), this concerns capacity building provided by stable investment conditions, entrepreneurship, economic interaction, transparency, and trade, that has proven key in limiting the risk of social and political instability, uncertainty and conflict (Jütting, 2003; Storper, 2005:32). Through strong institutional actors and communitarian bonds desirable economic circumstances can facilitate opportunities for economic activity, for example by generating trust among economic actors and lowering risk, uncertainty and information costs (Fukuyama, 2001:1), institutions reinforce and contribute to the process of knowledge diffusion and innovation transfer throughout territories and among actors, generating greater economic and social conditions for the development of sustainable economic activity (North, 1990, 1995; Vázquez- Barquero, 2002).

At the same time, however, a surfeit of either formal or informal institutions may prove to be counterproductive for economically competitive and socially viable development (Williams, et al. 2014). There has been much interest in how an extreme presence or role of one or more interest groups can have a significant impact on social change and societal collective decision-making processes. It can create "*insider-outsider and principal-agent problems, rent-seeking and free-riding behaviours*" (Rodríguez-Pose and Storper, 2006:4), which can further contribute to distrust, particularistic preferences, and negative externalities thwarting opportunities for sustainable economic development (Boix and Posner, 1998; Fukuyama, 2000; Putnam, 2000). From this perspective, as Putnam (2000:325) puts it, in the absence of efficient institutions that generate strong societal structures strategies may result in social polarisation undermining equal opportunities and resultantly lowering competitiveness (Rodríguez-Pose and Storper, 2006:4). Indeed, institutions are capable of creating vicious circles of suboptimal development trajectories through institutional 'lock-in' effects and 'path-dependencies', driven by the presence of detached and rigid 'dysfunctional' institutions that struggle to neither anticipate nor respond to changes in economic circumstances (Unruh, 2000).

In light of this, in the institutional literature, public-spiritedness and strong communitarian bonds have proven to play a critical part in economic development for example through reducing transaction costs, generating trust, and disseminating knowledge, associational activity and networks, highlighting an important connection between formal and informal institutions, social capital and the likely generation of positive externalities associated with economic activity (Putnam, 1993:89-90; Pike et al. 2006). However, studies have also shown that strong societal institutions in the absence of interpersonal trust, civic engagement, informal institutions and social networks could result in conflicting demands and a dissatisfactory allocation of public goods, service quality and responsiveness, confrontational situations, and costly conflict resolution (Rodríguez-Pose and Storper, 2006).

Moreover, while institutional arrangements can indeed have a causal impact on economic activity, they are to some extent the product of economic development, in part indicating that institutional quality is endogenous to income (Rodrik, 2004:10). Indeed, much attention has been given to the impact of social capital and its characteristics on the performance of its formal and informal institutions and the economic development of societies (Boix and Posner, 1998). Empirical work has argued that institutions and economic development “*co-evolve and are mutually reinforcing, with changes in capacity building and improvements in governance contributing to the development of economic activity and vice versa*” (Rodríguez-Pose and Storper, 2006:4-5) accordingly institutions and positively related economic activities are related to the effects of social capital. For which the direction of causality is subjective and problematic to predict.

While many theoretical institutional descriptions are in use, three further equally important and commonly known approaches systematically decompose an institution into its major components and subcomponents based on its institutional environment and arrangements. Theoretical discussions have proceeded to show variations in how existing institutional definitions have categorised institutions according to their degree of formality, hierarchy and subject category.

2.4.4 Institutions and Urban Economic Development

In recent years, international research has increasingly focused upon the role of institutions in the promotion or hindrance of the level of economic development in an area (Keefer and Knack, 1997; Hall and Jones, 1999; Chong and Calderon, 2000; Glaeser et al., 2004; Rodríguez-Pose, 2010). Experts and analysts have increasingly recognised institutions as a critical element in the process of urban development (La Porta, et al. 1998; Hall and Jones, 1999; Acemoglu, et al. 2001, 2002; Easterly and Levine, 2002; Rodrik, et al. 2004). As a consequence, a large volume of literature documents a strong correlation between institutions and economic performance, which has resulted in institutions having received a growing recognition for their role and importance in the economy (Acemoglu, et al. 2001; Rodrik, et al. 2004; North, 2005).

The idea that institutions are a fundamental determinant of economic development is not new and has received strong support. While North's (1990) work is seen as a major effort to explore the relationship between economic performance and institutional factors, Smith's (1776) work was the first to recognise that nations are affected by institutional characteristics and that they will prosper if they develop institutions that encourage entrepreneurship and savings. In a collection of research by Gwartney, et al. (1996) and Scully (1988) it was concluded that the institutional quality of a nation (more specifically economic freedom and policies that provide security to property, non-confiscatory taxes and enforcement of contracts) would promote economic development and in turn, the area would experience a heightened economic performance. Work by Knack and Keefer (1995) claimed that the quality of institutions is crucial to growth and investment and concluded that there was a strong relationship between economic growth and rule of the law in general. North and Thomas (1973) upheld that institutions are the fundamental sources of cross-country variances in growth. While a vast source of studies demonstrate that institutional quality has a critical role in economic performance (Alesina, 1998; Hall and Jones, 1999).

Evidence provided by Rodrik (1999, 2002) and Frankel (2002) suggested that successful market-based economies require strong institutions. The influential work of Acemoglu *et al.* (2001, 2002) concludes that institutional quality has a large causative influence on economic development and patterns of growth. The research showed that institutions had a fundamental impact on economic growth, whereas geography does not have a direct influence. In addition, Adkins and Savvides (2002) conclude that institutions promoting economic freedom have a positive effect on the economic performance of that area. A further study by Dawson (2002) found that economic prosperity was heightened when there were improvements in investment and economic freedom, and Sokoloff and Engerman (2000) argue that high rates of inequality result in significantly unbalanced access to economic opportunities. While, the empirical studies carried out by Easterly and Levine (2003) makes a case for institutions as a sufficient statistics accounting for economic growth.

As illustrated above, a large proportion of studies concerning the determinants of economic performance stress the role of institutions. In fact, recently the focus of the most influential research has shifted from macroeconomic policies to institutions and their institutional characteristics. More interestingly, the empirical evidence of the research suggests that the positive correlation between good economic policies and development is the result of good institutions. Easterly, et al. (2004) show microeconomic variables have no significant impact on economic development once the variable institution is introduced to the test. Reflecting the views of Acemoglu, et al. (2004) and IMF (2004) who posit that institutions are a key cause of growth. However, according to the empirical studies of Glaeser, Porta, Lopez-de-Silanes, et al. (2004) they claim that human capital could be the forthright

cause of growth as opposed to the institutional quality of a location. This is in contrast to a study conducted by Rodrik et al. (2002) for which the quality of institutions variable triumphed all other variables, according to Rodrik et al. (2002) the institutional characteristics of an economy has a much broader impact on the development of an area than the geographical conditions of a location. In contrast, However, Dollar and Kraay (2003), in supporting the role of macroeconomic policies, found that: “*in the very long run better institutions and high trade shares have a positive impact on economic growth, while in the short run, high trade shares have a greater effect on economic performance than quality of institutions*” (cited in Osman, 2012:145). In Helpman’s (2004:139) view,

“Institutions affect the incentives to reorganise production and distribution in order to exploit new opportunities, and the incentives to accumulate physical capital, for these reasons institutions are more fundamental determinants of economic growth than R&D or capital accumulation, human or physical”.

Despite all of the theoretical propositions and empirical evidences, the results of Presbitero’s (2006) empirical work demonstrates that other conditions, more specifically geographical factors play a more direct role in economic development. Notably, the influence of geographical factors differs across areas according to the level of development and could have a bearing on good governance and efforts to sustain long-term economic development. However, Ulubasoglu and Doucouliagos (2004: 6) raised the case that a poor institutional environment and associated policies would induce potentially inefficient investment choices, a negative viewpoint and confidence in the governance of the economy in the rule of law, independent judiciary and protection of rights and so on. While, an increase in democracy has been argued to lead to faster city formation, according to Maitland MacFarlan (2003) “*improvements in institutions lead to higher incomes, stronger growth, and lower volatility*” (MacFarlan, Edison and Spatafora, 2003: 112). Institutions do significantly matter for growth,

“Differences in institutions across countries have proven empirically to be among the most important determinants of differences in rates of economic growth... one of the ways in which institutional capacity can affect economic performance is through the allocation of resources” (Martin, 2000; Vijayaraghavan and Ward, 200:1),
intervening to improve the efficiency and functioning of the economy.

Knack (2003: 294) acknowledges the widespread research demonstrating the importance of governance, and how place-based governance matters for the long term development of areas: “*does not often point the way towards specific reforms, because it is based largely on very broad and aggregated indicators of institutional performance*” (Kaufmann, 2003; Barca, McCann and Rodriguez-Pose, 2012). Considerable attention placed on the role of institutions as an explanation of differences in urban economic development has led to an understanding as to how place-based institutional

dynamics can shape and enrich local contexts (Amin and Thrift, 1994; Scott and Storper, 2003; Rodriguez-Pose and Crescenzi, 2008).

Despite recent works on institutions, there is a broad consensus that theoretical propositions are not supported by robust empirical evidence, for instance the possibility of there being a reverse causality in growth regressions. Although there is a common agreement among growth economists, development experts and international policymakers that institutions matter, their influence is not well understood, and there is a common disagreement as to the relative importance of the various institutions. One of the major difficulties of undertaking empirical work is that there is not a well-defined understanding of the notion of institutions in the literature (Acemoglu, 2009). Furthermore, a clear means as to how to measure the influence of institutions and their characteristics on the economic performance of place has not yet been established.

2.4.5 Institutional Thickness and Efficiency

The work of Amin and Thrift (1995) considers the strong presence of ‘institutional thickness’ to be related to economic development. Institutional thickness is recognised to act as an indicator to help determine the adaptive capacity of a territory to changing conditions, to promote growth and explain the superior performance of city-regions (Tomaney, 2014:133). This claim is supported by studies that have explored the potential relationship between (the density and thickness of) institutions and the outcomes of local and regional economic development (Hudson, 1994; Amin and Thrift, 1995). A considerable body of literature has focused on the influence of institutions with some authors having specifically looked at regional and place-based development (Helpman, 2004; Acemoglu and Robinson, 2008; Rodriguez-Pose, 2013:1039). Their work has highlighted the influence and relative advantage institutions can have on generating and assimilating innovation, competitiveness, social capital, policy consistency, and human capital development (Sotarauta, 2009, 2010; Sotarauta and Mustikkamaki, 2012). Whilst it would thus seem that communities, localities and regions suffering from institutional ‘lock-ins’ and ‘path dependencies’ have a low probability of achieving long-term economic performance.

Institutional thickness is conceived to generate a degree of trust and legitimacy, a heightened level of innovative capacity, facilitate spillovers and shared knowledge known to subsequently increase the stock of social capital, resulting in an efficient bureaucratic system (Amin and Thrift, 1995; Jutting, 2003). Leading on from this, others such as North (1990:48) hold that institutions are accountable as the ‘scaffolding that shapes human interaction’ as such strategies that operationalize a spatially blind one-size-fits-all approach to economic development policy are unfeasible (North, 1990:477; Rodriguez-Pose, 2009). It has been found that the existence of institutional thickness does not necessarily guarantee

regeneration and development (Hudson, 1994: 212), approaches must support and nurture the place-based connections and relationships between multi-level actors and civic links, giving greater attention to the conditions of geographically shaped economic development and competitiveness. Admittedly, the importance of institutional thickness and its positive externalities such as bridging and coordinating actors, facilitating knowledge formation and dissemination, clustering of activities and stimulation of entrepreneurship have been recognised for their role in economic theory (Amin and Thrift, 1995; Amin and Thomas, 1996; Morgan, 1997; Cooke and Morgan, 1998). However, a significant deficiency in efficient informal institutions has come under scrutiny as it can result in negative externalities hindering the ‘learning’ capacity and associated agglomeration effects of an area. Thus, demonstrating the significance for a combination of both formal and informal institutional systems that ultimately lead to greater economic efficiency (Amin and Thrift, 1995; Rodriguez-Pose, 2013:1039).

In discussions regarding the question as to whether, and if so how, ‘institutional thickness’ or ‘institutional capital’ matters for the economic development trajectory of territories institutionalists have been critical in confronting this issue (Healey, 1998). As a consequence, institutions have received growing attention and research has shown that,

“a greater the density of combinations of ‘intellectual capital’ (that is, knowledge resources), ‘social capital’ (trust, reciprocity, cooperative spirit and other social relations), and ‘political capital’ (capacity for collective action), in brief, the greater the ‘territorial capital’ (Camagni, 2009) within any given region, the greater the potential for economic development and growth.” (Rodriguez-Pose, 2013:1039)

Hence, acknowledging the importance of institutions in achieving sustainable development is considered to lead to the implementation of development strategies that encourage community voices, bottom-up approaches, greater social and economic cohesion, and the empowerment of people, to be more responsive to the changing environments, conditions and needs of the local institutional environment. There is no single formula, instead it is reasoned that greater consideration needs to be made for the context specific conditions of society in both the design and implementation of development strategies to influence societal outcomes (Vázquez-Barquero, 1999; Rodriguez-Pose, 2013:1039).

The work of Rainnie and Grobelaar (2005) argue that locations with a superior number of institutions are more likely to be associated with successful characteristics of economic performance than those with ‘thin’ and lacking institutional settings. This accords with North’s theoretical argument that institutionally ‘thin’ environments not only limit economic development but have been found to be a crucial explanatory dynamic characterising cross-country variation in development levels. For example, in institutionally ‘thin’ environments Rodrik, Subramanian, and Trebbie (2004) argue that economies

can often become dominated by elite voices or ‘institutional sclerosis’ as emphasised by Amin (1998), which can resultantly distort the sustainability of development. Institutional sclerosis has been known to retard an economy’s innovation, dynamism and growth rates through heightened levels of social segregation, and an overall dissatisfaction and distrust for the decision-making process (Jones, 2001: Lane and Ersson, 1997:170; Picciotto, 2000; Rodriguez-Pose, 2009). A somewhat differing insight has emerged from the literature in that the “*effectiveness of institutional arrangements is not necessarily a matter of having too many or too few institutions, rather it is a question of having the correct mix of effective institutions*” (Rodriguez-Pose, 2013). Given the recognition that social, cultural, political and institutional forces are context-specific it is thus contended that the quality and performance of institutions is dependent on their locational settings on the basis that ‘*very similar institutional settings work in different ways in different territories*’ (Farole, et al. 2011:74). Tomaney (2014) posits that there is an inevitably uneven distribution of formal and informal institutions, as the geographical setting of such dynamics are thought to act as critical inputs to the institutional economic performance of a context. On this basis, it would seem that formal and informal institutions express the local identity of a location and influence the sustainable performance of city-regions. For example, Morgan (2007) attributed the economic performance of a location to be attributable to the local specific context of an institution; he posits that the character of a location shapes institutions and their economic efficiency, while social capital contributes to the informal performance of institutions. Thus we learn that there has been a substantial recognition and advancements made by geographers in the discipline of economic geography: in understanding how informal institutional dynamics explain and shape micro-economic behaviour to in turn influence economic outcomes in certain local contexts (Farole, et al. 2010:2 cited in Boettke and Fink, 2011:5).

2.5 Networks as Institutional Enablers of Entrepreneurship

Network dynamics are a major determinant of economic development (Glückler 2006, 2007), and throughout the literature the concept has common intangible characteristics beneficial for entrepreneurship. As such the performance of networks in an urban context provides important and insightful contributions in understanding the association between networks and entrepreneurial performance (Admin, 2004; Yeung, 2006). In a knowledge-based economy, there is increasing focus on access to knowledge and innovation in order to evolve and remain competitive, as Chesbrough (2003) stressed businesses no longer innovate in isolation but exist within a network as a source of value creation.

2.5.1 Cooperative Networks

Collaboration between firms has been an increasingly important determinant of entrepreneurialism. The diversity of inter-organisational network collaborations is considered to better promote innovations and enhanced productivity. University and research partnerships provide huge opportunities for achieving entrepreneurship and economic development in the current knowledge-based economy (Pineiro et al. 2015). In return, these collaborations can provide access to knowledge sources, talent pipelines, funding and resources (Barnes et al. 2002; Ankrah and Al-Tabbaa 2015). That said, the collaboration of sectors could cause tensions due to conflicting bureaucracy and hierarchies for example universities have been criticised for their slow rigid structures, which are major barriers to entrepreneurial success (Boardman and Bozeman 2015; Schofield 2013; Vorley, et al. 2015).

The impact of communication within a network nurtures relationships and interactions with actors to bridge and build bonds to reduce uncertainty (Camen et al. 2012). The heightened frequency of interactions acts as an enabler of trust, openness and reciprocity to build a community of shared understanding fostering efficient communication channels to overcome knowledge barriers (Harisalo and Miettinen, 2010; Hong et al. 2010; Lee 2011). Frequent network activity is vital to create a sense of community capital through regular interaction, continuous feedback, mutual exchange of information and updates on developments, challenges or activities (Huggins and Johnston, 2010). Trust, openness and reciprocity have been identified as major enablers of cooperation and collaborations within network dynamics (Sako, 1992; Bstieler, et al. 2015; Vorley et al. 2015). A crucial asset considered to positively affect the performance of business networks and productivity, through the facilitation of social capital and innovation (Putnam, 2000; Attia 2015; Canhoto et al. 2016). Wever, et al. (2005) made the distinction between fragile (calculated) and resilient trust a characteristic of network effectiveness and community capital. However, each network is diverse and as complex as the actor's participating. Grabher (2006) criticised the network literature for overlooking the vulnerability of network characteristics and overlooking those locked out of network channels, or networks can become unstable when exploited or actors make new relationships outside of the network (Beckman, et al. 2004). Additionally, the Government is a crucial urban autonomy able to enhance or hinder networks (Kozlinska 2012) they are able to implement legal restrictions and regulations, or provide ineffective support structures that have an adverse impact on businesses performance, their entrepreneurial capacity, associated knowledge networks and their willingness to share (Şerbănică 2011; Attia 2015). On the other hand, institutional disturbances could incentivise actors to align to overcome the hardships of the institutional setting to establish strong network ties of collaboration (Williams, et al. 2015).

The research touches on the notion of social capital as a key characteristic of network dynamics (Bosma, et al. 2004; Bridger, et al. 2006; Feldman, et al. 2012). Notably, while there is no set or commonly

agreed definition of social capital, for the purpose of this study the concept is broadly defined as the social connections and relationships of individuals who live and work in society (Robison, et al. 2002). Social capital refers to the positive informal values of social networks and interactions that derive from the context specific nature of each unique environment. These naturally occurring informal values are embedded within social relationships, social units and networks that facilitate opportunities and positively enable society to function effectively (Fukuyama, 1997). The operative dynamics influences behaviours and promotes economic development through coordinated cooperative and collaborative action for mutual benefits (Rutten, et al. 2010).

2.5.2 Network Resources

The value of proximity networks in knowledge production and entrepreneurial activity is a valuable determinant of urban economic development. In particular, firms that do agglomerate are able to exploit three central advantages (Steiner, 1998; Huggins and Izushi, 2007; Morgan, 2011). Firstly, firms are recognised to operate at a heightened level of productivity due to the presence of cohesions and complementarities, as these grant access to advantageous opportunities contained within the local 'socio-economic business culture' (Porter, 1998: 81; Huggins and Izushi, 2007:60; Vorley, 2011). The second being that a diverse entrepreneurial setting can act as an incubator for innovation and drive the direction and pace of future productivity flows within, and to and from the agglomeration (Glaeser, *et al.* 1992; Ciancutti, *et al.* 2000). Dodgson (1993) argued innovation is not space-less, instead agglomerations or coworking spaces are specifically able to provide environments with diverse sectors to form embedded networks of common business goals, and interactive learning that reinforces innovations and knowledge enhancing qualities (Steiner, 19998: 214; Williams, et al. 2016). Indeed, according to Doeringer and Terkia (1995) an active business relationship among firms facilitates the elasticity to, "*act instantaneously to new market windows, and experiment at low expenditures due to their distributed risks*" (Steiner, 1998:39), sharing common opportunities and threats. What is more, the concentration and proximity of similar industries upholds a competitive pressure of entrepreneurship and rivalry, wherein the isolation of business lock-in is prevented (Huggins and Izushi, 2007). Instead they enter a continual life-long development process characterised by the agglomeration of horizontal and vertical relationships of a collaborative nature of learning and improvement (Porter, 2000; Markusen and Schrock, 2006). These alliances can advance expertise through corporate access to organisational know-how, as well as tacit and explicit knowledge and; "*can stimulate reconsiderations of current practices*" (Steiner, 1998:215) to in turn reduce production risks (Chesnais, 1988; 1996; Ciborra, 1991). This advancement in expertise can overcome technological and market uncertainties, reducing the repetition of mistakes, and has resulted in performing clusters seeing challenges as market opportunities, as oppose to risks that pose a threat to survival (Chesnais, 1988; 1996; Ciborra, 1991:59; Mody, 1990; Steiner, 1998:215).

Thirdly, gaps in the market can be exploited through the emergence of new spin-off businesses, the expansion of service innovations and by strengthening the agglomerations or coworking spaces providing a positive feedback loop (Ciborra, 1991; Mody, 1993). Competitive behaviour is dominant among industries within proximity (Porter, 1998), networks are based on specialist services generating a higher value by: *“tapping into and distributing the potential local strengths as a whole, rather than as a series of fragmented companies”* (Steiner, 1998:63). Steiner observed efficiencies and associations within an agglomeration or coworking space to bring a cooperative approach to services; *“instead of an individual ‘search for excellence’... as a group we are stronger”* (Steiner, 1998:4-5). The collective learning process facilitates the construction of new strategies of business behaviours to discover, *“exceptional levels of technological and product innovation”* (Keeble, 2000: 220). Market evolution and technological developments are crucial for survival; they facilitate new insights, further exploit the resources of their network value and recurrently account for product and service gaps (Huggins and Izushi, 2007:62-63). All considered, the role of space and place has become increasingly recognised as agglomerations and coworking spaces represent a valuable source of sustainable growth, dynamism and competitiveness (White Paper, 2001). They can facilitate and support the progression of formal and informal local partnerships with other sectors and established enterprises, enriching the stability and resilience of SME’s (Morgan, 2011; Garnsey *et al.* 1992).

When adequately formed it is argued that agglomerations and coworking spaces have the aptitude to address local needs and improve local and regional business and ‘friendship’ networks, often based on trust. Proximity networks can offer an invaluable entry point for SME’s whereby they can take advantage of market opportunities and the connective composition of resources pools, that these agencies would be unable to achieve alone. In particular, the difficulties posed by the restrictions of the UK’s potential exit from the UK in the current economy have left entrepreneurs and SME’s at risk. In light of this, performing proximity networks can enable SME’s to enter into dynamic knowledgeable strategic networks. Indeed, according to Doeringer and Terkia (1995) an active business relationship among firms facilitates the elasticity to, *“act instantaneously to new market windows, and experiment at low expenditures due to their distributed risks”* (Steiner, 1998:39), sharing common opportunities and threats.

2.6 Contextual and Capital Determinants of Entrepreneurship

Although most research considers context as a secondary consideration this thesis supports the proposition that entrepreneurship is a context-based phenomenon, where it is a necessity to understand the theoretical framework within the context of time and place (Davidsson, 2003). Although there is

limited agreement as to what constitutes context, Brown and Mason, (2017), Zahra, et al. (2014) and Welter (2011) stressed the importance of the role of contextual determinants as a considerable explanatory determinant of entrepreneurship. Therefore, it is crucial entrepreneurial activity is not observed in separation of the social, historical, temporal, institutional and organisational contexts. To theorise differences between contextual differences (e.g. in institutional settings and network dynamics) and entrepreneurial activities, for the purpose of this study context is defined as the historical, temporal, institutional, spatial and social setting. To provide a more realistic understanding of the interaction between and implications of contextual determinants they are often understood to act as an entrepreneurial ecosystem (Mason and Brown, 2014; Isenberg, 2010). The interrelated nature of contextual conditions is understood to act as an ecosystem that can promote or impede entrepreneurial activity, a system that involves highly complex interrelations among industrial, social, and institutional conditions. In particular, Spedale and Watson (2013) stressed the importance for the need to develop theoretical thinking past the artificial separation concerning 'context' and associated theoretical concepts, to focus on variations among the characteristics of settings and entrepreneurial circumstances. To enrich understandings through the development of an increased awareness of the role of differences in 'context' in determining variations in entrepreneurial behaviour, aspirations, access to opportunities and resourcefulness (Welter and Xheneti, 2013; Welter and Gartner, 2017).

2.6.1 Physical Capital as a Determinant of Entrepreneurship

As discussed earlier, entrepreneurship is a context-based phenomenon where entrepreneurs and the wider business community are dependent on the characteristics of their contextual environment, and the (enabling or impeding) development of its provisions. The presence and quality of supportive infrastructure has been found to affect entrepreneurial activity and is recognised to be a crucial aspect of an entrepreneurial environment (Fritsch and Storey, 2014; Audretsch, et al. 2015; Stam, 2015; Spigel, 2017). However, the literature has demonstrated that limited attention has been paid to the influence of investments in physical infrastructure developments and its ability to stimulate entrepreneurial activity. Despite the rising importance of intangible assets (as discussed in section 2.2), Audretsch, et al. (2015) and Bennett (2019) suggest that urban economic development has a significant reliance on the provision of the quality of physical infrastructure (transportation, communication, housing, electric systems etc) that can serve as enabling or disabling determinants in entrepreneurial activity (Davidsson, 2015).

Audretsch, et al. (2015) found investment in physical infrastructure development, specifically railway and broadband infrastructure, has a positive influence on entrepreneurial activity and more specifically the creation of new start-up activity and the creation of employment. This demonstrates the link between the development of physical infrastructure provisions and the positive stimulation of entrepreneurial activity (Stam, 2015; Spigel, 2017). Indeed, entrepreneurs are strongly influenced by the contextual

environment they operate within and are dependent on the resources available and their ability to promote or impede entrepreneurial opportunities (Pfeffer and Salancik, 2003). In particular, scholars have found contextual conditions to have had an influence on the entrepreneurial capacity of contexts for example, by stimulating business formation and business exit rates (Feldman, 2001; Campbell et al. 2012; Fritsch and Storey, 2014). Notably, the development or improvement of physical infrastructure requirements is a key public policy consideration to ensure the continued economic development of cities through support for continued market progressions.

However, the allocation of resources to support infrastructure improvements tends to require high-cost financial investments crucial in stimulating entrepreneurship and cities economic development, although some studies have argued investments are perceived to have a marginal impact on entrepreneurial activity (Audretsch, et al. 2015; Davidsson, 2017). On the contrary, investments in physical infrastructure was reported to fulfil a functional purpose in its potential to generate positive externalities by facilitating the transportation of talent (e.g. airports, road infrastructure, rail links etc) and access to services (e.g. broadband, office space, educational institutions etc.) to ensure the optimal efficiency of a location and its entrepreneurial business community (Miller, 2013; Ramoglou and Tsang, 2016). That is, due to the opportunity-enabling function of infrastructure as a determinant of beneficial externalities (e.g. enhanced productive capacities, perceptions of entrepreneurial opportunities) (Dimov, 2011; Ramoglou and Tsang, 2016; Davidsson, 2017). Indeed, the development of physical infrastructure is often cited as a government rationale to incur economic change, and a key mechanism to stimulate perceptions of opportunity to increase the attractiveness of a location for potential investors, employers and employees (Wood and McKinley, 2010; Dimov, 2011). This suggests that the development of new infrastructure is understood to play a central role in eliciting new entrepreneurial opportunities, and the attraction of entrepreneurs seeking exploitable opportunities (Davidsson, 2017; Bennett, 2019). However, rather crucially infrastructure developments were also recognised to cause polarised growth by inducing the redistribution of entrepreneurial opportunities in urban centres promoting economic entrepreneurial activity away from peripheral areas (Chandra and Thompson, 2000). In this way, infrastructural development can simultaneously disable entrepreneurial activity in peripheral areas, encouraging the relocation of business activity in central locations (Wood and McKinley, 2017).

2.6.2 Financial Capital as a Determinant of Entrepreneurship

A considerable amount of research has been devoted to understanding disparities in economic development across cities. Scholars have found financial institutions to play a central role in assisting enterprise and the development of entrepreneurial endeavours, establishing a strong link between cities with strong financial institutions and development rates. Financial institutions have traditionally acted

as a vital conduit for the expansion of entrepreneurial activity, through the transfer of resources and the provision of a variety of financial services and other assistances to satisfy the varied needs of the economy (Shaw, 1973; Goldsmith, 1969). Law and Singh (2014) stressed access to finance was able to exert a supportive impact on the growth of SMEs and the economy more broadly, but that limited access to financial provisions and adequate financial institutions impedes entrepreneurship and subsequently economic development. The research deduces that development of entrepreneurial opportunities and growth is reliant on institutional constraints. For example, restrictive and ineffective institutional structures, and associated financial resources, can wield a restrictive force on emerging entrepreneurs and the growth of enterprise (Sunley, et al. 2005). This suggests that the sustained growth of emerging entrepreneurs and small-scale enterprise is reliant on a combination of supportive capital resources and the right institutional context for entrepreneurship (Klagge and Martin, 2005; Turner, 2011). A deficiency in financial institutions and systems tended to result in equity gaps leading to a market characterised by limited entrepreneurial and venture investment, reducing the probability of innovation slowing economic development. In contrast, better financial systems can improve the rate and efficiency of innovation and thereby increase the pace of economic development. Financial systems have an active role in evaluating prospective entrepreneurial activity and mobilise financing for the most promising, investing in the initiation of innovative activity bringing new products to the market enhancing productivity activities.

Economists have increasingly recognised a spatial bias in in the flows of capital to firms leading to differing growth trajectories across cities. In particular, empirical evidence has shown the limited availability of financing has left small, young SMEs vulnerable, and the main victims of asymmetric information, external funding shortages and increased uncertainty (Pollard, 2003; Beck and Demirguc-Kunt, 2006). The limited availability of finance has led to the formation of a ‘funding gap’ impeding the productivity and growth of SMEs (Bell and Young, 2010; Fraser et al., 2015). Uzzi and Lancaster (2003) argue that physical proximity between bank branches and headquarters of branches, where funding decision making powers reside, exacerbates financial constraints faced by local SMEs (Stein 2002). Moreover, this line of reasoning points to the role of proximity benefits and the importance of operational distance in strengthening trust (building channels of social capital), the quality of communication and resultantly reducing organisational friction and improves information efficiency (Berger and Udell, 2002; Chakravarty, 2006; Pollard, 2007; Degryse et al., 2015). The counter argument refers to the visibility of businesses, rather than the physical proximity between a bank branches and borrowers (businesses), is a crucial determinant of access to funding (Klagge and Martin, 2005). Overall, the theoretical and empirical evidence on the relevance of the spatial distribution of access to finance, particularly in the context of the UK, remains a contested topic (Klagge and Martin, 2005; Pollard, 2003).

2.6.3 Human Capital as a Determinant of Entrepreneurship

The impact of human capital on the micro, meso and macro-economic performance has been the subject of considerable debate over the decades (Freire-Seren, 2001; Fuente, et al. 2002; Haldar, et al. 2010). The literature on human capital is vast and provides a number of arguments on how human capital can be helpful to the performance of the individual, the organisation and the economy as a whole (Borias, et al. 2007; Cohen, et al. 2007; Estrin, et al. 2016).

(i) Importance of investment in education

In response to the changes presented by the recent downturn and saturation of the job market, countries have placed an increased emphasis on the production of human capital as a means to accelerate economic development (Abramovitz, 1993; Abramovitz and Davis, 2000; Keeley, 2007). In an attempt to leverage a competitive advantage governments and firms have embraced human resources as a cost-effective strategy to sustain a competitive advantage (Goldin and Katz, 2001; Keeley, 2007). A key body of literature highlights how externalities created by the accumulation of higher education, training and personal development activities increases the exploitation of opportunities, technologies and efficiency, knowledge and output levels (Delaney and Huselid, 1966; Baptise, 2001; Hitt, *et al.* 2001; Bontis, 2007; Halpen, 2008). Further to this, according to Barro (1993) and Heckmann and Klenow (1997) individuals with high levels of cognitive abilities heighten the productive capacities of those they interact with by way of competitive awareness and knowledge spillovers, which could in turn create new advanced economic activity and increase total factor productivity (Olaniyan and Okemakinde, 2008). Rostow's theory (1960) placed an increased emphasis on the investment and development of efficient human capital (i.e. managerial and entrepreneurial skills) as a primary driver of faster economic take-off and prosperity. Rostow held that an investment in education and training is an important component of growth, considered to generate a productive workforce that would eventually yield financial returns (Becker, 1993). Theoretical literature on human capital suggests a more educated labour force will "leak out" externalities that will benefit the wider community and produce macroeconomic gains (Fuente and Ciccone, 2002). In short, the educational development of human resources is positively associated with competitiveness and economically productive human capabilities (Schultz, 1971; Sakamota and Powers, 1995; Psacharopoulos and Woodhall, 1997). Individual educational attainment is considered indicative of the willingness of an employee to carry out life-long learning and brings higher productivity growth (Becker, 1992; Brooks, 2004). In the same way as investing in physical capital, an investment in labour productivity is closely related to the improved production capacity of a population and the attraction of entrepreneurial investments (Bontis, 2007). However, human capital represents both explicit knowledge, the result of formal education and tacit knowledge, a consequence of experiences, intuition and practical learning. Hence, theoretically

experiences in both an extensive array of labour markets, and specific vocationally orientated experiences, will (according to predictions) result in an upsurge in the quality of human capital (Becker, 1964).

Modern economies have sought to remove barriers and promote investments in education, training and personal development activities (Savvides and Stengos, 2008). It is the intent to maintain and improve the education and skills of human resources to produce a labour force that supports the requirements of the future economies' development tendencies, positioned towards a knowledge and technology intensive economy (Romer, 1990; Kremer, 1993). However, the World Bank loans for education programmes from 1963 throughout the 1970s and their associated investments failed to yield the desired high rates of returns in all countries, instead some governments were left with sizeable debts with growing interests (Jones, 2004:189). Thus, the relationship between human capital and socio-economic development is not straightforward or deterministic but highly complex and context specific.

Human capital development theory shows that investments in human capital will increase the cognitive stock of economically productive human capability, which will lead to the greater productivity and efficiency of workers resulting in increasing levels of individual and organisational performance, economic outputs and sustainable competitive advantage (Noudhaug, 1998; Tatlal, et al. 2010). However, the rationality behind this theory is contradictory and difficult to validate. The literature suggests that there are significant limitations to existing estimates on the influence of human capital on economic progress. Methodological issues have been identified in existing estimations, for example studies have sought to measure the influence of human capital as implied by the quantity of formal education attained by an individual. This is a controversial matter as it has become widely recognised that the quantity of educational attainment is an imperfect proxy and does not represent a reliable estimation for the true stock of human capital (Krueger and Lindhal, 2001). In this field, most proxies of human capital are only able to represent a limited view of the multidimensional concept, few studies have observed and explored the qualitative characteristics of human capital. As such it can be suggested that past statistical studies have included measurement errors and have significantly underestimated the strength of possible connections between human capital and economic productivity. This indicates that there is a greater need for in-depth qualitative research to uncover and find out more about the complex and idiosyncratic patterns of performance and development (Becker and Gerhart, 1996).

2.7 Conceptualising the Connections Between Development, Entrepreneurship, Institutions and Networks in the Urban Context

As mentioned in the introduction, this chapter has sought to investigate how entrepreneurship can act as an enabler for urban economic development. However, the state of knowledge that builds on understandings of intangible capital and its contributions is incomplete.

2.7.1 Entrepreneurship and Urban Economic Development

The review of literature has shown that high levels of entrepreneurial activity are strongly correlated with improved productivity, innovation, employment, wealth creation, and enhanced competitiveness within a global market. The literature considered presents a clear argument in favour of entrepreneurial strategies; the dominant theoretical discourse stressed favourable consequences such as induced progress and development within societies and the wider economy.

A critical examination of dominant theories on the role of entrepreneurship in urban economic development highlighted key areas of exploration that have been given limited attention. Theories have overlooked the complexity of the nature of entrepreneurial capital and contextual influences, and the importance of space and place in its development. Despite this there is clear evidence that “high quality” institutions bring about productive entrepreneurial activities (Sobel, 2008), it is reasoned that stable, supportive institutional environments heighten entrepreneurial productivity (Sauka and Welter, 2008). With little attention paid to exploring the socio-economic context and institutional environments in which (productive) entrepreneurship exists. The evidence demonstrates that there is a significant theoretical and empirical need to understand the contextual dynamics in which entrepreneurship flourishes and falters. Against this background the research presents a unique contribution, acknowledging the environmental influences that shape the entrepreneurial processes, behaviours, interactions and outcomes. The review identified a clear gap wherein there is a need to explore an area of study that is currently underdeveloped, how spatially bound intangible capital creates value and opportunities.

It is anticipated that the study will address a shortfall in existing studies; the mobilisation of the concept and depth of understanding has not been adequately examined and requires further empirical exploration to understand the complex link between the fields of entrepreneurship and urban economic development. Accordingly, this study seeks to acquire a deeper understanding of the link between entrepreneurial characteristics and urban economic development through the exploration of a multi case study approach. Past research has focused on entrepreneurial dynamics in isolation and almost

completely ignored contextual cues; in this view it is the intent to contextualise the phenomenon within the socio-economic and institutional environment it exists.

2.7.2 Institutions and Urban Economic Development

The literature has engaged with a range of theoretical works that have provided an insight into the ways in which institutions deliver, support and nurture urban economic development (Williams, et al. 2015; 2017). From which the impact of institutions has been shown to be a fundamental determinant of economic performance and development differences within and across nations, but also that institutions themselves are endogenous (Acemoglu, et al. 2005; Boettke and Coyne, 2009). Nonetheless, despite this wide-ranging body of research the literature has not yet explained precisely how institutions shape the development of urban areas or addressed their influence on intangible capital (Acemoglu, et al. 2008; Bruton, et al. 2010; Boettke and Fink, 2011). Despite increasing efforts there is still uncertainty concerning how, why, and what formal and informal institutions matter for sustained urban development (Sautet, 2013; Williams, et al. 2017). An inherent problem comes from there having been relatively few efforts to provide qualitative explanatory empirical evidence to satisfactorily address how the governance of institutions can influence entrepreneurship and the formation of network capital (Williamson, 2000; Boettke and Coyne, 2009; Williams, et al. 2017).

Considerable knowledge has identified that context-based characteristics play an intrinsic role in influencing intangible capital and their outcomes (Volkov, et al. 2007; Corrado, et al. 2009; Chun, et al. 2015). However, the relationship between informal institutions such as context-based characteristics and formal institutional capacity has been overlooked (Pejovich, 1999; Helmke and Levitsky, 2004; Tonoyan, et al. 2010; Estrin and Prevezer, 2011). It has been shown that urban performance is associated with social capital and the quality of institutions in place; context-based habits have been found to be reliant on the institutional fabric of society in which institutional capacity is shaped (Crewe, et al. 1998; Mueller and Thomas, 2000; Florida, 2012). Theorists have paid little attention to social capital and overlooked the significance of context-based characteristics that shape institutions and their economic efficiency (Putnam and Sander, 1999; Robison, et al. 2002; Rutten, et al. 2010). Accordingly, the study aims to give greater consideration to the context specific conditions of society to inform development strategies, to positively influence societal outcomes and associated economic activities (Welter and Gartner, 2017).

2.7.3 Networks and Urban Economic Development

Networks are recognised as a crucial source of innovation and growth (Huggins and Thompson, 2013), argued to lead to organisational advantages (Newman, 2003; Jackson and Yariv, 2010), builds inter-organisational networks which are in turn able to access knowledge sources (Topa, 2001; Rodgers, 2003), facilitate key capital resources underpinning growth processes and is rooted in economic rationality (Sundararajan, 2005; Mobius and Szeidl, 2006). Additionally, high growth cities were identified as possessing high stocks of network capital having access to the most economically beneficial knowledge leading to heightened economic performance (Falk and Kosfeld, 2003). Institutions and networks were identified to have a fundamental influence in achieving sustainable regional growth (Huggins and Thompson, 2013:511).

The study's unique research contribution lies in the acknowledgement that social capital is a capital accumulating factor that is able to heighten productive capacities and competitiveness. An aspect that has often been overlooked, there has been an apparent disregard for the influence of societal cultures, social arrangements and collective beliefs in favour of pursuing economic determinants. This study seeks to explore both socio-cultural and economic network capital, theories have on large ignored the contextual characteristics that exert a valuable influence on individuals working and living within an urban environment. Despite the numerous complex connections between human capital and economic development economic sociology contends that socio-cultural values are of economic importance and determine the dynamics of the economy. A further area of debate concerns the issue of reverse causality, that is, whether the accumulation of high-quality human capital equates to heightened performance levels or vice versa. The aim of this study is to critically examine and understand how formal and informal interventions can influence (enhance and hinder) variations in entrepreneurial activity.

In order to capture the multiple theoretical perspectives that underpin the research aim, a conceptual framework was developed to serve as the foundation on which the research phenomenon is constructed. According to Grant and Osanloo (2014), the framework acts as a guide to navigate existing theoretical discussions that are either related or reflect the research aim and questions. It is the intent to clearly define the key constructs and the interrelated nature of these concepts, to establish the theoretical coherence of the research phenomenon.

2.8 Central Theoretical Questions

2.8.1 Research Aim and Questions

The current understanding of the determinants of urban economic development is conflicting and incomplete. This study intends to inform and provide further insights into the following overarching theoretical aim:

To understand how context, institutions, infrastructure and networks shape urban entrepreneurship

Thus, the following key research questions were informed by the research aim and gaps identified in literature review and emerged in tandem with the gradual evolution of the theoretical argument. The research questions are as follows:

- (1) How do contextual factors influence urban entrepreneurship?
- (2) How do institutions (moderate) constrain or enable the relationship between entrepreneurship and context?
- (3) How do networks influence entrepreneurship in an urban context?

2.9 Concluding Remarks

The connection between entrepreneurship and urban economic development is multidimensional. This section has established an understanding of the driving forces of entrepreneurship and its characteristics. The importance of entrepreneurship in fomenting and sustaining economic development has been established. In considering the role of entrepreneurship in urban economic development the literature has identified specific leads to be addressed: (1) to understand the behaviour and interactions of entrepreneurs, (2) to analyse how the institutional environment shapes and encourages entrepreneurialism (3), to explore the role of the socio-cultural setting and economic context on the development of productive and unproductive entrepreneurship. Based on this review, these insights are believed to be vital to understanding the relationship between entrepreneurship and urban economic development by investigating why some urban areas are more entrepreneurial than others, and why certain types of entrepreneurship prevail in particular areas to provide a new level of understanding of differences in entrepreneurial activities.

This thesis will attempted to understand, explain and critically engage with a range of theoretical works that have provided an insight into the ways in which institutions deliver, support and nurture urban

economic development. Concluding, we can summarise that the impact of both formal and informal institutions has been shown to be a fundamental determinant of economic performance and development differences within and across nations, but also that institutions themselves are endogenous. Nonetheless, despite this wide-ranging body of research the literature has not yet explained precisely how institutions shape the development of urban areas. More specifically, there have been few efforts to satisfactorily address how the governance of institutions can influence entrepreneurship and the formation of network capital.

The role of networks dynamics is recognised as a fundamental source of innovative entrepreneurship, knowledge and economic development. The proximity of networks and the frequency of interactions were observed to lead to productivity efficiencies and facilitate new insights, a valuable source of dynamism and sustainable growth. Notably, high-growth cities were found to possess high stocks of network and social capital. The importance of the accumulation of collaborative and cooperative alliances are considered to lead to heightened productive capacities and competitiveness. Indeed, collaborative network dynamics were found to act as a crucial asset that would have a positive influence on the performance of business networks and productivity, through the facilitation of social capital and innovation.

The subsequent chapter provides an overview of the selection and suitability of the methodological choices used to explore the research aim and question to inform the thesis' theoretical framework.

CHAPTER 3

RESEARCH METHODOLOGY

CHAPTER 3

Research Methodology

3.1 Introduction

This chapter presents an overview of the research strategy used to inform the study. This section initially considers the appropriateness of the philosophical stance underpinning the investigation; then, the rationale for each stage of the research design and data collection process specifically deployed to address the research aim and questions is laid out. The final section explains and discusses the techniques adopted to organise and analyse the research data and the ethical considerations and validity of the research design are considered.

This chapter is structured as follows: the first section considers the appropriateness of the philosophical stance underpinning the investigation. The research explores the influence of contextual variations in the performance of entrepreneurship in urban contexts rooted in a critical realist paradigm and correspondingly employs an exploratory mixed method approach. Then, the rationale for each stage of the mixed method research design and data collection process specifically deployed to address the research aim and questions is laid out. The research adopts a multiple case study approach to acquire an understanding of the complexity of the theoretical concepts under study in Birmingham, Bristol and Cardiff. The investigation consisted of two stages of data collection, a structured business survey questionnaire administered to Knowledge-Based Firms (KBFs) and semi-structured interviews with public and private stakeholders. Throughout the chapter explains and discusses the techniques adopted to organise and analyse the research data and the ethical considerations and validity of the research design are considered.

3.2 Philosophical Stance

3.2.1 A Critical Realist Stance

This study was developed in line with a critical realist perspective. The philosophical stance and researcher's positionality guide the context, purpose, and expectations of the study (Kincheloe and Berry (2004:5). The critical realist perspective supports a qualitative research approach aimed at going beneath the surface to facilitate an in-depth understanding of the social structures, mechanisms and

complexities of urban economic development; more specifically for the purpose of addressing the research questions, how the actions of agents and institutions shape entrepreneurial business behaviours. This approach is especially relevant due to its compatibility with a mixed method research approach as, “*it is expected that gaining knowledge in any particular situation will require a variety of research methods*” (Sayer, 1992, 2000; Mingers, 1997, 2001, 2004:100). There are numerous examples of empirical critical realist studies, particularity in urban geography (Landry, 2000, 2006; Florida, 2002; 2012) and economic development (Fleetwood, 1999; Lewis, 2004) wherein case study and interview approaches have been identified as a suitable strategy (Sayer, 2000).

A critical realist approach holds that social reality exists independent from an individual’s experience, knowledge and cognition (such as human perception, constructions, imagination or language) (Lopez and Potter, 2001:28; Greener, 2011:6). It establishes we are only able to fully understand the social world when individuals recognise the existence of deep structures, mechanisms and unobservable events that exist apart from our consciousness (Bashkar, 1989). The perspective seeks to document structures shaping social situations and the actions of individuals and organisations, going beyond observable ‘facts’ that could be illusions, to investigate the underlying laws and mechanisms (such as formal and informal institutions), behind those events behaviours and discourses. This study seeks the acquisition of rich in-depth knowledge in conjunction with the exploration of the complex dynamics of urban institutional settings, to adequately facilitate descriptive and exploratory knowledge on conditions that either promote or impede city dynamics. This perspective is especially relevant due to its key concerns with causality and the identification of causal mechanisms; it encourages both a description of the entities involved in the phenomenon and seeks an explanation of the causal mechanisms underlying interactions (Lopez and Potter, 2001:11).

Ultimately, this approach aims to empirically identify and understand the objects under study such as “entrepreneurship” and “networks” that exist and act independently of the observer. Accordingly, research informed by this perspective acquires a greater explanatory power and representation of the phenomenon, to inevitably shape knowledge and engage with a process of critical theory building (McLennan, 1989:3; Ackroyd and Fleetwood, 2000:15). A distinguishing feature of critical realism is its primary motivations, “*to [critically] explain the relationship between experiences, events and mechanisms*” (Jeppson, 2005:5), and the emergent interaction between these, across a stratified reality (Easton, 2009). According to the critical realist philosophy there are three related overlapping realms (see Appendix 3.2) Hence, to understand reality it is crucial to examine the experiences of individuals, the events they experience, and the underlying structures and mechanisms that make up the social world (Gadamer, 1989; Sayer, 2000; Dobson, *et al.* 2007; Wagenaar, 2011:264).

3.3 Research Design and Mixed Method Approach

This study has taken a largely qualitative research approach to the collection of the data, its analysis and interpretation to comprehensively inform the research aim and questions (Yin, 1989). The qualitative design was developed in accordance with the review of literature and explored via the online structured business survey and semi-structured stakeholder interviews, while a quantitative element has been used when interpreting, quantifying and analysing the online survey results. The researcher acknowledged that there are on-going discussions and debates concerning the type of data and research that is most appropriate and has the greatest potential to strengthen and enrich the study, its validity and scientific rigor (Creswell and Plano, 2011). Discussions of the two opposed paradigms (qualitative or quantitative) cannot be exhaustively explained within this section, though the suitability of the approaches taken will be discussed it is not the intention of this study to provide a comprehensive review of the qualitative versus quantitative debate.

3.3.1 Rationale for a Mixed-Method Approach

The research approach has taken a ‘pragmatic’ rationale governed by ‘what works’ to inform the research aim and questions rather than the epistemological perspective (Dewey, 1920; Tashakkori and Teddlie, 2003; Dewey, 2008). The researcher holds the view that the use of methodological techniques can be considered and understood as primarily technical, and not necessarily philosophical. The rationale for combining methods stems from “*the basic and plausible assertion that life is multifaceted and is best approached by the use of techniques that have a specialised relevance*” (Fielding and fielding, 1986:34). Thus, this study embraced a mixed method inquiry to focus on approaches best suited to inform the research problem at each stage of the research cycle, to access a breadth and depth of data. It was the view to explore fundamental issues concerning the role and influence of the context, institutions and networks on entrepreneurship, to create a solid foundation of knowledge to inform the research analysis and its conclusions (Cochrane, 1998: 2130; Hair, *et al.* 2003; Creswell and Plano Clark, 2007; Yin, 2009).

Together with numerous social and urban studies (Creswell and Clark, 2007; Florida, 2012; Storper, 2010) a combination of data collection techniques and analysis have been adopted to obtain an in-depth understanding of the research phenomenon in its specific context (Fielding and Fielding, 1986; Arksey and Knight, 1999:24-28; Creswell, 2003; Clark and Creswell, 2010). Qualitative and quantitative methods offer the procedures and processes to provide unique insights into the multifaceted dimensions of urban economic development. It has been increasingly acknowledged that, “*the differences between types of data can be as illuminating as their points of coherence*” (Fielding and Fielding, 1986:31), each

technique has its specialized and distinct relevance in representing a different dimension of the research questions (Fielding and Fielding, 1986:34). The study follows a three-stage research design similar to what Creswell (2009) termed a ‘sequential explanatory design’; the first stage involved a review of relevant policy documents; the second stage was characterized by an analysis of qualitative and quantitative survey data; this is followed by a third stage which involved the collection of qualitative semi-structured interview data. Qualitative research is inherently multi-method in focus (Flick, 2009), the combination of multiple data sources and evidence is important when combining a variety of knowledge sources, expertise and perspectives around the same case or setting (Cochrane, 1998: 2130).

As asserted by Yin (2009), a mixed method research approach is known for its ability to understand the unique contexts within which the research and its associated dynamics exist, particularly useful when exploring entrepreneurial ecosystems. It is the intention to understand the nature and complexity of unique settings, to then unpack the particulars of these contexts to acquire a depth of understanding (Patton, 1987, cited in Merriam, 2009:14). Hence, qualitative methods of investigation are particularly suitable to study the research phenomenon within its specific context, to make discoveries and observations that contribute to the development of empirical knowledge (Baxter and Jack, 2008). A combination of multiple methodological practices and empirical evidence from a range of cases, businesses and stakeholders intend to capture the multiplicity of actor perspectives. To, ‘explor[e] and understand the meaning individuals or groups ascribe to a social and human problem’ (Creswell, 2009:4), to ensure validity and rigor is maintained, and problems of anecdotalism are mitigated (Bryman, 1988:77; Denzin and Lincoln, 2005:5). The research adopts a quantitative approach in the formation of the structured survey questions, specifically designed to give standardized answer categories with a focus on obtaining numerical data interpreted with statistical measures, while the survey has also included open-ended questions. The aim was to collect the most relevant and insightful data to evaluate the phenomena to show institutional and context-based variations in entrepreneurship, business satisfaction and business links (Aliaga and Gunderson, 2000:1; Patton, 2002).

3.4 The Case Study Approach

3.4.1 Application and Justification

This section provides a justification of the rationale of the research design and an overview of the selection of each of the three case studies. The research adopts a case study approach to acquire context specific insights and an in-depth understanding of the theoretical concepts under study. As argued by Feagin, et al. (1991) and Eisenhardt’s (1989) a case study approach is widely used to better understand and theorise the phenomenon in its unique contextual setting, cases can be selected to comprehensively examine or document variations in theoretical conditions and understand wider forces operating in

differing contextual settings. A multi case-study approach provides the opportunity for the researcher to obtain a comprehensive understanding of the factors affecting urban economic development in varying localised contexts, “*the in-depth study of instances of a phenomenon in its natural context and from the perspective of the participants involved in the phenomenon*” (Gall, et al. 1996). It is of significant importance to the research aim and questions to be able to explore contextual differences in institutional settings, societal, entrepreneurial and innovative cultures to provide a broader understanding of the complexity of the multi-dimensional phenomenon.

In the case of economic geography and social science research researchers tend to adopt a single or multiple case study approach to acquire an in-depth understanding of real-life events in each unique case. Suitably, the case study method acts as a heuristic device for understanding the complexities of interdependencies within a contextual setting, to realize what mediates the ‘rules of the game’ to generate a more extensive theoretical understanding. A multi case study approach is particularly appropriate for examining the influence of entrepreneurship and institutions on contemporary urban economic development, an ongoing phenomenon influenced by a number of interrelated forces contextualised in real life contexts (Yin, 2003; Tsoukas, 1989). In this sense the approach is an especially useful methodology for researchers that seek to understand interrelated theoretical drivers (institutions and entrepreneurship) rather than viewing the concepts as isolated phenomenon divorced from their contextual setting, the approach helps to better understand how complex settings can contribute to the phenomenon (Yin, 2009:4; Simons, 2009:107).

The approach facilitates a wide diversity in study design and an in-depth exploration of the research phenomenon within the specifics of its context. Multiple methods of data collection and methods of analysis can be used to capture and explore real-life contexts to illuminate theoretical issues raised in the review of academic literature. The case studies are facilitated through stakeholder interviews coupled with knowledge-based business surveys (Yin, 2003). This study does not seek to compare the case studies due to the uniqueness of each of the contextual settings. Instead the research undertakes exploratory research to produce theory in connection with its context.

3.4.2 The Selection

The rationale for case study selection, as recommended by Eisenhardt (1989), was based on the need to inform the research questions and explore the research phenomenon. The study adopts an information-orientated strategy with the selection of cases made on the basis of suitability and appropriateness (Appendix 3.1). However, due to time constraints the quantity of cases that could be undertaken is limited to within the study’s timeframe for example, it would not be feasible to survey all the major UK cities. Accordingly, the research will explore a selection of the UK’s Core Cities, the economically

largest areas in England, Scotland and Wales outside of London, as the research requires all cases to be a typical instance of economic and competitive interest.

A selection made on account of the positioning of the Core Cities as a significant source of economic activity and growth in the national economy, producing 25% of the nation's economic output and 29% of exports (Demonstrating Delivery, 2017:9; Blake, 2017). The growing devolution of powers and resources established through the City Deal agreements has increasingly transferred a wide range of decision-making and fiscal autonomy from central government to city contexts. This has provided a greater degree of local autonomy over the direction of economic and social policy than was previously possible under the top down policies in place, which offered little diversity and failed to recognize local strengths or resources. This brings the promise of new power and opportunities within cities to work with local people and businesses to tackle low productivity and foster the growth of social capital and long-term economic development. The devolution to cities has become ever more important than ever to address the differing productivity, business growth, wellbeing and spending challenges in each city context. This should help build bespoke packages that support and unlock the full potential of urban economies. Moreover, within a post-Brexit economy the publication of the Governments Industrial Strategy (2017) understood the importance of local places and regional specialisms. This has demonstrated the ten Core Cities are becoming increasingly recognized as central to the UK's future prosperity. Thus, the Core Cities present an opportunity to explore the theoretical underpinnings of the research within distinctive local economies and communities.

The selection of specific cases made from the UK's Core Cities involved an extensive review of UK city rankings based on index and classification categories (such as the 2013 UK Competitiveness Index, 2013 Experian Best Performing UK Town and Cities, 2015 Good Growth for Cities Index etc.), demonstrating the performance of businesses, entrepreneurialism, culture, growth, quality of life and competitiveness (Appendix 3.3). Accordingly, the selection criterion is guided by the theoretical demands of the research aim and questions from which the following contextual criteria was identified:

- I. Varying geographical contexts and population size
- II. Differing institutional contexts
- III. A recognized reputation of differing competitive and economic strengths

Data was collected from June 2016 to March 2017. The researcher collected data in two phases from three Local Authority areas. The first phases involved the distribution of postal and online structured business surveys and the second stage involved semi-structure interviews with key stakeholders in each city.

3.4.3 Birmingham, Bristol and Cardiff

Birmingham, Bristol and Cardiff were selected to deliver new insights into urban contexts, an under-researched area of theoretical interest in the fields of entrepreneurship and institutional theory. The exploration of urban contexts is particularly intriguing as there are limited studies that place focus on multiple city contexts with regard to the role and influence of entrepreneurship in this context. A number of contributory factors were taken into consideration such as the historical background, contextual setting and the wider institutional, economic and entrepreneurial dynamics at play providing a greater contextual understanding of each case study.

Known as England's second city, Birmingham is the largest city outside of London, this makes it the largest of the three-case studies home to over 1.1 million. In addition, Birmingham stands out as an internationally competitive business destination with the largest economy outside of London worth £28.1bn (ONS, 2017). While Birmingham's visitor economy attracted 41.8 million visitors in 2017 (ONS International Passenger Survey, 2017). Bristol is the second largest of the case studies with a population of 463,400 and ranked the eighth largest city in the UK. Bristol is renowned for being a diverse city socially, economically and culturally with areas of extreme wealth and deprivation. The city of Cardiff is the capital of Wales and its economic powerhouse. Cardiff is the eleventh largest city in the UK estimated to have a population of over 361,760 in 2017. The city has experienced a virtual renaissance having carried out major investment in cultural and event amenities. It has transformed its visitor economy attracting more than 20 million visitors to Cardiff in 2016, driving the momentum of the city economy delivering an economic impact of £1.2bn.

With regards to each of the city's institutional composition, in term of the population Birmingham covers Birmingham City Council is the largest local authority in Europe. Welsh Government is the devolved Government for Wales as Cardiff is a devolved administration, and the National Assembly for Wales is the devolved parliament for Wales, which holds powers to initiate primary legislation, vary taxes set by local authorities and scrutinises Welsh Government. Whilst, Birmingham and Bristol are governed by the directly elected Mayors, the Mayor of the West Midlands and the Mayor of Bristol, head of Bristol City Council and responsible for the strategic governance and leadership of the city.

The research recognises that a strong economy is not formed in isolation of its informal environment. GVA alone provides a narrow focus on economic development; instead this study explores the wider dynamics of each context. In terms of informal contexts, Birmingham is widely recognised to have a huge diversity of cultures with ethnic minorities making up nearly a third of the population. Notably it is the fourth most visited city in the UK by foreign visitors and home to major cultural institutions with

international recognition. Comparably, Bristol is consistently rated as one of the best places to live and visit in the UK as a destination of cultural creativity, and while Cardiff is acknowledged as having a strong event visitor economy as discussed earlier however this is not represented in the top UK city rankings.

The capital city of Wales regularly features near the top of surveys for the best cities to live in UK and Europe. The city is ranked joint third for quality of life attributable to Cardiff having a particularly loyal workforce due to the lifestyle afforded to them, there is also recognition that once graduates secure employment they often stay (European Commission, 2016). Bristol is internationally recognised for its vibrant culture and similar to Cardiff features highly on various quality of life surveys, with the 2017 Sunday Times Best Places to Live Guide ranked Bristol as the best place to live in the UK. Similarly, Birmingham also features as a desirable place to live in the UK reported as the third highest-ranking for the overall quality of life outside of London (Mercer, 2019).

From a cultural standpoint, Bristol has a strong history of influential music with a lively arts and diverse music scene, whilst the Hippodrome is reported as the most popular theatre in Britain. Bristol is a city widely recognised as a hotbed of artistic creativity with world-beating festivals and its own unmistakable identity. The city's strong cultural reputation has been a catalyst for innovative diversification and is a fundamental driver of Bristol's urban resilience, inward investment and visitor economy. Commentators reported Bristol's approach to cultural-led partnership and collaborations across the city to be exemplary (Oatley, et al. 1999). Bristol's city's success does bring with it rising residential costs, which is a key challenge in attracting and securing young professionals who are often pushed out into the outer regions. There is an awareness of the importance of Cardiff's creative economy with a focus placed on improving the quality of life and attracting talented professionals and higher value businesses. Most of the cultural institutions in Wales are located in Cardiff with the Wales Millennium Centre recognised as one of the top cultural attractions in the UK. Notably, economic inequality and levels of employment in Birmingham and spatial segregation in Bristol are amongst the highest in the UK. Bristol currently has 42 areas that are ranked in the 10% most deprived areas in England.

3.4.4 Limitations

Despite the advantages of case studies highlighted above one of the main criticisms of case study research is that they provide a limited basis for scientific rigour and as such are not able to reach a generalised conclusion (Tellis, 1997; Yin, 1993). However, for the purpose of clarity it is not the intent of this research to generalise the findings to other cases beyond the case itself, but to identify patterns, challenges and examine the lessons learnt. In the conduct of research, it is possible for the researcher to

influence the design of the study to suit their own unconscious bias, controlling the ‘facts’ to encourage the data to generate the results expected. A further challenge is presented in volume of data accumulated and the difficulties involved in its organisation, integration and analysis.

3.5 Conducting a Structured Business Questionnaire Survey

For stage one of the data collection process a structured online business survey questionnaire was undertaken. The administration of this survey, including its rationale, sample selection, respondents and the data-collection procedure, is discussed below. This section justifies the method, its design and development, and administration. It further discusses the validity and reliability of the questionnaire and its analysis.

3.5.1 Rationale

The main objective of this stage of the research is to obtain data on the critical determinants of firm success within urban environments. Accordingly, a structured business survey questionnaire was undertaken to allow the researcher to gain a general picture of the institutional setting, current practices, and the role and effectiveness of policy in its contextual setting. It served as a ‘listening exercise’ used to acquire crucial insights and investigate respondents’ attitudes, experiences and perceptions towards factors shaping and obstructing their needs. This information was essential in discovering key trends in the views and experiences of a large number of firms. As suggested by De Vaus (1991) and Fink (1995) survey questionnaires are a cost-effective method of studying a large sample population within a relatively short amount of time. They are reliable in acquiring first-hand views, to gain a general picture of the intentions, requirements, and barriers encountered by firms at a fixed point in time.

A structured survey approach is well suited to target a representative sample of firms (Galiers, 1992). However, critics of the method have argued that the approach frequently provides a quantitative “snapshot” of time overlooking explanations of the phenomenon, contributory factors and associated cause and effects. For example, Bryman and Bell (2011) posited that the approach often fails to acknowledge the true nature of social science research and its concern for people as an object of study, often overlooking the unique and unpredictable nature of individuals. Lee Cronbach (1950) presented the issue of ‘personality biases’ in which a wide range of cognitive biases, personality traits or other social factors may influence respondents understanding of keywords, or the way individuals behave and interpret the world around them. A further consideration acknowledged by Johnson and Fendrich (2005) is a matter of ‘social desirability bias’, a tendency for respondents to present themselves and the

company they are affiliated to in a manner that will be viewed favourably to avoid criticism and negative attention, to conform to socially accepted expectations or to acquire social approval (Huang, *et al.* 1998; King and Brunner, 2000:81). Consequently, as the researcher relies on the truthfulness of respondents to draw reliable findings (Huang, *et al.* 1998) the impact of bias on the validity of the questionnaires results has been considered in the development of the instrument; to minimize items that could encourage issues of bias.

The information collected in the business questionnaire survey is both quantitative and qualitative, a purposeful design that sought to add richness to acquire an in-depth understanding of: human behaviour, a general business consensus and, more importantly illuminate factors that could explain the behaviour and characteristics in particular contexts at a fixed point in time. The design of the questionnaire considered a number of authors' views (Bryman, 1988; Corbin and Strauss, 2008; Gbrich, 2007; May, 2002; Silverman, 2006) who expressed the need for a qualitative research paradigm under the premise that, "*not everything that can be counted counts, and not everything that counts can be counted*" (Cameron, 1963:13). In this regard, the survey required respondents to assign *qualities*, rather than *quantities*, to variables of interest to provide a, detailed understanding of social situations in their context that could otherwise be lost in a purely quantitative approach (Richards, 2005:34; Silverman, 2006: 56). Admittedly, qualitative data can be difficult and time-consuming to sort, code, measure and quantify nevertheless the exploratory nature of qualitative research can uncover valuable attitudes, detailed descriptions, expose behaviours and interactions, illuminate gatekeepers and key actors, and perspectives that have proven difficult to access through traditional quantitative approaches (Brannen, 1992; Patton, 2000; Merriam, 2002). The main objective of this stage is to gauge the views of local businesses on issues pertaining to their institutional and contextual setting. However, the research acknowledges that there are multiple socially constructed interpretations made by individuals that are in flux and constantly transforming and changing over time (Merriam, 2002:4).

3.6 Questionnaire Design and Development

3.6.1 Rationale for the Questions

A questionnaire is a frequent instrument employed in survey research. However, its design can be challenging and time consuming. The accuracy and success of a survey is dependent on its careful consideration and design to ensure that it can truthfully measure respondents' experiences, behaviour, opinions, and attitudes (Ortinou, Bush & Hair 2009). For this reason, the questionnaire was designed in accordance with the review of literature that explored the theoretical framework for networks, entrepreneurialism, informal and formal institutions, and urban economic development with the intent

to adequately capture the information required to inform the research questions. Accordingly, it must be noted that each question was constructed or adapted from the literature to specifically accommodate the needs of this study. The researcher followed best practices and was informed by previous questionnaires such as The Kauffman Firm Survey (2011) prepared by Alicia Robb and Joseph Farhat, Good Growth for Cities (2015) prepared by PwC and Demos, the London Business Survey (2016) prepared by Confederation of British Industry (CBI) and Central Building Research institute (CBRE) and others, used to guide the design of the questions.

3.6.2 Question Wording and Content

The wording of the eleven survey questions has been specifically designed to avoid the use of vague expressions and preconceived assumptions to heighten the reliability and validity of responses. The questionnaire design has used a series of open-ended and scaled response closed-ended questions, the latter limited respondents' responses to a specific set of carefully designed pre-existing choices informed by the literature. These often included the use of attitude statements, a short statement that expressed an opinion or judgment, in order to explore the experiences, attitudes, and opinions of participants (Oppenheim, 1992:174). Scaled closed-ended questions are considered to have higher response rates due to the methods ease of use and speed of completion, the required investment in time and effort to produce a thorough response to an open-ended question has been found to discourage response rates in online survey questionnaires (Gendall and Menelaou, 1996; Vehovar and Manfreda, 2008; Sue and Ritter, 2011). The disadvantages of closed questioning include the limited amount of information the questions can gather, a lack of impulse answering, and issues of bias that might arise from researcher advocated response categories.

Respondents are required to select a response category that is the most similar to their true response even though it may not exactly reflect the answer respondents would want to give. The use of constrained answers does not allow the respondent the opportunity to reveal an alternate more personal response; this might force the respondent to give an answer they otherwise had not considered (Kiesler and Sproull, 1986; Fowler, 1995; Gendall and Menelaou, 1996). Further to this, it is not known whether the options given have confused the respondent as there is no way of assessing whether or not the questions asked have been understood. To address this, when appropriate, open-ended questions were placed after closed-ended questions to allow participants to express their true and spontaneous responses, permitting unforeseen findings to be raised (Foddy, 1993:127; Ghauri et al., 1995). The use of open-ended questions has proven advantageous due to their ability to ask 'why' questions to probe the issues that are most important to them, investigate the strength of their opinion, and understand deviant responses to closed questions to acquire a greater depth of response, and the opportunity to reveal matters that would have otherwise been overlooked by the researcher. Further detail can be found

in in Appendix 3.4, including the cover letter (Appendix 3.5), business survey (Appendix 3.6) and accompanying information sheet (Appendix 3.7).

3.6.3 Sequence of Questions

A self-designed method is largely reliant on a well-structured, concise and easy to follow questionnaire that has a clear structure. The main benefit of self-designed methods is the ability to personalize the complexity of the questions and the quality of data captured in the process. The questions unfold in a logical progression developed from the review of literature dealing with institutional, business and entrepreneurial matters. The instrument sought to challenge the literature and its fundamental arguments to adequately contribute towards the achievements of the research questions. In terms of the questionnaires overall structure it commenced with background information and simple themes to establish rapport and capture the participants interest to encourage participation. The schedule then progressed to cover more complex issues on the formal institutional setting, the business community, informal institutional settings and general comments to gradually stimulate question answering and probe theoretical links. The instrument comprised of eleven quantitative and qualitative questions (Appendix 3.8) organized into five sections, these included:

Section 1: Business Profile

Section2: Locational Questions

Section 3: Local Government Context

Section 4: Local Business Community

Section 5: Quality of Place

3.7 Sample Design

3.7.1 Sampling Strategy

The criterion for selecting survey questionnaire respondents was framed by the need to explore and inform the research questions. The main focus of the study is to understand the role and influence of entrepreneurship, networks and institutional settings in urban economic development. To do this it is instrumental to explore the views and experiences of individuals considered to be ‘knowledgeable’ about the subject under examination. According to Dmitry VolKov and Tatiana Garanina (2007:539-545), forms of intangible capital associated with entrepreneurial ecosystems have become the locomotive of Knowledge Based Industries (KBIs), which is the focus of this section. As such, Knowledge Based Firm’s (KBFs) were identified using Thompson’s (2007) cluster of Standard

Industrial Classification (SIC) codes (Appendix 3.9). It was anticipated that the companies chosen (identified as KBFs based on their 2007 SIC code) placed an importance on intangibles such as knowledge, innovation, creativity and experience, rather than “traditional” non-physical sources of tangible capital. For this reason, samples were selected with the view that managers, directors and seniors of KBFs would be able to provide the information required. The OECD (1999) definition of KBFs is employed which includes all high-technology, manufacturing and knowledge-based service sector activities such as ICT, computer technology and telecommunications, financial and business services, media and broadcasting. It was the intent to capture the experiences, activities, attitudes, and barriers faced by knowledge-based firms. As such, managers and directors of KBFs were considered to be those that would have the most comprehensive knowledge and experience of the characteristics, local institutions and strategies that have shaped the success and downfall of knowledge-based firms.

Due to the nature of the study’s design a sampling method was required to capture the views of knowledge-based firms. At this stage it was the aim of the research to identify a sample population that consisted of managers, directors and seniors in the knowledge-based sector, they were judged to be of interest to the researcher on the basis that they were deemed most likely to produce informed insights, useful observations, and resultantly valuable data to inform the research questions. Probability sampling was deemed inappropriate, as it could not ensure that the knowledge-based sector would be represented, there were also issues of bias that might arise from random and systematic sampling. In addition, a representative sample was not selected for reason that it would not have been possible to obtain a significantly large enough random sample to formulate generalisations due to the seniority of the target informants and time constraints. Accordingly, purposive sampling a non-probability sampling method proved to be the most appropriate approach for informant selection. The advantage of a purposive sampling method is that respondents were not selected randomly. Instead it allowed the researcher to target directors and managers in knowledge-based firms. This should not be understood as a limitation but critical for the research, since the survey was designed to be informative, as an explorative study. Furthermore, this sampling technique resonates with empirical studies specializing in institutional settings and entrepreneurialism (Audretsch and Feldman, 1996; Smallbone and Welter, 2001; Acs and Audretsch, 2005; Khamalah, 2007), where research has proven to have a demonstrable contribution to the development of legislation, conceptual and empirical work.

The sample size chosen was dependant on the need to obtain a true picture of the perceptions and experiences of knowledge-based firms. The sample sought a balance between the point of saturation and a statistically valid sample limited by the availability of listed contacts and time. In total 1,600 Birmingham, 1,418 Bristol, and 1,333 Cardiff knowledge-based firms were initially contacted, from which 214 responded. The size of the data sample was initially decided prior to data collection deemed to be sufficient for an explorative survey and altered during collection, in direct rejoinder to low (4.9%)

response rates, with the intention of obtaining a larger sample of participants. Due to the limited knowledge-based firms available on FAME for Cardiff, and a significantly low response rate for both Birmingham and Cardiff a postal survey was executed.

Table 3.1: Sample Selected

Local Authority	Total contacted	Total non-responses	Total responses	Response rate
Birmingham	1,600	1,517	83	5.2%
Bristol	1,418	1,346	72	5%
Cardiff	1,333	1,274	59	4.4%
Total	4,351	4,137	214	4.9%

3.7.2 Forecasting Analysis and Modelling Environment Database

To identify respondents a suitable database source was identified, The Forecasting Analysis and Modelling Environment (FAME) was deemed appropriate as it is updated daily and has long been recognised as a market leader in data storage and management. This database handles a wide range of company account details and information that can be requested by a user-defined research strategy delivered with unparalleled speed. Through the use of the FAME database a sample of knowledge-based firms were set up using a researcher-defined five step criteria, as follows:

Step 1: A postcode search strategy was set up to specifically select firms based on their trading address i.e. those that were located within the postcode boundaries of: (i) Birmingham, (ii) Bristol, and (iii) Cardiff's Local Authority.

Step 2: The search strategy involved the selection of “all active companies (not in receivership nor dormant) and companies with unknown situations”. Later on, after Step 4, Company House was used for the first 30 companies to prove the reliability of this research filter to see if the selected firms were still active, this proved true.

Step 3: The results were then randomised to avoid bias.

Step 4: From this list, the researcher then individually selected firms with SIC 2007 4-digit codes for knowledge-based firms (Appendix 3.9).

Step 5: A contact email address from the firm’s directors or managers was identified and recorded via FAME, web-based business directories or from the firm’s website. For ease of distribution of the survey, which was hosted online, the sample initially targeted firms that had readily available email addresses.

Table 3.2: FAME Search Strategy (FAME, 2016)

Local Authority Research Strategy	No of registered trading address within postcode search strategy	All active companies (and those with unknown situations)	With 07 Primary SIC Codes	No of KBIs in each city (firms with 07 Primary SIC Codes)
Birmingham	326, 729	104,062	14,618	14,618
Bristol	120,302	42,257	8,688	8,688
Cardiff	65,369	20,394	3,570	3,570

3.8 Piloting the Survey Questionnaire

The researcher administered a four-stage pilot study (Appendix 3.10), which played a crucial role in thoroughly testing the questionnaire prior to dissemination. The questionnaire underwent numerous stages of alteration and improvement to test the validity, and eliminate any problems with the instructions and design of the instrument before it was distributed to its target audience, directors and managers of knowledge-based firms (Moser and Kalton, 1985; Robson, 2002; Malhotra, et al. 2006; Zikmund, Babin & Griffin 2010). According to De Vaus (1993:54), Baker (1994: 182-3), Polit, et al. (2001:467), Sekaran (2004), and Bryman (2008) a pilot test is a crucial element that can act as a feasibility study to assess the adequacy and usefulness of the research instrument. The pilot directed attention to potential practical issues and uncovered alternate forms of data that should be collected and provided valuable insights into the type and range of answers that might be provided, leading to an improved knowledge of the context in which the research is situated.

3.8.1 Administration of the Business Questionnaire Survey

For efficiency and effectiveness this study has enlisted the help of the computer-assisted data collection software Qualtrics to design and administer the survey via e-mail. The development, design and testing of this computer-assisted e-survey method was a long and multifaceted process. However, due to the

unique characteristics of the study population (it being a large sample size, location bound and sector based) the use of this particular instrument to administer the survey was used to increase the efficiency and speed of the data collected and the capture process, to assist organizational procedures, sense making, and editing. However, online methods of data collection do not guarantee success, and an increase in time efficiency may compromise the quality and depth of the data and lead to related errors and higher roll-off rates (Malhotra, 2008). In particular, while the ease of data entry and convenience allows respondents to answer the survey questionnaire in their own time and pace, some authors warn that the instant access and ease of use of online data collection surveys may result in temptations to ‘give matters less careful consideration and to institutionalise bad practice’ (Lee, *et al.*, 2008). To counter this a cover letter was presented to all respondents prior to the survey to seek their agreement to participate and to explain the purpose and relevance of the research, and how it would benefit their interests to encourage greater cooperation. The survey procedure is detailed in Appendix 3.11.

3.9 Survey Analysis

The survey was analysed using descriptive statistics, primarily cross tabulations. Key variables were explored to give background across each of the case study areas. Specifically, the analysis focused on KBFs perceptions of the performance of key factors in their business environment. These key factors were institutions, entrepreneurship and networks. Within the statistical analysis these were defined according to the findings of Chapter 2. As the survey had a reasonable response rate given the difficulty of accessing KBFs, the statistics discussed provide a useful background to the themes drawn from the qualitative analysis. However, as the response rate varied somewhat across the case study areas the base for each variable discussed has been included. In addition, significance testing has not been undertaken for this analysis, meaning that the results cannot be generalised to the wider population.

3.10 Issues of Validity and Reliability (Limitations)

It is crucial to recognise the limited reliability of Standard Industrial Classification (SIC) codes determined by the principal economic activity of a unit. The codes are self-assigned often with limited rigour. Business activities commonly fall under a range of codes which can lead to inaccuracy. The nature of KBFs business activity is adaptive and evolving. In some cases, businesses purposively select codes to aid performances ratings as agencies often compare the performance of businesses within the same SIC code.

It is crucial that the questionnaires use of words and phrases are 'sensitive' to their target audience to avoid causing offence by use of terms that could be viewed as insensitive, offensive, bias or that could provoke an emotional reaction. A further issue to consider in the wording of the questionnaire is the challenge of accounting for 'social desirability bias', while research has shown that the risk of this potential bias is significantly lower when the researcher is not present, loaded or slanted wordings can 'lead' respondents to understate their personal views and provide desirable and inaccurate responses (Fowler, 1995; Payne, 1980).

3.11 Semi-Structured Stakeholder Interviews

Following on from the online structured business survey, qualitative semi-structured interviews formed the third stage of the data collection process conducted with key stakeholders in each of the three-research defined case study areas. This section will discuss the key stages of the interview data collection process: interviewee selection, administration and design, coding and analysis.

3.11.1 Justification

As presented in various scholarly works, interviews are commonplace within the economic development literature. Recent work in the urban economic development field is commonly based upon focused interviews, or close dialogues with industry and stakeholder correspondents (Porter, 2010; Querejeta, et al. 2008). As a qualitative method, focused interviews facilitate an in-depth study of the influence of entrepreneurship, networks and institutional settings on urban economic development with industry and stakeholder correspondents, collecting rich data within the time constraints of the study without imposing pre-existing conceptions on the research setting (Patton, 2002).

Qualitative interviews are adopted widely across the research discipline due to their ability to explore and draw on theoretical perspectives in specific contexts, by systematically investigating the constructs of theory through focused and probing questions. This posed an inherent advantage in determining the extent to which formal and informal interventions enable or impede entrepreneurial ecosystems. As discussed in varying scholarly works, interest in qualitative research has been widely praised for obtaining an unexplored depth and breadth of important social issues that are otherwise unobservable matters (Rubin and Rubin, 2005; Bettany and Woodruffe-Burton, 2009; Yin, 2009). In this case, entrepreneurial ecosystems and associated institutional and network dynamics within specific urban contexts. Where in contrast, quantitative studies have been known to provide limited insights in accounting for understandings and explaining patterns, and the connections between operating

dynamics. Unlike a structured interview, a semi-structured interview is shaped by a set of loosely structured iterative, open-ended questions to address a clear list of issues and subsequent questions with latitude, to explore and unpack the phenomenon through the eyes of the respondent without imposing pre-existing expectations (Patton, 2002; Hesse-Biber and Leavy, 2006:125).

3.11.2 Interviewee Selection

The rationale for the selection of stakeholder participants was by virtue of their ability to offer knowledge, expertise and various insights through their roles and responsibilities relevant to the themes of this research (Mason, 1996). The researcher considered the needs of the study, from which importance was placed on conducting stakeholder interviews to garner local knowledge through their views, experiences, and recommendations in addition to the issues and concerns raised. As such, the selection was made on the basis that individuals being interviewed were key elite actors by virtue of their professional roles: who could provide knowledge on the decision-making process, the design and implementation of policy and initiatives, were gatekeepers of information flows and had direct experience relating to the phenomenon. The acquisition of the information sought explored the role of key stakeholders and was transformed to generate common themes to develop a needs summary; that would assist business growth through the development of recommendations for future policy and actions. It was the intent to build a comprehensive understanding of the research phenomenon from a multitude of perspectives to avoid bias. The suitability of the interviewees in this study was identified based on their occupational positions and their recognition as having a significant role within the urban economic development of their jurisdictions. To satisfy the needs of this study four key interview groups were identified in order to allow the researcher to explore and understand how institutions, entrepreneurial and network capital are having an influence on urban economic development, the particulars of the four key reference stakeholder groups are included in Appendix 3.12.

3.11.3 Sampling Strategy

Semi-structured interviews, which typically lasted between an hour and two hours, were commonly conducted at the workplace of the interviewee in Birmingham, Bristol, and Cardiff. In total, 43 interviews were conducted, with public and private stakeholders between October 2017 and March 2018 (Birmingham-n10; Bristol-n15; Cardiff-n18). The sampling procedure taken for this research stage was not random since the stakeholders interviewed were specifically chosen on the basis of their occupational position and relevance to the research (Patton, 1990; Creswell, 2009:178). Instead a purposive sampling technique was initially adopted to identify and select key informants through a secondary desk-based search strategy, through data sources such as local authority and community

websites, government documents, and publicised collaboration endeavours to obtain initial contacts within the four pre-determined stakeholder groups listed in Appendix 3.12 (Bryman, 2001; Kaplan, 2001). Whilst the various secondary data sources mentioned proved helpful in suggesting some potential interviewees, more were required, to do this the interview strategy was amplified through the use of a 'snowballing sampling mechanism' with the view to identify promising 'hard to reach' insiders whose details were not publicly available to ensure the most suitable stakeholders were selected for interviews (Cochrane, 1998; Padgett, 1998:53). To overcome difficulties in identifying further contacts the researcher attended networking events such as conferences, presentations, and community events to network and acquire further points of contact (Patton, 2002).

In addition, as the interviews commenced contacts were used to identify potential key informants, gatekeepers and/or knowledgeable insiders to generate other promising respondents for the study who had insider knowledge, experience and expertise in the research area (Padgett, 1998:53). The number of interviewees selected was determined by the need to capture sufficient, qualitative information from key insiders and knowledgeable informants within the available timeframe. The sampling frame required a sufficient number of participants in order to achieve 'saturation point' (Strauss and Corbin, 1998; Robson, 2002; Richards, 2005; Hesse-Biber and Leavy, 2006) with the interviews continuing until theoretical saturation was reached, a point where it becomes evident that no new data was felt to be emerging from additional participants, research discussions were well developed and links have been well established (Lofland and Lofland, 1984; Strauss and Corbin, 1998). As a result, the saturation sample for this study, with 43 interviews in total, was deemed sufficient to acquire a 'saturation point' (Hesse-Biber and Leavy, 2006), wherein respondents were reiterating what others had already affirmed (Lofland and Lofland, 1984).

3.11.4 Interview Design: Question Formulation, Interview Format, Style and Content

The design of the interviews was based on an interview guide approach. Prior to the conduct of the semi-structured interviews topic guides were prepared for each of the stakeholder groups, this protocol served to provide the interviewer with a set of guiding topics and core questions to be covered (Robson, 2002). The content was based on a combination of sources that explored the key issues raised and themes identified in the review of academic literature, relevant local policy and initiatives, and the business survey results completed in the first phase of data collection.

The design of the interview guide followed the guidance of Banaka (1971), Fontana and Frey (2005), Valentine (2005:111) and Yin (2009). With regards to the formulation of the interview questions a series of topic themes and pre-determined open-ended questions were designed for each stakeholder

reference group to allow for a conversational questioning style and responsive research strategy, this allowed for a two-way exchange where interviewees had the freedom and flexibility to stray from the specific topics listed (Rubin and Rubin, 2005; Valentine, 2005:111). Emphasis was placed on giving informants the space and flexibility to discuss and address issues beyond the interview guide to allow for the construction of an authentic narrative (Silverman, 1993:91; Dunn, 2005; Clifford, *et al.* 2010). It was expected that due to the exploratory and descriptive nature of the study semi-structured interviews would result in rich, detailed descriptions and empirical information on the relationship dynamics operating. However, it has also been posited that in allowing interviewees greater freedom in their responses this could reduce the comparability of interview data (Kitchin and Tate, 2000: 214). Thus, a flexible and responsive interviewing style was deemed important to remain structured enough to address the research questions while able to explore the: “what, when, how, why, or with what consequences something happened” (Rubin and Rubin, 2005:11). Accordingly, for the purpose of this study a topic guide approach was considered the best way to obtain authentic, high quality, focused responses in a short timeframe (Flick, 2006).

3.11.5 Administration

All participants were informed at the outset that interviews would be audio-recorded for the sole purpose of transcribing the data that no personal identifying information would be used, and all data would be presented as anonymous to concur with the best practice requirements of this study. Prior to the conduct of the interviews the researcher conducted a pilot of the initial interview guide on seven purposively selected respondents (two professors, two peers and three research professionals) to validate the effectiveness of the guide with regards to the appropriateness of the terminology used, to identify areas of ambiguity and to ensure the guide would elicit a wealth of data that would inform the primary research questions. Respondents were encouraged to comment on areas of confusion and their overall impressions of the loosely structured research instrument, as well as to make general suggestions for improvement. It was the intent to assess the practicality, clarity and functionality of the guide. This testing resulted in some questions being refined to ensure clarity as well as removing questions that appeared to be duplicated. Once the interview schedule was fully refined following the pilot interview feedback, the researcher began the interview process. The interviews commenced with a brief introduction and explanation of the study and its research objectives. At the start of each interview, the researcher made note of the experience participants had, work affiliations and related fields to obtain a sense of their contextual experience and place specific expertise. All interviewees were physically shown the research brief (research aims), handed a copy of their consent form and assured that discussions would not be attributed to individuals but occupational positions and treated with

confidence. The interviews were directed towards three areas of theoretical interest (institutions, entrepreneurship and networks) unpacked further in Table 3.3.

Table 3.3: Thematic exploration

Connections deduced from guiding theoretical framework	Interview themes representing theoretical framework
Business Environment	<ul style="list-style-type: none"> • Quality of business environment. Public sectors main priorities and activities, particularly in the sense of those factors which shape the quality of the place and the environment in which businesses can thrive;
Entrepreneurship and economic development	<ul style="list-style-type: none"> • Innovative entrepreneurship and its significance for the development of cities; • Entrepreneurship and its impact on cities and individuals; • Entrepreneurship as an achievable aspiration (accessibility);
Entrepreneurship and formal institutions	<ul style="list-style-type: none"> • Actions and influence of the public sector to positively promote entrepreneurship; <p>Formal and informal promotion of entrepreneurship in cities;</p>
Networks and formal institutions	<ul style="list-style-type: none"> • The promotion of business connections by the public sector; • The promotion and existence of cities as collaborative and cooperative environments;
Networks and Informal institutions	<ul style="list-style-type: none"> • Business communities, social capital and network capital; and
Urban economic development	<ul style="list-style-type: none"> • Key challenges obstructing policies from effectively shaping the development of cities.

The interview invitation cover letter and the interview schedule can be found in Appendix 3.13 and 3.14.

3.12 Transcriptions, Coding and Thematic Analysis

In relation to the analytical process, the qualitative analysis of this research was predominantly inductive informed by grounded theory (Glaser and Strauss, 1967) involving the progressive identification and integration of categories to construct a theory or model through the systematic collection and analysis of the raw data (i.e. data-driven coding), rather than distorting the data through the preconceived views of the researcher (Marshall and Rossman, 1999). Grounded theory is particularly useful as it provides an explanatory framework to help understand the empirical data collected by the researcher; it offers flexible ‘coding procedures’ to ‘help provide some standardization and rigor’. The theory enabled the researcher to probe and identify emerging themes and make critical in-depth assessments of participants’ comments through the use of open coding and axial coding to extract, process and collapse as many themes as possible to produce a theory pertaining to the research phenomenon (Strauss and Corbin, 1998:13; Charmaz, 2000). As the theory suggests the empirical interview data collected needs to undergo certain processes or procedures with the view to develop a theory about a specific phenomenon, rather than beginning with a theory at the outset and then seeking to prove it throughout the research process (Strauss and Corbin, 1990:23).

3.12.1 *An Integrated Approach*

The literature (Weitzman, 2000; Creswell, 2009) presents extensive discussions advocating the benefits of using assistive computer software in the writing up, editing, coding, categorising and sorting, storage, search and retrieval, connecting of themes, memoing, content analysis, data display and graphic mapping to aid the process of qualitative data analysis. Accordingly, the researcher strongly considered the use of data analysis software (CAQDAS) packages such as Nvivo designed for rich qualitative text. However, despite the advantage of Nvivo in supporting the research process and in saving the researcher extensive time, the software, according to Bauer and Gaskell (2000:55), “cannot do the intuitive and creative work that is essential part of qualitative research”. Instead Layder (1998) and Bauer and Gaskell (2000:55) contended that the development of meaningful ideas, theoretical connections and intellectual efforts are a result of the researcher becoming familiar with the transcripts and making ‘links’ between the raw data and important segments of the theoretical review. Weitzman (2000) and Rodik and Primorac (2015) warned of the ‘false hopes and fears’ attached to the reliance on the use of computer software in research to facilitate the meaningful analysis of interviews (see Appendix 3.15)

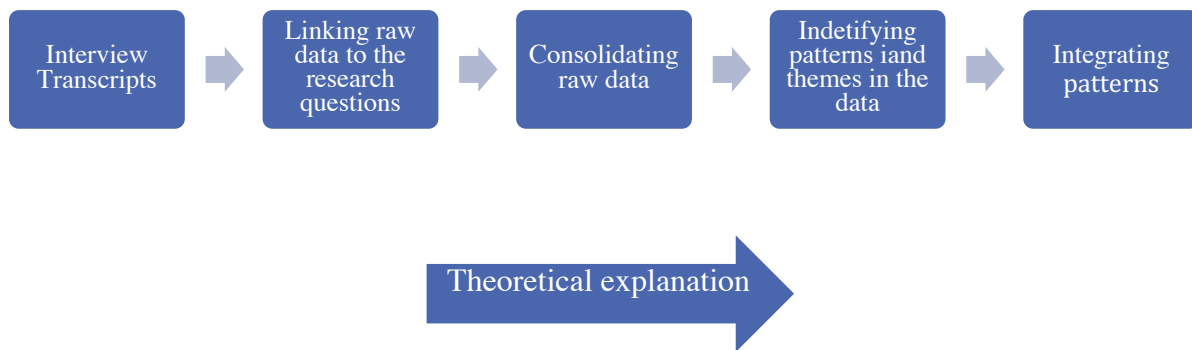
Table 3.4: Summary of the integrated analysis process

Stage 1	Adopted a detailed and meticulous <i>line-by-line</i> pen and paper process of analysis. The researcher followed Strauss and Corbin's (1998:77) advice by using 'sensitising questions' based on the aims of the study, such as "what are their policy priorities". This identified promising analytic routes, important quotations, categories, and properties highlighting key themes throughout.
Stage 2	The subsequent coding phase involved a <i>focused coding</i> approach whereby the researcher selects codes to represent the interviewee's voice. The data produced was coded in a variety of colour codes with memos and theoretical observations made on post-it notes. Memos or otherwise known "theoretical memos" were used to record and support the development of categories to provide a record of the researcher's thoughts, key concepts, ideas and connections throughout the analysis process. Different themes were allocated a variety of colours.
Stage 3	A further phase of coding known as <i>axial coding</i> which aims to add depth and structure to existing categories by re-assembling the data to establish connecting links within and between the interview transcripts, defined as " <i>the act of relating categories to subcategories along the lines of their properties and dimensions</i> " (Strauss and Corbin, 1998: 123). From this the researcher developed a list of concepts, themes and categories presented in a matrix with properties and dimensions in MS Word.
Stage 4	Subsequently, the researcher (re) applied the manual matrix of codes and themes to the interview transcripts in Nvivo. Interview themes were assigned different colour codes and labels for the researchers ease of distinction and the themes or "nodes" were organized according to the user's preferences.
Stage 5	The re-sorting of material, redefining of codes and patterns. Final codes in N-vivo were established.
Stage 6	Categories and an initial theoretical framework were developed.

Following on from this each transcription was imported into Nvivo to facilitate the organization, coding and management of the transcripts (Kitchin and Tate, 2000: 234). Each transcript was systematically read line-by-line and appropriate codes or 'nodes' were created and developed to contain sub-categories or 'child nodes' progressively building and developing a framework of classifications, relationships and associations (Dey, 1993). The qualitative analysis software was utilized to reduce the amount of time spent on organising, managing and resorting the material and findings, to increase the speed of tiresome tasks such as redefining codes. The software enabled the researcher to progressively structure, restructure and discontinue themes or "routes" with considerable ease, this assisted the user's ability to

reflect on the data and build connections within and between the case study data. Once all passages had been analysed, sorted and assigned codes the researcher was able to search, trace and view specific strings of codes and memos across all the interview sets. The analysis considered the transcripts within each case study and across all case studies to draw assessment.

Figure 3.4: Coding as an initial step of qualitative data analysis



3.12.2 Secondary Data Source Corroboration

This study has followed the guidance of grounded theory and advocates Charmaz's (2006) approach in the conduct of the theoretical review of literature prior to the conduct of the data collection process. As opposed to the advice of Glaser (1978) who advocates postponing the review of literature until initial findings had been made to ensure the study explores the subject area through the participants' eyes, to prevent the distortion of the research findings through the researcher's preconceived ideas. The decision to conduct the review of literature prior to the process of data collection assisted the researcher in demonstrating the need to develop current understandings as to how intangible capital shapes urban economic development within an urban context to satisfy the requirements of the Schools research committee. This process aimed to shape the research problem and heighten awareness of similar research conducted to identify methods used in previous research, and to recognize the most appropriate perspective to take in the conduct of this study.

Accordingly, emergent premises, patterns and concepts highlighted in the analysis of the interview transcripts were corroborated against the various secondary data sources discussed in the literature review and the case study segment. Multiple data sources were found to enhance the robustness of the research findings, providing the research with greater credibility. It also allowed the researcher to unpack and develop theories regarding wider academic debates on the factors that shape city development in particular, formal and informal institutional contexts, network capital and entrepreneurial capital as drivers of city development. These themes are explored in the following

chapters (4, 5 and 6) where empirical data is used to support or refute suppositions prevalent in the academic literature related to this research.

3.13 Ethical Considerations

3.13.1 Confidentiality

To prevent a breach of confidentiality all participants who took part in the study were anonymised, as requested. Due to the high profile and public presence of particular stakeholder's interviewees requested that no reference was to be made to their occupational positions. As a substitute interviewees 'public' or 'private' stakeholder position was disclosed to convey the perspective, expertise, status and persuasive reliability of selected contributors. Further to this, all interview recordings were not divulged and kept secure. Additionally, all participants were required to complete and sign an ethical approval form prior to the execution of the research (Appendix 3.16).

3.14. Conclusion

This chapter has explained the research methodology used in this thesis. A critical realist stance appropriately suits the researches methodological position, in that it attempts to facilitate and understand the complexities and intangible properties contained within the underlying dynamics of the complex and interrelated research phenomenon. The design of the multiple case study approach was generated to investigate the research phenomenon under study, to explore, develop and understand the qualities, intricacies and relationships that underline urban economic development in city environments. The methods of data collection (knowledge-based firm survey and semi-structured interviews with public and private stakeholders) are discussed and justified, while the principles of validity and ethical conduct underpin the execution of the research.

The subsequent three chapters present and analyse the research findings.

CHAPTER 4

ENTREPRENEURSHIP IN THE CITY

CHAPTER 4

Entrepreneurship in the City

4.1 Introduction

Contextual influences emerged (Chapter 2) as an important facet of entrepreneurial activities and economic development, recognised to either impede or facilitate entrepreneurial activities in urban contexts. Despite a number of existing studies having highlighted the connection between differences in urban environments and economic development across localities, there is growing interest in defining the role of contextual characteristics and the influence they have on entrepreneurial activities. Accordingly, this chapter explores three unique UK contexts to provide a contextualised view as to how differences in urban characteristics contribute to entrepreneurial activities.

The aim of this chapter is to assess how contextual conditions influence entrepreneurship. It is the intent to acquire an awareness of the contextual environments in which entrepreneurial activity takes place, more specifically the factors (hard/soft) that influence entrepreneurial activity, the challenges presented to both KBFs (as defined in Chapter 2) and stakeholders, and the impacts of these contextual factors on entrepreneurial activity.

To understand the connection associated with varying contextual environments and urban economic development this chapter explores the perceived importance of hard and soft locational factors in the attractiveness of business environments. This chapter looks at the motivations behind companies' decisions to situate themselves in a specific context, by looking at 'soft' factors (such as personal connections, access to talent etc.) and 'hard' factors (such as transportation links, availability of suitable office spaces, access to finance etc.). The empirical Knowledge Based Firm (KBF) survey data is supported by stakeholder interview data to provide a comprehensive understanding of key locational factors crucial to entrepreneurial activity.

The chapter is divided into four key subsections. The first, discusses the perceptions of what it means to be an entrepreneur in the city and the consequences of its promotion, the second reports the influence of soft infrastructural factors, the third considers the role of hard infrastructural factors, and the fourth draws the chapter to a conclusion. Overall, the chapter identifies seven key factors crucial to entrepreneurial activity and economic development more widely across the three case studies. The

research confirmed that a combination of hard and soft locational factors plays an incremental role in the promotion of entrepreneurship. Notably, in terms of soft factors personal connections had the greatest influence on the attractiveness of locations for businesses across the three cities. Following on from this the presence and nature of an entrepreneurial business culture, entrepreneurial business support, and the availability of human capital were key soft locational factors. Whereas, with regards to hard factors access to finance, the availability of suitable office space to support business growth, and urban mobility, transport links and proximity to other cities were identified as influential factors.

4.2 The Pursuit of Entrepreneurship

While the concept of entrepreneurship is vital for productivity and innovation (Chapter 2) it is suggested there are numerous risks in pursuing entrepreneurial endeavours. Stakeholders highlighted the dangers that exist in the promotion of an entrepreneurial economy and the need to be more discerning and strategic about leveraging the power of entrepreneurship. This research highlights the importance of resilience and self-efficacy in conjunction with entrepreneurial intent. This section explores the strong stakeholder focus placed on (1) the risks associated with the over promotion of the entrepreneurial concept and the ability of individuals to withstand financial hardship, (2) the distinction between encouraging entrepreneurs and being entrepreneurial, stakeholders raised a strong concern that innovative entrepreneurship is unrealistic for the majority of the population, and how (3) in Bristol's case the competitive success of urban areas has had undesirable repercussions where it is suggested there have been implications on a widening inner city inequality gap, pricing out local talent and gradually pushing creatives to outer regions.

Starting with the case of Bristol, a number of private stakeholders expressed the need for caution in the promotion of entrepreneurship to not over promote and overdress the concept of entrepreneurship. They questioned whether institutions are focusing on the right type of entrepreneurship.

“I'm not a fan of trying to over-promote to youngsters that you should be creating a business. Universities often fall into this trap of thinking they can manufacture entrepreneurs. You're setting people up for failure.” (Private stakeholder, Bristol)

“I don't think that's a healthy thing to do. Now, that might sound unambitious, but where I see pockets of activity around the country, around the world where there's hype around entrepreneurship in young people, I'm not sure it's too healthy.” (Private stakeholder, Bristol)

“I've just got this slight distaste in my mouth about pushing entrepreneurship.”
(Private stakeholder, Bristol)

In the application of entrepreneurship Cardiff private stakeholders expressed significant concern that the term 'entrepreneur' had become overused where societies have become lost in the exaggerated narrative of wealth creation. This has tended to diminish the true understanding of the traits and ambitions of what makes up an entrepreneur, causing the entrepreneurially minded to become concerned and increasingly distance themselves from the term. Cardiff private stakeholders detailed the need to better clarify entrepreneurship across networks due to the increasing misuse of the entrepreneurial label. In some cases the understanding of the term can be a deterrent to prospective

“I would be personally less enthusiastic about that [the promotion of entrepreneurship] because I'm not a fan of really inflating the X-factor mentality of entrepreneurship, which I don't think is healthy.” (Private stakeholder, Bristol)

innovators, as such the majority of private stakeholders stressed the need for the term 'entrepreneur' to become less focused on business ownership, and more centred on the exploitation of opportunities, skill development and the innovative assimilation of knowledge. In particular, a Bristol private stakeholder highlighted the implication of the over-promotion of entrepreneurship in young individuals. The promotion of business creation in universities was viewed to have a potentially negative effect as a limited number of entrepreneurs establish high risk and significantly profitable ventures.

Several Bristol private stakeholders placed emphasis on the importance to support entrepreneurship rather than necessarily promote it. According to a couple of private stakeholders a key part of the promotion of entrepreneurship in Bristol is focused on celebrating success and encouraging people who have embraced innovative thinking to develop ideas. Consistent with a Bristol private stakeholder who suggests that when you recognise and showcase the achievements of successful ventures it improves ambition and encourages the growth of others. A number of private and Bristol public stakeholders further suggested that entrepreneurship and business development is not for everyone, suggesting it was a risky approach to glamorize and honour entrepreneurs. Instead some Bristol private stakeholders claimed individuals are not required to setup a business to be entrepreneurial, an entrepreneurial skillset can create stronger employees more equipped to enter smaller companies and open up the mind-sets of bigger organisations.

“There is already an entrepreneurial creative vibe and it's harnessing that and making sure that people are supported and encouraged to be an entrepreneur but equally using those skills in a bigger business as well.” (Private stakeholder, Bristol)

Cardiff private stakeholders expressed a concern that the promotion of entrepreneurship can simplify what it required to build, run and sustain a successful business. They stressed that entrepreneurship is unrealistic for the majority of the population. The entrepreneurial label has unrealistic expectations and often found to overemphasise the financial and lifestyle rewards, which Cardiff private stakeholders considered to be irresponsible, instead they detailed it must be recognised that an entrepreneurial

“lifestyle” is not for everyone. Alternatively, several private stakeholders detailed the need for greater consideration for the wider benefits of entrepreneurship not connected to economic gains and encourage entrepreneurial skills to incite innovative thinking and problem solving in the wider community. In particular the public and private sector encouraged entrepreneurial skills to be used in the workplace to translate into problem solving, to endorse the responsible involvement of individuals in entrepreneurial activities.

A key Bristol public stakeholder expressed apprehension that while there has been a steady rise in self-employment there is not enough support (rights) and protection for workers. Self-employed workers were stated to be crucial part of Bristol’s labour market and creative sector however, it was recognised that there is a need to overhaul employment rights as a lot of working practices are unsecure and unrewarding for self-employed workers. Public stakeholders considered independent professionals and self-employed workers to be a legitimate approach to Bristol’s labour market so long as practices provide support to protect the rights of workers.

“We've always seen self-employment as an important part of our labour market, but sometimes it can work, sometimes it can't work. In the same way, as we would want to see someone who enters employment progress and become more secure into higher value employment, we'd look at the same process for people who are entering self-employment, but it perhaps needs a different skill set to be addressed.” (Public stakeholder, Bristol)

“Bristol is a very innovative and creative city and particularly when you look at the creative sector. Vast majority of people who are working in that sector are self-employed or small businesses. They're freelancers.” (Public stakeholder, Bristol)

There is a particular private stakeholder concern the Bristol city environment is pricing out local talent and in particular creatives. It was expressed that it has become increasingly difficult to provide low cost studio space for creative to set up their own business and as a result the creative ecology in Bristol is expected to suffer, as people cannot afford to live in Bristol.

“So we try to provide some of the lowest cost studio space in the country. We try and keep it subsidized because people can't afford to work and live here. So we try and make it so that it's at least worth scraping rent together because they can afford a studio here and they work and access our production and connections that way. But it's becoming harder and harder and the creative ecology in Bristol is suffering because people can't afford to live here.” (Private stakeholder, Bristol)

Bristol’s inviting cultural environment and diverse employee opportunities has attracted increasing numbers of established talent, a couple of private stakeholders stated this can obstruct indigenous individuals who are not yet successful to compete. It was expressed that housing and office prices in parts of Bristol are becoming similar to London, and with the continued rise there is a risk the local culture could become bland and monocultured,

“You don't want everybody to be middle class and they're the same background, you want to be bringing a diversity of all people.” (Private stakeholder, Bristol)

“Bristol is losing its edge because of house pricing and things like that. Normal people moving from London mean that actually that grittiness is gone. Which is a shame. You see lots of people with like t-shirts and hats and stuff it says, "Make Bristol shit again.”
(Private stakeholder, Bristol)

The entrepreneurial ambition was criticised by some private stakeholders for failing to acknowledge the consequences of developing a risk-taking culture, it requires an enormous tolerance for risk and the ability to withstand financial hardship. In the cases of Bristol and Birmingham entrepreneurship has been promoted as a solution to unemployment and social change. However, this suggests there is a failure to understand the true causes of inequality and the assumption that individuals are able to tolerate high levels of strategic and economic challenge. Furthermore, there is an underlying assumption that a high level of self-employment is not necessarily a good indicator of entrepreneurial activity. Instead inequality can reflect other structural, economic or social impediments. Notably in the case of Birmingham stakeholders did not express a concern for the over promotion of entrepreneurship. This could be explained through two circumstances first, the concept of entrepreneurialism is not actively promoted across the city as a career opportunity or secondly, the omission suggests that Birmingham has not fully recognised potential issues and negative repercussions that may arise as a result of the cultivation of an entrepreneurial economy. This reaffirms the nature of Birmingham's traditional (closed off) approach to business demonstrating a protectionist mind-set.

4.3 Soft Determinants

The main objective of this section is to understand how different contextual characteristics (hard and soft) contribute to entrepreneurial activities. This section focuses on the role and influence of “soft” contextual factors such as personal connections and the presence of an entrepreneurial spirit or local business community and human capital. A locational overview of the attractiveness and performance consequences of “soft” contextual dynamics is explored to understand why firms locate in their urban context. As Chapter 2 explained the unique characteristics of urban environments play a significant role in attracting human capital (talent), investment, KBFs and in generating economic development (Storper, 2013; Florida, 2012). The findings look at why companies decided to situate themselves in a specific context, by looking at factors such as social ties, access to talent, geographical characteristics, financial viability and the existence of a business community. It was the intent to assess the factors that shape the location of KBFs within a UK context to understand the determinants considered crucial for entrepreneurial behaviour and economic development in urban areas.

The survey explored a combination of soft and hard locational factors that have attracted firms to locate in Birmingham, Bristol and Cardiff. The findings discuss the importance placed on personal connections and the presence of a strong business community, entrepreneurial culture and the sense of entrepreneurial business support. However, further options that will be discussed in Section 4.3 included: geographic location and proximity to other cities, transportation links and infrastructure, each city as a financially viable location, access to a talented workforce, access to customers, partners and suppliers.

Table 4.1: Personal connections as an important locational factor

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	Sample (N)
Birmingham	50.6%	21.7%	14.5%	8.4%	4.8%	83
Bristol	57.7%	16.9%	12.7%	5.6%	7.0%	71
Cardiff	54.2%	25.4%	11.9%	0%	8.5%	59
All	54%	21%	13%	5%	7%	213

When looking at the locational factors indicated by respondents, **personal connections** (such as family, friends, personal relevance etc.) were identified as the most important locational factor influencing the location of KBFs in Birmingham, Bristol and Cardiff (Table 4.1). These findings might suggest that social ties are increasingly important for the locational choices of KBFs, despite the increasing propensity and ease for businesses and workers to relocate. Notably, personal connections and social ties (in reference to an individual’s personal attachments to locations due to social connections such as friend and family ties) were identified as the most dominant determinant in the attractiveness of cities, highlighting the influence of “soft” motivations in the attraction of talent and business. A premise supported by Florida (2012) who recognised the ‘personal trajectory factor’ as the attachment of an individual to a geographical location and a fundamental determinant of the location of talent. As the literature suggested, this may indicate that the locational choices of individuals and firms are not solely based on the evaluation of comparative advantages or disadvantages but a myriad of factors that shapes the ultimate decision-making process (Storper, 2013; Florida, 2012).

4.3.1 Business Environment

The value of a strong business environment emerged as a crucial explanation of entrepreneurial success (Chapter 2). Accordingly, this section seeks to understand how the business environment of three dynamic urban contexts has an influence on firms and entrepreneurial behaviour. A combination of KBFs and stakeholder perspectives are explored to acquire a variety of contextual perspectives on the

research phenomenon, in particular a focus is placed on how urban settings such as the quality of the business environment in each of the three cities can facilitate or impede entrepreneurial behaviours.

Table 4.2: The presence of a strong business community as a significant locational factor

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	Sample (N)
Birmingham	8.4%	36.1%	49.4%	4.8%	1.2%	83
Bristol	23.9%	42.2%	23.9%	5.6%	4.2%	71
Cardiff	13.6%	32.2%	40.7%	11.9%	1.7%	59
All	15.3%	36.8%	38%	7.4%	2.4%	213

Notably, the survey data demonstrated that the **presence of a strong business community** was only a key locational factor for KBFs situated in Bristol (42.2%) (Table 4.2). However, this could be interpreted in two ways (i) that there is not a strong enough community presence to attract firms or (ii) that the presence of a strong business community was not a consideration in Cardiff and Birmingham. In other words, the findings suggest that KBF's perceptions were more firmly based around financial and social factors, as opposed to the connection of a strong business community. Overall it would appear KBFs were more concerned with cost-minimisation as indicated by the literature rather than having access to a business community. In accord with the survey results, all Bristol stakeholders considered Bristol to be a distinctive location on the basis that it is an attractive place to live and delivers a diverse business environment, which when you consider the economics of a location versus lifestyle factors, this is a key motivator for individuals working in new growing sectors.

“[In Bristol], you've got much more diversity. The single line that runs through all of that is diversity. Diversity of culture, diversity of space and diversity of great industry.”
(Private stakeholder, Bristol)

“Diversity of business space and attractive place to live, means that it would be easy to get people to come here because if you're in a partnership, if you're a couple, both of you will be able to get decent jobs. Whereas other cities, I think, struggle with that. So I might get a job in Newport working for the Office for National Statistics but their partner may not, so they wouldn't live there.”
(Private stakeholder, Bristol)

Several Bristol private stakeholders considered the city to be a hotbed of invention at the forefront of innovation, large enough to sustain and have an open capacity of businesses at both the self-starting start-up and the larger high-end scale. In particular, a number of Bristol stakeholders specifically reported the resilience of the local economy to be due to the diversity of the city's business portfolio, resilient sectors and its significantly strong and vibrant small-business economy. This is indicative of

the city's strong enterprising legacy and consistent pace of innovative development and entrepreneurship acting as a driving force of urban economic development.

“Bristol is what I would call a bleeding edge city. It doesn't follow the crowd; it leads the crowd.” (Private stakeholder, Bristol)

“[The] Bristol and Bath city region is the only city region in the UK that actually sends money back to the Chancellor of Exchequer every year, to the tune of about £1.6 billion.” (Private stakeholder, Bristol)

“It is traditional innovation and how that's part of its success today. It is a phenomenal place to do business and be in business.” (Private stakeholder, Bristol)

“It's got quite good at reinventing itself and developing and changing.”
(Private stakeholder, Bristol)

Similar to Bristol, all Cardiff stakeholders reported the small and friendly nature of the city had made it easier to make connections within given sectors and get access to individuals regardless of their political status, *“that community feel is the X factor that will take Cardiff to the next level”* (Private stakeholder, Cardiff). Cardiff was therefore stated to have a very strong business network, a large majority of stakeholders specified that there were no hierarchical rules or boundaries when seeking access to individuals and as a result individuals have been able to reach those required. In contrast, a private stakeholder recognised that it can be beneficial but also potentially damaging when individuals know each other and are in quite close networking groups, as explained by a number of studies on the structural properties of knowledge networks and the stifling of innovation (Labianca and Brass, 2006; Crespo, Suire and Vicente, 2014). Stakeholders considered the city to have undergone considerable development, which has led to Cardiff experiencing rapid growth and innovative momentum. As a place to do business the majority of stakeholders considered Cardiff be a thriving destination that has over recent years demonstrated a clear innovative shift, to develop a relatively new but broad innovative landscape that accommodates a thriving start-up scene with lots of networking connections. This has been reinforced through universities that are said to be actively supporting start-up businesses through the transfer of their expertise, specialised business programs and by encouraging graduates to think more entrepreneurially to become entrepreneurs.

Correspondingly, all Cardiff public stakeholders recognised that Cardiff had undergone significant regeneration in the last five years accelerating it into a modern and progressive city. A number of private and public stakeholders acknowledged that Cardiff had since become a city wherein the private sector is well engaged in its progression, it was further recognised that Cardiff is no longer a city entirely dependent on public sector driven initiatives and subsidies. However, the majority of private stakeholders considered that Cardiff was not sufficiently value adding, it was suggested that the city does not provide additional benefits, in reference to business attraction, *“They are not head-office, they're more subsidiary. That's a problem for Cardiff still”* (Private stakeholder, Cardiff). Yet

stakeholders recognised Cardiff's exceptional business environment, which has taken advantage of a range of government support opportunities considered key in the development of Cardiff's business environment. To illustrate, the UK Government has dedicated £1.2 billion to the Cardiff City Deal and in 2018 three quarters of Wales' fastest growing businesses benefited from Welsh Government support, which combined with Cardiff's friendly atmosphere, low cost of living estimates and quality of life businesses are in a strong position to take advantage of economic inward investment,

“As a place to do business, a place to beat business in, it's a good city to be in. There are a lot of connections. I know there seems to be a lot going on at the moment”
(Private stakeholder, Cardiff)

“It's a small enough ecosystem that almost everyone knows everyone. Wales is tiny so is Cardiff. When you think about Cardiff compared to other cities, we're a fraction of the size really. It seems to be punching above its weight. There have been some big successes as well recently with the whole semiconductor side of R&D which has really taken off and as a result people like IQE, the big contract with Apple. That's huge. There's some serious momentum now. I think eyes are looking across the water, they're thinking, "What's going on in Cardiff? They're taking a lot more notice of it.”
(Private stakeholder, Cardiff)

However, in comparison a significant part of Birmingham's entrepreneurial strength derives from the population's spirit of enterprise. The city is widely recognised for being one of the UK's most innovative cities and resultantly a good place to start a business. All Birmingham stakeholders stated that the city presents a remarkable contemporary economic environment with a strong mix of industries supported by the presence of multi-cultural communities. The majority of Birmingham stakeholders testified that the city experienced strong immigration of culturally diverse and entrepreneurial individuals, which was considered to have resultantly led to Birmingham being recognised as one of the most diverse populations in the UK. Consequently, Birmingham private stakeholders acknowledged that the economy was made up of pockets of strong ethnic enterprising communities.

“We've got a strong ethnic enterprising community which continues to thrive within the city and then I think it's through the leadership of I think the city council. They get supported by professional bodies as well as industry bodies. I think there are a number of different drivers there, which have helped to create these businesses to be stable and this community that it exists. So I think it's probably a multitude of factors.”
(Private stakeholder, Birmingham)

Indeed, the majority of Birmingham stakeholders recognised the diversity of the city, its business sectors and its population has created a powerful competitive advantage setting a distinct culture drawing investment, talent and business from competing areas. For Cardiff, an emphasis was also placed on the environment and the influence the social cultural context has in stimulating entrepreneurial learning. According to stakeholders the development of entrepreneurial competencies is encouraged by local cultures (social construction, observation of successful behaviour, community of practice etc.) (Smith and Parkinson, 2012), access to resources (financial infrastructure, office space etc.) and learning through interactions (knowledge sharing, networks, mentoring etc.), all bearing an

influence on the exploitation of potential benefits and reflective learning. At a time of political uncertainty, within each of the urban contexts all stakeholders recognized the value of entrepreneurs as an asset able to react to, learn from and influence the environment (Bruyat and Julien, 2001). Entrepreneurial characteristics are considered to build a competitive environment by continually adjusting to obstacles and uncertainty to overcome adversity (Bullough and Renko, 2013; Adeniran and Johnston, 2012), in turn building a sense of entrepreneurial resilience in times of uncertainty,

“It's one of the things we can control irrelevant of what Brexit comes about. So Brexit is happening, we're doing it. A vibrant entrepreneurial ecosystem, places will do well in any part of the world whatever the outcome of Brexit it is a good thing to do. So a flexible, dynamic workforce, a flexible dynamic economy is where we need to be. So in times of uncertainty it is one of the things we can control. So I would always push it as an opportunity. I wouldn't want to limit the term; I mean entrepreneurship in all its forms. It's not just about these start-ups. It's about individuals in big corporates the intrapreneurs. The intrapreneurship [entrepreneurial activity by employees] element, Thinking differently. Individuals in the civil service just being able to bring that mind-set.”
(Public stakeholder, Cardiff)

The findings demonstrate the crucial role intangible characteristics play in the pursuit of entrepreneurship in an uncertain political economy. Overall, the research highlights the significance of the entrepreneurial business climate in urban economic development. The findings accord with the literature demonstrating a strong business community is able to mobilise resources and establish knowledge channels (Florida, 2012; Acs, et al. 2009). This presents a strong environment for entrepreneurial activities and is particularly beneficial for economic dynamism (Wennekers, 2006; Acs, et al. 2009).

4.3.2 Culture of Entrepreneurship

The literature discussed in Chapter 2 identified (innovative) entrepreneurship and its promotion is important for the development of cities. This section explores how each of the three contextual environments supports a spirit of entrepreneurship, a characteristic conducive to urban economic development.

Table 4.3: Does each city facilitate a strong entrepreneurial spirit or culture of innovation and creativity?

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	Sample (N)
Birmingham	25%	44.4%	18.1%	12.5%	0%	72
Bristol	43.6%	30.9%	21.8%	3.6%	0%	55
Cardiff	16.7%	40.7%	27.8%	11.1%	3.7%	54
All	28.4%	38.7%	22.6%	9%	1.2%	213

According to KBFs the survey found Bristol (43.6%) had the significantly **strongest entrepreneurial spirit and culture of innovation and creativity**, followed by Birmingham (44.4%) and Cardiff (40.7%) (Table 4.3). For clarity, ‘entrepreneurial spirit’ refers to an entrepreneurial mind-set and approach that actively seeks continuous improvement and innovation. Whilst there are a range of definitions in this thesis ‘innovation’ and ‘creativity’ is referenced in acknowledgement that the terms are subjective to personal experience (Chapter 2). Relative to Bristol, the results from the KBF survey suggest Cardiff’s cultural offer of innovative entrepreneurialism was weaker (Table 4.3). This could be due to Cardiff’s recent growth and transformation into an entrepreneurial business destination and reflects the city’s positioning on UK and international rankings as discussed in Chapter 3. There is a private stakeholder perception that historically Cardiff had a strong reliance on government subsidies, likely due to Wales’ devolved government and thus a heightened capacity to engage, allocate resources and address local priorities. This is especially the case for Cardiff as the capital of Wales, as opposed to Birmingham and Bristol as regional centres. It would appear the sustained cultural shift toward entrepreneurialism across the three cities and increasing provision of entrepreneurial support has incited an increased economy of independence, facilitating a generational change of business minded individuals pursuing innovative ambitions. According to a key Cardiff public stakeholder against the current backdrop of challenging trade dynamics city governance is increasingly recognising the positive opportunities provided by the creation of new enterprise, and its contribution to productivity and dynamism. While in the past Cardiff placed a strong reliance on public sector support, all Cardiff public stakeholders asserted a commitment to deliver entrepreneurial value and heighten the entrepreneurial mind-set of its communities.

Historically Birmingham has demonstrated a strong culture of innovativeness and deep-seated individualism, a heritage understood by all Birmingham stakeholders to be a catalyst for the future development of the city. A transformation that established greater resilience across the economy. Birmingham City Council channelled effort into the skill base of residents to improve the productivity and sustainability of local businesses. Notably, in the cultivation of Birmingham’s culture all

stakeholders highlighted the physical transformation the city underwent rebranding areas of niche cultural heritage such as the Gun Quarter developing areas of cultural interest. The modernisation of the economy has shaped the city's business culture and is a competitive asset the public sector seeks to nurture to enhance productivity and increase business survival and investment. Birmingham public stakeholders have become increasingly aware of the importance of place attractiveness as a catalyst for business and talent relocation. This is indicative that urban economic development is very much influenced and, in some cases, determined by the distinctiveness of the historical legacy of urban contexts (Welter and Gartner 2016). The mind-set of local actors is shaped by past and current performance characteristics, with the city council supporting economy strengths to stimulate continued development.

In terms of Bristol's business environment, all stakeholders described the city as a place that holds a spark and enthusiasm for business, where businesses either originate from or migrate from London. Several Bristol stakeholders considered this to demonstrate the holistic value the city can add to businesses to establish, grow, be supported and collaborate with likeminded individuals (Rutten, et al. 2010; Feldman and Zoller, 2012). To illustrate, SETsquared a not-for-profit high-tech university business incubator, was ranked the best incubator unit in the world by UBI Global. The enterprise hub has added approximately 3.8 billion in Gross Value Added to the UK economy since 2002. The majority of Bristol stakeholders recognized innovation as a vital part of the continued regeneration of the business community, reporting innovation to thrive amongst new business formations rather than the existence of longstanding businesses. An emphasis on innovation led entrepreneurship encouraged private stakeholders to recognise Bristol's strong sector of academic research, referencing its ability to enhance 'learning capacity' to assimilate and exploit existing knowledge. In terms of the promotion of innovative entrepreneurship within Birmingham and Bristol, the vast majority of stakeholders contended the success of coworking spaces have created a strong entrepreneurial environments and infrastructure support from the private sector and university activity. Knowledge innovation and exchange is a key dynamic at the University of the West of England (UWE) ensuring graduates develop practical skills to recognize opportunities to contribute to enterprise development.

I think every single one of the courses now has got enterprise as part of their agenda, what's called curriculum, so that they're all getting encouraged to think about entrepreneurialism but also developing skills for the working world as well."
(Private stakeholder, Bristol)

Collaborations and alliances emerged as a key facilitator of innovative entrepreneurship and competitive resilience. The breadth and depth of university collaborations in Bristol as demonstrated through UWE collaborations such as the universities alliance with Engine Shed, an internationally leading incubation facility, was stated to have strengthened the innovation process through knowledge sharing and the joint development of research agendas. Additionally, the findings have demonstrated that the historic legacy of Birmingham and Bristol's innovative entrepreneurial business spirit appears

to have had a significant influence on their performance, and the development stage of their business community and its ecosystem. Whereas Cardiff's historical reliance on the public sector seems to have initially limited the growth of Cardiff's business community and as a result it has a youthful ecosystem.

Table 4.4: KBFs perceptions of the presence of an entrepreneurial business community

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	Sample (N)
Birmingham	6.9%	54.2%	26.4%	6.9%	5.6%	72
Bristol	23.6%	43.6%	21.8%	10.9%	0%	55
Cardiff	9.3%	35.2%	31.5%	18.5%	5.6%	54
All	13.3%	44.3%	26.6%	12.1%	3.7%	213

Noticeably in Table 4.4, Bristol emerges as having the strongest entrepreneurial business community, followed by Birmingham and Cardiff. This reflects stakeholders claims regarding Bristol's longstanding status as a creative and entrepreneurial destination, the results also reflect Birmingham's recent entrepreneurial transition from its industrial heritage to its competitive position as the most entrepreneurial city outside of London, as discussed in Chapter 3. In accordance with all Birmingham public stakeholders who further elaborated to state that the city has a strong ecosystem of investment and supportive infrastructure. While Cardiff was been found to have the least entrepreneurial business community possibly a reflection of the youthfulness of the city's entrepreneurial environment. The findings demonstrate intangible characteristics of urban contexts have an influence on the development of business environments. In particular, the historic legacy of a city such as the presence of an innovative culture, a multicultural population and the diversity of business sectors was found to facilitate entrepreneurial behaviours.

The findings build on the literature where a distinctive culture of innovation and creativity was found to add to a business community's productive potential, promoting faster information flows with likeminded individuals and tacit knowledge (Feldman and Zoller, 2012; Audretsch, 2007). A number of empirical studies have demonstrated that a distinctive culture of innovation and creativity is an important element of innovative entrepreneurship, business growth and economic prosperity (Florida 2012; Vorley, et al. 2012; Cantner, et al. 2009). Indeed, Johannisson (1995) found evidence that the characteristic of an environment and its innovative settings were a competitive advantage for entrepreneurial activity.

(i) Urban contexts as business facilitators

Based on stakeholder interviews a number of sub themes emerged in relation to the importance of urban centres as facilitators of business activity. An influential area was the scale of cities for example in Birmingham stakeholders considered the city's scale to be an influential factor in the performance of Birmingham's business environment and the ability of firms to do business. Due to the scale of Birmingham in comparison to Bristol and Cardiff the city was considered to be somewhat disconnected by reason of the city's physical size and the density of its networks. Although private stakeholders did acknowledge that there are pockets and communities of business network activity.

An indication of the strength of Birmingham as a business destination according to public stakeholders was the city's ability to entice vast investment and global corporations to Birmingham. This further reflects the diversity and depth of Birmingham's sectors with there being a strong presence of highly professional and technical roles. However, in accordance with Bristol and Cardiff, the majority of both public and private Birmingham stakeholders recognised that the city does not celebrate its achievements and promote itself enough,

Somehow, it's not succeeded in overcoming those perceptions and shouting out about it. Somebody who's worked in a local enterprise partnership, it feels that it's always a challenge for us." (Public stakeholder, Birmingham)

This has presented a particular challenge in Birmingham's ability to attract talent to the region. A challenge that has emphasised that there is a strong need for the city to continue to promote the opportunities of its sectors, and also the city as a great place to live. All Birmingham public stakeholders considered that the city still suffers from negative external perceptions, a crucial challenge shaping the progression and development of Birmingham,

"There's a lot of prejudice, I think. There is a lot of preconceived ideas about Birmingham that it's dirty, industrial, ugly, city. There's a lack of understanding including how much it's changed and what's going on here." (Public stakeholder, Birmingham)

However, Birmingham stakeholders also acknowledged Birmingham's rising prominence in urban rankings as the most popular location for people to relocate from other UK cities such as London. Accompanied by the city's diverse economy, job opportunities, investment and the relocation of major headquarters such as HSBC demonstrating the city's strong reputational transformation.

"It's definitely developed creating a momentum now where I think young professionals see Birmingham as a place that they can develop their careers and probably also the best quality of life, than in London... particularly if they want to raise their families. It's promoting capitalism too, investors want to invest, companies want to come here. It is changing and that's, you know, it takes time. It's challenging being in the mix of something." (Public stakeholder, Birmingham)

Nevertheless, as a business destination Birmingham's economy is growing at a heightened rate attracting nationally significant companies, the city's performance is gradually overcoming the negative perspectives of the attractiveness of the city. Wherein Birmingham public stakeholders can confidently state that the region has gained greater traction and is able to promote its achievements and provided a united front.

Interest in entrepreneurial endeavours and self-employment has heightened, with the number of UK entrepreneurs, sole traders and SMEs on the rise. This is, in part, considered to be due to the increasing support and facilitative opportunities available to professionals. It is anticipated that with the uncertainty of the economy surrounding the UK's possible exit from the EU it will be essential to assist professionals to adapt to uncertainties. All stakeholders considered entrepreneurship to have become increasingly accessible due to the development of supportive infrastructure. The majority of Birmingham, Bristol and Cardiff stakeholders reported entrepreneurship to be a definite aspiration for an increasing proportion of individuals. In accord, all stakeholders contended business minded individuals had the opportunity to engage in entrepreneurial and innovative activities,

"I would say not for all of wales but for Cardiff definitely. It's got good support networks, there is a real understanding, [and] there are good institutions that support the principle. You have got places to go." (Private stakeholder, Cardiff)

"It depends on your definition of entrepreneur the right side. Yes. Anyone can enterprise, or have a lifestyle business, but in terms of genuine entrepreneurs and wealth creators, it's not for everyone." (Private stakeholder, Cardiff)

"Definitely, yes, 100%...there's opportunity, there's room for everyone because it's not saturated. Bristol is saturated with stuff, whereas there is so much room for stuff to happen in Cardiff. I think there is plenty of room, there's plenty of room for people to start being a little bit more, doing first and then asking for permission. There's loads of room for that because from people I've spoken to, they seem to want to get an approval first before they do something, and I think it's almost build it first and then see what happens." (Private stakeholder, Cardiff)

All Cardiff stakeholders considered the city a supportive environment for entrepreneurs. According to stakeholders in Bristol entrepreneurship was also considered an achievable aspiration for individuals living and working in Bristol. The majority recognised increasing numbers of entrepreneurs, *"I think it [entrepreneurship] is seen as achievable in Bristol. I think people can move here to do it. There's that safety in numbers"* (Private stakeholder, Bristol). All Bristol private stakeholders recognised the city provided increasing private sector support for SMEs in a number of co-working spaces where individuals collaborate, tap into local knowledge pipelines and receive informal support that is not necessarily from an organization directly. All of which, contributes to a climate of informal support from likeminded individuals carrying out similar activities and learning from each other. Of the three cities Bristol stakeholders had a more hesitant and cautious approach to the promotion of entrepreneurship but believed it was an achievable aspiration for individuals to start their own business.

The Bristol stakeholder consensus was that it is not achievable for everyone and would be mistaken to encourage all to start a business or pursue entrepreneurial activities.

Entrepreneurship was considered to be an achievable aspiration for those living and working in Birmingham. The majority of Birmingham private stakeholders held that while the city provides supportive infrastructure made available through network activities and coworking (the Growth Hub) the entire urban ecosystem was not conducive to start-ups. They conceded that the city can act as an isolated silo where the extent of infrastructure in place is not as sophisticated as it needs to be. However, a number of Birmingham private stakeholders did concede that within pockets of Birmingham it is achievable in areas with supportive mechanisms in place, but only through those support mechanisms. Additionally, a further Birmingham private stakeholder highlighted a disparity of perceived access across the large complex city. Acknowledging amongst certain social groups and communities' entrepreneurial activities are an achievable aspiration and less so for others. A premise comparable to Bristol where stakeholders identified a barrier to entrepreneurship in individuals perceived access and self-esteem at a community and personal level.

Both public and private stakeholders were in agreement that more could be done to support entrepreneurs. Birmingham public stakeholders considered it an on-going requirement to develop an environment that encourages entrepreneurship, particularly amongst groups that might not consider it an option. A private stakeholder reported a city could never have enough entrepreneurial initiatives to enable innovations and to support entrepreneurial aspirations. Supportive infrastructure was recognised to be able to encourage communities that hold an assumption entrepreneurship is not a viable option, to identify partners or investors for those that require financial arrangements. Markedly, access to finance and managed affordable workspaces were identified as two key challenges that require greater development to support aspiring entrepreneurs in Birmingham.

Across Cardiff public stakeholders expressed a considerable focus on enterprise and entrepreneurship activities (i.e. Big Ideas Wales). Cardiff was perceived by stakeholders to offer favourable resources and support organisations to connect entrepreneurially minded individuals with access to knowledge, opportunities and resources to encourage business-minded individuals to carry out innovative activities. These efforts have an increasingly important role to play in addressing the perception of entrepreneurship as an achievable aspiration, to raise ambitions and inspire the next generation of entrepreneurs. The public sector in Cardiff acknowledged a cultural shift towards entrepreneurial interests to harness and mobilise talent. In particular, with regards to supportive enabling infrastructure it would appear the initial stages of the entrepreneurial cycle are accessible and achievable with good support networks. Whereas the later, more challenging stages of enterprise growth further along the growth cycle receives the least public sector support, a view shared by both the public and private sector.

From a Birmingham public stakeholder perspective, the city's high start-up and rising self-employment figures have demonstrated that Birmingham had the most active and entrepreneurially minded business population. A finding reflective that entrepreneurship was definitely an option the population was considering and pursuing, *"It's a sign that it's definitely an option that people consider"* (Public stakeholder, Birmingham). The public sector was consistent in recognizing that the entrepreneurial economy is a key priority for Birmingham City Council where significant work has been channelled, to create advantageous conditions for people to be in business and progress. A Birmingham public stakeholder acknowledged there was a strong need to convert the five-year survival rates of just 39% of all Birmingham-based businesses to support entrepreneurial aspirations. Similarly, Bristol has seen a massive growth in its start-up rates recorded as one of the highest in the UK, yet the city is lagging behind in survival rates. This could be due to Bristol having a strong and therefore competitive economy. The majority of Bristol private stakeholders stated that there was not the space for everyone to have unique ideas, find a niche in the market and create businesses. It could be said that while there is a large number of entrepreneurial individuals' it does not necessarily result in 'success'.

"Just saying, "I want to be an entrepreneur," I don't think is good enough. It's easier to giving that confidence to people that there is support and advice and space for people to do that is really valuable. You wouldn't want to just go around encouraging everybody to be an entrepreneur." (Private stakeholder, Bristol)

Bristol was recognised to have a growing entrepreneurial culture with a diverse set of industries. It was posited by the majority of Bristol's private stakeholders that it is likely that there are more opportunities in Bristol than elsewhere due to the development stage of Bristol as a wealthy city with a mature ecosystem that has an established business community. This is in reference to the establishment of a strong diverse business community composed of a variety of developed sectors such as tech, aerospace, financial services etc. (Public stakeholders, Bristol). The city has vibrant, wealthy and culturally diverse markets, which creates an interesting consumer market with lots of opportunities and a strong market economy. However, it is also a highly competitive market and as such private stakeholders expressed their significant concern for the over promotion of entrepreneurship as a career opportunity for all.

All stakeholders made reference to Birmingham's large graduate population and the city's thriving youthful creative entrepreneurial community partly due to the growth of the city's universities, notable in Silicon Canal. Public stakeholders considered the city to have some strong and encouraging clusters for entrepreneurship. The growth is demonstrated in the local universities generating a trend of young enterprise driven by graduates and the support networks that exist amongst young entrepreneurs. However, public stakeholders recognized there is a need to join up pockets of entrepreneurial activity and scale entirely across the city. Cardiff stakeholders recognise that there has been a significant change in mind-set from a government led perspective to a collaborative and supportive network approach, the dialogue placed emphasis on the value of a collaborative network approach in the provision of support.

With the view to ensure ambitious entrepreneurially minded individuals are able to access the resources and knowledge they require to reach their competitive potential.

To ensure aspirations are proportionate across Birmingham's community groups Birmingham City Council and Birmingham's private sector was stated to be increasingly focused on social enterprise to provide opportunities for all. Public stakeholders highlighted the polarization in entrepreneurial uptake in females and considered the Women in Enterprise Centre situated in a minority community, to be a vital mechanism in heightening accessibility for females. Birmingham City Council recognised that they face multiple challenges including child poverty, youth unemployment and rising homelessness and were committed to support the city's enterprise sector to raise the ambitions of its population. Social Enterprise UK recognised Birmingham as a Social Enterprise City due to the public sectors commitment to strategic partners and the best practice delivery in the promotion of local projects raising aspirations, such as the Digbeth Social Enterprise Quarter, an initiative dedicated to using innovative enterprise for social good. Public stakeholders conveyed real optimism for their support in social enterprise initiatives in tackling isolation and unemployment, through networks and the development of clusters such as the Custard Factory, which has created a supportive environment for creative entrepreneurs.

While stakeholders in Cardiff placed focus on the positive promotion of entrepreneurship and the associated benefits. In the context of Bristol private stakeholders reported how the promotion of entrepreneurship and the drive towards an entrepreneurial economy can have both positive and negative impacts on the development of the city. A strong entrepreneurial standing generates a number of opportunity benefits. As stated by the majority of private stakeholders in Bristol, the city's supportive entrepreneurial environment enhances the image of the city as a business destination. The urban setting has established a cultural reputation for entrepreneurialism as a vibrant, creative and self-starting city. Private stakeholders further asserted that Bristol has progressed from its initial identity as a bohemian destination to a more business-orientated and corporate center for creative industries. The development of Bristol's entrepreneurial reputation was considered to have had a positive influence on the attraction of investment and creative professionals with entrepreneurial ideas, a dynamic that has created a vibe around the city and a sense of opportunity and growth that in turn attracts talent.

"People being creative and feeling like, "I want to do something a bit different." That is a vibe. That is a culture within the city. I think the city influences that ability, but also gives one of those self-fulfilling things, isn't it? More people you see doing it the more you could be like, "Yes, I could do that." Then the more support there is available, the more you think, "Maybe I should give that a go." I think it is all part of the frame." (Private stakeholder, Bristol)

Indeed, the promotion of an entrepreneurial economy and associated innovative activities is understood by a number of Cardiff public stakeholders to reinforce Cardiff's economic momentum. An entrepreneurial presence is perceived by Cardiff stakeholders to develop a progressive and diversified economic base that thrives off the vitality of innovative entrepreneurs, assisting with the growth rates

of the economy and businesses. As such, entrepreneurship and associated innovative activities are considered to be vital for the revitalisation of the economy and the economic progress of Cardiff. Stakeholders in Cardiff recognised that entrepreneurial activities and the development of Cardiff go hand in hand, where **communities** that fail to take advantage of innovative climates and technological change can experience economic stagnation (Startup Genome Report, 2019). According to Cardiff private stakeholders there is an anticipation that the promotion and drive towards an entrepreneurial economy will generate local jobs and businesses rooted in the city, as opposed to the attraction of large footloose corporations lured by incentives, concessions and arguably relatively low long-term value.

In seeking to understand the conditions that influence entrepreneurship and urban economic development a focus was placed on the relationship between the legacy and scale of urban contexts and the influence this has on performance differentials (Welter and Gartner, 2016; Rodriguez-Pose and Storper, 2006). The findings demonstrated the historic legacy and scale of a city has a strong influence on the nature of the business environment and the culture of entrepreneurship (Hall, 2000). Indeed throughout the research the historic roots (such as diversity, inward migration of cultures, perceptions, entrepreneurial spirit, collaborative nature, entrepreneurial aspirations, inclusiveness, inventiveness etc.) of an urban context shapes the cultural offer and character of cities and their entrepreneurial business culture, whereby differences in cultural offers are often shaped by their urban legacy (Audretsch, et al. 2017; Hudson, 2010; Korsgaard et al., 2015). For instance, the historic legacy of inventiveness in Birmingham and Bristol appears to have influenced the characteristics of the city's performance, whereas Cardiff's historical dependence on the public sector to mobilise resources and funding set the city's trajectory back due to its recent transformation and the establishment of a relatively youthful entrepreneurial business ecosystem. A discovery demonstrating the influence of the development stages of entrepreneurial business ecosystems in urban contexts and the influence this has on urban profiles of economic development. Bristol recognised innovation as a vital part of the continued regeneration of the business community, as discussed by Schumpeter (1942) and Baumol (2002) an environment rich in innovation plays a fundamental role in the performance and survival of firms.

Overall an entrepreneurial business culture was found to be a crucial component of entrepreneurship (Florida, 2012; Pearce-Neudorf, 2014; Williams, et al. 2017), with the economic diversity of contexts strongly connected to the economic performance of cities (Jacobs, 1969). A growing body of literature cites a positive relationship between an entrepreneurial culture and business productivity. Sobel, et al. (2010) and Lavoie (1991) argue the culture and presence of a diverse environment is at the core of entrepreneurial activity, wherein entrepreneurial behaviours are shaped by the cultural diversity of each unique urban setting. The study highlights the positive influence an entrepreneurial business culture can have on rates of innovation to prevent economic stagnation and the competitive resilience of sectors (Eraydin, et al. 2010; Florida, 2001). Notably, the research acknowledged the concentration of diversity as a crucial lever of productivity, competitive advantage and efficiency to foster continuous

improvement (Russell and Koch, 2009; Yew & Ahmad, 2014). The literature suggests great concentrations of diversity can lead to higher rates of entrepreneurship (Florida, 2012), wherein the inward migration of individuals enhances the image and identity of a destination as a place to do business through the presence of unique “cultural capital”. Furthermore, this thesis found urban scale (concentration) to have a bearing on the connectivity of business communities and the spatial distribution of entrepreneurial activity.

4.3.3 Entrepreneurial Business Support

This section explores how entrepreneurship is positively promoted in a variety of urban settings. The empirical survey data demonstrates that urban contexts have varying perceptions of infrastructural support.

Table 4.5: The satisfaction of KBFs with their ability to access business support

	Strongly satisfied	Somewhat satisfied	Neither satisfied nor dissatisfied	Somewhat dissatisfied	Strongly dissatisfied	Sample (N)
Birmingham	4.2%	40.3%	38.9%	15.3%	1.4%	72
Bristol	1.8%	23.6%	60%	12.7%	1.8%	55
Cardiff	5.5%	29.6%	48.1%	13%	3.7%	54
All	3.9%	31.2%	49%	13.7%	2.3%	213

The survey findings suggested KBFs located in Birmingham (40.3%) had the greatest access to business support (Table 4.5). In particular, the majority (60%) of KBFs located in Bristol perceived that they had not been influenced by their ability to access business support. Overall this implies that either, (i) there is a need for greater business support across the three settings to provide greater assistance and encourage business activity or (ii) KBFs were significantly dissatisfied with the quality of business support available to them in Bristol and Cardiff.

In terms of access to business support, while institutions of higher education (HE) have placed a significant focus on the provision of entrepreneurial skills for its undergraduates. A Bristol private stakeholder emphasised that it was not The University of Bristol’s intention to encourage undergraduates to set up their own business but to add value through their professional entrepreneurial capacity. It was the intention of the strategy to have a deeper impact on the urban entrepreneurial culture whereby graduates would be better equipped and have greater scope to add value to smaller businesses and use their skills to be better employees.

“Not the same thing as setting them up on a path to say, whether it feels effective if you haven't started a business by the time you leave, then that's a failure because if you create entrepreneurial students, they'll create more better employees and more equipped to go into smaller companies, which is important”. (Private stakeholder, Bristol)

“I don't believe that everybody should be an entrepreneur because if everybody was setting up their own business, we'd have nobody to do all the other jobs of the bigger companies. I think there is a balance to be had but even just giving that as an option for people and inspiring, I suppose, is really valuable. It comes back to that whole thing I was saying about the general vibe of the city is it thinks differently. It is a bit of a maverick. It doesn't want to follow the norms.” (Private stakeholder, Bristol)

A further dynamic highlighted by a key Bristol public stakeholder was that entrepreneurship should be viewed as a means to drive inclusion across the city. A strong public sector emphasis was placed on the need to support enterprise in all of Bristol's communities,

“We want to encourage social enterprise because it has a valuable part to play, not just in economic growth, but in social growth”. (Public stakeholder, Bristol)

“Our growth is not just about racking up extra GDA, it's about developing this as a place that matters to the people that live here”. (Public stakeholder, Bristol)

As highlighted, a key element of entrepreneurship and its promotion in Bristol and Birmingham centred on its capacity to raise aspirations and mobilise segregated social groups. For example, the establishment of the Enterprising West of England programme supported by Bristol City Council brought together four local councils and three of the regions most experienced business support providers (Business West, YTKO Group and the Prince's Trust) to support SMEs and foster entrepreneurship. The programme operates at a grassroots level in some of the most deprived communities across the four unitary authority areas, dedicated to providing equality in access to business support in disadvantaged areas. The initiative addresses a local need for external expertise and support in Business Doctors and Scale Up Coaching Grants to effectively support and develop medium sized businesses and the GetSet for Growth service that brings professional expertise, practical support and invaluable commercial insights.

There are significant challenges in the delivery of business support across the spatial scale of Birmingham. Notably while statistics have demonstrated that Birmingham is an entrepreneurial city there is growing public and private stakeholder concern that greater support is required to support the growth of start-ups. A further area identified by public stakeholders was the inconsistency of access to business support across the city, whereby some areas are substantially more supported than others. Birmingham public stakeholders and some private stakeholders identified the need to adopt a citywide approach to infrastructure support to aid connectivity across the city to main areas of commerce. A Birmingham private stakeholder held that similar to all cities, Birmingham's biggest challenge was

around the creation of network opportunity and the complex nature of the city's communities and how you are able to connect those to economic opportunity. Correspondingly, a key Birmingham public stakeholder acknowledged disparities in the delivery of entrepreneurial business support across the city as a significant challenge presented by the limitations of the current funding environment. Indeed, to improve the offer of Birmingham's entrepreneurial ecosystem the public sector is seeking to establish initiatives to reach a wider urban scale.

The private sector in Birmingham emphasised their instrumental role in supporting entrepreneurial aspirations through private led programmes such as Barclays Eagle Labs and NatWest's Business Accelerator that are running enterprise programs to support entrepreneurs and businesses to grow and build a robust entrepreneurial ecosystem. However, Birmingham private stakeholders emphasised the need for public stakeholders to take greater ownership to encourage wider engagement in the creation of an entrepreneurial environment that is 'Birmingham driven'. However, a public stakeholder reported that in the case Birmingham City Council is not able to invest resources, or it is held that the private sector is better placed the council relies on the private sector to drive transformations and change. Conversely Birmingham private stakeholders argued that rather than leaving it to the private sector the public sector should be harnessing the wealth of Birmingham's start-up community. An approach that could mobilise market disruptors and their innovative capabilities,

"We've got massive disruptors in industry who could compliment a large-scale project, whether it'd be a building project or whether it be something else. Councils do what they always do, and they procure to the big companies thinking that is the only way. A bit limited thinking to think, "Do you know what? We have got a wealth of start-up businesses that are doing loads of different things. How can we get them involved in stuff." which could be the launch-pad for them, but also creating more joined up approach and not just always have the big boys winning their piece of the cake."
(Private stakeholder, Birmingham)

"We've got some serious disruptors in markets where we can potentially introduce them to big companies to help, not to replace them, but to support them."
(Private stakeholder, Birmingham)

This highlights the importance and demand for the public sector to use their position of authority, governance mechanisms and network connections to directly mobilise local talent and resources, to drive business support through the facilitation of enabling collaboration partnerships between large corporations and SMEs in Birmingham with the intent to provide access to new market opportunities and business-led innovation. As discussed by Turkina, et al. (2013) and Huggins (2014) network linkages are important conduits of intangible resources, ties with actors of different positioning's within the network structure can aid problem solving and the identification of entrepreneurial opportunities. Consequently, a number of private stakeholders argued that Birmingham City Council should mobilise their local resources - pool of start-ups as disruptors and their influence on entrepreneurial activities to assist the delivery of a larger collaborative urban agenda, engaging with big corporate organisations and start-ups to align mutually reinforcing actors to support the delivery of projects.

A key priority shaping the development of all three cities was the need to offer an attractive thriving business environment as a catalyst for investment, business and talent attraction. Birmingham public stakeholders were unanimous in their standing that the city's entrepreneurial business community was a key priority specifically driven by Birmingham's business community. In order to create the right conditions for economic development the Birmingham City Council Leadership Team was reported to regularly meet with businesses to ensure their voices were heard and a 'Made in Birmingham' approach was incorporated into the council's work to develop initiatives that specifically addressed business needs. All Cardiff stakeholders identified a need to position Cardiff as a destination open to a broad range of business and development opportunities that support entrepreneurial and innovative organisations. Cardiff private stakeholders emphasized a further need to consider the wider overarching development of Cardiff's business environment, not just its small microcosms of business activity. An emphasis was placed on understanding how Cardiff can link up its resources to work in unison to facilitate a diversity of lifestyles rather than just delivering a place of work,

"[The focus should be] how they can facilitate lifestyles rather than how can they provide somewhere to work." (Private stakeholder, Cardiff)

"The talent base of the city is the key ingredient. At the same time, we have to create the right kind of environment to keep people in the city, accommodation, residential accommodation, but at the same time create the right kind of business environment to attract those new businesses who want to come here because we have the right kind of skilled population." (Public stakeholder, Cardiff)

"The idea of the advocacy and connecting the dots a little bit better is definitely, for me, where that improvement needs to happen, because there are so many resources. It's a small ecosystem, but actually, it can also be very siloed." (Private stakeholder, Cardiff)

All Cardiff public sector stakeholders emphasised their desire for businesses to come in, invest and bring jobs into Cardiff. To do this they expressed that they had taken an open and cooperative position, *"what we try to do, rather than say, 'This is a picture of exactly something we want it to look like,' we create proposals like Central Square. You've got the canvas there for somebody to come in and work with"* (Public stakeholder, Cardiff). Cardiff public sector stakeholders consistently reported that they are keen to show an institutional willingness to take risks and set up a vision for the Cardiff private sector to work with and develop, on the basis that it delivers the economic outcomes required to support the business environment. It was suggested that the public sector seeks to portray Cardiff as open and flexible, engaging with business and investors to shape and deliver a collective vision for the future.

A further priority for the majority of Cardiff public stakeholders was the designation of Cardiff's first centralised business location and accompanying strategy. While Cardiff has had a clear commercial centre, public sector stakeholders agreed that a discernible business heart had not previously been developed. All public sector stakeholders stated their intent to provide a non-retail commercial

heartland to drive a higher value-added service economy in Wales. Several Cardiff public sector stakeholders stated their intent to encourage public-private sector working to develop projects and minimise obstacles to concentrate a high number of jobs and drive benefits from strong agglomerations of business within advanced service sector activities. A number of public sector stakeholders discussed the importance of developing links between universities and business in specific sectors to create a better environment to support sectors such as the life sciences in Cardiff. This echoes the literature Malecki (2011) and Baumol (1990) whereby joint activity is suggested to be more effective. There was a strong interest in working with businesses and higher education to capitalise on the universities innovative offer as discussed by Cooke, et al. (1997), an innovative environment is often considered a primary draw for many businesses. Similarly, Cardiff public sector stakeholders highlighted the 2018 Green Paper 'Building More and Better Jobs' that was stated to have detailed the first 'proper' public sector enterprise zones in Cardiff. Public sector driven visions partly designed to effectively manage and help concentrate sector strengths to build investor confidence, in terms of both indigenous business and investors. A further Cardiff public sector stakeholder emphasised the public sector readily connected with the local community during the consultation process for a number of large-scale developments, further acknowledging engagement needed to occur more often. Indeed, several Cardiff public sector stakeholders stated that future plans needed to be communicated early as businesses and investors valued a degree of certainty. However, Cardiff private sector stakeholders held an alternate view to the promotion of business districts. They stated that at present there is a huge business focus on enterprise zones to attract investors, they held the position that this will not make places popular. Instead they stated that a focus should be placed on facilitating a lifestyle to reinforce an attractive environment through the value of cultural distinctiveness, highlighting the significance of constructing a 'people's climate' as opposed to solely developing a 'business climate' through engagement in 'softer' strategies aimed at attracting and retaining people (Florida, 2012).

Central to the discussion of the role of formal institutions in the facilitation of entrepreneurial business support, the research found the institutional quality and variations in the public sectors emphasis on fostering entrepreneurship to have an influential role in shaping the industrial transformation of cities (Williams, et al. 2017; Williams and Vorley, 2015; Baumol, 1990). Notably, the willingness of formal institutions to increase their effectiveness in the promotion of entrepreneurship is crucial in the supply of support for local businesses across each context (Vorley, et al. 2017). Strategic support is increasingly facilitated through public-private partnerships to increase access to business guidance, networks and capital through entrepreneurial resources mobilised and coordinated through shared office spaces (Chittenden and Robertson, 1993; Bellone and Goerl, 1992). Notably, the cultivation of "soft" determinants within shared office spaces highlights the value of intangible assets in the promotion of entrepreneurship, and individual's increasing ability to sources "soft" determinants such as an entrepreneurial business culture within shared office spaces (Moriset, 2013; Parrino, 2013; Fabbri, et al. 2014) highlights the changing dynamic of resource accessibility. Access to support was increasingly found to involve the collaboration of public and private stakeholders to promote a culture of innovation

to strengthen the resilience of cities business base (Coe and helpman, 1995; Chittenden and Robertson, 1993; Bellone and Goerl, 1992). In seeking to maximise the impact of urban infrastructure, support through higher education and research has continued to be encouraged with varying performance differentials.

Mason and Brown (2014:11) detailed the significance of ‘bridging assets’ or ‘liaison-animators’ who are individuals that become key connectors between ‘people, ideas and resources’ and can resultantly assist the performance and innovativeness of entrepreneurs and businesses (Bosma, van Praag, Thurik, and de Wit, 2004; Slotte-Kock and Coviello, 2010). Using the knowledge, recommendations and connections to assist the process and link up connected support infrastructure for those seeking access to capital and local spaces to enable start-ups to flourish.

The findings further touch on the facilitation of a diversity of lifestyles rather than just delivering a place of work. This echoes the research of Richard Florida (2012), Madeleine Verdich (2010) and Charles Landry (2000), which explores the development of stimulating and dynamic places and their ability to retain talent, whilst at the same time creating a business environment that can foster new businesses drawn in/attracted by the presence of human capital. All stakeholders sought to enhance the retention and attraction of talent in Cardiff and recognized it as a key driver of business investment and sustainable development. This resonates with several studies on human capital that discuss how the presence of a highly skilled and entrepreneurial workforce can translate into productivity gains (Florida, 2012; Becker, 1992; Brooks, 2004). A number of private sector stakeholders recognised that modern businesses in the knowledge sector look to go where there is a strong pool of talent to foster knowledge and innovation.

4.3.4 Human Capital and Skill Demand

The research highlighted the presence and influence of human capital (knowledge, skills, experience and education) and its associated economic value in entrepreneurship and wider urban economic development (Becker, 1964; Schultz, 1961). Overall KBFs and stakeholders suggested there was a positive relationship between human capital and entrepreneurial success aiding individuals to exploit business opportunities, accumulate intangible assets and promote innovative entrepreneurship. However, the findings demonstrated the interrelated value of human capital together with other important factors such as the presence of an entrepreneurial business community and culture.

Table 4.6: Access to talent as a significant locational factor

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	Sample (N)
Birmingham	12.1%	41.0%	44.6%	1.2%	1.2%	83
Bristol	38.0%	42.2%	15.5%	1.4%	2.8%	71
Cardiff	15.2%	27.1%	42.4%	8.5%	6.8%	59
All	22%	37%	34%	4%	4%	213

Lucas (1988) and Florida (2008) recognised human capital as a key underlying driver of economic development. Affirming these well-established findings, the survey identified the ability to **access a talented workforce** as a key motivational factor for KBFs located in Bristol (Table 4.6). However, in contrast the findings suggest that human capital was less important for the KBFs surveyed in Cardiff and only somewhat of a factor for KBFs located in Birmingham.

Table 4.7: The satisfaction of KBFs with their ability to recruit the right staff

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	Sample (N)
Birmingham	2.8%	44.4%	36.1%	15.3%	1.4%	72
Bristol	27.3%	54.5%	14.5%	3.6%	0%	55
Cardiff	7.4%	42.6%	33.3%	9.3%	7.4%	54
All	12.5%	47.2%	28%	9.4%	2.9%	213

Similarly, the survey further found that firms in Bristol (54.5%), Birmingham (44.4%) and Cardiff (42.6%) were somewhat satisfied with their **ability to recruit the right staff** (Table 4.7). This suggests that Bristol was perceived to have a greater pool of human capital, in contrast to Cardiff where perceptions suggests there is a smaller pool of talent. The findings appear to demonstrate Bristol has the greatest talent pool whereas Cardiff provided the shallowest. Noticeable in recent statistics a number of private stakeholders reported Cardiff to be suffering from a Wales-wide graduate drain due to the limited availability of attractive graduate jobs to retain talent. For instance, to develop Cardiff's tech scene into an anchor sector a key Cardiff private stakeholder stated it was reliant on a continuous talent pipeline to reinforce its innovative development. Hence, there is a need to retain graduates, provide highly skilled and highly paid jobs to retain talent and to encourage individuals to have the confidence to be entrepreneurial.

In terms of graduate retention across the three cities Birmingham has secured a high retention rate of graduates with a stable legacy and projection of younger generations choosing to stay in the city. In addition to this the city was considered to have a high indigenous population and is increasingly recognised as a popular place to relocate. In comparison, the majority of Cardiff stakeholders reported that the city was unable to provide job opportunities for the majority of its graduates, whereas in Bristol graduates are being priced out of the city and pushed into the periphery. A Birmingham private stakeholder specifically highlighted the crucial role of the network Birmingham Futures as a resource especially valuable for young professionals delivering a combination of professional networking and city leadership for young professionals. The network is a key urban opportunity for young professionals to access the business community and establish an open and inclusive environment. Birmingham Futures was a particularly important resource for the city's large graduate population to enable the opportunity for talent to connect with likeminded individuals and enablers to maximise opportunities within the business community.

With regards to Bristol's entrepreneurial sustainability, the city has strong international links and with the UK's anticipated exit from the EU this is foreseen to have negative repercussions on Bristol's labour market especially as a number of private stakeholders expressed that the city's domestic skills offer was poor and heavily reliant on the external inward migration of labor. A number of key private stakeholders considered this to have been further exacerbated by various factors such as Brexit and the unwillingness of individuals to travel or move to Bristol in the current uncertainty. In particular, Bristol has quite a strong presence from the South East attracting a lot of young professionals from Spain, France, Italy and Greece, which if there is a shift in migration policy a private stakeholder suggested that it would become much harder to attract and recruit international talent.

“What is a real challenge for Bristol is that growing our own talent. Even if I look at my own development team, here, there are only a few people that are from Bristol. Lots of people have moved, to work for us.” (Private stakeholder, Bristol)

“Why aren't we able to find the talent here, in our local catchment? That's the problem with all industries, so I get to sit on a local enterprise partnership sector board for creative and digital. So there are only another 12 sectors there. So right across financial services, aerospace, renewable energy, like the whole range, and what kind of brings everyone together is that lack of skills and ability to train the people that they want.”
(Private stakeholder, Bristol)

A number of private stakeholders considered it crucial that Bristol employers took a more sustainable approach to skilled workers. The majority of private stakeholders considered it to be a key priority to rethink how workforce skills and qualifications are defined to recognize and use training, development and apprenticeships to address their skills gaps and support business activity going forward.

“If there was a way of us really looking at the way in which we try and train people, I know lots of professional service firms are moving across to a apprenticeship model, learning on the job etc. I think there's a kind of slow uptake in other sectors as to kind of getting over the fact that you don't have to have a degree to do lots of the different jobs. Particularly, in our sector, it is still a requirement on application process. It's actually why-- it's a bit old fashioned. And also, I think that whole system is changing because of this.”
(Private stakeholder, Bristol)

Indeed, the demand for skills was stated by a number of Birmingham and Bristol private stakeholders to have been compounded by the poor transportation system offering limited permeability throughout the city, poor state school performance and longstanding deprivation. In response, a Bristol private stakeholder acknowledged a new enterprise initiative The Aldridge Institute for Enterprise and Entrepreneurship, the institution goes into schools to train teachers and teach children entrepreneurial skills to equip the next generation with the skills to feed into the wider economy.

As for the future supply of human capital, the deprived areas in Bristol's inner city and outer inner city are seeing quite a free flow of both first and second-generation immigration as well as late 20s-30s talent moving out of London into Bristol. There is the base level expectation that locals should be able to send their children to a local state school and receive a quality service, however according to two Bristol public stakeholders the city suffers from a history of poor state school underperformance rates (Gov UK, 2019). A private stakeholder was hopeful that an influx of talent could help to underpin educational institutions through a good flow of highly skilled labour that could in turn improve the educational offer. However, a private stakeholder identified a significant problem in South Bristol where there is a swathe of disconnected and very poorly connected white working-class neighbourhoods with low-aspirations and school performance is significantly bad. According to a couple of Bristol private stakeholders there is a need to secure better transportation in deprived areas to draw talent into disconnected communities to capture the value released by transport and improved connectivity.

Access to human capital plays an important role in entrepreneurial productivity (Borias, et al. 2007; Cohen, et al. 2007; Estrin, et al. 2016). Schultz (1961) deduced human capital to be one of the most important factors of economic growth and development. This view led both Schultz (1961) and Gary Becker (1964) to consider stocks of productive knowledge and the skills possessed by individuals to contribute to economic and social transformations. The empirical findings corroborate the literature and demonstrate that physical capital alone is not enough to explain modern economies and development (Abramovitz and David, 2000; Goldin and Katz, 2001). Economists and policymakers were initially influenced by the studies of Petty (1690), Smith (1776) and Farr (1853), their observations placed importance on the role of people, and their abilities, in the wealth of nations (Cipolla, 1969; Houston, 1983). Accordingly, intangible assets are found to be significant determinants of innovation and economic development potentials (Woodhall, 1997).

(i) Investment in human capital

Investment in human capital emerged as a clear emphasis in the development of a sustainable entrepreneurial economy in Birmingham, Bristol and Cardiff to establish a competitive business environment. Public sector interviews in Cardiff revealed a noticeable public sector ambition to develop an entrepreneurial culture across Wales to change existing attitudes and equip future generations with entrepreneurial mind-sets to foster innovative competencies, to address the current skills gap and nurture a self-sufficient workforce. In particular contributions are focused on raising local aspirations and unleash an entrepreneurial mind-set to promote an inclusive and sustainable economy. Cardiff stakeholders revealed that based on the UK average Cardiff is behind in terms of its volume of entrepreneurs per capita, an entrepreneurial deficit that led Cardiff stakeholders to consider the need to provide a greater focus on education.

Notably, the skill profile of a workforce can have a strong bearing on the ability of the individuals to participate, contribute and compete in the local labour market. The skill base of a local economy can influence the prosperity of the population, productivity, engagement in entrepreneurial activities and the competitive performance of the local economy. In the case of Birmingham, the city's skill profile has been a major challenge with the skill level of the local population underperforming the national average. A Birmingham public stakeholder acknowledged unemployment had continued to be a major challenge since the decline of the city's traditional manufacturing base in the 1970s and during the 2007-2008 recession. To overcome Birmingham's skill level deficit the public sector was reported to focus on the need to up skill and develop the educational achievement level of the city's residents to harness the competitive performance of Birmingham's economy. The Local Enterprise Partnerships and local schools set up the Life Ready programme, a framework specifically designed to guide and support educational institutions to raise the ambitions and employability skills of their students. A further initiative developed in direct response to the city's poor performance in the attainment of higher-level skill qualifications was the Strategy for Growth comprised of (i) Ignite, to target individuals in education or training, (ii) Accelerate, to support those in employment and, (iii) Re-tune, targeting individuals out of work to improve Birmingham's skills talent pool to build sector strengths and opportunities, and to continue to attract business and investment.

The public sector in Cardiff and Birmingham placed a strategic emphasis on the development of skills and an entrepreneurial mind-set to improve access to employment and address skills shortages. In particular, the Cardiff Capital Region City Deal is concentrated on challenge-focused education, an approach that endeavours to invest in the skills and needs of the future economy with an increased importance placed on the training and the development of entrepreneurial mind-sets. It is the intent to address existing and potential future deficiencies by up skilling the local workforce to be equipped for emerging demands and aspirations. This notably demonstrates how entrepreneurial skills and urban economic development are intrinsically linked as found in Kim et al. (2006) and Evans and Leighton

(1990), who's research found human capital (education, skills etc.) to be a fundamental variable in explaining entrepreneurship. In support Welsh Government has identified apprenticeships as a crucial component of economic success and committed to at least 100,000 apprenticeship positions over the next five years.

As for the development of human capital, the analysis elucidates the importance placed by the public and private sector in Cardiff on building a community that shares an entrepreneurial mind-set. Cardiff stakeholders presented a core focus on encouraging businesses to strengthen their links with primary schools to nurture the conversation of entrepreneurship. An emphasis was placed on the need to develop entrepreneurial mind-sets and capacities by embedding enterprise education and entrepreneurial behaviours within the Welsh curriculum to pointedly improve the engagement of schools with employers, to tackle national prosperity and the future skills gap to support greater equality and social mobility. In the past employer engagement and enterprise education was restricted to secondary schools, however there has been a significant shift in recent activity in response to *'a growing awareness that older age primary children are already developing strong aspirations about their future lives and careers'* (Archer, et al. 2014; Le Gallais and Hatcher, 2008). This has led to the embedding of enterprise education in schools, and the renewed publication of the Welsh Government Youth Entrepreneurship Strategy (YES) (2010) to improve employability and increase the occupational upward mobility of children.

The findings accord with the literature, wherein it states human capital represents a way for nations to foster entrepreneurs, organisational innovations, technology, generate new ideas, and new efficient business models, increasing the rates of economic development (Charles Jones, 1996, 2001). There is the belief that the presence of highly skilled and knowledgeable individuals enhances the performance of firms and their economies, and heightens market competition (Harper and Earl, 1996; Lepak, 1999; Baptise, 2001; Bontis, 2007). Moreover, due to technical progress and the improved quality of goods and services labor is theorised to become more efficient and specialised meaning that output rates become more productive and profitable, often having a pivotal effect on technology across all sectors (Romer, 1986; Papageorgiou, 2003; Caselli and Wilson, 2004). As such, there is the belief that by broadening access to educational and training opportunities individuals can extend their social reach by enhancing their competence and capacities to improve their levels of education and development on a global scale (Xu, 2000; Caselli and Coleman, 2001).

(ii) Influence of the education system

The findings have highlighted the role and influence of higher education institutions and academic research in the process of innovative entrepreneurship through the generation of knowledge and implementation of new ideas (Audretsch, et al. 2014). The role of universities and partnerships with the business community have been increasingly recognised in entrepreneurial thinking to provide

leadership, drive innovation and cultivate entrepreneurial capital. In each of the three cities the support and uptake from academics positioned in universities has been found to be inconsistent. In some cases, academics are stated to have provided a fantastic supportive role where both parties have gained a lot from the relationship. The extent to which academics undertake wide-ranging partnerships in innovative and entrepreneurial activities is stated to be individual specific. In particular, a Cardiff private stakeholder stressed that there was a significant gap in communication across the hierarchy of stakeholders, where there are strong communication links between top-level organizations such as CBI, universities and the council. However, this did not filter down through the hierarchy to businesses and those organisations on the ground delivering services, an arrangement that emphasizes the need for greater vertical networks and collaborations. The Cardiff private stakeholder emphasised the importance of networks and the significant role universities can have in strengthening vertical ties and bring people together as stated to have been achieved through Creative Cardiff's innovation network.

“There are always equally frustrating barriers and blockers, human nature dictates that we all run our own silos... take Cardiff University depending on who I speak to depends on how open its often personality led and what I find is go to the people that have got an open mind to working collaboratively on, because otherwise you just lose so much time in doors shut.”
(Public stakeholder, Cardiff)

“It's frustrating, it's hierarchical. I often think gosh if I was a young entrepreneur what the heck would I do here. Cause it's not easy and I use my networks to get an influence basically. But one thing I would say is that you don't need many, movers and shakers to make a difference.” (Public stakeholder, Cardiff)

All stakeholders across each of the three cities recognised that historically the cities had been particularly weak at building connections between their research base and their businesses, while these connections are affirmed to exist in places there appears to be a need for a greater concentration. An approach that could convert social capital into network capital whereby individuals can have a greater innovative impact in assisting local initiatives. There is the recognition that universities are large complex organizations, which makes it particularly hard for businesses to penetrate their silo-ed approach/thinking. A key body of literature emphasised the positive externalities and efficiencies created through interactions between Higher Education and businesses in their problem solving, exploitation of opportunities and innovative performance to sustain a competitive advantage (Fuente and Ciccone, 2002; Becker, 1992). Public stakeholders in Cardiff acknowledged the efforts universities had made to assist wider research agendas and the business community through initiatives they are affiliated with such as Creative Cardiff and Cardiff Start. Similarly, in Birmingham both public and private stakeholders stressed the innovative influence Birmingham's six universities have had in the development of Birmingham's innovative culture and entrepreneurial activities by way of knowledge transfer activity, partnering with businesses and sector focused research activity. In particular, a Birmingham City Council incubator The Birmingham Science Park Aston was recognised by a private stakeholder as a key facilitator of higher education spin out activity and enterprise through university resources and academic research.

A further link into higher educational resources expressed by a number of public and private Birmingham stakeholders is facilitated through the Local Enterprise Partnerships ensuring talented individuals have placement and research opportunities with access to a range of collaborative services and opportunities. However, a Birmingham private stakeholder reported the need for greater business engagements with educational institutions. The education system in Cardiff and somewhat Bristol was recognised to have a critical role in the facilitation of entrepreneurship. The findings highlighted the role of the public sector in the facilitation and coordination of education providers and business needs. All Cardiff, some Bristol and a limited number of Birmingham stakeholders made reference to the fundamental role education has in shaping the future generation of business leaders to become meaningful contributors to society. In particular, a number of Cardiff private stakeholders emphasised the importance of education in innovative entrepreneurial activities:

All roads lead back to education. To win the massive battles, irrespective of which are the stakeholder groups, education came out loud and clear.” (Private stakeholder, Cardiff)

A number of private stakeholders in Cardiff emphasised a need for new approaches to education and knowledge creation, linking into the Donaldson Report that advocates how changes to the curriculum in Wales can encourage successful futures. Cardiff private stakeholders focused on the requirement to future proof the provision of education and relevant research to respond to trends in market forecasts to drive innovation to deliver a competitive urban market. In shaping the future need of businesses and their skill demands Cardiff and Bristol private stakeholders stressed how activities in higher education can create entrepreneurial mind-sets and assist future business needs. A number of stakeholders stated that the business community in Cardiff and Bristol should be working in collaboration with providers of higher education to have a long-term impact on current demand to deliver the needs of emerging economies and business demands. While at present a number of public and private stakeholders across each of the three cities acknowledged academic institutions are not solely focused on entrepreneurship, but wider contributing factors such as skill development, creative exploration and curriculum content relative to the appropriateness of future careers. In practice, Be the Spark a Cardiff public sector initiative was highlighted to have facilitated the coordination between business needs and research knowledge in institutions of Higher Education. However, notably a Cardiff public stakeholder reported the unpredictable and frustrating nature of actor interactions in the business community, highlighting variations of engagement within institutions of higher education.

A Cardiff public stakeholder discussed the issue further highlighting how a minority of thought leaders in an institution can influence from within and convert some of the slower movers. A Cardiff public stakeholder strongly argued that as a policy mover it is imperative to focus on future generations and their entrepreneurial mind-sets with those who can and are willing to make a change, then as activities develop it will be difficult for others to stop momentum. Across the three case studies the role of higher

education in innovation and entrepreneurial activities has gained prominence in economic development studies. A majority of Birmingham, Bristol and Cardiff private stakeholders recognized universities to be key assets having driven research and innovation across the city. The knowledge transfers derived from the cooperation amongst universities and businesses was considered to have led to increased innovation. A Bristol private stakeholder raises a frustration with the pace at which universities move that has been a key challenge obstructing the development of initiatives and was stated to be a key reason for private sector collaborations.

“[Universities] recognize that they are very slow and bureaucratic. It's not a criticism; it's just recognition. Actually, sometimes the sheer volumes of events, initiatives, programs, facilities, I think it can be massively overwhelming. If I'm thinking that somebody that's in the industry, I dread to think what some of the businesses are thinking and how to navigate all of those things.” (Private stakeholder, Bristol)

The majority of Bristol private stakeholders reported the stark differentials across Bristol between the city's highly educated workforce and significant groups of deprived individuals. Bristol private stakeholders acknowledged Bristol's highly skilled workforce and significant groups of deprived communities, which are subject to stark differentials across the city.

In accordance with the literature the findings concurred that human capital is a crucial component of entrepreneurship and economic development (Borias, et al. 2007; Cohen, et al. 2007; Estrin, et al. 2016). The prominence placed on the successful development of human capital and an entrepreneurial mindset stems from the fuller recognition of the role of competitive knowledge and rapid technical progress in the modern economy (Goldin and Katz, 2001; Keeley, 2007). Human capital is considered to be a determinant of improved productivity, knowledge and invention, a particularly important source of economic development (Barro, 1993; Heckmann and Klenow, 1997). As the works by Florida (2002; 2012) and Landry (2000) suggest education and “intelligence” alone are not synonymous with creativity, technological inventions and the ability to take risks, they do not necessarily equate to entrepreneurial success and economic returns. Though, it must be noted that a vast array of literature has demonstrated the contrary, Card (2001), Harmon, et al. (2003) and Belzil (2007) found clear wage returns on schooling a view supported by the stakeholder interviewees. Consequently, the empirical findings reinforced the literature and considered human capital to contribute strongly to associated skills acquired, innovative activities, economic profit and the future growth of cities (Tatlah, et al. 2010; Brooks, 2004; Becker, 1992).

(iii) Youth development

An emphasis was placed on the importance of public sector youth support in the development of an entrepreneurial economy. As part of Bristol City Council's resilience agenda, the council works with the schools in the city to promote enterprise for young people in Bristol. The education system was identified as a major instrument in introducing an awareness of entrepreneurship from an early age to

increase the awareness and self-confidence in young people. A dynamic programme advising those that want to run and start their own business, work for themselves or enter into more traditional employment where they can apply the valuable skills they have obtained. This demonstrates the urban agenda promoting investment in human capital to equip future generations to engage in entrepreneurial activity. One of the public sectors key issues has been the influence of social networking and peer pressure in the uptake of entrepreneurial activities in the more deprived areas of Bristol. A Bristol private stakeholder found young people who were unaware of role models who pursued higher education tended not to either, emphasising the importance of raising entrepreneurial aspirations in education. Furthermore, those who do not mix with people who value employment find it harder to get into a federal job. Whereas, if an individual knows a number of people who work in the informal economy for themselves or as freelancers and are in the position to act as role models, this has a demonstrable effect on individual's mind-set and influences their choices. It is important to understand the effect an individual's exposure to entrepreneurial actors and inspiring role models can have on the willingness of individuals to engaging in entrepreneurial activity.

In a similar line, the role of entrepreneurial engagement in the education system was stressed as a crucial aspect in developing a sustainable entrepreneurial economy. The majority of Cardiff private and public stakeholders held the view that you can easily encourage entrepreneurial behaviours and create entrepreneurs. Indeed, almost all Cardiff public stakeholders concurred that the curriculum should better infuse entrepreneurial behaviours and skills into the education system. Both Cardiff public and private stakeholders identified the need for the education system to adapt to reflect the current 'hollowing out' of the labour market that no longer serves for 'jobs for life'. That said, a number of Cardiff public stakeholders further acknowledged the limitations of education structures and recognised teachers have a limited understanding of entrepreneurship within the education system. Despite this, Cardiff private stakeholders stated that entrepreneurship should be formally embedded into the curriculum, as while a high proportion of university students express an interest in business start-up, the data reveals only around 10% are self-employed six months after graduation. However, a Cardiff private stakeholder found students at later stages of the education system to lack advance skills, intrigue and creative thinking. Accordingly, a public and private Cardiff stakeholder placed an emphasis on the need to incorporate entrepreneurial behaviours at an earlier stage to inspire creative behaviours in current generations. An understanding reflected by Cardiff's public sector wherein youth entrepreneurship is fostered through early engagement in school curriculums to encourage the development of entrepreneurial mind-sets. Notably, some public stakeholders and a key Cardiff private stakeholder identified the need to manage expectations concerning the extent to which the public sector is responsible for generating entrepreneurship, where it was argued entrepreneurial behaviours are a product of Cardiff's contextual environment.

“I think historically, entrepreneurship has been a bolt on. If you've got a teacher that's particularly interested in it, then great, but by and large they perhaps haven't got experience in it. It's done like a one-hour smash and grab kind of activity, and then it's gone. Lost in the midst of time. Whereas it really should be something they are exposed to on a regular basis.” (Private stakeholder, Cardiff)

Cardiff public stakeholders strongly acknowledged the role of higher education as a driving force of innovative development and entrepreneurial activities, highlighting that there are a lot of public sector led and funded initiatives centred on innovation. However, a Cardiff private stakeholder noted that Cardiff is not as good at linking up the expertise within higher education to the application of entrepreneurial thinking in business to assist innovative developments. While a private stakeholder recognised Cardiff Universities Innovation Network to be a good Knowledge Transfer Partnership, outside of that a further Cardiff private stakeholder considered there to be almost nothing that is determinedly aimed at innovative space. On the contrary a Cardiff private stakeholder stated that there are plenty of schemes to bridge the gap between education and business that provide opportunities for innovations however, most are only relevant to a small proportion of businesses. Such as, Simply Link a University of South Wales scheme set to revolutionise how commercial organisations and universities work together to help students put their business ideas into practice. A service providing an effective conduit between talent pools within HE and industry sectors supporting entrepreneurial activities, accelerating innovation and driving organisational performance.

The findings demonstrated the importance and value of human capital in fostering entrepreneurial activity. In accordance with a longstanding body of literature (Becker 1964; Schultz, 1961) the presence of a population attributed with knowledge, skills, experience and education has significant economic value. A discovery that accords with Henderson, et al. (1995) and Glaeser, et al. (1992), who stressed entrepreneurship to be strongly associated with highly skilled professionals. In accord, the empirical analysis identified the presence of human capital as a key determinant of productivity and innovative entrepreneurship. In support, Bullough and Renko (2013) found an entrepreneurial resilience to prevail in challenging and dynamic market situations, it can be described as: “*..the ability of an entrepreneur to manage difficult personal and market conditions as well as destabilising events and be future-oriented. Resilient entrepreneurs welcome rather than resist change and work hard to achieve goals and manage challenges*” (Fatoki, 2018:3). Thus, entrepreneurial individuals can have a stabilizing and dynamic contribution in difficult market conditions experiencing internal and external shocks or changing business environments, assisting the development of the economy and individual entrepreneurial success (Bernard and Barbosa, 2016; Reinmoeller and Van Baardwijk, 2015). However, in the current climate of political uncertainty the drive towards an entrepreneurial economy was criticised by some for its inherent risk that would not necessarily increase resilience.

Despite the three case studies stressing the importance of entrepreneurial mind-sets a skills shortage prevails across the three cities. The analysis identified the need to invest in human capital to equip

future generations to address the skills gap, to establish a dynamic labour pool to facilitate access to a talented workforce to attract investment and reinforce the presence of an entrepreneurial business economy (Chiswick, 1983). A specific focus was placed on future generations and youth development through educational resources and the development of entrepreneurial mind-sets to secure future talent flows. This resonates strongly with Ibrahim and Galt (2011) who emphasised the importance of human capital determinants (education, skills, etc.) and their association with productivity. While the role of higher education and research in innovative entrepreneurial activity was strongly promoted the findings highlighted significant variations in the engagement of higher education with businesses. Clark (2004) detailed the benefits of a “proactive university” engaging in activities that can reduced state dependency and heighten institutional self-reliance. As is the case, innovative and commercial academic behaviour should be encouraged, whereby academics should be encouraged to stimulate external collaborations and be incentivized to generate and engage in local projects with external bodies. The findings recognised the increasing role of the public sector in the coordination of educational provisions with business needs (skill demand). Perlman, *et al.* (1988) coined the term “academic intrapreneur” whereby agents invest time and intellectual knowledge outside of the regulatory mechanisms of their own institutions to encourage innovative entrepreneurial behaviour outside of academia. As such it is reasonable to state that a shortage of an adequate supply of human capital is a barrier to entrepreneurship and urban economic development, and public-private partnerships are of increasing importance to innovative entrepreneurship within the business community.

4.3.5 Importance of Soft Determinants for Entrepreneurship

Although, previous studies have struggled to define determinants that influence urban entrepreneurial activity, the role of “soft” determinants in the location of KBF’s and the attraction of talented was emphasised (Musterd and Deurloo, 2006). In particular, the intangible nature of “soft” determinants has made it particular difficult for scholars to identify and define precisely how intangible determinants are understood. However, the presence of an entrepreneurial spirit and business culture is undoubtedly crucial in the promotion of entrepreneurship. The examination of empirical survey and interview data unearthed the importance of several key overarching “soft” determinants perceived to contribute to the promotion of entrepreneurship across the three contexts. The analysis highlighted the influential presence of the following determinants, (i) personal connections, (ii) a strong business environment and entrepreneurial culture, (iii) entrepreneurial business support, and (ix) supply of human capital, all stressed as important determinants in the attraction of talented individuals and the location of KBFs (Musterd, et al. 2007).

4.4 Hard Determinants

The earlier section discussed the influence of soft factors to explore the association between differing urban contextual settings and variations in urban economic development. This section specifically describes the survey findings on the perceptions of “hard” contextual dynamics such as the importance of connectivity focusing on transportation links and infrastructure, the availability of suitable space for businesses to grow into and access to finance. It is the intent to provide a contextualized view as to how infrastructural characteristics contribute to entrepreneurial activities and wider urban economic development. As referenced in section 4.3 the survey explored locational factors that have attracted firms to locate in Birmingham, Bristol and Cardiff. These included personal connections, geographic location and proximity to other cities, transportation links and infrastructure, each city as a financially viable location, access to a talented workforce, access to customers, partners and suppliers, presence of a strong business community, business friendly regulations and whether each city had a unique culture and local character, some of which were discussed in the previous section.

4.4.1 Opportunities for Finance

The findings have demonstrated the ability to access financial resources is a crucial determinant of entrepreneurship found to nurture an environment conducive to business creation and development, ultimately heightening the productivity performance of business communities. In particular, this section to discusses, (i) the importance of opportunities for all and (ii) finance as an enabler and or barrier.

Table 4.8: The Local Authorities (LA’s) influence on KBFs awareness of financial support in each of the three cities

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	Sample (N)
Birmingham	11.1%	23.6%	37.5%	18.1%	9.7%	72
Bristol	1.8%	12.7%	41.8%	25.4%	18.2%	55
Cardiff	3.7%	25.9%	35.2%	18.5%	16.7%	54
All	5.5%	20.7%	38.2%	20.7%	14.9%	181

The public sector has a limited influence on all KBF’s **awareness of the availability of financial** support for each of the three cities (Table 4.8). It is possible that this could reflect public sector funding cuts and the limited availability of funds, or the limited public sector promotion of entrepreneurial business activities within each of the cities. The survey findings concur with stakeholder perceptions across the three cities that there is limited access to funding in the current political uncertainty.

A key emphasis was placed on the influence of opportunities to access finance and its association with the promotion of inclusive growth across Bristol, the city was recognised as having an established

“It’s about humanity being kinder to itself and providing opportunities for all.”
(Public stakeholder, Bristol)

“Whatever we do for development, we don't want to damage that [Bristol’s quality of life] and wherever possible, we wish to enhance it. Then we would want development which enables us to see prosperity rises across the whole city, so we're very much looking for inclusive and sustainable growth.” (Public stakeholder, Bristol)

entrepreneurial ecosystem that fostered a competitive business environment. As such public stakeholders in Bristol reported inclusive growth to be a key motivation for the city’s development to increase accessibility of business support. Increasing pressure has been placed on the need to support and encourage individuals from marginalised communities to participate in entrepreneurial activities to nurture the equality of opportunities for all. Indeed, a Bristol public stakeholder affirmed the council’s intent to unlock the city’s potential by providing opportunities for all under the ‘inclusive growth’ agenda which set the ambition to deliver a sustainable economy inclusive for all, with the intention to create better places for people to live and work where there is employment and equality of opportunities.

It is the intent to tackle barriers to opportunities to entrepreneurship to release the potential of disadvantaged communities, Bristol private stakeholder perceptions shared the view that minority and deprived communities lack access to finance, networks and resources. It could be argued that due to the competitiveness of Bristol’s business community, as a Bristol private stakeholder held, investors have an internal bias and perceive entrepreneurs in disadvantaged areas to be riskier than those integrated within the business community. Likewise, in the context of Birmingham access to finance is a key issue for entrepreneurs from deprived backgrounds. Birmingham private stakeholders recognised the market is competitive and those not found to be creditworthy are often those perceived to need finance but struggle because they are deemed riskier and too expensive to administer in disadvantaged areas.

In a similar line several private stakeholders in Cardiff expressed the more the public sector is involved the more complicated entrepreneurial endeavours become and likely for problems to emerge. That while their attempts have good intent there is the risk the Government thinks the community wants something and creates a number of bodies to facilitate their ‘perceived needs’, which unintentionally displaces the market. A number of Cardiff private stakeholders stated the biggest challenge was centred on how funding is allocated to a project, part of the restrictions that come from trying to impose levels of investment creates further challenges. For example, to secure government funding entrepreneurs are required to complete a tender process. However, a Cardiff private stakeholder detailed that if a start-up did go to tendering it is unlikely that it would secure funding as it would not have the appropriate resources (balance sheet, trading history etc.). Whereas, it would appear that if the public sector creates

a body it is a lot easier for them to fund new bodies to do the work however this then results in the body fighting to justify their survival. This has meant bodies have been getting more and more tied up and involved in the broader concept resulting in a situation where the public sector is seeking to create as many jobs as possible.

Table 4.9: Financial viability (affordability of resources) as a significant locational factor

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	Sample (N)
Birmingham	20.5%	38.5%	25.3%	13.2%	2.4%	83
Bristol	26.8%	45.1%	21.1%	1.4%	5.6%	71
Cardiff	28.8%	33.9%	23.7%	10.2%	3.4%	59
All	19%	39%	23%	8%	4%	213

Being **financially viable** (the affordability of resources in each location) was a significant locational factor for Bristol and a key-contributing factor for KBFs located in Birmingham and Cardiff (Table 4.9). Indeed, the locational decisions of KBFs were exercised to ensure financial viability. A further consideration demonstrated by Table 4.12 was the perceived **quality and affordability of premises for KBFs** was identified as a key consideration in both Cardiff (46.3%) and Birmingham (41.7%) whereas in contrast, this was not as much as a consideration for firms located in Bristol (38.2%). This could be indicative of the affordability and availability of office space in Birmingham and Cardiff, whereas Bristol is constrained by a high demand for premises, high rental prices and a limited supply of office premises.

Table 4.10: The satisfaction of KBFs with local business rate costs

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	Sample (N)
Birmingham	4.2%	12.5%	44.4%	31.9%	6.9%	72
Bristol	1.8%	29.9%	40%	27.3%	1.8%	55
Cardiff	7.4%	25.9%	38.9%	22.2%	5.6%	54
All	8.9%	22.7%	41.1%	27.1%	9.5%	181

Notably, on a scale of satisfaction the majority of KBFs did not report that they were either satisfied or unsatisfied (Birmingham, 44.4%; Bristol, 40%; Cardiff, 38.9%) with their **local business rate costs** (Table 4.10). Although over a third (31.9%) of firms in Birmingham did express that they were

somewhat dissatisfied with their local business rates. Contrastingly, a third (29.9%) of firms in Bristol reported that they were somewhat satisfied with their business rates in Bristol, a fairly surprising discovery as local demand for office premises has resulted in rental prices overtaking those in London. Whereas in Cardiff perceptions of local business rates in their urban area were rather neutral, where an almost a balanced number of firms expressed their somewhat satisfaction (25.9%) and somewhat dissatisfaction (22.2%).

A Bristol private stakeholder conceded while business entry costs were considered low if there was greater finance available it would lead to a greater focus on later stages of the growth life cycle of businesses. Bristol City Council set up the Bristol and Bath Regional Capital that offers access to experts, loan-based finance and connects local and external investors with commercial and entrepreneurial opportunities. An approach working with the community to connect businesses to access to finance, to establish a source of funding to provide support for entrepreneurialism. A key Cardiff public stakeholder expressed the significance of having a supportive system to facilitate individual's entrepreneurial aspirations, further highlighting the need for appropriate industry specific supportive resource requirements that enable entrepreneurs to realise their business aspirations. The Cardiff stakeholder conceded that entrepreneurs should not necessarily be public sector reliant but have a sense of initiative and ownership where individuals take on a proportion of risk and capital cost. However, the Cardiff stakeholder acknowledged the system in place can be problematic and discourage disadvantaged social groups from providing a business service or pursuing a job opportunity. However, a key Cardiff public stakeholder expressed the view that candidates seeking access to financial support are commonly required to meet an extensive eligibility criterion. Profiling requirements that disincentives social groups from entrepreneurial opportunities as they require business experience, financial competence and are a crucial influence in securing financial support in an increasingly competitive area.

In a similar line to Cardiff, to support entrepreneurial aspirations the Midlands Engine Investment Fund (MEIF) collaboration between the British Business Bank and ten Local Enterprise Partnerships commits a proportion of their European structural funding towards the development of SMEs. The MEIF was established to address market gap in access to funding to eliminate regional imbalances to support the midlands as a place to do business. A Birmingham public stakeholder reported it was the intention of the £250million fund to address gaps in SMEs ability to access finance and support businesses in identifying access to finance outside of the fund, to deliver a greater outward reach than the fund itself. On the basis of a number of private stakeholders it would appear there are not enough individuals taking risks in investment opportunities,

“We're always fighting what feels a losing battle, but constantly trying to get new people to come in, trying to think of new ways we can support the businesses.”
(Private stakeholder, Birmingham)

It was noted that whilst Birmingham's business economy received support and investment from Asian investors their focus continually reverts back to activity in London. Limited access to finance and investors presents significant uncertainty a narrative expressed within each of the three case studies for example, a Birmingham private organisation was working with a promising start-up with three weeks of funding remaining and no investment interest. The notable absence of financial support results in significant uncertainty for a lot of SMEs and whether their programs can continue. Additionally, a key source of funding for business support activity across each of the cities has been European funding, which is currently uncertain, this has demonstrated a fundamental need to be innovative and find novel ways of generating business investment.

The empirical analysis highlighted the importance of access to finance and space to accommodate business growth as key determinants of entrepreneurship and enterprise expansion (King and Levine, 1993; Berger, et al. 2002; Bell, et al. 2010; Fraser, et al. 2015). All stakeholders acknowledged the opportunity to secure investments and funding is pivotal to the success of SMEs and has the potential to transform the financial landscape for smaller businesses to boost productivity and opportunities to expand (Pollard, 2003; Beck, et al. 2006). In particular, to meet the operational needs of a business community a key focus was placed on the requirement to support business growth through the availability of finance and affordable office space, the two resources were deemed underlying necessities to secure the capacity to continue and scale up operations. However, whilst "hard" resources are essential to cater for the economic requirements of businesses (Stein, 2002; Beck, et al. 2006), arguably without the availability of skilled expertise, business support, and an entrepreneurial business culture the provision and impact of "hard" determinants would not be fully mobilised.

4.4.2 Importance of Connectivity (Transportation and Proximity to Other Cities)

There is considerable variation in entrepreneurial activity across urban contexts as considered in Chapter 2. Accordingly, this section intends to understand how contextual conditions such as the connectivity and proximity of urban areas can influence entrepreneurship. The survey findings highlighted the importance of connectivity between urban areas in both proximity and transportation links. KBFs perceived the connectivity between urban areas to be a fundamental characteristic of a competitive and attractive location suitable for KBFs business needs. While stakeholders emphasised the importance of urban mobility to address urban issues and provide wider access to resources.

Table 4.11: The geographic location and proximity to other cities as a significant locational factor

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	Sample (N)
Birmingham	16.9%	44.9%	31.3%	2.4%	4.8%	83
Bristol	18.3%	43.7%	25.3%	7.0%	5.6%	71
Cardiff	13.6%	32.2%	40.7%	6.8%	6.8%	59
All	16%	38%	33%	7%	6%	213

A key aspect of the locational choices of firms surveyed in Birmingham and Bristol was their **geographic location and proximity to other cities** as well as the availability of **transport links and infrastructure** (referring to the geographical positioning of each city relative to others and the availability of transport infrastructure) (Table 4.11 and 4.12). Notably, both Birmingham and Bristol are perceived to consider the geographic location of the cities and their proximity to other cities to be a significant locational factor, both of which have strong transportation links to London. Arguably, it is somewhat unexpected that Birmingham underperformed Bristol as a competitive business location on the basis that Birmingham is centrally located within a short distance from London and other neighbouring cities. Of the three cities Cardiff appeared to be the least competitive location with the majority of KBFs not having been particularly influenced by the geographical location of Cardiff or its proximity to other cities.

Table 4.12: Transport links and infrastructure as a significant locational factor

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	Sample (N)
Birmingham	13.23%	54.2%	27.7%	2.4%	2.4%	83
Bristol	15.5%	45.1%	16.9%	8.4%	14.1%	71
Cardiff	10.2%	44.1%	32.2%	8.5%	5.1%	59
All	13%	47.8%	25.6%	6.4%	7.2%	213

In some cases, respondents elaborated to claim their perceptions were based on the city's proximity and connectedness to the capital London. However, the location and its connectedness to other cities was not a consideration and had the least influence on employees in Cardiff. This could be due to Cardiff having limited transportation connections to major urban players such as London, Manchester and Birmingham, although it is conveniently linked to Bristol. Survey respondents across each of the cities appeared to confirm **transportation links and infrastructure** was a significant locational factor (Table

4.12). Indeed, in terms of the influence of “hard” infrastructure on the attractiveness of locations as a competitive business destination, all private stakeholders across the three cities were highly critical of existing urban infrastructure and identified the need to strengthen urban mobility in order to unleash the potential of cities. Bristol’s transportation system was considered by both public and private stakeholders to be one of Bristol’s greatest challenges. In accord, the continued development of enhanced transport infrastructure in Cardiff was a clear priority for public stakeholders and expected to benefit the city’s business economy enormously. Notably, all Cardiff private stakeholders considered the improvement of transport infrastructure to be their biggest issue, claiming if the proposed infrastructure system were not developed Cardiff would ‘grind to a halt’. Similarly, Birmingham’s transport system was reported to be a key weakness and the source of continued private stakeholder frustration. Overall there was a strong emphasis on the need to develop multimodal public transport services to serve businesses and local residents to improve mobility across each of the three cities.

“We have three train stations in the center of Birmingham, none of which are particularly accessible and the rail's okay-ish but the rest of the infrastructure that supports getting people in and out, i.e. buses and the roadways are absolutely atrocious.”
(Private stakeholder, Birmingham)

There was a strong Birmingham private stakeholder demand to reduce travel barriers to improve levels of economic wellbeing, retain talent and secure investment. A Birmingham public stakeholder highlighted the significance of transport connectivity and how it can contribute to the attractiveness of place empowering talent retention and inward migration out of London. The importance of urban mobility for the future development of the city was a prevalent private stakeholder focus, wherein they placed emphasis on the need to establish reliable infrastructure to increase the attractiveness of the economy as an efficient business destination. Notably, the majority of Birmingham private stakeholders shared the view that the public transport system was a key hindrance and were sceptical of the public sectors confidence in the transport systems future development.

“Transport is a real nuance for businesses.” (Private stakeholder, Bristol)

“We have a massive problem with transport. The transport infrastructure in the city is a total disaster.” (Private stakeholder, Bristol)

“They've been trying to do a tram system for however long, which is not worth the paper that it's written on.” (Private stakeholder, Birmingham)

“In fact, my partner, for example, works up at the university and we live in South Bristol and the quickest way for him to get there is to cycle because if he was to go in the car, he has no idea how long it's going to take him because of traffic and he would never be guaranteed to get there in time and public transport would require, I think, three changes of buses for him to be able to there.” (Private stakeholder, Bristol)

“There are lots of people that live in Bristol, but they can't get to aerospace to be able to be trained.” (Private stakeholder, Bristol)

“If you ask a lot of businesses and people why they stay clear of the center because it's a nightmare to get to basically.” (Private stakeholder, Birmingham)

“I found getting a train into Cardiff Central brilliant. No issue getting a train there. The buses were phenomenal. If I compare that to Birmingham, you are head and shoulders above Birmingham for transport.” (Private stakeholder, Birmingham)

Both Cardiff public and private stakeholders recognized transportation links between the city and the wider region crucial to maximize productivity gains from a dynamic city likened to a region of 1.2-1.3million. Similarly, all private stakeholders reported infrastructure to be a key priority for the development of the urban business environments. In particular, the Cardiff metro is anticipated to bring huge opportunities creating hubs of entrepreneurialism, business parks and enable the free unrestricted flow of individuals moving into Cardiff for work but also out of Cardiff to take up wider opportunities. While numerous Bristol private stakeholders discussed various transport plans such as the metro bus system, which should be running but has not opened and the metro-river system in place of the tram system, which was proclaimed as financially unfeasible. This led a further private stakeholder to raise their disappointment in the uncertainty as to what course the city's public transportation system should take.

“Marvin [the city mayor] is throwing around all sorts of ideas around having a tube system or extending the trains system, but if we could just finish the bus system first, see how that works then we could start looking at other things whereas, it feels like we're trying to find- we do need some extra solutions but tunnelling our way through the city might not be the immediate answer. If we could just maybe work on the Metro Bus Route System first, and that got a number of routes that will cross east to west, north to south and see if that helps then work out what we need on top of that.” (Private Stakeholder, Bristol)

Transport has become an increasing concern for all stakeholders. Notably, in Birmingham there has been a long-term trend of declining bus use and increased car use across the city. To address this in

part, the £55.7 billion HS2 high-speed rail project is expected to improve connectivity with London and neighbouring regions. It is anticipated an efficient transportation system would bring greater economic benefits to the local area, attracting new businesses, talent and investment. In particular, Cardiff private stakeholders highlighted the opportunities the economy would benefit from if there were a smoother transition into Cardiff to increase access to neighbouring markets. A Cardiff private stakeholder suggested the abolition of tolls should make Cardiff a better inward investment opportunity but there was the need to create a business environment that is capable of accommodating the needs of modern investors. Whereas in contrast Birmingham was recognised by the majority of stakeholders to have secured significant business investment and has a strong network rail links to London, Manchester and Bristol. Public stakeholders reported Birmingham's public transport system was ranked the ninth best-connected city outside of London. The KBF survey results demonstrated that Birmingham's good transportation links to London and across the UK were a key locational factor for KBFs and a crucial asset for business. The qualitative survey data highlighted the importance of transport and the city's links to London. Ultimately, urban mobility and the effectiveness of urban transport systems is argued to have a powerful influence on the movement of people and the opportunities available to them (employment, education, business support etc.), an issue that continues to be key concern for local residents and businesses across the three cities.

The notion of connectivity, referring to the availability of transportation and proximity to other cities, appears to have links with the provision of "soft" determinants. Urban mobility was raised as a crucial aspect impeding access to entrepreneurial opportunities across the three case studies (Audretsch, et al. 2015). As discussed earlier poor urban mobility within Birmingham and Bristol was reported to have impeded employer's accessibility to talent, whilst in Cardiff poor connectivity into rural communities has led to increasing unemployment. As such the modernisation of transportation links into and out of each of the cities and within Birmingham and Bristol was considered crucial. Notably, in the case of Birmingham and Bristol poor urban mobility was reported to segregate minority groups from key employment opportunities. Overall, it would appear "hard" determinants were considered an operational "must" to facilitate opportunities for entrepreneurial activity; in the case that an adequate supply of "hard" determinants was available the role of "soft" determinants could have a crucial impact. Notably the research found "soft" determinants to be an essential component in support of the innovative needs of entrepreneurial activity and to secure competitive growth. The findings stressed the importance of urban mobility, the value of urban proximity and connectivity to pools of skilled professionals. However, Brown, et al. (2017) were critical of the power of human capital and stated that it is more than human capital hinting toward the presence of strong cultural business contexts. On the other hand, the need for connectivity challenges Friedman's (2005) assumption that 'the world is flat' wherein we live in a digital era where there is a diminishing need for proximity and physical presence. The findings reinforce the role of transport as a necessary operational "hard" determinant of entrepreneurship with factors determining the distribution of economic activity.

4.4.3 Space for Business Growth

This section engages with the availability of “hard” infrastructure and the repercussion this can have for entrepreneurial growth. In particular, all private stakeholders placed a strong emphasis on the availability of suitable office space, as a valuable business requirement and a prerequisite to encourage scale-up growth. In each urban context, the suitability of “hard” business infrastructure is recognised as a fundamental barrier or driver of spatial patterns of business growth.

Table 4.13: The satisfaction of KBFs with the quality and affordability of local premises

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	Sample (N)
Birmingham	5.6%	41.7%	26.4%	26.4%	0%	72
Bristol	5.4%	38.2%	29.9%	27.3%	0%	55
Cardiff	11.1%	46.3%	27.8%	13%	1.8%	54
All	7.4%	42.1%	28%	22.2%	0.6%	181

According to the findings of the business survey Cardiff (46.3%) was considered to have the greatest **quality and affordability of office spaces**, followed by Birmingham (41.7%) and Bristol (38.2%) (Table 4.13). This could reflect the increasing demand for ‘grade A’ office space in Bristol which has led to added pressure and an increased market demand resulting in increased rental costs. Accordingly reducing business satisfaction in the affordability of rental premises, whereas Cardiff was recognised to have the lowest rental costs of each of the three cities (Table 4.14).

Table 4.14: Cost to rent flexible office space in 2018 (InstantOffices, 2018)

	Average cost per person per month
London	£690
Bristol	£287
Birmingham	£264
Cardiff	£233

In the exploration of hard infrastructural determinants, stakeholders highlighted the availability of suitable office space as a crucial facet of business growth. In line with earlier discussions all private stakeholders identified the inadequate provision of “hard” infrastructure required to support local business communities. As stated by Cardiff’s public stakeholders the delivery of relevant and

responsive business needs plays a pivotal role in cultivating an attractive business environment. The majority of stakeholders maintained that within the three cities there has been a significant increase in demand for a broader range of market-driven requirements such as high quality 'grade A' locations and more entrepreneurial structures. In accord, all private stakeholders have seen businesses re-approach the nature and use of office space in a more flexible and efficient manner. It was widely acknowledged that shared office spaces are increasingly popular due to their intangible benefits, unlike a traditional office shared spaces facilitates network connections, knowledge sharing, and problem-solving assets strongly correlated to performance productivity. A Birmingham public stakeholder recognised that the collaborative nature of shared offices has tended to generate agglomerations of enterprise. Nonetheless an outcome not guaranteed as in the case of the Advanced Manufacturing hub a Birmingham City Council initiative focused on the advanced manufacturing sector. A Birmingham public stakeholder stated that whilst you would have expected cluster effects and associated synergies through the agglomeration of similar businesses, this was not the case. It was found that as the site did not have a head office or central building for individuals to congregate and meet likeminded individuals to exchange knowledge, the site did not promote business connections or agglomeration benefits.

The role of the public sector in the facilitation of space for business growth was raised, a number of Birmingham and Cardiff public stakeholders maintained that while some provisions are carried out by the public sector, public institutions took a market-led response and sought market assistance from the private sector. Across the three cities there is a significant shortage of central office space (specifically 'grade A') that has resultantly heightened rental costs. Thus, pricing SMEs out of the market and created an unattractive environment for entrepreneurs. According to a public stakeholder, in direct response Birmingham City Council identified a number of priority strategic employment sites to accommodate business growth, investment projects and draw business from London to promote economic development. Birmingham City Council emphasised how the city's planning system placed a strong emphasis on the availability of land for future investors, *"we try and make sure there is that land available at all scales to make sure people can have those investments and grow"* (Public stakeholder, Birmingham). The council's focus on the availability of enabling infrastructure is an economically critical attribute of a competitive urban economy attractive to investors. Controversially a Bristol private stakeholder claimed the council had exacerbated the shortage of commercial space and pushed rents up by permitting the change of use from office to residential, which in 2017 resulted in the highest rates of office to residential conversions outside of London. As highlighted by a Bristol private stakeholder there is the risk indigenous businesses will be unable to access office space and drive growth due to the public sectors "hasty" actions.

In a dynamic urban economy "hard" determinant were found to be an important element of an attractive business environment. Spigel (2017), Audretsch, et al. (2015) and Stam (2015) found supportive infrastructure was a crucial element of an entrepreneurial environment. The availability of appropriate office space can be overlooked as a vital infrastructural enabler for business growth, the relocation of

firms and investment. Bennett (2019) and Davidsson (2015) acknowledged that the availability and quality of physical infrastructure served as a crucial determinant of a business community and the formation of entrepreneurial business activity. In response to the urban shortfall the research found the private sector across each of the case studies had taken a responsive approach and developed low cost shared office environments to meet local business demand. Across the three cities the public sector was found to be promoting and, in some cases, (Birmingham) actively encouraging public-private partnerships to facilitate the needs of the business community as a cost-effective method to mobilise existing resources. An approach discussed by Bellone and Goerl (1992) who suggested that “public sector entrepreneurs” act indirectly, (in this case) bringing the private sector in to intervene and work with public institutions to secure provisions and support demand, through the provision of incentives to induce private sector actors to act in a manner that delivers the public sectors desired objectives. Indeed, stakeholders supported the premise that capital investment is not enough it requires the collaboration and cooperation of key stakeholders to develop an innovative ambition and skill base of entrepreneurs.

(i) Scale-up space

In terms of the influence of the availability of suitable business space on business performance and ultimately urban economic development, the majority of all private stakeholders identified the need for businesses to scale-up and grow. Cardiff private stakeholders acknowledged while there are numerous network facilitation events and co-working spaces these are not equipped for the process of expansion or to bridge partnerships with larger organisations. However, according to a Cardiff private stakeholder accelerator programs are adapting to support the aspirations of business minded entrepreneurs to incorporate this provision, but a limited number have reached the scale-up growth stage. Of the three cities Birmingham appeared to be responding to the increasing demand for scale-up support beyond the start-up stage with planned construction for scale-up space. To illustrate Innovation Birmingham committed to a new hub “Enterprise Wharf” for scale-ups to accommodate the growing digital and tech community. Similar to Cardiff, a number of Bristol private stakeholders detailed there was a greater emphasis and support from the council for start-ups than later growth stages due to their ability to bring fast economic growth. Interestingly, in Birmingham and Bristol institutions of higher education are recognized to most likely to form partnerships with high-growth start-ups, encouraging business development beyond the growth stage of firms.

“It's that medium kind of bands that are actually feeling the pinch much more than the start-ups and the entrepreneurs who are always being thrown incentives here, there and everywhere. Probably more from the universities in Bristol than from local government or from central government than local government.” (Private stakeholder, Bristol)

However, Birmingham and Bristol private stakeholders suggested that the public sector must demonstrate greater support and protection for local businesses. To illustrate, Bristol City Council was stated to have employed contractors from outside of Bristol, which according to a Bristol private stakeholder demonstrated a strong disregard for local employment.

“I look at what the council do, and I see contractors coming into the city from Birmingham. I think, “You’ve got people in Bristol who could have done that.” Of course, the council have got this duty of care to get the best value, not necessarily the best price through the National Audit Office. They couldn’t be seen just to use a Bristol business because it was Bristol business and pay £100,000 more for the same piece of work they could have got through the committee from Birmingham.” (Private stakeholder, Bristol)

Further to this, Birmingham private stakeholders expressed a strong public sector focus on accommodating big corporates using ‘old economy’ incentives to strengthen the economy. However, Birmingham private stakeholders considered a ‘lots of eggs in one basket’ strategy to be ill suited to the development of Birmingham’s local business community, with small businesses receiving limited support and are exposed to greater barriers in comparison. The approach was criticised for prioritising the needs of global corporations over local SMEs having a detrimental impact on smaller businesses. On the other hand, Birmingham’s public sector viewed the city to have a strong provision of affordable and flexible office space for entrepreneurs and businesses. However, private stakeholders in Birmingham and Bristol noted the business community is increasingly requiring supportive space to grow as at present businesses are reluctant to leave shared spaces and the supportive networks they provide, as there are limited options. The business community was stated to have consistently acknowledged the positive influence supportive infrastructure and the quality shared office spaces has had on their productivity. Moreover, private stakeholders identified an insufficient availability of quality affordable premises as a crucial limitation restricting the aspirations of entrepreneurs in Bristol and Cardiff. Notably, in the context of Birmingham a private stakeholder found a further significant challenge in the ability to secure funding from banks to invest in shared office spaces as the venture is considered a risky investment. A significant urban challenge highlighted by a several Birmingham private stakeholder is the gradual process of breaking down the city’s traditional closed off corporate business values, to endorse a business community of collaboration and cooperation.

“So one challenge we’ve had is won’t say difficulty, but just a challenge, is sort of like breaking down those values, is to try and make them aware of what we do there.”
(Private stakeholder, Birmingham)

An emphasis was placed on the demand for suitable support for business growth. Co-working spaces in Cardiff identified the need to provide connected supportive infrastructure for businesses during the scale up stage to facilitate a collaborative and supportive network to move forward to break out of a siloed mind-set. A significant number of Bristol private stakeholders expressed the council needed to listen to the business community and have a stronger supportive role to ensure Bristol did not lose its medium sized firms, as if they did relocate it would present a significant loss to Bristol's economy.

“In an ideal world you grow your people, luckily you train them, you get them into local employment and so on, but companies will grow faster than people do. We end up with people moving to the city to take jobs here and we've run out of space. We've now got a real housing shortage, house prices are going up which makes even harder for local, younger people - It's a national problem, but it's even worse in Bristol. It's gentrification, in effect.” (Private stakeholder, Bristol)

From a long-term standpoint there is a need to develop and progress the longevity of business activity and business 'grow-on' issues. A number of Bristol private stakeholders concluded that otherwise Bristol could be a great destination for start-ups but unable to reach the growth stage. For example, Kinnear Dufort a product design company in Bristol stated as the only business of their size in their area found they lacked interactions with likeminded peers undertaking similar work. Of a similar tenet, a couple of design agencies shared the view,

“We're the only ones doing what we do in the city and therefore there isn't that kind of like thing that happens in London where there might be - if you go to the pub and there's some other people that are from another design agency there and then you talk about things and ideas develop and a lot of them talked about going through a period of stagnation where their staff aren't turning over because they've got good staff. Why should they leave? There's nowhere else to go to because there isn't anything else of that size in Bristol and so they therefore are finding it hard to reinvent themselves, hard to get that kind of social aspect. The community benefits - and they feel isolated.”
(Private stakeholder, Bristol)

A further narrative was the importance of establishing rooted local supply chains utilising the local knowledge and resources of entrepreneurs and SMEs. The challenge, according to a Bristol private stakeholder, is to stimulate enough spin-off or to establish a relatively deeply rooted community mass, to ensure the economy is not monopolised by footloose organisations but to establish a strong company base with high-value specialised activity. To illustrate, individuals who worked at Hewlett Packard in Bristol have spun off and set-up tech companies, a premise that draws on the Silicon Valley

“For a city like Bristol, it's easier when you're in an already a decent position to keep that maintained... we've been successful in a lot of our sectors, there's a long legacy around that. The legacy of HP and setting up in having a strong - We have a strong business park in Aztec West. It's slightly outside the city but there was a big computer, IT cluster there in the '80s and loads of people who work there have spun off and done other things.” (Private stakeholder, Bristol)

collaboration effect and the value of proximity benefits as an important component of economic development.

Independent entrepreneurs and businesses make up the majority of enterprise in Cardiff and were recognised to have strong foundations and locational ties that make them more stable. A narrative shared by a Cardiff public stakeholder who stressed the economy should avoid dependence on larger footloose businesses to create mass employment and collaborative links. The public sector recognised the need to promote the diversification of the economy through entrepreneurial activities and innovative driven enterprise in uncertain business climates.

With regards to the provision of entrepreneurial business space, the analysis emphasised the significant demand for scale up space across the three cities. As referenced by private stakeholders in Cardiff and Bristol, Feld (2013) discussed the importance of the scale-up phase for the development of entrepreneurial ecosystems, attributing the scale-up stage to a strong start-up community, *“you have to have a vibrant “start-up community” to get to the point where you have enough interesting companies to ‘scale up’”*. Indeed, the ScaleUp Institute Report by Irene Graham (2017:11) highlighted the importance of scale-ups for heightened productivity and employment, *“evidence continues to show scaling businesses generate more productive jobs than the average and provide employment opportunities across a varied spectrum from work experience, to apprenticeships, and from graduates to non-executive directorships”* (ScaleUp Institute, 2017:11). Moreover, Sherry Coutu (2017) stressed: *“the need for the whole ecosystem of stakeholders to collaborate to improve their local environments so that a greater proportion of companies make the leap from ‘small to large’ is essential. The responsibility to become a ‘Scaleup Nation’ rests with all of us”* (Coutu, 2017:7 cited in ScaleUp Institute). The results demonstrated that the availability of funding and human capital is impacting on business growth and investment in the provision of start-up space, this demonstrates how the promotion of entrepreneurship is less centred on exceeding in one of the determinants in isolation and more about how combined the determinants strengthen the likelihood of entrepreneurial success.

4.4.4 Importance of Hard Determinants for Entrepreneurship

The empirical analysis confirmed the importance of hard determinants for entrepreneurship. In the case of the three cities the research observed three key determinants in the promotion of entrepreneurship and the development of business communities, these are: (i) access to finance, (ii) space for business growth, and (iii) transport connectivity and proximity to other cities. However, it must be noted that the determinants identified could be dependent on the contextual circumstance of each location, whereby the determinants identified/raised are key concerns within each context. For example, the provision of transport infrastructure is underperforming expectations, resulting in the poor circulation of skilled

professionals leading to a deficit of human capital. While the aspects raised are not generalizable, they appear to be a common constraint and a necessity for a competitive entrepreneurial climate.

4.5 Significance of Hard and Soft Determinants in the Pursuit of Entrepreneurship

The empirical evidence presented in this chapter suggests there is a positive association between the influence of locational factors and the promotion of entrepreneurial dynamics (Huggins and Thompson, 2015; Welter and Gartner, 2017). Locational characteristics were suggested to have a strong association with entrepreneurial activity and business performance, as such the availability of favourable locational factors was posited to be more likely to lead to heightened productivity and innovation. In such theories (Florida, 2012; Storper 2012; Landry, 2000) in order to remain competitive, the performance of urban economies is posited to be nurtured by a combination of “hard” and “soft” locational determinants. However, notably within the economic literature there is no clear consensus on the classification of the two groupings of “hard” and “soft” locational determinants (Dziembowska-Kowalska and Funk, 2000; Grabow, Henckel, HollbachGrmig 1995; Diller 1991). Broadly speaking, “hard” factors entails tangible influences such as transport infrastructure whereas “soft” factors comprises more intangible assets such as the entrepreneurial culture and spirit of the local business climate. Accordingly, the research (Chapter 4) has highlighted the on-going debate concerning the importance of “hard” and “soft” determinants in the promotion of entrepreneurial activities and behaviours. While it would be reasonable to expect different contextual settings would identify and facilitate differing factors of importance respondents across each of the three case studies were unanimous in a number of their core focal determinants. Resultantly, the research identified three “key” hard (connectivity of transportation links and proximity to other cities, access to finance and space for business growth) and four “soft” (personal connections, entrepreneurial business culture, business support and access to human capital) categorisations of determinants of entrepreneurship. However, the respondent emphasis on core categorisations may be indicative of the limited provision or support in each of the categorisations raised, this would explain the consistent case-study emphasis on the listed determinants i.e. the prominence on the limited availability of skills could be reflective of a UK wide shortage/demand.

In the case of the three cities, both hard and soft factors were considered crucial. In particular, “hard” determinants were understood to be an essential precondition for the operation of entrepreneurial activity and urban economic development more widely, influencing the operational dynamics of businesses. Indeed, the findings demonstrated “hard” determinants to be a fundamental requirement of a competitive entrepreneurial destination. In Section 4.4 ‘Hard Determinants’ a consensus of survey and interview respondents identified three key assets (transportation, office space and access to finance) which are not necessarily unique to the urban context but can play a crucial role in the performance of a location as a place to do business, promote business growth and entrepreneurial dynamics (such as access to resources to facilitate growth and talent etc.). Whereas in comparison, the presence of more

intangible assets recognised as “soft” determinants were reported to be unique to each urban context and have a considerable effect on productivity and growth, i.e. through access to an entrepreneurial culture and supportive business community (Florida, 2012; Krueger, et al. 2013; Williams, et al. 2017). To an extent the intensity of “soft” determinants was indicated to be dependent on the performance of “hard” locational conditions such as the urban mobility of talent and the ability of businesses and entrepreneurs to access human capital to be able to exploit and harness the availability of “soft” determinants. However, the performance of “soft” factors could be as a result of their dependence on hard provisions, as to an extent some locational factors i.e. access to finance and office space are understood to unleash the capacity of intangible assets i.e. business support and skilled professionals, to have a positive impact on innovativeness and the performance of the entrepreneurial business community.

4.6 Conclusion

This chapter distinguishes between hard locational factors and soft locational factors, arguing place-based characteristics and contextual variances have an influence on entrepreneurial activities and urban economic development more broadly. In particular, the research explores the significance of local contexts to better understand the locational conditions that facilitate or hinder entrepreneurial activities and behaviours, and how they can contribute to the competitiveness of cities. The philosophy of critical realism aided the researchers need to understand and explain variations in entrepreneurial activity facilitating the exploration of the interrelationships of the concepts. It was the intent to critically investigate how entrepreneurial ambitions are challenged or enhanced by contextual conditions and the availability of supportive infrastructure, which is often central to enabling the behaviour of entrepreneurial activities.

The three case studies strongly confirm that a combination of both soft and hard locational factors contribute to the attractiveness of urban contexts and promote entrepreneurial activity. It was anticipated that hard and soft locational factors would have a varying influence on the attractiveness of a location and influence on entrepreneurial activities. From a business perspective, there are a number of key factors that are particularly crucial in the attractiveness of a location as a place to do business. The most significant role was facilitated by hard factors that could in turn promote the development of soft locational factors, in the sense that hard factors are able to set the foundations from which soft factors can flourish. For example, the connectivity of an urban environment enables individuals to access entrepreneurial business support and associated opportunities, without urban mobility entrepreneurial aspirations would be limited. In particular, regarding the importance of hard factors firstly, poor transport infrastructure and urban mobility was recognised to have a limiting effect on individual and business productivity, either restrictive or facilitative of access to tangible and intangible resources. Secondly, demand for a talented workforce in the knowledge economy demonstrated a strong

emphasis on the need for human capital to aid the productivity of sectors. In order to accommodate urban skill demands cooperative relationships with universities and research establishments have been sought to access knowledge crucial for innovation and to enhance productivity by facilitating complementarities between actors. It is demonstrated that collaborative alliances are considered to have a positive impact on innovative entrepreneurship. Thirdly, scale-up space for the growth of the business community was a crucial requirement of each urban context wherein shared office spaces were found to facilitate access to intangible assets (soft factors), this demonstrates the interconnected nature of hard and soft factors. Lastly, personal connections a soft locational factor, was the most important locational factor for KBFs demonstrating that while hard factors are crucial in the cultivation of an attractive business environment, an individual's connection to an urban context can override the suitability of a location as a business destination.

Needless to say, the research demonstrated that the three case studies identified a number of consistent hard and soft locational preferences. Although in parts there are differences in supply and shortages - for example there were significant variances in the quality of opportunities available and access to infrastructure, human capital and entrepreneurial mind-sets across each of the three contexts, these are unique locational disparities that have ultimately led to differing institutional objectives within each of the seven locational factor groupings. Notably, the institutional quality and connectivity within urban contexts has a major influence on individuals and the opportunities afforded to them which could have a detrimental influence on entrepreneurial aspirations and opportunities to engage in and access entrepreneurial activities. For example, hard factors such as the ability to access talent and infrastructural requirements are a considerable influence on the operational productivity of firms and wider urban economic development, and furthermore the nature of the business community and business support influences entrepreneurial opportunities.

CHAPTER 5

FORMAL AND INFORMAL INSTITUTIONS

CHAPTER 5

Formal and Informal Institutions

5.1 Introduction

Scholars have increasingly recognised institutions as a critical element in the process of urban development (La Porta et al. 1998; Hall and Jones, 1999; Acemoglu, et al. 2001, 2002; Easterly and Levine, 2002; Rodrik, et al. 2004). There is a consensus among economists that effective institutions influence economic development through their ability to foster a favourable entrepreneurial climate (Holcombe and Lawson, 2004; Acemoglu et al. 2002, 2001; Green, Melnyk and Powers, 2002; Hall and Jones, 1999; Gwartney, Dawson, 1998; North, 1990). However, research exploring the mechanisms through which institutional differences lead to higher rates of entrepreneurial activity and economic development is limited. This chapter looks at the extent to which these formal mechanisms, initiatives and entrepreneurial agendas are central to sustaining and encouraging an entrepreneurial environment. As discussed in Chapter 2 the research defines institutions as the underlying rules that govern, shape and influence interactions and behaviours. This chapter explores the general belief that institutional arrangements matter and can encourage desirable economic circumstances facilitating opportunities for economic activity. The literature, Rodriguez-Pose (2010) and North (1990), acknowledged institutions as a critical element in the promotion or hindrance of entrepreneurial activity and ultimately urban economic development. Accordingly, the association between the perception of the institutional quality of each urban environment and the role this has on entrepreneurial activity is observed.

Formal mechanisms are defined as the policies, regulations and initiatives created by state institutions, with reference to standard definitions such as Helmke and Levitsky (2004) and North (1990; 1994) these are often understood as the ‘constraining and enabling actors’ and structures in place to incentivize entrepreneurial activity. Additionally, Hoskisson *et al.* (2000) attributed institutional governance with the ability to enable or impede business development and entrepreneurial opportunities. With regards to informal institutions this study makes reference to standard definitions such as Rodriguez-Pose and Storper (2006) and Pike, et al. (2006) defining informal institutions as the place-based habits, culture, social conventions and informal networks that evolve over time. Informal institutions are conditioned by their socio-cultural environment and have a significant underlying impact on the entrepreneurial behaviours of individuals, capable of inducing community capital and entrepreneurial intentions (Florida, 2012; Koellinger, 2008; North 1990).

This chapter explores the relationship between differing institutional settings through a measure of public and private support for entrepreneurial activities and the perceptions of KBFs in each of the case studies. This research seeks to determine whether the public or private sector actors positively promote entrepreneurship and how this is done. It is the intent to contribute to the literature on the role of formal and informal institutional settings in the promotion of entrepreneurship, by looking at the influence of formal and informal institutions and their interactions to explore the influence they can have on the business community. Much of the existing literature on entrepreneurship examines the individual role of formal and informal institutions on firms. In particular, there is a lack of multiple case study research exploring the theoretical concepts across three unique urban contexts. It is the aim of this chapter to better understand how the institutional setting in cities influences entrepreneurship. To do this, the research explores (1) how formal and informal institutions constrain or enable entrepreneurial behaviours, and (2) the interplay between formal and informal institutions in practice.

The chapter is structured in the following order: first, an overview of the performance of each city as a business destination is considered to acquire a contextual understanding of performance variations. The research sought to understand KBFs perceptions of each case study as a business destination to then explore the degree to which this was a reflection of the quality of the institutional environment. Second, the perspective further looks to develop an understanding of the role the formal rules and regulations play in the promotion of entrepreneurship and its associated activities. Third, an understanding of the role and influence of key aspects of informal institutions such as community capital has on entrepreneurial behaviours and activity. Lastly, the conclusion draws the chapter to a close discussing the interplay between institutional dynamics across contextual factors and their influence on entrepreneurship.

5.2 Formal Institutional Context

This section examines the relationship between the formal influences that govern, shape and effect entrepreneurship and entrepreneurial activities (Lin and Nugent, 1995). As discussed earlier, formal mechanisms are defined as the policies, regulations and initiatives created by state institutions (Helmke and Levitsky, 2004; North 1994; 1990). An examination of the formal institutional arrangements of each city help to explain the locational choices of business and the impact of the regulatory environment on wider urban economic development (Acs et al. 2008). This section explores formal institutions defined as the rules and regulations governing the environment as detailed in Chapter 2 (Tonoyan, et al. 2010; Krasniqi and Desai, 2016).

5.2.1 (Un) Supportive Regulatory Setting

The survey findings demonstrated that there remains a need to improve the formal institutional infrastructure (as discussed in Chapter 4) to ensure mechanisms are conducive and supportive of entrepreneurial business activities. A majority of KBFs in Bristol (65.4%), Cardiff (55.6%) or Birmingham (51.4%) indicated they felt formal institutions did not create **stable, transparent and attractive regulations & policies** and as such, there is a need to develop stable institutional environments that are not barriers to business operations. Additionally, KBFs located in Cardiff (42.6%) and Bristol (40%) reported that their locational context did not facilitate or enable firms to gain **good opportunities to have a strong voice and influence**. Whereas in Birmingham firms equally felt the location did not provide good opportunities (43.1%), others felt the city's formal institutions did (40.3%) give them good opportunities to have a strong voice and influence. This suggests that although Birmingham is listening to the voices of its business community, this has not been converted into access to business opportunities.

Furthermore, it is noted that when asked to share their views on aspects of their local formal institutional context, KBFs were neither satisfied nor dissatisfied with **business rate costs** (Birmingham, 44.4%; Bristol, 40%; Cardiff, 38.9%) and **the ability to access business support** (Bristol, 60%; Cardiff, 48.1%; Birmingham, 40.3%) in their local area. In particular, the majority (60%) of KBFs located in Bristol were not influenced by their **ability to access business support**. This suggests that the formal institutional setting across the three contexts could either, (i) provide greater assistance and facilitate a more supportive environment conducive to business activities or (ii) other factors are perceived to be more important. The survey findings demonstrated **business friendly regulations** were not perceived to be a key-contributing factor in the location of KBFs for each of the cities (Birmingham, 78.3%; Bristol, 75.1%; Cardiff, 47.5%). A finding that could be interpreted in two ways, (i) there is not a strong presence of effective business friendly regulations or (ii) that business friendly regulations are not a key consideration for businesses.

The results demonstrated the regulatory setting in each of the three case studies was considered unsupportive and ineffective for the growth of KBFs. In accord, Estrin et al. (2013) pointed out that the regulatory setting and government capability exerts a significant impact on entrepreneurial aspirations and behaviour and plays a crucial role in economic development. In terms of the formal regulatory context the findings demonstrated business friendly regulations were not perceived to be a key-contributing factor in the location of businesses for each of the three case studies. This was particularly the case in Birmingham and Bristol where a strong majority of businesses did not consider the regulatory setting to be an attractive locational determinant. The presence of constraining institutions

can ultimately hinder prosperity and growth opportunities (Huggins, et al. 2016). In accord, the policies and regulations in Bristol and Birmingham were also perceived to have proven to be an obstacle to business success with unclear and confusing steps and procedures. According to Kaufmann, et al. (2018) when regulatory government structures do not perform effectively it can limit entrepreneurial opportunities and hinder the development of growth. It would appear that the rules, regulations and procedures are a burden on business activity. These factors can have significant ramifications on growth prospects. The existence of efficient formal institutions can result in an environment conducive to entrepreneurship and business growth, facilitates productivity through leadership and a complimentary regulatory setting (Acemoglu et al. 2012).

In order to understand the influence of local authorities on entrepreneurial activities the following question was posed to KBFs, 'how does the Local Authority influence your business activity or involvement in entrepreneurial activities?' Based on the responses to this question, the local authority was not considered to be a key-contributing factor. Moreover, for each of the three cities, the local authority was not perceived to be a key factor influencing KBFs **business activity or involvement in entrepreneurial activities**. This suggests that either, (i) businesses are not aware of the supportive mechanisms in place to aid entrepreneurial activity in each of the cities or (ii) the mechanisms in place are not perceived to be important and thus are not influential in entrepreneurial business activities.

In the context of Bristol, governance arrangements were stated to have been a significant public sector challenge. Notably, as expressed by a key Bristol public stakeholder, since the role of the Mayor was created in 2012 the public sectors understanding of and integration with the business community has vastly improved. A couple of Bristol stakeholders acknowledged that prior to the election of a Mayor the business community had complete distrust and low expectations of Bristol City Council. To date the local governance arrangements has resulted in strong, visible leadership that represents local business needs, with the majority of private stakeholders reporting that the public sectors knowledge and awareness of the business community has significantly improved.

“It [public sector] would have improved if we hadn't had so many cuts. The council just can't do anything. I think the perception and awareness is probably better. I think the council now understand a bit better their role in enabling and supporting what's going on, rather than trying to own it.” (Private Stakeholder, Bristol)

However, due to the UK-wide public sector cuts, the majority of Bristol, Birmingham and Cardiff stakeholders all acknowledged that local governance is limited in their resource capabilities and has to act creatively to support businesses.

Notably, the appointment of a Mayor in both Birmingham and Bristol appears to have facilitated a number of mechanisms to secure and encourage entrepreneurial business activity across the cities. All

Birmingham public stakeholders considered the Mayor of the West Midlands Combined Authority (WMCA) to have demonstrated a commitment to positively influence entrepreneurial business activity through initiatives, such as the supportive business partnership between Minerva Business Angel Network and WMCA. The survey findings implied that the regulatory institutions did not appear to be **communicating with firms or ensuring that they are knowledgeable about business situations** (Cardiff, 53.7%; Bristol, 45.4%; Birmingham, 44.4%). This suggests that the formal regulatory environment was either, (i) unsupportive of entrepreneurial activities or (ii) the support mechanisms in place are ineffective. In light of the discussions in Chapter 4, it would appear that the latter is true; public stakeholders are keen to support local businesses. However, the survey results imply that these attempts have fallen short.

In terms of the influence of formal institutional leadership in the promotion of entrepreneurial activities, KBFs did not perceived the public sector to be a key factor influencing their business activity or involvement in entrepreneurial activities. While this could be indicative of a lack of public sector engagement with the business community, or of businesses unawareness of supportive mechanisms in place that could assist entrepreneurial engagement, or that the mechanisms in place are not influential in entrepreneurial business activity. Thus, institutional incapacity can negatively influence the uptake of economic activities and entrepreneurial capacities. The literature is testament to the concern that poor institutional leadership can negatively shape entrepreneurial ambition, opportunity perceptions and aspirations destructively influencing the likelihood of individuals to undertake entrepreneurial activities (Gherhes, et al. 2017; Estrin, et al 2012; Jütting, 2003; Storper, 2005:32). As suggested by Stenholm, et al. (2013) entrepreneurial behaviour is more likely to occur if entrepreneurial business activity is perceived as a viable and desirable business opportunity.

Although the survey findings imply the public sector has limited contact with KBFs the majority of Cardiff public stakeholders discussed their role in the promotion of entrepreneurship, through the provision of contemporary guidance and support for SMEs, in order to move away from a culture of dependency. They recognised the need to act strategically to address barriers collectively faced by the business community to assist business development, as well as addressing the allocation of resources to encourage businesses to act in an entrepreneurial manner, independently of state support. However, the private sector expressed the need for caution in the promotion of entrepreneurship. A Cardiff public stakeholder stated that aspects of entrepreneurship should be promoted where there are natural opportunities to support specific elements (such as business support, access to finance and entrepreneurial networks) as opposed to having a single source. An approach seeking to ensure collective entrepreneurial action is taken across several actors to support the broader development of entrepreneurial opportunities.

The majority of Cardiff public stakeholders stressed that the public sector seeks to promote entrepreneurship to assist some of the most under-represented communities by providing business support for small businesses and entrepreneurs in some of the most deprived communities. Similarly, according to all Birmingham public stakeholders Birmingham City Council is focused on the city's key challenges and seeks to develop an inclusive and supportive economy for all, in order to drive inclusive growth and productivity. To address the social challenges facing Birmingham and the wider region, the public sector expressed the importance of ensuring firms have access to training, workshops and business advisory services.

A Birmingham public stakeholder strongly conceded the need for the public sector to improve local awareness of resources, amenities and knowledge bases, stating, "*there is support out there, it's just to know where you go to get it*" (Public stakeholder, Birmingham). It is the intent to increase visibility to drive inclusive growth and heighten productivity. An approach intended by all Birmingham stakeholders to breakdown social barriers, and although a number of Birmingham private stakeholders reported individuals are able to access supportive networks and resources, there is the need for greater public sector engagement to break down perceived barriers. For example, a Birmingham private stakeholder reported that the Asian Business Chamber of Commerce in Birmingham is conducting a programme of outreach and branding over the next year. They will be visiting different community hubs to try and break down some of these deceptions. A number of Bristol private stakeholders noted that due to Black, Asian and Minority Ethnic (BAME) minorities having limited information and support to access finance and manage bureaucracy, their entrepreneurial prospects are hindered. To specifically tackle and promote race equality across the city, Bristol City Council reported a strong focus on the promotion of entrepreneurship within more diverse communities, distributing additional help into BAME sectors to parts of Bristol which are less socially mobile and economically active.

The findings demonstrated that the regulatory institutions in place were not perceived to be communicating with firms or ensuring they are knowledgeable about business situations. Indeed, the research appeared to indicate that supportive and informative measures are largely promoted through shared office spaces and enterprise network events (Mody, 1993; Ciborra, 1991), with the public sector taking a supportive role rather than actively engaging with the business community. This brings into question the role of formal institutions in urban economic development, wherein private stakeholder perceptions position formal institutions as having the autonomy (and expectation) to have a greater significance than just that of simple regulators of economic activity (Vázquez-Barquero, 2002). Whereas due to resource cuts public stakeholders asserted that the public sector largely undertakes a supportive role in the promotion of entrepreneurship, creating stable conditions for the development of sustainable economic activity. Although there were some variations in public sector support across the three case studies, Bristol was seen to be taking a more removed approach so as to not distort and 'leave

them to it' but increasingly focused on access for deprived communities and drive inclusive growth; formerly Cardiff was supported by vast public sector subsidies but has since established a growing private sector and has a strong focus on youth entrepreneurship to facilitate future generations; and Birmingham has engaged in partnership working to tackle issues of entrepreneurial business growth such as appropriate scale-up infrastructure and inclusive growth.

In terms of public sector support for entrepreneurial activity, a number of Bristol private stakeholders reported that Bristol City Council does provide valuable facilitative tools and mechanisms, even though it does not celebrate entrepreneurship, or actively promote individuals to start their own business.

"I don't think the council is particularly going to shout [about] entrepreneurship and say go start your own business but they do have the tools. If you think, "Oh, I'm going to start my own business." Then they will support you. I don't see a great deal that says, "Why not start your own business? Do you have a passion? Do you love to bake cakes? Do you love to knit? Do you love to do gardening or whatever?" I don't see anything that sort of shout about why not turn your passion into a job or a business because a job and a business are two different things. I don't see much of that and I don't think many organizations shout about that as much as the banks and the other organisation."
(Private stakeholder, Bristol)

Similarly, across each of the cities a number of private bodies promote entrepreneurship. However, in the case of Bristol, bodies such as the Federation of Small Businesses offer expertise and support even if this is not formally promoted across the city,

"we don't shout about start your own business particularly there is stuff to support them but it's not something that is broadcast out there which is a shame because potentially there's a lot of people out there that are working that could start their own business."
(Private stakeholder, Bristol)

The findings appear to demonstrate the limited active promotion of entrepreneurial support and commitment to encouraging business endeavours as a contributor to inclusive growth. In this regard, Bristol public stakeholders affirmed the Mayor's commitment to the promotion of a strong and dynamic enterprise culture to advance the social and spatial distribution of entrepreneurial opportunities and support programmes. To illustrate, the Mayor demonstrated support for research undertaken to understand Bristol's BAME business communities and their barriers to growth (finance, support and access to networks) to facilitate improved entrepreneurial opportunities for deprived communities. However, while Bristol City Council has translated the previous Mayor's mission to a service plan level, the current Mayor's mission has not been translated. In other words, while the council is continuing to support entrepreneurship, this is only in the context of a previous, now-defunct policy position.

According to the survey results, local authorities were found to be stifling entrepreneurial endeavours by not **engaging with and providing support to entrepreneurial talent and businesses** (Bristol, 47.3%; Birmingham, 47.2%; Cardiff, 46.30%), or **encouraging business mentoring, accelerator programs, incubators and university connections** (Cardiff, 48.1%; Birmingham, 45.8%; Bristol, 43.6%). All of these are crucial factors for fostering innovation and sustainable business growth. Due to these inefficiencies and in the absence of effective regulations, entrepreneurs have been found to adjust and establish informal activities, such as network activity and coworking spaces (as discussed in Chapter 6) to augment the wider entrepreneurial environment (Moriset, 2013; Fabbri, et al. 2014). As such, the survey results appear to demonstrate that there is either (i) a collective feeling that the current level of engagement and support for entrepreneurial talent and business is inadequate or, (ii) the findings highlight a surprising lack of knowledge among many KBFs of public sector led activities already in place to engage with and support entrepreneurs and businesses.

As previously indicated, local authorities were found to be stifling entrepreneurial endeavours by not engaging with and providing support to entrepreneurial talent and businesses or encouraging business mentoring, accelerator programs, incubators and university connections. All of which are crucial factors for fostering innovation and sustainable business growth (Lee, 2011; Morgan, 2011; Steiner, 1998). Although, the survey data did demonstrate that the policies and regulations in Birmingham were perceived to have encouraged the employment of graduates and apprenticeships. However, it is important to note the stakeholder interview data suggested that public stakeholders did not consider the public sector best placed to advise and guide entrepreneurs and businesses in entrepreneurial endeavours. Instead a public stakeholder consensus had focused on fostering public-private partnerships with business networks and shared office spaces to encourage engagement within the ecosystem (Morgan, 2011; Garnsey, et al. 1992).

On the contrary to the survey findings the majority of Cardiff public stakeholders identified Welsh Government's intent to develop a strong entrepreneurial culture to stimulate interest and encourage entrepreneurial thinking at a young age to raise the aspirations of the economy's future generations. Their approach was stated to focus on supporting and encouraging youth entrepreneurship through the development of school age capacity, which is concerned with developing necessary skills and mind-sets of future generations. A particular focus was placed on the delivery of Welsh Governments entrepreneurial strategy through their work with Business Wales, innovation support, and programmes, such as Be The Spark and Big Ideas.

Several Cardiff private stakeholders placed emphasis on the role of universities in the promotion of innovation and the development of entrepreneurship. Institutions of higher education were praised for drawing a large pool of young talented individuals to Cardiff, a contribution stated to be one of the

greatest determinants of Cardiff's economic performance. Moreover, a number of private stakeholders stressed the importance of universities in a local entrepreneurial culture. In their view the dynamic interaction between talent in the environment of universities and the contribution they could make to the economy, either through starting companies or contributions to existing businesses, has a distinctive role in innovative entrepreneurship (Feld, 2012:37). The universities in Bristol were considered to be extremely active in research, innovative and entrepreneurial activities, according to both Bristol public and private stakeholders. A large proportion of the promotional activity in Bristol's informal networks and connections is attributed to having been built through the shared vision and activities of network actors. According to a Bristol private stakeholder the fact that actors and decision-makers are able to identify gaps to inform future policy priorities due to being on the same page, talking to one another and understanding each other's challenges and opportunities.

"Somebody can sit there and see a gap and say, "Right, let's go and bid for some funding that will fill that gap." I think those informal things [activities] are probably the most valuable, but with the obviously, the caveat that informal stuff has done well and that somebody is leading it to make sure that those gaps are filled. I'm not sure about that whole policy thing. I just name the paths." (Private stakeholder, Bristol)

The majority of Birmingham stakeholders reported a number of dynamic engagement and support initiatives working in partnership with private organisations and university partners to provide a range of services. The Birmingham City Council Business Development and Innovation Team emphasises the importance of innovation in business development, supporting businesses and entrepreneurs through a number of programmes, with Birmingham receiving the "Most Enterprising Place in Britain" award in 2016. The public sectors commitment to collaborate with research institutions to increase entrepreneurial competitiveness is highlighted in the council's partnership with Aston University, delivering a supportive facility for entrepreneurial talent and businesses located within a £30million development zone. A further initiative promoting engagement and support for innovative entrepreneurship is the Greater Birmingham and Solihull Local Enterprise Partnership (GBSLEP), which is a private sector, academia and public sector alliance. The partnership encourages links with business individuals for example the challenge-led programme promotes businesses and entrepreneurs with innovative solutions to some of Birmingham's industry challenges. Essentially a strong emphasis is placed on partnerships stressing the importance of not remaining strategically isolated, instead and the cooperation between partners has identified network and new market opportunities with formal institutions having mobilised local resources to stimulate innovations.

In the context of Birmingham, the city's local research-intensive universities are considered to be major players in the economy. Notably, Birmingham private stakeholders recognised that universities are increasingly seeking to have a greater role and impact on the economic growth agenda. It became

evident through stakeholder interviews that Birmingham's universities have strong links with a number of key business organisations. For example, students from Aston University undertake internships supporting physicists at the incubator space Eagle Labs. In particular, the University of Birmingham prides itself on ensuring they have strong links with the business community by establishing a number of industry partners and engage with the needs of the business community through the Birmingham Business School Advisory Board.

In light of the above, it could be argued that KBFs have not been adequately informed of public sector initiatives such as entrepreneurial engagement and support taking place in educational institutions affecting talent by raising aspirations in future generations. It is likely that KBFs have not been made aware of entrepreneurial education taking place in schools, which has the aim to promote a positive attitude and value system to become more entrepreneurial and follow such a career path. In this case the survey result demonstrated a need to raise awareness of public sector led business activities within the business community, as there is the current risk that a lack of awareness could lead individuals to assume that entrepreneurial policy is not a priority and the city has limited entrepreneurial engagement opportunities.

Further initiatives raised by stakeholders highlighted the importance of role models and the significance of celebrating success. The majority of Cardiff private stakeholders identified the need to recognise and celebrate the entrepreneurial success of local entrepreneurs that can, in turn, raise the entrepreneurial awareness of the general public. The private sector in Cardiff discussed the significance of entrepreneurial confidence, courage and conviction to execute, interactions with successful entrepreneurs and likeminded individuals. The celebration of entrepreneurial achievements highlights good practice and outstanding achievements across the business landscape, which can resultantly build confidence levels, strengthen networks of entrepreneurial businesses and supportive infrastructure.

In the context of Cardiff, a heightened importance is placed on the celebration of entrepreneurial role models to inspire others, build business confidence and celebrate outstanding achievements across the business landscape to inspire likeminded individuals. The celebration of success through award ceremonies and role models builds a connected network of future entrepreneurs, driving forward the business community and inspiring others to have an action orientated attitude towards innovative activities. In particular, private stakeholders accredited Cardiff's compact and friendly networks as a unique asset that is able to provide entrepreneurs with significant network advantages.

Interestingly, while there is evidence of collaborative partnerships between the public sector and academics to support Bristol's transformation into an inclusive city, it became increasingly apparent

that Bristol private stakeholders were not necessarily aware of these initiatives, “*there's some kind of university stuff. Occasionally there used to be a couple of key individuals within the Council who'd help with that stuff*” (Private stakeholder, Bristol). This supports a Bristol public stakeholder claim that the city and its communities need to better promote entrepreneurial activity as it is a key area of weakness in Bristol, “*yes, we do need to get better at telling people about ourselves and putting our message out to a wider audience. We are going to need to exploit a lot of our expertise. If people don't know about us, they won't come looking*” (Public stakeholder, Bristol). At present, a number of private stakeholders reported that Bristol had fallen short at celebrating the achievements of businesses and voicing the strength of its thriving scene as local businesses continue to thrive.

Bristol’s local authority was found to influence business activity and/or involvement in entrepreneurial activities by holding business events, inspiring interaction and recognizing local entrepreneurs and businesses (Bristol, 43.6%; Birmingham, 31.9%; Cardiff, 25.9%). For comparison, this was facilitated to a limited extent by the local authority in Birmingham but was not a contributing influence for business activity and entrepreneurial activities in Cardiff. The findings appear to indicate that the public sector in Bristol is holding, supporting or encouraging a range of activities and events that influence and recognise local businesses, which is facilitated to a lesser extent in Birmingham. The results suggested that Cardiff has fallen short and fails to have a significant influence on business activity.

Williams, et al. (2014) suggested the absence of a strong formal institutional presence could prove to be counterproductive in the pursuit of entrepreneurship and the facilitation of economic activity. A strong formal institutional setting is able to promote the creation of innovative opportunities and facilitate entrepreneurial business opportunities (Acemoglu and Robinson, 2008). Institutional theory and the entrepreneurship literature emphasise the role of formal institutions in entrepreneurial activity, specifically their importance in building investment confidence, stable business conditions, transparency and desirable economic opportunities that in turn reduce risk perceptions, uncertainty and information costs (Storper, 2005; Jutting, 2003; Fukuyama, 2001).

5.2.2 Policies and Regulations

In general, previous studies have found there to be a close link, direct and indirect, between good governance and the economic performance of a place (Williams, et al. 2017). However, the majority of firms in Cardiff, Birmingham and Bristol did not perceive the council’s policies and regulations to have **increased turnover and productivity** (Cardiff, 59.3%; Birmingham, 58.3%; Bristol, 54.5%) or to have **increased firm capacity to access new resources** (Cardiff, 66.7%; Bristol, 54.5%; Birmingham, 54.17%). The formal institutions in Birmingham (52.8%), Bristol (52.7%) and Cardiff (46.3%) are

perceived to be failing to maximize the benefits that come with **strategic leadership and proactive approaches to business support**. The survey findings further demonstrated that the policies and regulations in Bristol and Birmingham were perceived to have proven to be an **obstacle to business success** with unclear and confusing steps and procedures (Bristol 69%; Birmingham, 56.9%; Cardiff 50%). That said, policies and regulations were perceived to have encouraged the employment of graduates and apprenticeships in Birmingham (33.3%). This highlights a significant breakthrough for Birmingham's entrepreneurial policy within the area of entrepreneurial education, whereby the survey results indicate an increased uptake in graduate jobs and apprenticeships.

In other words, the survey evidence suggests that according to those surveyed the formal institutional culture across each of the cities has not been supportive of business activities and entrepreneurial endeavours. Previous studies have demonstrated a positive correlation between good policies and economic development as a product of good proactive regulatory institutions (Williams, et al. 2017). A sound institutional context has been found to have a direct effect on productivity, efficiency of firms, productivity and facilitates a positive climate that encourages investment. Whereas in the cases the examined by this study, procedures and regulations in place have been specifically identified as key obstacles to business success. It could be argued that the ineffectual policies and regulations are a consequence of UK-wide spending cuts. Across each of the three cities the majority of stakeholders acknowledged that the deteriorating financial prospects of the UK economy has led to local governments receiving substantial cuts, which has forced local councils to re-evaluate priorities and impose drastic spending cuts.

“Since 2008 we've been going through a period of austerity. If I had been coming into my job rather than nearly three years ago but eight years ago, there would have been 54 people in economic development. When I joined three years ago there were 4 and a half members of staff, the local authority was spending 2p per head of population per week on economic development, which I think you'll agree is a paltry sum. Since then we've been able to regrow the service, but we've only been able to do it by growing income streams”
(Public stakeholder, Bristol).

The council's policies and regulations across each of the case studies were not perceived to have increased turnover and productivity or firm capacity to access new resources (Williams, et al. 2014; North, 1995). A finding that concurs with North and Thomas (1973) who argued institutions are a central explanation of performance variances across contextual environments. Indeed, an effective regulatory setting is anticipated to improve the performance of determinants of innovative entrepreneurship and economic development (Storper, 2005; Rodrik, 2004). Therefore, the absence of supportive and business friendly regulations can have a negative effect on business performance and the attractiveness of a location as a place to do business (Rodriguez-pose and Crescenzi, 2008; Acemoglu, et al. 2012).

It emerged that Bristol's public stakeholders were in the process of reassessing the delivery of local services and intended to introduce a more efficient and sustainable model through public-private partnerships. The majority of private stakeholders recognised that Bristol City Council is no longer in a position to be able to invest in schemes and initiatives as in previous years. Consequently, there is a shortage of financial support for entrepreneurial endeavours and local governments are under intense pressure to develop sustainable responses. Accordingly, Bristol City Council has implemented creative new approaches towards community initiatives to cushion the effects. For instance, as highlighted by a Bristol private stakeholder, the Mayors One City Plan endorses public private sector partnerships, working together as part of a long-term preventative and resilient approach to the economy.

“Potentially, I think what Marvin's [the mayor of Bristol] trying to work towards is that kind of sweet spot of the council and the public sector and the private sector working together.”
(Private stakeholder, Bristol)

“It's a bit like what I was saying about headlines. He'll [the mayor] say it all but whether it actually makes a difference, I don't know.” (Private stakeholder, Bristol)

“The problem is at the moment, the council is floundering because they've got no money, they've got no people. There's nothing really coming.” (Private stakeholder, Bristol)

For Cardiff, the city's historical dependence on the public sector experienced a shift toward private sector partnerships. This focal shift from government to governance has led to the mobilisation of effective networks and strategic alliances between the public-private sectors, to combining resources and expertise to form essential partnerships and to build a resilient and diverse economy. This shift towards entrepreneurship in the public and private sector has seen greater cooperation across stakeholders and is considered to have contributed to public perceptions and key attitudinal changes towards self-employment, intrapreneurship and entrepreneurial activities.

Stakeholders indicated that there is strong public-private partnership support for increased access to entrepreneurial opportunities for deprived communities. However, Williams and Huggins (2013) were quite critical of this approach, they suggested that certain forms of enterprise support and activity in deprived communities could discourage entrepreneurship. Yet, Thompson et al. (2012) made the argument that greater exposure and interactions between entrepreneurial opportunities and deprived communities would have a positive effect on communities' insights and ambitions. A further focus is centred on the human capital development of future generations with stakeholders having reported that initiatives are providing entrepreneurial learning opportunities through the development of entrepreneurial mind-sets, youth education enterprise programmes and apprentices (Heckmann and Klenow, 1997; Barro, 1993; Rostow, 1960).

The majority of Cardiff stakeholders acknowledged that an entrepreneurial economy presents a modern progressive and sustainable economy. An entrepreneurial approach is considered to secure significant advantages over competitors through the utilisation of knowledge, new potentials and contribute to the diversification of the economy. A diverse economy is able to deliver a greater depth and range of entrepreneurial business agglomerations, which is understood to foster a dynamic ecosystem that can enhance the overall resilience of the economy. In particular, stakeholders considered entrepreneurial characteristics to assist local employment, build entrepreneurially skilled employees and create an environment attractive enough to attract and retain talent. According to stakeholders an entrepreneurial ecosystem creates a vibrant economy that allows entrepreneurial behaviours to thrive. Cardiff private stakeholders placed an emphasis on the importance of focusing on the characteristics of this enabling environment rather than the concept of entrepreneurship, as entrepreneurship is seen as a product of the environment.

In terms of the role the public sector plays in the promotion of entrepreneurship all public stakeholders across the three case studies strongly recognised the value of entrepreneurs and their ability to generate multiple ideas and propositions that draw investment into the city. The entrepreneurial narrative in Birmingham is further recognised for generating employment opportunities through the development of a wider entrepreneurial ecosystem of professional occupations. The challenge-led programme discussed earlier demonstrates how entrepreneurs and the innovations they generate provide the opportunity to bring new ideas and solutions to mitigate or overcome urban challenges.

A large part of Bristol's success is due to its widely recognised status as a hive of entrepreneurial activity. However, Bristol public stakeholders acknowledged that there is a sense of contentment and entrepreneurial activities could be better formally promoted. Indeed, Bristol public stakeholders reported that the public sector is still on the 'journey' of translating the One City Plan vision into policy, a notion which renders with a number of Bristol private stakeholders who were notably sceptical as to whether the Mayors vision would come to fruition. A crucial aspect of the of the One City Plan narrative, as highlighted by two Bristol private stakeholders, was the progression from inclusion as a right of people to be included. To the realisation that economically we need to include local people and unlock their economic value, as otherwise there will be limited availability of talent to meet the needs of the economy. As such, an emphasis is placed on the economic need for inclusive growth to close the widening wealth divide.

“Economic development's a service, promotion of entrepreneurship will be part of economic development though it's not written down there as a matter of policy. That doesn't mean of course that we're not doing it, you asked whether it was a matter of policy.”
(Public stakeholder, Bristol)

Rather than the explicit promotion of entrepreneurship, Cardiff public stakeholders detailed the public sectors intent to encourage and facilitate an environment conducive to entrepreneurial mind-sets. Both public and private stakeholders revealed that Welsh Government has taken responsibility for the entrepreneurial agenda across Wales, with the aim to facilitate an innovative society and resilient communities. In terms of financial support, the public sector offers financial structural assistance through The Development Bank of Wales, set up by the Welsh Government, which provides additional capital to strengthen and support Welsh businesses, while Cardiff City Council facilitates a supportive impact through the allocation of its economic development budget. In order to strengthen local supplier networks, the Welsh Government has a particular focus on supplier development activity around big strategic investors with the objective to harness support for local businesses networks in Wales. Still there is the recognition across public stakeholders that while the entrepreneurial agenda is supported through policy, it is not necessarily the most successful, influential or effective in practice. Indeed, entrepreneurship is an evolving and complex concept that Cardiff stakeholders believed must adapt, shift and change for the needs of the economy. Overall Cardiff stakeholders believed that formal measures needed to translate into actions rather than policies, and they identified a need for initiatives, projects and policy schemes (such as Be The Spark) to translate into actions and outcomes.

In the case of Bristol, private stakeholders considered the public sector focus in Bristol celebrates more than promotes entrepreneurialism. All Bristol stakeholders acknowledged the impact of public sector cuts and the limited funding capabilities and resources the public sector is able to allocate to entrepreneurship as a result. In response, Bristol City Council sought to connect authorities, to bring strategies together and establish powerful partnerships. Notably, a public stakeholder acknowledged that, at present, the formation of partnerships has been mainly public sector-led to advocate and hold group members together. Furthermore, the public sector endeavoured to further reinforce the value of these partnerships with the involvement of big businesses to generate investment funds and ultimately reach a stage where the state would step back if required.

“It's a bit of a tricky one. I'd say they celebrate it. More than they promote it. And they very much want to sell that as a success story of Bristol. But Bristol City Council is in a very tricky place financially and so it doesn't really have the resources to be actively promoting things.” (Private stakeholder, Bristol)

In terms of public sector support for entrepreneurship, the majority of Bristol public stakeholders considered the public sector to promote entrepreneurship but not necessarily actively. This reinforces

Bristol private stakeholders' earlier views that emphasised the public sectors limited provisions for entrepreneurship. However, all public stakeholders discussed their wide range of powerful partnerships and support for a range of programmes providing mentorship, access to co-working facilities, advice and support, angel links and collaborations.

The value of business mentoring as a mechanism to increase firm productivity and capacity to access new resources was criticized as a poor example of business support in Cardiff, on the ground that it is highly dependent on the quality of business mentors. A Cardiff private stakeholder reported that they had found the individuals recruited through the Welsh Government, as business mentors are not the best suited. To illustrate, a mentor from the Welsh Governments Development Agency sent to advise a company had been fired from the same company two years prior. This may be indicative of a wider resource issue and a number of private stakeholders claimed that there is a significant lack of independent, knowledgeable and experienced mentors to accommodate demand in Cardiff. Numerous Cardiff private stakeholders stated that once businesses expanded beyond SME size it seemed that Cardiff did not have a large enough sector legacy to recruit high quality business mentors. In practice recruitment for the mentoring scheme tended to occur on a very informal basis but when businesses have approached others in similar sectors, they have not had experience beyond a particular growth stage. There is also a further shortage and need for business angels who are prepared to come to Cardiff and invest in local businesses, and they do need to understand the sectors they are investing in.

The findings emphasise the value of entrepreneurial business support to aid entrepreneurs to adjust to transformations, acquire new knowledge, induce innovative activities and reduce risk (Agrawal, 2010; Eakin and Lemos, 2010; Gupta, et al. 2010). Rodriguez-Pose (2013) contends that the quality of mechanisms in place are a valuable source of innovation, productivity gains and efficiencies. As Vazquez-Barquero and North (1990;1995) observe the ability to nurture innovative entrepreneurship is central to developing a competitive advantage and economic prosperity. A cooperative and collaborative business community facilitates a positive feedback loop reinforcing the necessary conditions to facilitate an environment of entrepreneurial pursuits (Tomaney, 2014; Rodriguez-Pose and Storper, 2006).

In Birmingham the public sector promoted a cooperative approach to businesses specifically facilitating business-to-business-collaborations, encouraging larger corporations to work with entrepreneurs and start-ups to aid innovative productivity. Leading on from this a public stakeholder also reported Birmingham City Council had undertaken significant strategic leadership around supply chain development, supporting smaller companies to understand and pursue supply chain opportunities to deliver a robust economy. The public sector is working with businesses to understand their demands

and facilitate smaller companies to generate opportunities such as supply chain development work. Overall, Birmingham private stakeholders reported that local authorities did not necessarily increase productivity but provided informal support through partnerships, communication channels and the provision of a supportive regulatory setting. In accordance with the KBF survey findings the Birmingham private stakeholder consensus held entrepreneurship was mostly promoted through private sector initiatives. The general perception shared by Birmingham stakeholders is that there is not that much public sector support in terms of grants for initial start-ups as perhaps there has been in the past, which is said to limit business growth.

Regarding the relationship between the public sector and the promotion of entrepreneurship, private stakeholders in Bristol stressed the benefits of the public sectors' hands-off approach. As acknowledged by the majority of private stakeholders the public sector in Bristol was not active in their local promotion of entrepreneurship. Interestingly, and in contrast to Cardiff, this was not considered detrimental. In fact, a couple of Bristol private stakeholders claimed that the public sector was most effective by not intervening and allowing the private sector to 'get on with it' to influence and engage in entrepreneurial activities.

“This [active public sector promotion] was not considered negatively as according to a private stakeholder, there is not believed to have been a deficiency.”
(Private stakeholders, Bristol)

“There is not an active local promotion of entrepreneurship, but that is okay.”
(Private stakeholders, Bristol)

“I'm simply not seeing things. That's not to say that they're not happening. Probably not my target market so I don't necessarily have seen promotional activities. Maybe I'm not the best person to ask about that.” (Private stakeholder, Bristol)

As argued earlier in this section, a number of private stakeholders placed emphasis on the public sectors' supportive role and considered the private sector to have a good relationship with Bristol City Council. In particular, an emphasis was placed on Bristol City Council's economic development officers, who were stated to have had a strong confidence and trust in the expertise and decisions of the private sector. To illustrate, the University Enterprise Collaboration composed of five research-intensive universities (Bath, Bristol, Exeter, Southampton and Surrey) have run the number one global business incubator and accelerator SETsquared for 15 years. This illuminates the advantages of a partnership between Bristol City Council and five universities coming together to create something innovative and non-transactional, in the sense that the partnership is not trying to deliver specific short-term outcomes but provide an investment for the future. As Pinheiro, et al. (2015) indicated university and research partnerships are critical in the promotion of innovation and enhanced productivity. The findings

demonstrate the value of cooperative networks in the creation of efficiencies and problem-solving, stimulating entrepreneurial opportunities in local production environments with diverse sectors of common business objectives (Steiner, 1998; Johannisson, 1995).

In the context of the promotion of entrepreneurship, the majority of Bristol private stakeholders reinforced the need for a greater contribution towards the promotion of entrepreneurialism in Bristol. They recognised the need to build confidence, opportunities and inspire future generations in schools, universities and the business community. However, a contrasting emphasis was also placed on the competitive nature of Bristol's entrepreneurial community and the associated risk of endorsing and promoting entrepreneurship as an achievable aspiration for all.

In contrast, a minority of Bristol private stakeholders were unaware as to how the public sector was positively supporting entrepreneurship, "*I haven't seen anything but that doesn't mean it's not happening*" (Private stakeholder, Bristol). The over-promotion and romanticising of entrepreneurship as a career pathway could potentially promote a huge talent pool to embrace a culture of risk-celebration and risk-glorification, rather than placing the emphasis on risk aversion and risk mitigation. On the other hand, a minority of private stakeholders expressed the concern that the public sector has tended to focus on a small proportion of successful individuals and '*hold them on a pedestal and everything they say is then gospel*' (Private stakeholders, Bristol). The imbalance of accreditation and over-promotion of a minority of entrepreneurs can overshadow the full activities of the business community.

"Yes, it's something for people to aim for rather than, 'Yes, I'm just getting a degree. I want to be an entrepreneur. I want to be running my own company. I want to be part of one of these really fun companies.' I think all of that inspiration is really valuable".
(Private stakeholders, Bristol)

"Are we trying to get people to leave their jobs and be an entrepreneur? I'm not sure that is the right answer. Maybe it should be happening at schools, colleges and universities. Maybe that's the better place to be doing it." (Private stakeholder, Bristol)

While the regulatory environment is widely regarded as ineffective, this can have a compounding influence on business activity and the attractiveness of the formal institutional setting. In these cases, it can encourage entrepreneurs to engage with informal opportunities as a means to acquire knowledge and develop insights.

The survey evidence suggests that according to those surveyed the formal institutional culture across each of the cities has not been supportive of business activities and entrepreneurial endeavours. Previous studies recognised positive links between good regulatory policies and development, and more

specifically that this is a result of good proactive regulatory institutions (Williams, et al. 2017; Rodriguez-Pose and Crescenzi, 2008). A sound institutional context has been found to have a direct effect on the efficiency of firms, productivity and facilitates a positive climate that encourages investment (Tomaney, 2014; Acemoglu and Robinson, 2008). Whereas in these cases the procedures and regulations in place have been specifically identified as key obstacles to business success (Tomaney, 2014; Amin and Thrift, 1995). Furthermore, there is strong evidence to indicate that the role of governance in the promotion of entrepreneurial activity and business support was strongly influenced by devolved powers (Knack, 2003). The research suggests that spatial differences in leadership structures influences public sector support for entrepreneurial activities (McCann and Rodriguez-Pose, 2012; Knack, 2003).

5.3 Informal Institutional Context

Too often the role of the locational context and the influence its institutions can have on local communities and the wider business community is undervalued (Welter, 2011:173-174). As such, by sharing the insights and experiences of entrepreneurs, civic leaders, academics, other research institutions and key stakeholders, the findings can assist our collective understanding to build stronger entrepreneurial ecosystems. As discussed earlier, the research is examined with reference to standard definitions of informal institutions defining informal institutions as the place-based habits, culture, social conventions and informal networks that evolve over time (Rodriguez-Pose and Storper, 2006 and Pike, et al. 2006).

5.3.1 Place to do Business

Locational characteristics are explored as a measure or proxy of how effective institutions are across the three contexts. The conditions or variations in the business environment in which KBFs and entrepreneurs operate has a huge influence on business dynamics, their exposure to entrepreneurial activity and their ability to capture the benefits of their local resources (Huggins, 2016; Estrin, et al. 2013; Bruton, et al. 2010). While some geographic environments can be conducive to business activity, others can restrain and inhibit entrepreneurial opportunities. Accordingly, this section explores the institutional quality of each city as a place to do business.

Table 5.1: How would you rate your city as a place to do business?

	Excellent	Good	Average	Poor	Terrible	Sample (N)
Birmingham	20.5%	61.4%	16.9%	1.2%	0%	83
Bristol	35.2%	52.1%	9.9%	2.8%	0%	71
Cardiff	28.8%	39%	28.8%	3.4%	0%	59
All	28%	51%	18%	2%	0%	213

To provide an insight and understand the performance of each destination as business environment, respondents were asked to rate their location as a **place to do business**. The results revealed the majority (61%) of Birmingham’s KBFs considered the city to be a ‘good’ place to do business, as did firms in Bristol (52.1%) and Cardiff (39%) (Table 5.1). While noticeably over a third of firms surveyed in Bristol considered the environment to be an ‘excellent’ place to do business which could be as a result of Bristol’s diverse cultural base and entrepreneurial spirit. In contrast less than a third considered Cardiff (28.8%) and Birmingham (20.5%) to be an excellent location to do business, which could suggest that the two cities are not as accommodating for business needs. Respondents expanded to elaborate on the ratings of each city as a business environment. The majority of those surveyed in Cardiff considered there to be good access to other cities, a vibrant local business community, networking scene and business environment. Cardiff was considered to be a financially viable location with good affordability of premises. However, others considered Cardiff to have a good public sector presence but noted that there are limitations to Cardiff when compared to other larger cities. Those surveyed in Bristol elaborated to state that the city provides access to talent, a strong business community and friendly environment, with good transportation links (more specifically access to London). Others criticized Bristol’s transport infrastructure, the competence of the local authority and its willingness to embrace change. The majority of survey respondents in Birmingham elaborated to state that there is a large business community and network infrastructure that supports business activities. The city is centrally located with good transportation links and links to the rest of the UK; however, the local traffic management is problematic. The majority of respondents across each of the cities acknowledged the presence of a strong business community and that the transportation or proximity to other cities is central to their business environment. Ultimately, it would appear that spatial geographic distributions of hard and soft factors have an influential role on the perception of each city as a place to do business.

Table 5.2: Does a business community exist?

	Definitel y	Probabl y	Mayb e	Probabl y not	Definitel y not	Sampl e (N)
Birmingham	20%	40%	34.3%	5.7%	0%	70
Bristol	72.3%	12.8%	12.8%	2.1%	0%	47
Cardiff	28.8%	42.3%	13.5%	13.5%	1.9%	52
All	40%	33%	20%	7%	1%	169

In terms of the presence of a business community, Bristol was found to have the strongest sense of a business community with the majority (72%) of respondents stating that a business community ‘definitely’ existed, while in comparison the majority of Cardiff (42%) and Birmingham (40%) responses expressed that there ‘probably’ was a business community (Table 5.2). This “sense of community” and “ethos of mentorship and support” are key characteristic of entrepreneurial ecosystems and attractive locations for employees (Feld, 2012:25). The survey results demonstrate that the majority of respondents considered Bristol to have a noticeably strong presence of a business community, whereas in comparison, Cardiff and Birmingham did not appear to have an as strong presence of a business community. This is a particularly interesting finding, notably Bristol has had the longest identifiable legacy of entrepreneurial business activity and has established a diverse base of business support and networking opportunities. Resultantly the city has the highest business survival rates of any other UK city. In comparison, Birmingham and Cardiff have a relatively less established and more youthful entrepreneurial business environment. This implies that while a strong business community is able to connect businesses and entrepreneurs with likeminded individuals and offers invaluable support (Feldman, et al. 2012; Steiner, 1998), the establishment of a strong self-sufficient entrepreneurial ecosystem often takes time to come to fruition (Isenberg, 2010).

In accordance with UK performance indicators, Birmingham was considered a good place to do business, whereas in comparison Bristol was divided and only a minority of businesses in Cardiff widely held that the city provided a good business environment. A variance that could be associated with the influence of urban scale and the associations made with the diversity and depth of business sectors. Nonetheless, businesses located in Bristol demonstrated that the city had a strong presence of a business community however perceptions of Cardiff and Birmingham were significantly less. Notably, there is a varying prevalence of business activity and community capital across urban contexts; this could to an extent be an indicator of the compact size (facilitating connectivity) and legacy (established network community) of Bristol as an entrepreneurial business destination.

Notably the cities were not influenced by their ability to access business support, suggestive of poor formal institutional support constraining the growth and entrepreneurial potential of businesses, crucial for economic development (Williams, et al. 2017). Furthermore, formal institutions in Cardiff and Bristol were not perceived to facilitate good opportunities for businesses to have a strong voice and influence, whereas in the case of Birmingham perceptions were divided. A finding that conflicts with public sector perceptions and indicates that the business community is constrained and has limited scope to be heard.

5.3.2 Community Capital

The findings demonstrate that informal institutions are a key consideration in the activities of KBFs. Previous studies have emphasised the role and value of 'hard' locational factors to explain the locational choices of businesses and investors (Nijkamp, et al. 1994; Audretsch, et al. 2015; Stam, 2015; Spigel, 2017). The wider characteristics of the environment have been considered to explain the influence of both 'hard' and 'soft' determinants over the process of economic development. Informal institutions such as the quality of the environment, cultural scene and the residential offer together with 'hard' determinants, such as transportation links and the quality of commercial buildings (Musterd, et al. 2007), create a 'sticky' environment that can assist in attracting and retaining a skilled workforce, employees and fosters productivity.

Bristol was found to facilitate a strong entrepreneurial spirit or culture of innovation and creativity, whereas this was only somewhat facilitated in Birmingham and Cardiff. Moreover, a larger percentage of KBFs in Bristol (43.6%) and Birmingham (54.2%) were only 'somewhat satisfied' with the presence of an **entrepreneurial business culture**. The location of KBFs in each of the cities was found to have facilitated **good opportunities to access business friendly resources, advice and local support networks**. Respondents in Cardiff, Bristol and Birmingham further found that their location facilitated **partnerships between universities and businesses**. Overall, it would appear that there is a strong presence of a business community reinforcing business needs. This highlights the importance of the interplay between formal and informal institutions, and it seems informal institutions are substituting formal institutions, a common occurrence when formal institutions are ineffective, weak or fail to provide for the needs of its inhabitants (Estrin and Prevezer, 2011).

A further association conducive of the promotion of entrepreneurship was identified in the collaborative and cooperative nature of urban business communities (Ankrah and Al-Tabbaa 2015; Barnes, et al. 2002). In particular, a link was made between the cooperative connectivity of business communities

and urban scale. Respondents in the three cities further found their location to facilitate partnerships between universities and businesses. This is suggestive of the presence of community interest networks reinforcing the link between innovative activities and knowledge exchange (Lee, 2011; Camen, et al. 2012). It is possible that this highlights the role of informal institutions substituting for formal institutions, whereby the collaborative and cooperative activity can heighten when formal institutions underperform or fail to deliver enterprise needs (Rodriguez-Pose, 2013; Farole, et al. 2011; Getler, 2010).

Table 5.3: The unique culture and local character was an important locational factor

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	Sample (N)
Birmingham	10.8%	14.5%	61.4%	8.4%	4.8%	83
Bristol	57.7%	16.9%	12.7%	5.6%	7.0%	71
Cardiff	54.2%	25.4%	11.9%	0%	8.5%	59
All	51%	19%	29%	5%	7%	213

While the **unique culture and local character** was not a significant factor for KBFs located in Birmingham, it was an important locational factor for those located in Bristol and Cardiff (Table 5.3). The latter concurred with Glaeser (2011) who considered the growth of cities to be a function of their attractiveness in terms of amenities and cultural experiences. In contrast, Storper (2015) was critical of the view that amenities alone could explain the locational choices of people and even more so firms.

The majority of Cardiff private stakeholders identified the importance of an entrepreneurial culture led by innovative and entrepreneurial individuals that is supported by policy, as opposed to a top down approach. Cardiff public stakeholders recognised that formal institutions should be cautious not to stifle entrepreneurial activity, but that financial and policy support should be available to assist social mobility. They further raised a significant challenge in empowering and nurturing informal activities, recognising that they have a key role in stimulating entrepreneurial milieus, which can be more effective if it is community driven. A further consideration observed by Cardiff public stakeholders was that we should not underestimate the power of social influences on the entrepreneurial psyche of individuals. Indeed, they recognised the power and influence family, friends and the local community has on an individual's entrepreneurial mind-set and ambitions. This response in particular raises the importance of socially situated conditions that can impact on an individual's uptake of entrepreneurial behaviours (Johannisson, 1987; Schutjens and Stam, 2003). Indeed, a Cardiff private stakeholder depicted that the

informal characteristics of an environment should determine the uptake of the formal mechanisms in place promoting entrepreneurship.

Despite this, Bristol's public and private stakeholders recognised Bristol City Council's ambition to support the diversification of Bristol's cultural offer and willingness to engage with the private sector to shape public services, with the aim to deliver a fair and inclusive economy for everyone to benefit from and strengthen Bristol's competitive positioning. The city is dedicated to strengthening its innovative spirit with a strong presence of public sector support for innovative place-making, reinforcing Bristol's identity as a cultural and creative destination, "*some of it if it was in any other local authority you wouldn't have got sign off. One of the things was to have lampposts which projected with shadows*" (Private stakeholder, Bristol). This example highlights the role of place and the informal promotion of entrepreneurship and how a cultural environment can attract and retain a talented workforce (Florida, 2012; Landry, 2012). Bristol public stakeholders reported that considerable public sector effort had gone into nurturing the city's creative character. This builds on the premise that a locations' cultural offer and creative infrastructure enriches the attractiveness of an environment (Florida, 2012; Scott, 1997; Hall, 2000). This reflects the connection between cultural distinctiveness and 'place-making' as a contributor of the quality of place, wherein a strong cultural economy often enhances the image and competitive advantage of a location (Huggins and Thompson, 2014).

All Birmingham stakeholders reported the importance of Birmingham's unique historic fabric built on industrial innovation and the local principles of risk taking, invention and innovation, which has established a strong culture of entrepreneurial spirit. Birmingham public stakeholders recognised entrepreneurship to be tightly linked to the character of its entrepreneurial community. All stakeholders acknowledged the diversity of Birmingham's social, ethnic, cultural and spatial groups in society and how the diversity of Birmingham's human capital has influenced the business community. In the same line, the populations' distinctive multicultural values shape the entrepreneurial behaviour of the city's entrepreneurs and businesses which has, in turn, contributed to a unique variety of culture, creativity, knowledge, technological, digital and scientific perspectives and innovative activity (Fainstein, 2005). Accordingly, the findings indicate that there is a positive link between urban diversity and entrepreneurship (Florida, 2012; 2002; Storper, 1997). Nonetheless, Birmingham public stakeholders acknowledged their role in facilitating contingency factors such as the institutional environment ensuring entrepreneurship is considered a desirable career option and not discouraged.

Table 5.4: Importance of the overall feeling of safety as an important locational factor

	Extremely important	Very important	Moderately important	Slightly important	Not at all important	Sample (N)
Birmingham	25.7%	44.3%	17.1%	10%	2.9%	70
Bristol	25.5%	48.9%	21.3%	4.3%	4.3%	47
Cardiff	32%	34%	22%	6%	6%	50
All	28%	42%	20%	7%	4%	167

When asked to consider the importance of safety in their urban environment on average, KBFs rated the overall **feeling of safety** as a “very important” factor for their business and staff in Bristol (49%), Birmingham (44%) and Cardiff (34%) (Table 5.4). A further 32% of KBFs located in Cardiff stating the feeling of safety to be “extremely important” to their business and their employees. This suggests that the safety of a location and the cohesiveness of a community can make a city a more attractive place to live and work.

Table 5.5: Satisfaction with local areas low rates of crime and anti-social behaviour

	Extremely satisfied	Somewhat satisfied	Neither satisfied nor dissatisfied	Somewhat satisfied	Extremely dissatisfied	Sample (N)
Birmingham	1.4%	23.6%	47.2%	13.6%	4.2%	72
Bristol	7.3%	52.7%	30.9%	9.1%	0%	55
Cardiff	11.1%	46.3%	27.8%	13%	1.8%	54
All	13.2%	40.8%	36.3%	23.8%	2%	181

Additionally, a further environmental factor was identified, and firms located in Cardiff (62.96%) and Bristol (52.73%) were ‘somewhat satisfied’ with the **low rates of crime and anti-social behaviour** in their area (Table 5.5). However, this was not a consideration for those located in Birmingham (47.2%), this indicates that the city does not necessarily have a strong sense of safety, but this has not heightened into a strong concern or dissatisfaction. Overall, out of the three cities Cardiff had the highest satisfaction for low crime and anti-social behaviour and Birmingham had the least.

Table 5.6: Importance of the range and quality of events as an important locational factor

	Extremely important	Very important	Moderately important	Slightly important	Not at all important	Sample (N)
Birmingham	12.9%	32.9%	30%	12.9%	11.4%	70
Bristol	8.5%	38.3%	27.7%	19.1%	6.4%	47
Cardiff	11%	36%	29%	14%	18%	50
All	11%	36%	29%	15%	12%	167

The **range and quality of events** in a city plays a crucial factor and was reported as a ‘very important’ aspect for KBFs located in Bristol (38%), Birmingham (33%) and Cardiff (32%) (Table 5.6). There is a significantly growing recognition that the informal institutional context of a place, such as cultural infrastructure and distinctive urban ‘milieus’ are of increasing importance in regional competitiveness and can initiate new types of competitive advantage (Florida, 2012; Turok, 2009). This concurs with studies (discussed in Chapter 2) which have found that firms are increasingly concerned about securing talent and are selecting locations that are attractive to a talented workforce (Florida, 2012). In accordance with the literature, the findings recognise that skilled workers are not attracted by ‘hard’ determinants such as economic opportunities alone and the quality of place correlates with the availability of a skilled labour pool is expressly linked. Ultimately, the findings suggest that a culturally thriving ecosystem provides nourishment and nurtures a diverse and creative culture. Bristol stakeholders were unanimous in the view that the city’s entrepreneurial activities reinforce Bristol’s cultural diversity and bring the city’s entrepreneurial character to life. Bristol was considered to have a strong business culture and community presence. In particular, Bristol City Council was heralded for understanding the role the cultural sector’s play in shaping the attractiveness of Bristol as a competitive business and visitor destination. All stakeholders acknowledged Bristol City Council’s encouraging approach towards its cultural and tourism sectors, taking advantage of, and strengthening and diversifying the unique characteristics of Bristol’s local economy through the promotion and consent of creative events and activities.

The importance of range and quality of events was emphasised as a fundamental asset and the importance of good quality housing as an important locational factor was stressed. This indicates that the role of amenities and cultural experiences within a locality has a significant influence on the attractiveness of a location (Glaeser, 2011). Furthermore, the findings contrast with Storper (2015) who opposed the presence of amenities as an explanation for the location of businesses and talent, a crucial finding in understanding the spatial differences in entrepreneurial performance.

The on-going regeneration of Birmingham was perceived to have a significant role in the attractiveness of the city as a business destination attractive to both investors and as a place to live, evident in the greater Birmingham area receiving increasing levels of foreign direct investment and inward migration. According to a number of public and private stakeholders the city was reported to have strong career options, affordable housing a diverse cultural and entertainment offer, which attracts international corporations despite the current political and economic uncertainty. The attractiveness of Birmingham as an entrepreneurial business destination is supported by the city's strong university base. All Birmingham stakeholders made reference to Birmingham's large graduate population and the city's thriving youthful creative entrepreneurial community notable in Silicon Canal one of the city's strong and ambitious clusters of innovative entrepreneurship. However, a Birmingham private stakeholder did acknowledge the need to join up pockets of entrepreneurial activity across the city.

Informal business networks provide a further example as to how entrepreneurship is informally promoted in Cardiff is through an array of networking opportunities, role modelling, business awards and, to some extent through, informal mentoring arrangements. In terms of informal networks, the public sector sponsors supportive business activities and the private sector holds a series of networking events, which is said to attract a diverse mix of entrepreneurs. These events have been accredited with being able to inspire entrepreneurs, build connections and instigate an awareness and confidence in individuals encouraging them to engage in new skills and innovative activities. That said, a number of key figures in the private sector considered that these events could be made stronger. In terms of the opportunities offered by these events private sector stakeholders noted that there was a lack of high-quality speakers and limited access into business at the higher end with larger corporations and key buyers. Stakeholders stressed the importance of moving away from a reliance on public sector driven activities to allow the private sector the space to deliver and compete against each other. A further area of improvement highlighted by a private stakeholder was the need for formal networking support to encourage greater interaction between micro-entrepreneurs, to allow them to seek advice, access referrals, open opportunities and build a support network.

The majority of stakeholders described Cardiff as a culturally thriving city that has a close-knit community where 'people know people' with a fairly tight network of entrepreneurs. Moreover, a Cardiff private stakeholder stressed the cooperative nature and informal mentoring arrangements of Cardiff's business community. The stakeholder detailed how informal arrangements have emerged where experienced business individuals often came to mentor young individuals in business; a narrative strongly endorsed through the Welsh Government's Big Ideas agenda. While there was recognition that there would always be a place for formal strategic economic development, it is essential to involve key stakeholder or engage with local communities to achieve success.

All three cities have demonstrated a supportive culture of creativity, which is expected to positively affect the willingness of individuals to carry out entrepreneurial activities, start new ventures and develop new innovations. Supportive cultures that value entrepreneurial endeavours can increase the rate of entrepreneurship, legitimizes innovative entrepreneurial activity and can increase entrepreneur’s chance of survival whilst aiding access to resources such as knowledge, finance, talent and markets (Canhoto, et al. 2016; Attia, 2015; Glaeser, et al. 1992). As, Lee (2011) and Huggins and Johnston (2010) highlights, informal business networks can provide access to knowledge sources, contribute to talent pipelines and patterns of entrepreneurship.

Table 5.7: Importance of the availability of access to diverse & creative spaces

	Extremely important	Very important	Moderately important	Slightly important	Not at all important	Sample (N)
Birmingham	5.7%	41.4%	18.6%	18.6%	15.7%	70
Bristol	10.6%	32%	29.8%	14.9%	12.8%	47
Cardiff	20%	20%	20%	14%	26%	50
All	12.1%	31.1%	22.8%	31.66%	18.5%	167

The findings demonstrated the significance of **diverse and cultural environments** with the majority of respondents in Birmingham identifying access to diverse and creative spaces as ‘very important’ (41.4%) attributes for both employers and employees (Table 5.7). Similarly, in Bristol the majority did consider access to diverse and creative spaces to be very important (31%). In contrast, the majority (26%) in Cardiff did not consider the availability of diverse and creative spaces to be important. It is possible that this could be due to, (i) the city’s youthful entrepreneurial ecosystem and its traditional attitude to business in comparison to Bristol and Birmingham, or, (ii) the compact size of Cardiff enables individuals to access a diversity of sector networks that would not have been as permeable at a greater scale. These could be characterized as informal network connections that enable individuals to acquire creative insight through a variety of personal network relations.

The cultural scene in Bristol was identified as a key characteristic of the city’s economy. Several Bristol private stakeholders reported the city to have a strong cultural offer, which has drawn people to the city. In particular, Bristol was recognised as a great place to live, as it possesses a diverse range of cultures from both an ethnic and social perspective (Florida, 2012). This supports the “stickiness” factor whereby the quality of life and thriving scene can assist the retention of talent (Florida, 2012). Bristol stakeholders widely focused on individual’s ability to tap into a variety of cultures and also the

mainstream cultural scene, and while a Bristol public stakeholder acknowledged that Bristol does not have an arena, it has developed a unique and strong cultural entertainment scene and holds a lot of festivals.

In terms of the quality of Bristol's business environment the majority of Bristol stakeholders emphasized the presence of a culturally rich international business community. Specifically, a key Bristol private stakeholder considered there to be a lot of diaspora that fades towards Europe and the US in terms of company relationships in key sectors and cultural openness.

“I think we've got a very different vibe. The other strength of it is we've got a very diverse cultural and ethnic base...91 languages are spoken here. It's a very good international outlook” (Private Stakeholder, Bristol)

Bristol public stakeholders identified Bristol as a city that benefits from a strong international offer coupled with its attractive domestic base, meaning it is culturally diverse with a strong international outlook. However, a key Bristol private stakeholder did highlight that Brexit and the UK's potential exit from the EU could impact on Bristol more than other UK cities due to its strong international connections. Nevertheless, it was also stated that the cities underlying economic strengths could indicate that Bristol is less exposed to shocks than others.

All Birmingham public stakeholders recognised that creating a diverse and culturally rich environment for entrepreneurs and businesses to flourish had to form a vital part of public policy. The public sector recognised that although hard factors such as universities, office space and transportation are necessary, they alone are insufficient to attract talented innovative thinkers who require an environment that fosters entrepreneurship. All Birmingham stakeholders considered the diversity and multicultural base of Birmingham to have cultivated the city's entrepreneurial personality. In the acknowledgement of community culture, the public sector was reported to promote the development of agglomeration communities and coworking spaces to generate like-minded communities of entrepreneurs. In particular, a Birmingham public stakeholder stated that they are eager to create more facilitative spaces to get creative entrepreneurs from different sectors together to facilitate informal communities of knowledge exchange. Birmingham private stakeholders recognized the value of local enterprise driven by the entrepreneurial business community. They reported the high number of start-up across the city to be a reflection of the community's high levels of curiosity, inventiveness and entrepreneurial culture. Both public and private stakeholders accredited the distinct ambition of Birmingham's entrepreneurial business culture as having facilitated entrepreneurial success.

The cultivation of a resilient and attractive informal environment can play a crucial role in the performance of urban areas (Florida, 2012; Hall, 2000). In the context of Cardiff, private stakeholders stated the public sector should focus on the development of culture to the same extent as business interests to stimulate entrepreneurial activity. For example, Bristol was reported to have a dynamic culture that acted alongside business activities, whereas a Cardiff private stakeholder stated that more could be done in Cardiff to harness local place-based cultures from locational synergies. It was suggested that there is a need to continually champion smaller indigenous talent, not just the big names such as the BBC to draw on the local cultural spirit of enterprise and to deliver long-term competitiveness. Indeed, as in Bristol's case, attractive and dynamic cities are better positioned to entice and retain a talented workforce (Florida, 2000). All stakeholders widely recognized Bristol as having retained an educated talent pool, a key asset for creating new opportunities to generate innovative entrepreneurship, which further determines a city's ability to attract and retain crucial employers and investment.

"It's always been a very sticky city for graduates staying in the city or coming back. It's very highly educated. That not surprisingly breeds a knowledge economy and wealth which makes, if you're relatively well off, it is a lot easier to start a business."
(Private stakeholder, Bristol)

Economic development in Cardiff has increasingly evolved into an agenda about enhancing the quality of place. As discussed by Charles Landry (2000), several public sector stakeholders stated the quality of an urban business environment promotes the preconditions that can attract investment, job creation and long-term competitiveness. A Cardiff public stakeholder stated that Cardiff has moved away from a crude grant-led approach to economic development, actively making interventions to enhance the quality of Cardiff as a business location, a place to live and study. Overall, public sector stakeholders perceived there to be a strong focus on driving public improvements in the quality and attractiveness of the environment to create an investable location that delivers a wide range of locational benefits.

The findings demonstrated that the majority of businesses in Birmingham and Bristol considered access to a diverse and cultural environment to be a crucial factor, whereas the majority of those located in Cardiff did not consider it to be an important locational factor. The findings demonstrate a variance in the perception of conditions pertinent to entrepreneurial business activity, this could be indicative of an individual's conscious awareness of necessity but also urban scale and the influence of the maturity (development) of the entrepreneurial business ecosystem across the case studies. Florida (2012) and Glaeser (2011) considered the growth of cities to be a function of their attractiveness in terms of the provision of local amenities and cultural experiences on offer. Whereas Storper (2015) was critical of the view that amenities alone could explain the locational choices of people and even more so firms. This was reinforced across the three cities with the majority considering the quality of public spaces, recreational and cultural amenities to be a crucial factor.

Table 5.8: Importance of quality of public spaces, recreational and cultural amenities as key locational factor

	Extremely important	Very important	Moderately important	Slightly important	Not at all important	Sample (N)
Birmingham	12.9%	34.3%	17.1%	17.1%	18.6%	70
Bristol	21.3%	34.0%	25.5%	12.8%	6.4%	47
Cardiff	18%	30%	28%	14%	10%	50
All	17%	33%	23%	15%	12%	167

Reinforced by a third of respondents in Birmingham (34%), Bristol (34%) and Cardiff (30%) it was reported that the **quality of public spaces, recreational and cultural amenities** are ‘very important’ for businesses and their employees (Table 5.8). This supports the view that creative individuals desire communities that are significantly rich in cultural diversity, amenities, have a tolerant atmosphere and are open-mindedness (Florida, 2002).

Table 5.9: Importance of the availability of good quality housing as an important locational factor

	Extremely important	Very important	Moderately important	Slightly important	Not at all important	Sample (N)
Birmingham	21.4%	28.6%	22.9%	17.1%	10%	70
Bristol	31.9%	40.4%	19.1%	4.3%	4.3%	47
Cardiff	18%	36%	34%	2%	10%	50
All	24%	35%	25%	8%	8%	167

The availability of good quality housing was a key consideration for respondents located in Bristol but not as critical for those located in and Cardiff and Birmingham. The majority of KBFs located in Bristol considered the availability of **good quality housing** to be a key consideration (‘extremely important’ (32%) or ‘very important’ (40%)) (Table 5.9). This could be indicative of Bristol’s current inner-city housing market whereby property prices are increasing at the rate of 1.5% as claimed by a key Bristol private stakeholder. The market is expected to outperform London, which has led to a

“How businesses thrive and how people thrive, our residents thrive, the people that live here thrive and frankly what gets me out of bed in the morning is how their economic development, is not how well businesses can thrive, but why we’re doing that at all and that’s to create better places for people to live in where there is employment and equality of opportunity for all.” (Public stakeholders, Bristol)

housing shortage and heightened rental values. Comparatively, housing was important but less of a concern in Cardiff with the majority of respondents stating the availability of good quality housing to 'very important' (36%) and 'moderately important' (34%). However, only 28.6% of Birmingham respondents claimed that the availability of good quality housing was an important factor for their business and its staff.

A key Bristol public stakeholder expressed that the locations in which businesses can best survive are those that also lead individuals to having better lives with higher levels of well-being. Bristol public stakeholders recognized that the environment, business productivity and economic development are intrinsically linked. Indeed, a further Bristol public stakeholder acknowledged how businesses, residents and visitors thrive off the quality of life available to them in Bristol. Accordingly, Bristol public stakeholders were unanimous in the view that the future development of Bristol should not come at the expense of the environment and its quality of place, but maintain, enhance and optimize its environment to retain and attract a diverse mix of individuals.

The future development of the city concerns building infrastructure to sustain growth, although it is not just about the provision of buildings and roads but also making sure talent is fully optimized to ensure they are being provided with the right skills to deliver greater prosperity. This highlights the alignment of the skills availability to skills demand. In light of the above, informal institutions are able to heighten the attractiveness of place to talent and cultivate a supportive social environment as discussed in section 5.3.

Interestingly, the findings reinforce the importance of historical legacy and its lasting influence on informal institutional characteristics (Audretsch, et al. 2017; Hudson, 2010; Korsgaard et al., 2015). The research highlights how current entrepreneurial characteristics can be reflective of historical development trajectories (Martin, 2012; Pejovich, 1999). Wherein Bristol was found to facilitate a strong entrepreneurial spirit or culture of innovation and creativity, although a strong culture of innovation was only somewhat facilitated in Birmingham and Cardiff. Again, this could be reflective of Bristol's strong business community. It could also be argued that the city's informal institutional environment is shaped by entrepreneurial traits reflective of Bristol's historical entrepreneurial legacy (Gherhes, et al. 2017). Moreover, the majority of KBFs in Birmingham and Bristol did acknowledge the presence of an entrepreneurial business culture. Quite crucially in the absence of an entrepreneurial business culture cities can face stagnation and struggle to develop adaptive efficiencies (Stuetzer, et al. 2016). The presence of an innovation cultural setting is recognized as a catalyst for entrepreneurial business growth and reinvention (Beugelsdijk and Maseland, 2011; Krueger, et al. 2013). The evidence engages with the concept of informal institutions as a determinant that mediates the relationship between the contextual nature of community capital and entrepreneurial behaviours (Mueller, et al.

2000). KBFs found each city to have facilitated good opportunities to access business friendly resources, advice and local support networks. Overall, it would appear there is a strong consensus in the presence of a business community reinforcing business needs. This would suggest the informal institutional context facilitates an underlying entrepreneurial milieu or business culture, exemplifying the importance of community capital in the cultivation of entrepreneurial productivity and knowledge transfer activities (Williams and Huggins, 2016; Audretsch and Keilbach, 2004). The findings are indicative of the presence of context-specific support networks considered to enable individuals to acquire an 'adaptive efficiency' through the acquisition of knowledge through a supportive learning environment, a premise supported by both public and private stakeholders (North, 1990).

Scholars have highlighted how the presence of informal institutional infrastructure varies according to the urban context (Farole, et al. 2011; Hodgson, 2007; North, 1990). Determinants and effects of informal institutions develop in association with the embedded characteristics of their contextual setting and tend to vary from place to place; as such entrepreneurial activity is reflective of institutional contexts (Estrin, et al. 2016).

5.4 Conclusion

While previous studies have stressed the importance of 'hard' factors in the location of business and investment, the responses highlight the importance of both 'formal' and 'informal' location factors. The findings suggest that the locational choices of KBFs were strongly influenced by 'soft' factors such as personal connections and the unique culture and locational character of an environment. Responses also accounted for more classical 'hard' factors, such as the ability to access talent, financial viability, availability of transportation links and overall geographic location and the proximity to other cities to explain the location patterns of KBFs. Whereas business friendly regulations did not play an important role in the attraction of KBFs to each of the cities.

The critical realist approach was crucial in understanding and unpacking institutional dynamics and their interplay through the exploration of the deep unobservable events, structures and mechanisms at play in each of the urban contexts. The data has demonstrated the formal institutions in the three case studies are in large ineffective. In one sense, the absence of formal institutions can increase barriers and worsen the ease of doing business; this can constrain aspirations, the generation of entrepreneurship and the development of the business community. In the case studies discussed this appears to have acted as an incentive for informal institutions to intervene and substitute for the limited presence of formal institutions to drive growth and entrepreneurial activity. This provides an understanding of when formal institutions have failed informal institutions can develop to counteract the performance of formal

institutions. A key aspect found to shape the operation of informal institutions in an urban context, is the presence of a network environment that can act as an informal institutional enabler, providing the lubrication to heighten network dynamics to mobilise resources conducive to entrepreneurship. An exploration of how institutional network dynamics influence the development of entrepreneurship leads discussions on to the final empirical chapter, in which the role and influence networks and collaborative relationships have on entrepreneurship is examined.

This highlights the notion of institutional asymmetry and the need for the two institutions to align, to ensure the formal rules legislated by the public sector support and reinforces the informal cultural norms of conduct to develop sustainable socio-economic productivity.

CHAPTER 6

NETWORKS IN THE CITY

CHAPTER 6

Networks in the City

6.1 Introduction

This chapter explores the presence and influence of networks and collaborations in three unique urban contexts to acquire an insight into differing network dynamics. In this light, networks and collaborative relationships emerged as an important driver and facilitator of productivity and entrepreneurship. The findings identified an entrepreneurial business culture and coworking spaces as significant drivers of networks and collaborations in each of the three contexts. The latter concept is built around the idea of a collective community that encourages collaboration. In general, coworking spaces refer to informal facilitative workplace environments in which individuals work independently or collaboratively in a shared office environment, specifically designed to encourage a collaborative and productive atmosphere. All private stakeholders and some public stakeholders in each of the cities discussed the value of coworking environments for network and entrepreneurial opportunities. Throughout, the findings highlighted the value of proximity networks with like-minded individuals within these collaborative environments.

It is the aim of this chapter to analyse networks as institutions in their urban context, it is the intent to explore and understand the value of network dynamics and how these interactions enable or impede entrepreneurial activity. This entails acquiring as to whether a networked collaborative approach to business promotes entrepreneurial behaviour and is thus an essential factor of entrepreneurial success. To then explore the presence and influence of community capital in the entrepreneurial business community urban areas. Lastly, the chapter seeks to acquire an understanding as to whether (or how) coworking spaces (a collective term used in this research to capture the variety of infrastructure, incubation, acceleration, hubs etc) are able to promote entrepreneurship and innovative activity.

This chapter presents the results of the empirical analysis and is structured accordingly, (1) the presence of an entrepreneurial business culture is explored to understand the origin and character of entrepreneurial cultures, (2) networks in an urban context exploring network activity and the nature of interactions as an influential factor of productive entrepreneurship. Highlighting the value of a collaborative and cooperative environment and the benefits of public-private partners and alliance in

effective entrepreneurship. The final section (3) stresses the role of enabling spaces in the cultivation of a community culture and associated networks harnessing intangible resources, understanding the facilitative capacity of networks in entrepreneurship.

6.2 Network Culture and Entrepreneurship

The research explores the premise that a networked economy is an essential factor of entrepreneurial business activity (Chapter 2). In summary, the findings of the empirical evidence demonstrate the importance of a strong business culture as an essential facilitator of economic activity. The results advocate an association between urban business cultures built on social capital and the willingness of individuals to be mutually reinforcing with a dominant spirit of co-operation.

Historically stakeholders considered the wealth of Cardiff to have derived from the entrepreneurial spirit of its people (social capital). Cardiff was accredited with having a strong business community from which it cultivated a business environment prepared to attract, encourage and support businesses. The majority of Cardiff stakeholders considered the willingness of individuals to reach out to one another to have contributed to a collective identity, this was stated to have facilitated the community's energy, confidence and support to deliver the communities shared interest in Cardiff's business needs to drive a wider collective impact. The majority of stakeholders in Cardiff considered the local business environment not to be attributable to a single individual's actions but as a result of 'the people' that live and work in the city who have established a local business community. The business community was reported to have grown organically with strong business links and community networks. All stakeholders considered the compact size of Cardiff to have assisted the connectivity of networks and provided greater opportunities for a range of face-to-face engagement activities in informal and formal networks. The business community is considered accessible and regularly interacts across a variety of formats often connecting through socially driven networks, which have unintended consequence as powerful business networks. Indeed, Bristol public stakeholders were unanimous in the perception Bristol's thriving creative scene and entrepreneurial spirit was a consequence of its creative and talented communities, *"I don't think the authority could claim that much responsibility. Actually, it's not necessarily us it's what the people in the city are doing. I think that's, quite interesting"* (Public stakeholder, Bristol). Accordingly, all stakeholders were unanimous in the observation that the diverse mix of Bristol's population has harnessed the positive promotion of entrepreneurship, a similar tenet to Birmingham.

According to the majority of stakeholders the legacy of the city is an influential factor on the development of Birmingham's business community, a premise shared by Bristol and Cardiff

stakeholders. Inspired by Birmingham's heritage, its innovative sectors and outstanding growth the majority considered the city's historic legacy as an entrepreneurial and inventive city to have had a lasting place-shaping legacy. Shaping the development of enterprise as a driving force behind the momentum of economic development across the city, with a population recognised for its hardworking ethos with a shared a sense of endeavour and commitment to take risks and engage in enterprise opportunities. To date the city's entrepreneurial spirit was evident in Birmingham (for the fifth consecutive year) having the highest number of new start-ups outside of London in the UK. For comparative purposes Bristol was ranked the tenth destination for new start-ups. According to a Birmingham private stakeholder this demonstrated the populations' confidence to take risks and engage in innovative business activity. A key public stakeholder reported a record number of businesses are choosing to locate and set up business in Birmingham, reinforcing the city as an innovative environment for entrepreneurs. Additionally, this could be further testament to the city's relatively youthful population with 45.7% of residents aged under 30, in conjunction with a city status as the most ethnically and culturally diverse city outside of London, all stakeholders considered Birmingham's greatest resource to be its dynamic population. All stakeholders unanimously considered the city to have a thriving cultural scene that is growing rapidly and supports innovation where 'everyone is free to be themselves', cultivating a strong cultural depth built on the diversity of its multicultural population. Nonetheless, public stakeholders claimed national perceptions of the city as an industrial city were a key obstacle in Birmingham's development. However according to public stakeholders' perceptions have shifted and further improved due to the renovation of the urban landscape and the city's £1.7 billion worth of planned developments redefining its skyline, establishing the city as an international location with strong future prospects.

As highlighted earlier, the historical legacy of cities is an influential determinant of local business communities (Gherhes, et al. 2017). Throughout the analysis of entrepreneurial performance the historical legacies of urban contexts was found to have a lasting place-shaping legacy for enterprise, serving to shape perceptions of entrepreneurial opportunities and a driving force behind the momentum of innovative entrepreneurial activity and economic development across cities (Audretsch, et al. 2017; Hudson, 2010; Korsgaard et al. 2015). In the context of the cooperative nature of business networks the results demonstrated interactions were honest and reliable, the results are suggestive of the presence of community capital within cities and their business environments, a finding that reflects the growing importance placed on the value of fostering trust in network interactions within the innovation network literature (Klijn, Edelenbos and Steijn, 2010; Klijn et al., 2016). The data strongly suggests that interpersonal trust has been built within these business networks this indicates that the connections are reliable, have integrity and reciprocity (Oxendine, Borgida, Sullivan & Jackson, 2003; Putnam, 2000).

In regard to the public sectors influence on the development of an urban entrepreneurial business culture Bristol public stakeholders recognised the public sectors limited capabilities as to what it can do to aid entrepreneurship. Both public and private stakeholders in Bristol acknowledged the limited expertise or experience civil servants have of entrepreneurship and enterprise being innately risk adverse. At the same time Birmingham, Bristol and Cardiff public stakeholders were unanimous in recognising the public sector cannot tackle key issues in raising and promoting entrepreneurship in isolation. Birmingham's public sector shared a strong awareness of the importance of the private sector to participate in city proposals and strategic discussions, to ensure future developments understand the needs of local enterprise to enhance the performance of the economy. Bristol public stakeholders acknowledged their work with key actors in the business community to facilitate the city's entrepreneurial culture. In a similar light, all Cardiff public stakeholders reported the public sector was encouraging private sector networks through initiatives such as Cardiff Start and Creative Cardiff, drawing the 'right' people together in a supportive environment to develop a shared agenda. All public stakeholders shared their intent to not get in the way of innovative activities but to do what the public sector does well providing supportive infrastructure, creating business units and incubation space, and offering seed corn capital but also, to not get in the way of networks to let them flourish without interference from the public sector.

“Removing barriers. The main thing is just get out of the way unless it's there for safety of the public...the main point is get out of the way or make it easier for people to press on. As long as there's no exploitation.” (Private Stakeholder, Cardiff)

In particular, all Cardiff public stakeholders highlighted it was crucial to work in unison with others such as Finance Wales and Business in Focus. Subsequently, some Cardiff public stakeholders noted how the private sector had since come on board and 'caught up' providing more incubation, innovation and accelerator space than the public sector, a major turning point in demonstrating Cardiff's strong market demand. Furthermore, the council detailed their work in setting up an advisory service supporting small businesses and entrepreneurs to encourage businesses ventures. Birmingham on the other hand, has a deep-rooted culture of innovation. The role of the public sector in the cultivation of an entrepreneurial business culture was demonstrated in the willingness of the public sector to transform the city from a start-up centre to support the scale-up process and survival rates, to build resilience in Birmingham's business community (Huggins, 2016). A key public sector challenge highlighted by Bristol public stakeholders was private sector perceptions of how the public sector can aid the business community. According to a Bristol public stakeholder the public sector was initially risk adverse only undertaking activities that were a comfortable fit. To date, Bristol public stakeholders identified their actions to challenge and overcome current private sector perceptions of the public sector through credible conversations with the business community, the use of public sectors legal powers and fiscal

capacity to support Bristol's local business community, and in facilitating and coordinating partnerships.

"We do things the Bristol way. I think there is that feeling of collaboration in the city. The entrepreneurialism of Bristol - It's been a port since forever."
(Private stakeholder, Bristol)

"I think it's down to the area being a little bit quirky. It's just the Bristol way."
(Private stakeholder, Bristol)

"It's a nice place to live. More than anything else, people like to be here. We import a lot of very smart, very highly skilled people who then don't want to leave. I've got an awful lot to do with it. It is just the right size. It's got good access to London and to other important parts of the UK. Yes, it's nice. High quality of life is what we would say, but basically, just call it life." (Public stakeholder, Bristol)

The research also highlights the major impact place value and intangible factors have in influencing the attraction and retention of talent in each of the cities. To illustrate, in a context of urban economic competitiveness professionals were reportedly attracted to Bristol's cultural diversity and bohemian quality of place. As the majority of Bristol stakeholders highlighted, these factors have demonstrated Bristol's ability to attract, import and retain highly skilled professionals.

As touched on by stakeholders, Bristol benefits from high graduate retention rates and attracts a highly skilled labour force from other key locations (i.e. London). The concentration of skilled professionals has contributed to the vitality of the city and its business community, having led to increasing numbers of professionals setting up enterprise. Bristol stakeholders characterised the city as quite self-reliant with a strong willingness to take risks cultivating a growing entrepreneurial culture. That said, a Bristol private stakeholder expressed the concern Bristol has become complacent and taken its creative city standing for granted overlooking the creative sectors requirements. In likeness to Bristol, according to a Birmingham public stakeholder the city has profited from high population retention rates and increasing inward migration from London, indicative of an attractive living and professional environment.

As discussed in earlier chapters, Bristol has a strong legacy of invention, entrepreneurialism and enterprise. Bristol's longstanding culture of exploration, export and importation was seen to serve a fundamental role in the generation of business spin offs and innovations. All Bristol stakeholders confirmed the importance of Bristol's history of entrepreneurialism in the establishment of an embedded culture of innovation and world-leading expertise. In particular, a private stakeholder reflected on Bristol's angst surrounding the city's heritage considered to have led to a strong focus on business ethics, to carry out open and honest business practices. A number of Bristol private

stakeholders tended to focus on Bristol’s quirky and bohemian culture as having contributed to the cultivation of its business community. Similar to Bristol, Birmingham was also established on a basis of invention. Stakeholders in Birmingham highlighted the cultural diversity and entrepreneurial spirit of the population that has led investor confidence and boosted the local business economy. The city delivers an innovative platform where entrepreneurs can operate a cost-effective business within a growing diverse ecosystem.

Table 6.1: Interactions are personally and socially supportive

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	Sample (N)
Birmingham	20%	47.1%	21.4%	11.4%	0%	70
Bristol	25.5%	48.9%	23.4%	2.1%	0%	47
Cardiff	20%	42%	34%	4%	0%	50
All	21.8%	46%	26.3%	5.8%	0%	167

The results demonstrated interactions were perceived to be **personally and socially supportive** (Bristol, 48.9%; Birmingham, 47%; Cardiff, 42%) (Table 6.1). There appears to be a strong presence of social capital accessed through networks in each of the three cities, a characteristic that appeals to a spirit of entrepreneurship and individual’s ability to access a diverse source of resources.

Within Cardiff, private stakeholders claimed leadership to be fundamental in the cultivation of a business community. It was commonly held that the nature of Cardiff’s business community is predicated on who the business leaders are in the community. Cardiff’s entrepreneurial community was credited as having been driven by several community leaders who have a strong connection with the city and want to make a difference to help Cardiff reach its full potential. The majority of Cardiff private stakeholders considered the entrepreneurial community to be led by friendly and approachable community leaders rather than politicians or officials. In accordance with Feld (2011) Cardiff’s business communities were defined as being led by its entrepreneurs and fed by the Government, academics, investors, and venture capitalists etc. The community was stated to be particularly strong at reinforcing one another’s achievements championing entrepreneurial efforts by recognizing, talking up and sharing the community’s successes. A Cardiff private stakeholder stated that even in areas of competitiveness it is rare to find individuals ‘badmouthing’ others. When it comes to Birmingham a number of private stakeholders asserted that the city does not shout of its achievements dubbing Birmingham the “UK’s quiet city”. A private stakeholder described the city’s achievements as a jigsaw of activity and success, where the pieces are established and in place, but the single narrative of Birmingham’s tech credentials are largely unknown outside the city. Birmingham’s business community was considered to be passionate about business but modest in their achievements, stating effective entrepreneurship was not

about entrepreneurial egos or recognition but an ambitious self-disciplined entrepreneurial spirit and mind-set. Within Birmingham’s ecosystem coworking actor facilitators act as community leaders and connectors, mobilising community knowledge to assist new and existing entrepreneurs in their networks. They act as community directories identifying the best available (tangible and intangible) resources, matchmaking, mentoring, and actively encouraging peer learning. In this sense, Bristol stakeholders further acknowledged the role network facilitators have played in bringing the ecosystem together to support entrepreneurs, establish viable business relations and mobilise resources to ensure gaps are filled. Akin to Cardiff and Birmingham, Bristol private stakeholders placed a strong emphasis on the need to celebrate success and the business community’s achievements,

“We are not good at shouting about our success and really kind of like putting out there the things that we're really good at. We're not good at kind of rubbing nose on new areas of investment and saying, we can do as a city. That has come because of Bristol is a nice place and it's aesthetically nice and all the things I was saying about it before in terms of the level of business that it supports and sustains. It's been a place that there's always some people moving to it and it's never had to reinvent itself.”
(Private stakeholder, Bristol)

In the context of entrepreneurship, the results have shown the promotion of innovative activities and sector strengths serve to celebrate and build on efficiencies to enhance internal and external network awareness of businesses opportunities. A further characteristic of business communities was based on the added value of the promotion of trust, reciprocity and cooperation in each of the cities.

Additionally, all businesses considered interactions to be personally and socially supportive, this demonstrated a strong presence of social capital existing within the networks of business activity. A finding in line with Bourdieu (1980; 1986), Coleman (1988) and Putnam (2000) who found the presence of social networks and shared values to be a positive group externality, able to improve the efficiency of society and incite productivity gains.

Table 6.2: Interactions are honest and reliable

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	Sample (N)
Birmingham	25.7%	55.7%	17.1%	1.4%	0%	70
Bristol	38.3%	48.9%	12.8%	0%	0%	47
Cardiff	30%	48%	22%	0%	0%	50
All	31.3%	50.9%	17.3%	0.5%	0%	167

In terms of the cooperative nature of business networks, the results demonstrated interactions were perceived to be **honest and reliable** (Birmingham, 55.7%; Bristol, 48.9%; Cardiff, 48%) (Table 6.2)

an indication of the presence of social capital. Notably, while Birmingham and Bristol proved to have the most honest and socially supportive network interactions Cardiff had the least.

With regards to leadership, the interview analysis revealed hubs and coworking spaces were considered by all private stakeholders to have a strong responsibility as leadership symbols demonstrating good moral business behaviour. For example, in Bristol the SETsquared incubator was reported to focus on creating ethically run sustainable businesses on the premise that if businesses are well run, they will survive. A strong focus is placed on the responsibility of the entrepreneur and their role in business reinforcing their responsibility to practice good business and avoid bad practices.

“If you're in business, do you fight tooth and nail with a competitor? Or if there's an opportunity to collaborate, do you collaborate because you can both move in the same direction?” (Private stakeholder, Bristol)

In Bristol, private stakeholders were unanimous in placing a strong focus on trust and how it underpins strong partnerships. Bristol's business community was stated to be built on the intrinsic willingness to let others in and create value based on trust facilitating alliances through shared resources, supporting the absorptive capacity for knowledge exchange (Giest, 2015; Klijn et al. 2010; Klijn et al. 2016).

“We talk about trust a lot... meeting new companies, if we can't build up trust in the first hour or believe that we can, then we probably won't take them in... trust is what underpins partnerships.”
 (Private stakeholder, Bristol)

“What do we do to encourage businesses to be more collaborative? Running an incubator, you are a parent or foster parent for the companies you're supporting. As a parent, what are the things, which are important? One of them is leadership symbols, demonstrating good behaviour, therefore, your kids will do the same you can't tell a company how to run their business and then go and do the opposite.” (Private stakeholder, Bristol)

“Interviewee 1: I'm not trying to have a go at the Council at all because I really respect the Council. Interviewee 2: there's a very do-it-yourself attitude people are very collaborative or willing to share and cooperate across sectors and across different organisations. That sort of spirit. Although on the one hand we call it a spirit of independence, is actually more a spirit of collaboration and cooperation amongst different organizations and individuals trying to support each other. I think there isn't a reliance on the local authority or someone telling you what to do, or kind of saying, "Well, there isn't any money for this, so I'm not going to do it." We're just kind of like, "Well, let's just find a way of doing it anyway." ... I think that attitude has permeated across Bristol for a number of years, if not decades. In some ways, that has allowed the council and others to draw back, because they kind of go, "Look, you're doing so well on that. Why do you need any more funding?" and you go, "Well, but think what we could do. You know how good we are with virtually nothing, imagine the possibilities if we actually had some investment." That's the kind of challenge. We've been almost too good”.
 (Private Stakeholder, Bristol)

Table 6.3: Interactions are mutually supportive

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	Sample (N)
Birmingham	17.1%	51.4%	27.1%	1.4%	2.9%	70
Bristol	19.6%	51.1%	23.4%	6.4%	0%	47
Cardiff	20%	52%	24%	4%	0%	50
All	18.8%	15.5%	24.8%	3.9%	1%	167

However, Cardiff (52%) was found to have the most **mutually supportive** business interactions with Birmingham (51.4%) and Bristol (51.1%) slightly behind (Table 6.3). Whilst the majority of stakeholders credited Cardiff's private sector for generating a strong sense of community, a Cardiff private stakeholder questioned the extent to which social capital has an effect on the productivity of the community. A Cardiff public stakeholder identified the risk involved in entrepreneurs becoming too engrossed in the development of social capital, stating that, “you've got to be a little bit selfish. You've

got to focus in on what you're doing, do it well and reach out where it's appropriate", as ultimately it can distract individuals from their initial entrepreneurial activities. On the other hand, networks are a key contributing factor in the establishment of business communities in Cardiff, by which its supportive nature facilitates network benefits. A similar stance was taken in Birmingham. The business community was reported to be working in unison to strengthen and nurture its local business community. Key organisations and actors such as the Greater Birmingham and Solihull Local Economic Partnership reported the value of local support from those that act within the community through the provision of advice, and the promotion of business resources and networks to give individuals the tools to improve entrepreneurial conditions.

The empirical data identified Cardiff as having the most mutually supportive business interactions followed by Birmingham and Bristol. This could be reflective of De Wever, et al. (2005) and the distinction of resilient trust whereby interactions are more effective, and actors are more willing to share and transfer knowledge, efficiencies and resources. A further link between the value of a strong entrepreneurial business culture was demonstrated by Hakanen and Takala (2016) who highlighted the value of interpersonal trust in business networks and how it is a crucial factor of cooperation facilitating the development of knowledge, innovation and productivity. Although, the data uncovered slight variations in the nature of network interactions across the case studies, quite interestingly networks appeared to hold similar compositions of interpersonal formations.

Overall, the informal nature of urban business cultures and the relationships fostered through city network activity is mutually supportive, honest and reliable. Informal network activity appears to have harnessed a local business culture and sense of entrepreneurial spirit through the presence of strong informal institutions, a development considered to rise in circumstances where there is a need to counteract the shortfall of formal institutions and the associated regulatory settings.

6.3 Networks in an Urban Context

6.3.1 Network Activity

This section provides a measure of network activity (drawing on structures of interactions and access) through interaction dynamics in each city. The results focus on network connections influencing network activity and the mobilisation of complementary assets. There are conflicting views concerning the role particular network characteristics play (i.e. weak and soft ties) in the performance of entrepreneurship and sustainable economic development (Johannisson, 2000; Hite and Hesterly, 2001;

Rowley et al. 2000). This section explores the presence of independent actors in a local geographic community, with the intent to understand the formal and informal dynamics at play within the network structures (Stam, 2015: 1761; Isenberg, 2010; Cohen, 2006).

To understand the intensity and diversity of actor dynamics survey respondents were asked how often they interacted with a number of actors. A major finding was the most frequent interactions took place with **suppliers and customers** on a 'daily' basis, in Bristol (70.2%), Birmingham (42.9%) and Cardiff (40.4%). Demonstrating that Bristol had the greatest intensity of interactions with suppliers and customers while Cardiff had the least however, a further 37% of Cardiff respondents interacted '2-3 times a week'. It would appear firms have established mutually beneficial relationships with a select community. KBFs are carrying out functional transaction-based interactions, which seem to be motivated by the economic value generated through mutually beneficial exchanges and activities. Markedly, Bristol had a significantly higher rate of interactions with their supplier and customer base; this could be due to the density and compact concentration of the city's networks encouraging a greater frequency of interactions.

In terms of the nature of interactions taking place within the business community of the three case studies the results reported most frequent interactions took place with suppliers and customers. It would appear firms have established mutually beneficial relationships with a select community. KBFs are carrying out functional transaction-based interactions, which seem to be motivated by the economic value generated through mutually beneficial exchanges and activities (Granovetter, 1985; Williamson, 2007). Markedly, Bristol had a significantly higher rate of interactions with their supplier and customer base; this could be due to the density and compact concentration of the city's networks encouraging a greater frequency of interactions (Huggins and Johnston, 2010; Turkina, et al. 2016).

Most interestingly of those surveyed Bristol interacted most frequently, on a 'daily' basis, with other businesses in the **same sector or industry** (Bristol 27.7%; Cardiff 21.1%; Birmingham, 7.1%), while Cardiff interacted with other businesses in **different sectors or industries** ('daily') most frequently (Cardiff 30.8%; Bristol 25.5%; Birmingham, 14.3%). This could be due to the compact size of Cardiff aiding cross sector connectivity. Indeed, private stakeholders reported the ease of permeability to aid interactions and assist the connectivity of business dynamics. Similarly, private stakeholders in Bristol highlighted the community proximity benefits have resultantly contributed to amalgamation of business sectors. In the case of Birmingham, firms had the most infrequent contact with other businesses in both the same and different sectors; it would appear respondents only interacted with these actors on an infrequent basis. Notably, Birmingham has the least frequent interactions with other businesses, it is possible to assume the intensity of business networks are restricted by the scale of the city, as the second largest city in the UK. Dispersed network connections can subsequently limit proximity interactions

reducing the frequency and intimacy of interactions, possibly a characteristic of weak network ties (Granovetter, 1973).

In terms of the influence higher education and research institutes have on KBFs a third of those surveyed in Cardiff (32.7%), Birmingham (30%) and Bristol (21.3%) interacted 'once every 2-3 months' with **higher education, universities and research institutes**. What was most striking was that less than a third of respondents in Bristol would occasionally interact (34%) with these institutes, it would seem KBFs are not well assimilated with educational or research institutions. Public stakeholders in Birmingham, Bristol and Cardiff demonstrated a few examples of university alliances but the opportunity was not fully exploited; instead the majority of links were established via private stakeholders. However, public stakeholders in Birmingham discussed their strong ties with university institutions in establishing and strengthening the city's entrepreneurial culture, "*lately, I do work very well with them [universities], they are a key partner of business supporters, mentees, innovation activities. They are really important players here*" (Public stakeholder, Birmingham). The survey results further showed KBFs seldom interacted with **private research institutes and consultants** (Birmingham, 40%; Bristol, 36.2%; Cardiff; 32.7%). Furthermore, all KBFs in each of the cities were found to interact with **freelancers and individual talent** infrequently (Bristol, 31.9%; Cardiff 26.9%; Birmingham 21.4%). This suggests KBFs have remained quite isolated from individual talent despite being in the same geographical vicinity. This could be reflective of the perception freelancers are depicted as highly priced employee substitutes, whereas employees ("insiders") are cost effective long-term human capital investments.

In regard to the frequency of businesses interactions with universities and research institutes exchanges were found to take place infrequently, this would suggest businesses are not well assimilated with educational or research institutions. Notably, university links and their positive externalities can facilitate effective knowledge transfer able to reduce uncertainty and encourage the commercialisation of knowledge. However, public stakeholders across each of the cities demonstrated examples of university alliances, but that the opportunity was not fully exploited, instead the majority of links were established via private stakeholders. It is anticipated university links and spin-off activity can be capable of leading and facilitating entrepreneurial behaviour through knowledge exchange and collaborative research activities (Audretsch, et al. 2014). However, on the other hand Breschi and Lissoni (2001) criticise the assumption that links with higher education and their research will generate automatic knowledge spillovers citing that often knowledge is tacit or specialised and therefore not easily accessible through informal contacts.

The survey results demonstrated businesses seldom interacted with private research institutes and consultants, this reinforces the premise that KBFs have not entirely harnessed the benefits theorised to

be generated through interactions or collaborations with university and research institutes (Boschma and Frenken, 2009; Canter, et al. 2009; Colombo, et al. 2011). As stipulated by Nijkamp, et al. (1994) innovation is decidedly dependent on research, knowledge and evidence, accordingly research institutes and the knowledge they generate is posited to be conducive to innovative entrepreneurship. However, the results are indicative of 'weak ties' when individuals acting in different contexts or sectors interact infrequently or in isolation (Granovetter, 1973). Nonetheless, in terms of interaction frequency, Burt (1992) recognized that irregular business connections can bridge otherwise unconnected groups and provide access to new information and resources. "Weak ties" can be particularly beneficial in encouraging individuals to step out of their comfort zones and reach into unknown waters, widening their network structure and provisions. It requires individuals to tolerate and trust unfamiliar network actors to seek social cooperation through shared learning to gain access to new knowledge, resources, advice and find customers and suppliers. Whereas tight networks can limit access to wider resources, opportunity perceptions and reduce access to new information and efficiencies (Boschma, et al. 2009; Colombo, et al. 2011; Malecki, 2011).

With regards to Cardiff, a specific area identified by private stakeholders as needing further development in Cardiff was the cross-fertilizing of communities. On reflection, Cardiff private stakeholders considered coworking spaces could do more to connect and cross-fertilize communities, on the basis independent minds coming together can have huge advantages. A further Cardiff private stakeholder projection anticipated that the next step in the ecosystem's maturity is individuals cooperating, collaborating and the development of a sharing economy instead of individuals holding onto the exclusivity of their communities. That said there appears to have been advancement in the collaboration and cooperation between the different provisions in Cardiff. While private stakeholders in Cardiff recognised some strains of competition their provisions are mostly compatible working together to strengthen Cardiff's business support. To illustrate, the coworking collective holds meetings every three months for incubators and accelerators to discuss key priorities and understand how their activities could complement one another. In contrast, the Birmingham stakeholder consensus identified the need for a wider joined up approach in the development of Birmingham's business community, utilising both public and private channels. Interestingly, public and private stakeholders were divided. In contrast to public sector perceptions, private stakeholders did not consider the city to be collaborative, cooperative or supportive. However, a private stakeholder reported in recent attempts to encourage collaborations and networking activities among large businesses there was limited uptake, "*trying to get people to do stuff together is nigh on impossible*" (Private stakeholder, Birmingham). Instead private stakeholders found businesses were largely looking out for themselves and have limited interest in collaborative or network activities until they are able to see the benefits for themselves. On this basis private stakeholders did not consider Birmingham to promote a collaborative business environment, this touches on an aspect central to the private sectors ambition to enhance the effectiveness of

Birmingham's business community through the development of a collaborative joined-up network approach.

In Bristol the majority of stakeholders highlighted the city's longstanding inequality across the city and those from deprived backgrounds were recognised to have significantly disproportionate access to capital, education and were found to be particularly cautious and risk adverse. As such Bristol City Council and a number of private stakeholders acknowledged the need for improved equality, connectivity, diversity and inclusion across sectors. Bristol private stakeholders placed a strong emphasis on rising inequality of opportunities across Bristol, and how vulnerable social groups acquire access to labour markets and capital to support entrepreneurial cultures in deprived communities.

“You need to think of the economy in a more diverse way as there are other sectors and other things happening. You need to think about how particular groups get access to labour markets, how you would invest in infrastructure to get better connectivity. How particular areas get access to financial capital to grow and support local entrepreneurial cultures in there. Those are what important interventions but clearly, central government doesn't really - there's a long legacy of why that doesn't happen. It's as much central government policy as local policy.” (Private stakeholder, Bristol)

A further issue identified by Cardiff private stakeholders concerns the functioning of networks in Cardiff's compact urban environment, as events can tend to default to the same familiar faces and usual suspects. It is stated there is a need for a diversity of voices to accommodate these spaces to represent the community and advise as to how the business community should advance entrepreneurial activities in Cardiff. There is the need to challenge traditional methods of delivery. The default should not rely on business organisations or network coordinators to occupy these spaces; entrepreneurs should take greater control and influence in these roles. In particular, a number of Bristol private stakeholders considered it was often the same organisations promoting cooperation and collaboration among the business community. Yet notably universities are playing an increasingly important role in 'cross pollinating' and bringing people from a range of backgrounds together in Cardiff through innovation networks, Creative Cardiff at Cardiff University and the enterprise network at Cardiff Metropolitan (Pinheiro, et al. 2015). A comparable approach to Bristol, whereby the UWE partnership EngineShed was recognised as a valuable resource and contributor to the city, connecting people with ideas. In Birmingham's case while a large number of businesses and entrepreneurs attend networking events across the city, a particular issue highlighted by a number of private stakeholders was their limited engagement with one another:

“We see a lot of people going to networking events, but I'm pretty sure they are there for either a free drink or to tick a box. There is very little activity that happens after those. For example, we held a networking event in November, which we had 250 odd people come to? We did that to try and get the other larger businesses around Birmingham to interact, help and support the entrepreneurs and start-up's... less than six actual decent quality conversations happened from that event and that many people left.”
 (Private stakeholder, Birmingham)

Pinheiro, et al. (2015) found universities and research partnerships to be an enabler of innovative entrepreneurship and sustainable productivity. A collaborative and joined up approach is vital to overcome knowledge barriers and uncertainty through the mutual exchange of knowledge, facilitating cross-pollination across multiple sectors. As Chesbrough (2003) stressed knowledge networks are a crucial source of innovative entrepreneurship, problem solving and value creation. Notably, the findings also stressed the cautiousness of actors to engage in knowledge channels (Vorley, et al. 2015; Boardman and Bozeman, 2015; Schofield, 2013).

However, the survey data (Table 6.4) demonstrated KBFs largely considered their business relationships to have led to leads and referrals. This could be reflective of their wider network connections and not necessarily reflective of their active engagement at networking events. That said, there is a clear disparity in private stakeholder perceptions (discussed above) and public stakeholder perceptions of Birmingham as a **collaborative and mutually reinforcing city** with almost half of KBFs (48.6%) reporting there to be access to network connections. Nevertheless, the public sector perception could be reflective of Birmingham City Council’s positioning in the urban hierarchy and as a result demonstrates the willingness of individuals to collaborate, support and cooperate with the public sector and not other firms or entrepreneurs.

Table 6.4: Business relationships have led to leads and referrals

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	Sample (N)
Birmingham	30%	48.6%	20%	0%	1.4%	70
Bristol	34%	53.2%	10.6%	2.1%	0%	47
Cardiff	28%	50%	14%	6%	2%	50
All	30.6%	50.6%	14.9%	2.7%	1.1%	167

Indeed, over a third (34%) of Bristol respondents ‘strongly agreed’ business relationships led to **leads and referrals** (Table 6.4). The survey results accorded with Camen, et al. (2012) and found that the nature of network interactions has a significant impact on resource opportunities in addition to discovering valuable new knowledge (Morgan, 2011; Steiner, 1998). Drawing on the characteristics of Bristol’s business community Bristol stakeholders strongly stated the city has a resilient and

entrepreneurial culture. All Bristol stakeholders reported the urban environment to offer plentiful informal opportunities to interact with like-minded individuals, share experiences and hear about new business ideas (Feldman, et al. 2012; Fukuyama, 1997). The role of coworking spaces in the informal creation and facilitation of innovative entrepreneurial activity (Mody, 1993; Ciborra, 1991), through Bristol's informal social network offer, was considered by the majority of Bristol stakeholders to be

“We tend to get a little bit carried away with how good we think everything is and then you meet someone who says, “Well, actually, that's invisible to me.” ... the perceived barriers are quite strong. Whilst it's a very innovative, very richly diverse city, you've got some very hard silos in the city. It's easy for us to think city in the center. It's for everyone actually. I don't know how about is in other cities. I get told it's actually worse here. We need to do better.” (Private stakeholder, Bristol)

one of the best informal innovative cultures than other equivalent major cities in the UK. However, a private stakeholder raised a significant concern that there was a frustrating sense of complacency across Bristol in the sense that while the Bristol and Bath City Region generates £1.6 billion per annum, with an £8.6 billion benefit provided to the Exchequer the city's status for cultural excellence must not be taken for granted. The Regional Cultural Strategy emphasised the continued need to nurture Bristol's local cultural provision to enrich the city's many socio-economic challenges.

Indeed, both Bristol and Birmingham private stakeholders identified the need for a wider societal perspective to acknowledge the inequality of opportunities in inner city locations. A number of Bristol private stakeholders continued to state that there are significant differentials in the perceived access of networks for insiders compared to those on the outside (Huggins and Johnston, 2010; Grabher, 2006; Beckham, et al. 2004). This was raised as a crucial weakness in Bristol and Cardiff. Interviews highlighted the need for more to be done to address perceptions of network exclusivity, to empower minorities and tackle rising inequality through increased opportunities to access entrepreneurial support, to prevent groups of society experiencing imposture syndrome and develop their capabilities (Ansari, Munir and Gregg, 2012). Undeniably Birmingham faces multiple challenges from high child poverty and youth unemployment to rising homelessness. In response, a number of coworking spaces have demonstrated their dedication to make positive change, to tackle these issues and act as a platform to deliver social value and build a more inclusive business environment. To illustrate, the Birmingham Social Enterprise Development Organisation setup an innovative programme to create a community of social entrepreneurs to tackle poverty and social isolation in their local neighbourhoods. To in turn overcome perceptions of network exclusivity and social barriers for opportunities to access a dynamic community of thinkers and support networks.

Table 6.5: Business relationships have proven to connect with key influencers in your industry

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	Sample (N)
Birmingham	12.9%	32.9%	42.9%	10%	1.4%	70
Bristol	21.3%	34%	31.9%	10.6%	2.1%	47
Cardiff	14%	36%	34%	8%	8%	50
All	16.1%	34.3%	36.3%	9.5%	3.8%	167

The findings revealed interactions were somewhat perceived to enable actors to **connect with key influencers in your industry** (Cardiff 36%; Bristol; 34%; Birmingham 32.9%) (Table 6.5). However, the majority of KBFs in Birmingham did not perceived business relationships to necessarily influence firm connections with key influencers in their industry. This could be due to Birmingham’s record number of start-ups and vast small business economy saturating the network scene, with more small businesses created in Birmingham than other city’s (other than London). It is possible the findings could suggest the connectivity of Birmingham’s networks is saturated with start-up and small businesses. On the other hand, it could be due to the physical size (scale) of Birmingham, KBFs might not perceive there to be a strong sense of influencer ties as the proximity distance fragments the city’s pools of network connections. The empirical findings demonstrate the influence of city scale on proximity relationships (Boschma, 2005). In accord with Audretsch and Feldman (1996) increased distance between actors can fragment ties, resource pools and information channels. Spatial proximity has been found to have a positive influence on entrepreneurial networks and facilitates the transmission of knowledge, resources and innovative developments (Ankrah and Al-Tabbaa, 2015; Huggins and Johnston, 2010).

According to both public and private Cardiff stakeholders, Cardiff has quite an accessible ecosystem. Cardiff stakeholders shared the view that in general individuals are able to reach the right people if needed. The involvement of key industry leaders in Cardiff’s Regional Entrepreneurship Acceleration Programme (REAP) panel, a programme that supports innovation-driven entrepreneurship, demonstrates the accessibility and approachability of successful entrepreneurs in the Cardiff City Region, who are committed to delivering opportunities for future generations. According to the majority of public stakeholders in Cardiff and Bristol the willingness of key business figures to interact, share their time and knowledge with others to co-create demonstrates the real commitment of a collective group to provide opportunities for future generations. A cooperative network environment can have significant benefits for enhanced productivity (Ankrah and Al-Tabbaa, 2015; Pinheiro, et al. 2015), that said it can also lead to substantial tensions due to conflicting positions and bureaucracy (Boardman and Bozeman, 2015; Vorley, et al. 2015). Interestingly, in Cardiff’s case many are not originally from Wales or Cardiff but have enjoyed the environment the city offers, in which they have progressed into mature

successful entrepreneurs and have not moved on but put considerable energy into the city's growth. To illustrate, initiatives such as Be the Spark, a business start-up and ideas initiative is driven by a collective group of entrepreneurs from across the UK currently living in Cardiff.

The concept of coworking spaces has become a mainstream workplace solution across the cities. These facilitative spaces encourage a community culture required for the positive effects of close-knit communities. In particular, private stakeholders in Bristol recognised these to be aided by key network facilitators acting as connectors and enablers building communities of connected local talent. In Bristol, it was recognised by the majority of public and private stakeholders that there are a group of core network facilitators and catalysts spread across a number of co-working spaces hosting events, setting the ethical foundations of how to do businesses, sharing referrals and connecting talent and ensuring innovative activity happens. These actors facilitate an environment that enforces knowledge production through inter-organisational collaborations. Contrastingly, a couple of Bristol private stakeholders claimed you would rarely see public sector employees who would do more than show their face.

“You rarely have public sector employees who officially work for the council or officials who work for the Command Authority who do much beyond come along and consult and say their structures is really important.” (Private stakeholder, Bristol)

“It's despite the local authority. It's a very resilient culture, very connected, very collaborative, very down to earth. People should get on and do. It's certainly not a culture sitting and waiting for the council to do anything.” (Private stakeholder, Bristol)

In this light, the findings highlight a significant tension between the private sector expectation of the role of public stakeholders in catalysing innovative activity in both Bristol and Cardiff, and the supportive role undertaken by the public sector. Indeed, Fukuyama (2001) argues economic activity is facilitated through strong institutional actors (both formal and informal) reducing risk perceptions and heightening actor confidence (Storper, 2005). Public stakeholders across the cities reported networking and the nurturing of entrepreneurs to be largely facilitated through co-working spaces and self-organised networks (Mody, 1993; Ciborra, 1991). Indeed, the three cities were widely recognised to have a diverse range of proactive co-working spaces across the city, recognised by Morgan (2011) to facilitate a valuable source of sustainable growth, innovation and entrepreneurial competitiveness. Stakeholders from Bristol City Council stated they were ‘very happy’ to encourage networking events but that the authority was not well placed to run and promote those events. Instead a further public stakeholder affirmed that the role requires synchronization between the public and private sector, wherein Bristol City Council fulfils a supportive and facilitative role making resources available where possible to build capacity and shape the environment for future growth. In sum, the public sector has taken a pragmatic stance in its facilitative role in promoting and fostering an environment conducive

to innovative entrepreneurship. In the context of Birmingham, the public sector delivered a supportive stance in the promotion of a partnership approach in the development of Birmingham's business community, establishing alliances with universities and organisations such as the Growth Hub to deliver the councils priorities. However, a Birmingham private stakeholder was critical of the public sector view that the attendance of events was an indicator of business engagement,

“Our success off the back of that is not a monetary success. It is also not the number of people that go there. What we class as a success is the number of interactions that happened as a result of that event.” (Private stakeholder, Birmingham)

Recognising the value creation of exchanges and interactions, a Birmingham private stakeholder stated a large proportion of events are attended by businesses, business development teams, or individuals seeking to make new customers:

“What we try and do and we would like to see happen is actually those big businesses, not just coming in and thinking they're going to get another customer, but to think about an innovative way that they could use their business to help some of the start-ups and the entrepreneurs. So, it's not a numbers game for us. It's more about a practical application of what these different businesses can come and bring them to the table.”
(Private stakeholder, Birmingham)

With regard to network activity, Bristol stakeholders considered there to be an openness and willingness of professionals to collaborate and mix with likeminded individuals. Information sharing and face-to-face interactions were seen as a crucial aspect of entrepreneurial activities (Canter, et al. 2009; Cook, et al. 2009; Colombo, et al. 2011; Giest, 2015). For example, TechSPARK in Bristol a combination of a cycling group that socialises afterwards and running clubs that have social events (pub quizzes, trips away and nights out) and community contributions (painting schools and fund raising). A private stakeholder in Bristol cited social capital, in the sense of social qualities, openness and a sharing culture, to be a critical element that forms the glue that assembles a sense of community spirit, where trust between individuals undoubtedly plays a fundamental role (Bridger and Alter, 2009).

The majority of private stakeholders in Bristol contended network facilitators from the local business community join forces with their competitors to build a stable and resilient business community, they meet in person on a regular basis to discuss key topics and identify key weaknesses to work together to deliver a collective impact. Harisalo and Miettinen (2010) found a heightened frequency of actor collaborations facilitates a shared understanding, reciprocity, trust and openness. Notably, according to a Bristol private stakeholder they take pride in leading by example demonstrating strong ties supported

by social mechanisms - such as the establishment of a collective understanding for the common good to deliver a stronger ethical community culture.

“We get together monthly. The point is that we get together, Future Space, positioned very much as a competitor...so that's run by UWE. We're run by University of Bristol, but it's the institutional level that is competitive. What we do with this group is to make sure that at the practitioner level we're not competitive, because it's pointless.” (Private stakeholder, Bristol)

“We do get together monthly to share and avoid being competitive, and create a common language around, we all want to achieve the same thing. Collectively, it's up to each other to spend the time understanding.” (Private stakeholder, Bristol)

Table 6.6: Interactions lead to effective problem solving

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	Sample (N)
Birmingham	22.9%	41.4%	28.6%	7.1%	0%	70
Bristol	27.7%	46.8%	23.4%	2.1%	0%	47
Cardiff	14%	50%	30%	6%	0%	50
All	21.5%	46.1%	27.3%	5.1%	0%	167

Further findings indicated Bristol had the highest proportion of respondents who strongly agreed (27.7%) interactions were more effective than other cities, with interactions having led to effective problem solving. Followed by Birmingham (22.9%) and Cardiff with the lowest proportion of KBFs who strongly agreed (14%) (Table 6.6). In this case, Bristol had the most supportive and effectual connections wherein actors appeared to communicate openly and benevolently to share ideas that generate new knowledge (Harisalo and Miettinen, 2010: 88). In all, the reciprocal and trustworthy nature of these interactions is playing an important role in dealing with uncertainty and creating efficiencies. Accessibility to closed networks, as detailed above, is commonly found to be more constraining, hierarchical and have select barriers to entry (such as a membership purchase) as found by private stakeholders in all cities. Given the growing importance of innovative activities for urban competitiveness, all private stakeholders discussed the value of open networks; they observed the benefits of knowledge spillovers, intellectual exchanges with likeminded individuals and visibility for the purpose of facilitation and referrals (Lichtenthaler 2005, Sammarra and Biggiero 2008). Additionally, Cardiff private stakeholders recognised a variance in value demonstrated in the participation of closed networks (Cardiff Business Club) in contrast to more open networks (Tramshed). It was suggested the degree of openness and interaction capabilities increases discovery, this echoes the notion that firms no longer innovate in isolation but require interactions with a variety of actors and

knowledge sources (Chesbrough, 2003). This demonstrates the cooperative interactive nature and value of informal non-business networks in the promotion of business connections:

“We see in our network people come and they say- you can get any number of networking specialists that will tell you how to work a room and get leads. They'll all be about lead generation. That really puts a lot of people off because they don't want to come and be hassled. What they want to do is meet like-minded people and not be pestered by people who just want a business card. The non-business networks have a real benefit in its slightly more neutral space. If you're there and something genuinely interests you, is just like any human interaction. I would create a connection with someone with whom I share a genuine interest. Now, if I can then, for my business, see an opportunity, I will probably value that relationship more than someone [who] stuck me with a business card. So, yes, I can see why people would say, actually the non-business networks are of more value to me, which is why I think Ignite was as successful as it's been. It's oversubscribed every single event and yet there are a core of people who are very successful business people that flipped Ignite around. A number of people that I meet that say, "I went to that, it's absolutely fascinating. I've got all sorts of connections. I may never ever use them for business, but they are nevertheless connections which are important to me, help me improve my life." Also, at the end of a hard day's work sometimes the last thing people want to do is go and do more of it.”
(Private Stakeholder, Cardiff)

Yet in Cardiff a number of private stakeholders stated open networks often attract the same faces demonstrating a need for more to be done to increase the reach of network engagement to attract a wider diversity of entrepreneurs and businesses. More generally, in each of the cities the role of social media was stated to provide the private sector with a platform to promote events and networking opportunities to reach a wider audience, extending the spatial distance of knowledge flows (Geist, 2015; Huggins and Thompson, 2014, 2015). As facilitators of network ties and knowledge flows these platforms are often mutually supporting and encourage businesses to utilise access to knowledge outside their organisation. Notably, some Cardiff and Birmingham private stakeholders expressed individuals tended to regularly attend networks they were members of rather than drifting in and out and finding all networks equally relevant.

The majority of Birmingham private stakeholders acknowledged that the business community is not fully engaged in networking dynamics and collaborating with network peers. A notable area of tension for private stakeholders running support and engagement events in the city is breaking down traditional business values and making firms aware of the benefits of engaging and partnering with a wider network of innovative actors. In the context of Birmingham there is a strong difference in engagement and network participation between SMEs and larger businesses. A key challenge in Birmingham is encouraging established businesses to break out of their traditional mind-sets to understand how an entrepreneurial approach could aid their development. For example, in an attempt to encourage the cooperation of large firms' private stakeholders have held meetings with business directors to

breakdown the wider objective of having a cooperative and collaborative business community and the value they can obtain.

“For a 28-year-old business like ourselves to continue for another 28 years, we’ve got to innovate... in order for them [companies with the old school thinking] to improve and carry on and then develop they have to innovate. It’s a digital revolution now and a lot of companies aren’t up to date with that really, that’s why we can support in so many ways that they can.” (Private stakeholder, Birmingham)

It is the intent of private stakeholders to open the mind-sets of older business club members and their initial reluctance to open their resources and knowledge to entrepreneurs and competitors. To think differently and realise the benefits of collaborative working, knowledge sharing and engaging with likeminded individuals who could potentially assist their work. At present in Birmingham it appears that there is a lack of a wider community conscience and responsibility for the development and sustainability of the local business community as has been demonstrated in Bristol and Cardiff.

6.3.2 Nature of Interactions

The research explores whether a networked collaborative approach to business is an essential factor of entrepreneurial success (Chapter 2). The findings acknowledge the value of networks as an integral driver of entrepreneurial activities. The empirical evidence illustrates the importance of the nature of interactions and the collaborative and cooperative nature of network dynamics as a resource.

Table 6.7: Interactions are work related contractual agreements

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	Sample (N)
Birmingham	34.3%	50%	15.7%	0%	0%	70
Bristol	63.8%	19.6%	14.9%	0%	2.1%	47
Cardiff	34%	38%	24%	4%	0%	50
All	40.3%	35.8%	18.2%	1.3%	0.7%	167

In terms of the nature of interactions the data showed a large proportion of Bristol (63.8%) respondents strongly considered interactions to be **work related contractual agreements** twice the amount found in Birmingham (34.3%) and Cardiff (34%) (Table 6.7). This appears to place emphasis on the functional purpose of network activities to carry out transactional exchanges in Bristol. The results suggest KBFs in Bristol are focused on work related business needs, whereas the majority of interactions taking place in Birmingham and Cardiff were not perceived to be as focused on transactional exchanges.

It has been shown that the majority of interactions are work related contractual agreements, significantly so in Bristol which could be due to the competitive nature of the city's entrepreneurial business environment. A narrative reaffirmed by Birmingham private stakeholders who did not consider the city to be collaborative, cooperative or supportive of business activities, a contracting view to public stakeholders. The findings demonstrate there is a clear disparity in perspective with public stakeholders sharing perceptions of Birmingham as a collaborative and mutually reinforcing city. A perception that could be dependent on urban scale, a supportive and collaborative network might exist at a local scale but not across the city as a whole (Huggins, et al. 2015; Camen, et al. 2012; Porter, 1990), this would have a significant bearing on the impact and influence of scale in urban entrepreneurship.

Table 6.8: Business relationships increase innovation and creativity

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	Sample (N)
Birmingham	7.1%	42.9%	48.6%	0%	1.4%	70
Bristol	19.2%	55.3%	19.2%	4.3%	2.1%	47
Cardiff	14%	46%	26%	10%	4%	50
All	13.4%	48.1%	31.2%	4.8%	2.5%	167

Table 6.9: Interactions provoke creativity and innovation

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	Sample (N)
Birmingham	11.4%	35.7%	37.1%	15.7%	0%	70
Bristol	19.2%	51.1%	21.3%	8.5%	0%	47
Cardiff	24%	38%	28%	10%	0%	50
All	18.2%	41.6%	28.8%	11.4%	0%	167

The findings (Table 6.8 and 6.9) demonstrated KBFs perceived interactions to have an innovative and creative influence on their activities. Business relationships were perceived to have the greatest influence on **increased innovation and creativity** in Bristol (55.3%) followed by Cardiff (46%) and Birmingham (42.9%). However, the majority of KBFs in Birmingham did not perceive business relationships to be beneficial for increased innovation and creativity (48.6%). As discussed earlier, this corresponds with the Birmingham private stakeholder consensus that network opportunities within Birmingham's business community are not fully embraced by existing businesses. While a networked approach to entrepreneurial business connections are widely recognised as a valuable source of innovative support by the majority of stakeholders, in the context of Birmingham private stakeholders identified the need for greater connectivity and knowledge exchange. The findings (Table 6.8 and 6.9)

suggest business relationships were perceived to be more beneficial in provoking and increasing creativity and innovation in KBFs than network interactions across the cities. Based on the evidence it would seem business relationships have stronger ties than network interactions and as such KBFs receive a greater facilitative capacity. This accords with the literature that stresses the presence of strong ties as a mechanism to avoid uncertainty and supports innovation transfer (Nahapiet and Ghoshal, 1998; Granovetter, 1983:421; Friedkin, 1980).

(i) Collaboration, Cooperation and Openness

Table 6.10: Business relationships secured reliable information about your operating environment

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	Sample (N)
Birmingham	21.4%	51.4%	25.7%	0%	1.4%	70
Bristol	25.5%	51.1%	21.3%	2.1%	0%	47
Cardiff	20%	46%	24%	8%	2%	50
All	22.3%	49.5%	23.6%	3.4%	1.1%	167

Indeed when survey respondents were asked how useful or beneficial their business relationships had proven to be, responses demonstrated business relationships were perceived to have secured **reliable information about their operating environment** (Birmingham, 51.4; Bristol, 51.1%; Cardiff, 46%)(Table 6.10), led to **leads and referrals** (Bristol, 52.1%; Cardiff, 50%; Birmingham, 48.6%)(Table 6.4), and increased **innovation and creativity** (Bristol, 55.3%; Cardiff, 46%; Birmingham, 42.9%)(Table 6.8). The nature of Birmingham’s business relationships appear to be indicative of the Birmingham public stakeholder view that Birmingham’s business communities and the relationships within these networks are a vital factor of knowledge exchange: *“I suppose what I see are some really strong communities, business networks, and initiatives that are around for businesses. I think Birmingham has got a strong sense of community”* (Public stakeholder, Birmingham). This demonstrates the role of business relationships in securing effective knowledge and business support.

All Bristol stakeholders were unanimous in their view that Bristol offers a collaborative and cooperative environment. Bristol stakeholders testified that the community shares an openness that is inherently trustworthy. It was reported that with Bristol having been a trade city for over 100 years it has established a multicultural scene and fostered a deep-rooted confidence to act independently and take risks, which has in turn created an innovative resilience and humbled spirit of independence. Similarly, the majority of Cardiff stakeholders considered Cardiff to be a collaborative and cooperative environment. According to Cardiff private stakeholders this came down to the people and the openness

of the city, with individuals willingly coming together driving collaborations rather than the actors or structures in place. Overall the mixture of individuals coming together in Cardiff has cultivated an accessible community with a cooperative environment, deemed to be an increasingly important determinant of entrepreneurialism (Schofield, 2013; Huggins and Johnston, 2010). Correspondingly, private stakeholders in Bristol also discussed the friendly, open and trustworthy nature of Bristol's networks and how well-connected individuals are across the community. A dynamic Bstieler, et al. (2015), Vorley, et al. (2015) and stakeholders credited with creating an inclusive open and dynamic community of collaborative working. In particular, a private Bristol stakeholder discussed the density of networking opportunities taking place across the city, facilitating a diversity of interactions and co-creation (Camen, et al. 2012). The overall private stakeholder perception was individuals in Bristol have open mind-sets and are willing to share their experiences and knowledge, a characteristic theorised to increase knowledge spillovers and referrals.

“There's a lot of networking, there's a lot shared experience, and there's a lot of loyalty to the city. There's a confidence level, which isn't smugness, but we're comfortable in our own skins. We don't feel we need to be brash, and to put a veneer on anything. We just will - I may be crap at that, but I'm great at that. That encourages people to trust each other and do stuff together.” (Private stakeholder, Bristol)

“Openness and trust, which is why this network works so well. It's a very compact city. Cities just pop over and there are great cafes and bars. Stuff so people do interact. That's the what. The why, what I've covered a bit of why in there, but that confidence, I think, goes back, we've been a trading city for 100 years. I always had a spirit of independence, resilience, don't care what the government do or say, just get on with it. Multicultural and so that brings a resilience and independent spirit.”
(Private stakeholder, Bristol)

Comparably, key public stakeholders in Cardiff detailed their focus on having a collaborative and cooperative institutional attitude. They highlighted the importance of embracing and celebrating the nations unique welsh culture, and the promotion of its cooperative nature to develop a place specific ecosystem. Public stakeholders in Cardiff stated their intent to work together with anchor institutions across the city to align agendas to ensure Cardiff presents a strong and united front to secure investment. A similar approach was taken by public stakeholders in both Birmingham and Bristol. Cardiff public stakeholders further pointed to the Welsh perspective and its distinctive collaborative and cooperative nature. A Cardiff private stakeholder described it as a team mentality that is not necessarily success orientated but supportive, which was seen to be a double-edged sword, having both positive and negative implications (Attia, 2015; Grabher, 2006; Beckman, et al. 2004).

Rather contrastingly a key private stakeholder considered Birmingham to offer a collaborative and cooperative environment with a diverse range of networks. The majority of both public and private

stakeholders acknowledged the private sector has developed or is developing business networks across the city to encourage firms to communicate and collaborate. A key Birmingham private stakeholder claimed that the city is learning to be increasingly collaborative with other entrepreneurs and businesses, wherein the development of these networks and coworking spaces are gradually demonstrating the benefits of a cooperative approach. They are further leading businesses that take a traditional enterprise approach to enable them to understand why their neighbour's success is their success. However, a number of Birmingham private stakeholders acknowledged that a transition in mentality takes time: "*In a place like Birmingham, one network will never do it. It's too big*" (Private stakeholder, Birmingham). To overcome traditional silo approaches to business an incubation hub stressed their focus on enabling collaborative innovation to provide support networks through events, but also through internal channels to reach clients and other service providers that may be able to help and support small businesses. It is the intent to create a bigger joined-up approach utilising local resources:

"The majority of it is through events, through, a pitching day when these businesses can pitch one to investors or to other larger companies in the area for them to understand what they're doing and what part they could play in it. It's very hard because actually trying to get corporate businesses engaged in the start-up world is the hardest part, but we try and we are not going [to] knock at every door to try and do that."
(Private stakeholder, Birmingham)

In stark contrast to Birmingham's public stakeholders a number of Birmingham private stakeholders did not consider the city to be a collaborative and cooperative environment:

"There's not much collaboration, not much support, but I think in the area that we work in, I think again from the feedback we've had from various different groups or different people, what we're doing is really valuable and we really proud to be part of it."
(Private stakeholder, Birmingham)

In the case of Birmingham larger businesses were considered to be the least collaborative and cooperative. To illustrate, private stakeholders reported that while a large number of people attend networking events,

"I'm pretty sure they are there for either a free drink or to tick a box. There is very little activity that happens after those. For example, we held a networking event in November, which we had 250 odd people come to. The reason that we did that was to try and get a lot of the other larger businesses around Birmingham to interact, help and support the entrepreneurs and start-ups here. I will be able to tell you that there was less than six actual decent quality conversations happened from that event that many people left."
(Private stakeholder, Birmingham)

This conflicts with the public and private stakeholder narrative that a collaborative approach is instrumental in securing effective economic development. Notably, stakeholders considered Cardiff's historical silo mentality had limited the growth of its entrepreneurial culture and connectivity. However, the majority considered to date Cardiff has become increasingly linked up and developed stronger business networks, indicative of an entrepreneurial culture. Networks were stated to be quite small but accessible with may-drains and investors in the Cardiff area reported to be approachable and contactable. This is in stark contrast to Birmingham where private stakeholders claimed, '*you will be lucky to get a response*'. That said, all stakeholders in Bristol paid special attention to the collaborative nature and underlying friendliness of Bristol's business networks. In particular, Bristol stakeholders highlighted the useful role social relations (social capital) play in entrepreneurial networks (Burt, 1992), and how it can help cultivate a supportive environment to test and share business ideas. Bristol stakeholders discussed Bristol's cohesive and inherently collaborative community, driven by community led networking events and collaborations. Whereas in Birmingham, according to a number of private stakeholders because of the size of the city there are a number of business communities and associated networks, but due to the scale of the environment these communities had previously acted in isolation. However, the private sector has increasingly promoted a collaborative and cooperative environment through its activities to collaborate with existing networks to bridge and bond ties to develop an urban ecosystem approach, "*It just takes a while to happen. In a place like Birmingham, one network will never do it. It's too big*" (Birmingham private stakeholder). The finding demonstrates the role of scale in the connectivity of networks in urban environments. Indeed the public sector acknowledged the incremental role the private sector has played in the development of Birmingham's entrepreneurial ecosystem recognising that a business community has been established, "*probably more through the organizations rather than city council itself, but Birmingham City Council would've been part of those discussions*" (Birmingham public stakeholder). The public stakeholder held the council supports public sector activities through mechanisms such as the Leadership Team at the council who were stated to be passionate about reinforcing the regions business communities across its priority areas.

“Yes. I suppose it got that underlying what's in it for me, what's in it for them. I think when you hear people coming into the region and going, "Wow. This is really something special."

That's what everybody does it for, so yes. I suppose it is trustworthy and seeing people being quite open. Ultimately, we're all commercial businesses. There's a certain amount of information that you wouldn't want to give. I think that's maybe what other places and other companies have made the mistake of in the past is the amount of people that come up and say, "I've got this really good business idea." You go, "Great, what is it?" "Well, I can't tell you." It's very unlikely that I'm going to be able to steal your business idea from you just giving me two sentences about what you do. People are often 100% closed on everything.

Whereas actually, by giving even 25% of your knowledge can actually really help and instigate other things. Yes, I think that's probably where it comes from. People sharing everything about everything that they do. There is still a level of competition, but we are sharing some of what we do.” (Private stakeholder, Bristol)

“Everybody in the team has got an understanding of roughly what each company does and so we're able to say, "Have you spoken to such-and-such?" There have been loads of examples of companies collaborating with one another, but I know there's one live project on at the moment where two companies have realized that there's something it can bid for together.” (Private stakeholder, Bristol)

“There is a lot of collaboration and cooperation in the city. People put their hands up and ask for help and help arrives. We all do our bit to contribute to that, using the skillsets we've got.” (Private stakeholder, Bristol)

According to key public stakeholders in Cardiff and Bristol each city has a collective group of leaders and successful entrepreneurs. Actors who appreciate the environment the city offers and are committed to providing opportunities for future generations, the willingness and cooperation of these key facilitators has fed into the development of REAP in Cardiff. A Massachusetts Institute of Technology initiative championed by the Welsh Government designed to further embed innovation-driven entrepreneurship in Wales to accelerate economic growth and job creation. Whereas in Bristol, a public stakeholder discussed the councils work in syndicate with the West of England Local Enterprise Partnership to build up and support the Bristol Temple Quarter Enterprise Zone Cluster of businesses in the digital creative high-tech sector. This priority growth area has attracted a number of large players (such as Somo, Oracle and PricewaterhouseCoopers) highlighted as a catalyst for innovative activity and new business opportunities, who have become key actors running their own start-up system in Bristol.

“We brought in Cray Computer and a number of other major players who've come into the area because they'd see the skilled workforce and also, the networking opportunities where we've got what you could call agglomeration benefits, because we've got lots of very smart people working in very similar settings.” (Public stakeholder, Bristol)

Cooperative joint alliances appeared to increase the sustainable competitive advantage of the local economy through the attraction of critical actors and anchor companies (Huggins and Izushi, 2007; Steiner, 1998). According to Williams, et al. (2016) and Steiner (1998) is anticipated they will become a key competitive asset in the local business community stimulating the generation of new economic activity, through a spirit of shared communitarianism, associated talent and learning efficiencies. Indeed, according to a public stakeholder, initiatives such as the Enterprise Zone Cluster which has attracted stand out companies and is considered integral to the sustainable longevity of Bristol's local business environment.

In Cardiff, private stakeholders expressed their lacked a strong, loud and consistent collaborative and cooperative message coming from formal mechanisms in Cardiff itself but that the city did have a strong legacy of people doing business. However, there is Cardiff private stakeholder advocacy organisations and representational bodies for entrepreneurs and businesses, whereby it is the role of their organisation to be the voice of entrepreneurs and the business community to collaborate and cooperate. With regards to Bristol, private stakeholders questioned whether the willingness of firms to participate in (informal) network activity was associated with the life cycle or developmental size of businesses, wherein it was posited that SMEs are more likely to socialize, connect and collaborate due to the facilitating effect of social networks. Whereas similar to Birmingham larger firms in Bristol were perceived to be motivated by turnover inducing benefits and are more likely to engage in calculative-based networks that can limit their network reach (Hite, et al. 2001).

“...with small businesses. I see it all the time that they help each other out. I think that's the difference between a small business-- Small business is about people. Big business is typically about profit.” (Private stakeholder, Bristol)

“I think that regular contact with somebody is really beneficial. I think that when it becomes more just employees and owners or bosses, it loses something in the makeup. If we look at John Lewis, as an example, where everybody owns it, then is that why that business has been far more resilient than all the others through the recession in 2007, '08 onwards because everybody's got some skin in the game.”
(Private stakeholder, Bristol)

Business relationships were found to secured reliable information about the operating environment, led to leads and referrals and effective problem solving (Vorley, 2011; Huggins and Johnston, 2010; Porter, 1998). In keeping with Porter's (1990) theories of interconnected geographical agglomerations, Cardiff's business community and its networks appear to support and rely on each other, arguably realizing the cooperative advantage of entrepreneurial communities, supporting and investing in their own communities to encourage its durable expansion (Ankrah and Al-Tabbaa, 2015; Barnes, et al. 2002). Business relationships were also perceived to have increased innovation and creativity, demonstrating how the nature of network interactions has a significant impact on resource opportunities

in addition to discovering valuable new knowledge (Lee, 2011; Steiner, 1998). Indeed, Wilson (1997) argues business interactions and networking enhances a community’s productive potential, due to their ability to facilitate cost efficiencies, access to new markets or actors and promote faster information flows. The findings support the suggestion that business communities and the relationships within these networks are a vital factor of knowledge exchange (Williams, et al. 2016; Steiner, 1998).

(ii) Partnerships and Strategic Alliances

Table 6.11: Business relationships communication and collaboration results in strategic alliances & enterprise collaborations

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	Sample (N)
Birmingham	22.9%	38.6%	30%	2.9%	5.7%	70
Bristol	19.2%	51.1%	25.5%	4.3%	0%	47
Cardiff	18%	36%	36%	4%	6%	50
All	20%	41.9%	30.5%	3.7%	3.9%	167

Interestingly Bristol (51%) was found to have strong presence of communication and collaboration that resulted in **strategic alliances and enterprise collaborations** (Table 6.11). Suggestive that Bristol has strong network of connectors and influencers that enhance individual’s ability to collaborate (Isenberg, 2014). Business relationships in Cardiff were perceived to offer the least strategic alliances and enterprise collaborations of the three cities. The survey findings are reflective of Birmingham City Council’s recognition that to build a resilient economy the council must undertake a collaborative and creative approach to mobilise the skills, talent and available assets to promote sustainable economic development and social cohesion across neighbourhoods. Birmingham public stakeholders acknowledged they were one of a number of actors required to work alongside each other to ensure Birmingham becomes more competitive and resilient. Notably the public sector in Birmingham has realised the benefits of a collaborative partnership-led approach to the development of the city and its sectors, identifying opportunities to work with local organisations to collectively respond to changing needs. Through the development of strategic alliances across the city and its networks public stakeholders seek to establish a citywide network of expertise and resources, to gradually transition from direct service delivery to mobilise partners’ skills and expertise to provide place-based solutions across neighbourhoods. The public sector placed a particular focus on supporting and proactively strengthening alliances with research institutions and local businesses, with all-public stakeholders endorsing a ‘Made in Birmingham’ approach to work effectively to enable local partners and strengthen local communities.

It was widely noted by the public sector in Cardiff that there has been a historic transition within Wales from an authoritative to a public-private network perspective. Public stakeholders suggested that there has been increased engagement in strategic alliances, with the public sector becoming increasingly dependent on cooperative processes, knowledge sharing activities and the resources of other parties in making and implementing policy. All public stakeholders acknowledged they have encountered significant limitations in funding which forced the Government to reevaluate their traditional approach to think smarter, collate resources and work together to develop collaborative agendas (Sugden, 1995). All public stakeholders recognised the need to be working in coalition with the private sector to help shape public sector schemes and influence the process of problem solving through public-private coupling (Chitten and Robertson, 1993). The majority of Birmingham and Cardiff's economic development structures were recognised to involve strategic alliances, working with universities, target groups and the third sector to fully exploit opportunities. To illustrate, a local authority funded compound semiconductor project has utilised private sector coupling, working with local universities to open up Cardiff's access to new networks and a range of new and innovative businesses. This development is reflected in Cardiff's economic development initiatives, which involve identifying useful resources through a connected network approach considered fundamental in formulating joint solutions and attracting foreign investment. The empirical findings have demonstrated the importance of strategic alliances to facilitate a cooperative and collaborative culture, Huggins et al. (2015) highlighted the value of access to a diverse pool of knowledge channels and resource opportunities as a determinant of entrepreneurship (Pearce-Neudord, 2014; Chitten and Robertson, 1993).

A number of Cardiff public stakeholders recognised how the co-location of a diverse mix of businesses, entrepreneurs and interest groups can have countless unanticipated benefits and contribute substantial value to innovative activities. Cardiff private stakeholders stated many new businesses have a high level of expertise in their sector but there are many unknown barriers, or areas of confusion that manifest in communities of practice that can be clarified through shared experiences. In particular, there was an identified need to 'connect the dots' to increase Cardiff's resource accessibility. Retrospectively according to a number of Cardiff private stakeholders those without pre-existing connections can find the small and accessible nature of Cardiff's ecosystem to be very siloed. This can cause resources and support to appear inaccessible and difficult to locate.

Furthermore, Cardiff's public sector reported the importance of the private sector in cultivating a strong business community, with declining public funds the public and private sector were required to work in partnership to achieve business interests. A 'pragmatic marriage' where a change in UK government led to private sector views being taken on-board more readily than the public sectors. The public sector was stated to have built up an authoritative business voice to support strategies creating partnerships to

instrument change, through a combination of sectors working together to achieve significant economic outcomes. All Cardiff public stakeholders credited the public sector with having a supportive and business friendly attitude to leadership. A Cardiff public stakeholder stated that the business community recognises that they have a business-friendly council that listens and engages with businesses when their advice is pragmatic and sensible.

The evidence acknowledged the emergence of network dynamics and business connections as a catalytic force behind innovation entrepreneurship (Huggins and Johnston, 2010). The findings have demonstrated Bristol's private sector is leading business connections, whereas the public sector is perceived to be less active in the promotion of business connections or networking opportunities. Instead, the public sector demonstrates a willingness and trust in business representatives to be figureheads and represent the city. An incremental approach provides stakeholders with a strategic position that can prove beneficial in knowledge sharing and building collaborations (Porter, 1998; Dodgson, 1993). Bristol private stakeholders raised an area of contention in the need for a shared vision, to facilitate a stronger relationship between the sectors. In line with Huggins and Johnston (2010), Bristol stakeholders considered network interactions across sectors to be crucial in facilitating innovation and sustainable economic development. Indeed, according to Bristol private stakeholders the informal consequences of interactions with key figures with mutual interests were stated to have greater benefits for trust and cooperation (Rutten, et al. 2010; Fukuyama, 1997).

Birmingham's public sector demonstrated a clear commitment and responsibility to place an increased emphasis on empowering local strategic partnerships to aid productivity and secure Birmingham's position as a leading world city. Partnerships in Birmingham were frequently driven by the public sector alongside leading organisations (such as universities, support organisations, and national business support hubs) to secure specialised knowledge and supportive resources to establish a diversity of partnerships and strategic alliances at all scales (Pinheiro, et al. 2015). For example, the Growth Company and the Chamber of Commerce is heavily invested in the power of communications in networks demonstrable of an effective collaboration. Furthermore, Birmingham City Council's collaboration with research through the city's universities work is accredited as having been extraordinarily positive in the development of advanced innovations and network developments.

As discussed above, all Bristol public stakeholders indicated that Bristol City Council does not seek to necessarily drive business connections, with greater emphasis placed on their supportive role. In support, all stakeholders were unanimous in the view that the public sector was not best placed to drive business connections, whereas in the context of Birmingham public stakeholders considered it to be their supportive role to establish key partnerships to realise Birmingham's potential. A key Bristol

public stakeholder emphasised their role in listening and responding to business needs and remain open to community influences on how the authority operates. While the public sectors strategic influence plays a fundamental role in facilitating supportive infrastructure in Bristol, it was widely held that the business community is best placed to create business connections:

“We will stand back but be in the background and be very supportive. Other networks would be [specialist] networks where we would be supportive but there's no way that we should be leaving it. The other thing is we listen to them. We don't drive, but we interact. If there are things that they require as the authority or they want to influence in the way that we operate then we're all paying attention.” (Public stakeholder, Bristol)

“With creating a space like the Engine Shed which we would see ourselves very much as co-creators, then we let people get on with it and run it. We made sure it would set up. When it was originally formed, we took a fair chunk of space within the actual building, but we withdraw once it's become successful and the people who really should be there were crying out for more space. We supported it by our presence and then withdrew.” (Public stakeholder, Bristol)

As outlined by public and private Bristol stakeholders, the Council performs a number of business-friendly functions, provides opportunities for active public sector engagement with the business sector and delivers a business support through various initiatives and programmes. For example, the council's business consultation and engagement programme have a dedicated team that engages with local businesses on a daily basis. Moreover, a Bristol public stakeholder held that Bristol City Council are well engaged with the private sector and have a good success rate at encouraging the private sector to promote events and support international related activities that bridge and build international connections. To illustrate:

“Bristol City Council has an active business engagement program where there is a team of individuals who are dedicated to going out and talking to local businesses of all scales on a daily basis. The private sector, the banks and people like that, they're using social media to promote the networking opportunities. You could go to a networking lunch, breakfast, and dinner five days a week in the city. I'm sure I see the same people at some of them.” (Public stakeholder, Bristol)

“The weekly newsletter from the economic-development team within the council signposts competitions, opportunities to get funding, various networking breakfasts and events that are coming up.” (Private stakeholder, Bristol)

“Apart from this inclusion piece, the inclusion about making sure the economic activity in the city works for everybody. There is a widely and activate focus of the council. When I say actively, they're not actually doing anything, they're just talking about it.” (Private stakeholder, Bristol)

As a Bristol public stakeholder outlines, during policy development the council engages in consultation with the business community through direct relationships with the council or relationships with representative bodies. Bristol stakeholders reiterated that the council has a strong relationship and frequently interacts with representative business bodies several times weekly. However, whilst the council facilitates access to private sector consultation it emerged that Bristol public stakeholders are wary of their position and relational proximity to businesses.

Active public sector engagement,

“I mean, clearly, we have close links with the Chamber of Commerce being the largest represented group for business in the city. We work very closely with the chamber. The local enterprise partnership, also, brings together a whole different set of business voices. Other organizations like the Federation of Small Businesses we work very closely with, and we, also, have a number of business improvement districts around the city where we work very closely with the businesses in a particular geographic area. We have a whole range of different connections where we clearly have a business support role.” (Public stakeholders, Bristol)

“Engaging with not just the biggest or smallest but those with the potential to grow, the need for protection or engagement, to be able to build on those touch points and work out how we can work more closely to deliver our mutual benefits.”
Public sector concern, (Public stakeholder, Bristol)

“I think there is a concern that local authorities shouldn't get too close to business. It's a fine line we draw because we're here to support the residents of the city. Businesses aren't necessarily residents in quite the same way. We do want to make sure that we are here to represent and to recognize the needs of the local communities. In addition to that, as business local residents, we look to first. Businesses will be there to service those local residents.” (Public stakeholders, Bristol)

“We are helping businesses in order to improve the lifestyles, life choices of our residents but we have to-- We can't get too close to business. We're aware of that.”
(Public stakeholders, Bristol)

The results revealed there was a strong presence of communication and collaboration that resulted in strategic alliances and enterprise collaborations. A narrative reinforced by stakeholders in each of the three case studies, wherein a strong focus on public-private partnerships in the promotion of entrepreneurship was provided indicating the observed value of cooperative relationships to strengthen competencies and financial efficiencies (Mundial, 2003). A number of examples of engagement in strategic alliances were reported, with the public sector becoming increasingly dependent on cooperative processes, knowledge sharing activities and the resources of other parties in making and implementing policy. This concurs with Miles and Snow (1986) and Alter and Hage (1993) who suggest, a 'lonely organisation' approach to the delivery of policy initiatives in isolation is obsolete. A go-alone strategic approach was criticised by Koppenjan and Klijn (2004) and Agranoff and McGuire

(2003) as being ineffective and inefficient as it can often optimize particular values at the expense of others leading to sub-optimal solutions.

6.4 Network Enablers of Entrepreneurship

6.4.1 Cultivating Community Culture

There is a strong recognition for the notion of a collective culture of social capital within urban networks shaped by their geographical setting (Coleman, 1994). The majority of stakeholders emphasised the consequence of a collective community culture as a potential source of value creation through the use of intangible network resources (this refers to assets often less tangible and built within a community culture), found to assist business effectiveness and influence entrepreneur's ability to access opportunities, intangible assets and achieve success (Coleman, 1994; Bourdieu, 1980). Throughout this section aspects of social capital (understood as culture, informal institutions and interpersonal relationships) are emphasised as a critical component of network relationships, drawing on the connection and interactions between individuals (Putnam, 1993).

The public sector recognised it was crucial to support enterprise and entrepreneurial spaces with Birmingham, Bristol and Cardiff public stakeholders taking a supportive stance and openness towards innovative spaces. The vast majority acknowledged the responsibility entrepreneurial spaces have taken in facilitating opportunities for innovation and learning (Mody, 1993; Ciborra, 1991). A number of Cardiff public stakeholders highlighted the central role Cardiff City Council played in kick-starting the process of innovative space in the establishment of one of the first generators of incubation space. The Cardiff Business Technology Centre and The Medicentre were stated to be some of the earliest examples of incubation and accelerator spaces established over 30 years ago, funded by Cardiff City Council and the European Regional Development Fund. Since Cardiff City Council was stated to have developed a series of supportive infrastructure including workshop and incubation spaces in some of the most deprived communities, as well as investing in existing infrastructure in some of the most successful communities. Setting up hard infrastructure such as Tramshed, a coworking space (still in place to date) that nurtures and fosters businesses. A site previously owned by Cardiff City Council who recognised the opportunity to use the space for an innovative purpose,

“That's a good example of us putting infrastructure in, that the innovative community could not afford or invest in but putting that in and then sitting back and let others provide the rest of the ingredients to encourage entrepreneurship. That's been our strategy.” (Public Stakeholder, Cardiff)

Through such an approach, the Cardiff City Council was adamant the grounds should be used as an innovative space and held onto the site until a suitable developer was found with the shared vision to bring the concept to life, with a share of public sector equity support to help the vision come to fruition. It highlights the public sectors emphasis on the need to nurture environments conducive to entrepreneurial activity to stimulate innovations and generate a density of stimulating synergies. Similar activity to Bristol, where initiatives target support for entrepreneurship in deprived communities through initiatives such as the Black, Asian, and Minority Ethnic (BAME) diversity and inclusion research project. The research understands the complex barriers facing BAME communities in accessing business incubation support, the outcome of which establishes a new Breakthrough Bursary available to BAME individuals establishing tech companies. In the case of Birmingham, stakeholders reported that the city seeks to encourage and mobilise talent within deprived communities to help underrepresented groups to develop skills, confidence and increase access to support through initiatives such as, the Enterprise Catalyst an enterprising communities business support initiative supported by Birmingham City Council. It is the intent to reduce regulatory barriers, focus on the survival and growth of existing businesses in deprived neighbourhoods and to develop current levels of human capital within the city through education, advice and mentoring, a comparable approach taken in both Bristol and Cardiff to address the UK wide skills shortage.

Strong support for innovative and entrepreneurial network infrastructure was demonstrated within each of the case studies, each authority recognised their ability to access intangible resources and wider innovation-led activity. Each of the council's acknowledged the crucial role coworking spaces play as supportive innovative spaces that encourage greater interaction between entrepreneurs, and where authorities would readily intervene to protect assets through strategic interventions rather than implementing a top-down approach. A narrative reiterated by a number of public stakeholders in Cardiff, where they conferred the council's recent work on Womanby Street positioned Cardiff as a music city ensuring sound diplomacy in creative areas. A majority of Cardiff public stakeholders consider entrepreneurship and innovative spaces go hand in hand proven to be central to the quality of place. According to a Cardiff public stakeholder the public sector recognises the critical role and intangible value of innovative spaces and the entrepreneurial communities they generate as crucial in setting the city's cultural tone, and act as a fundamental point of attraction for entrepreneurs setting-up businesses in Cardiff and thereby spurring start-up activity. Overall a buoyant cultural scene was viewed as imperative in fostering an innovative economy. Similarly, Bristol public stakeholders shared their positive perceptions of the public sectors role in the construction of a supportive entrepreneurial environment in Bristol. In accord, a Bristol private stakeholder reported the benefits of entrepreneurial collaborations, the ability to access an innovative community of expertise and how these networks can

affect entrepreneurial behaviour and lead to positive outcomes. For example, Future Space a pioneering collaboration with Bristol City Council and UWE Bristol leads cutting edge research and provides students access to supportive research expertise, employment opportunities and R&D collaborations, *we [Future Space] see it first-hand where current students come into Future Space current graduates are inspired and want to be there one day*” (Private stakeholder, Bristol). Bristol public stakeholders recognised the value of Bristol’s leading universities and local businesses in building local resilience and entrepreneurial aspirations.

In accord, all Cardiff stakeholders emphasised the incremental role and impact coworking spaces have had in building an interconnected business community in Cardiff. Steiner (1998) observed key entrepreneurial efficiencies and collaborative advantages associated with the agglomeration of actors. All private stakeholders acknowledged their ability to enable a facilitative space where a diverse group of individuals can network, collaborate and talk to like-minded individuals (Morgan 2011; Garnsey, et al. 1992). These physical spaces were recognised to facilitate face-to-face contact, which has had significant benefits for entrepreneurs building informal communities,

“Offer[ing] a safe space that people ask can questions, they can learn and listen, where people can have fun, they can make friends in [and] do the good work. They can support each other in highs and lows.” (Private stakeholder, Cardiff)

“...having a space that they come to means we can bring other people here as well. It's easier to facilitate if we've got a point for everyone to meet at. There's something about having a permanent space here as opposed to hiring a venue for an event which means that people should can and do just pop in, and want to have a look around and happen to meet that person and it becomes much more natural when there's a space for people to be.”
(Private Stakeholder, Cardiff)

It is important to note that in a similar line to Cardiff all Birmingham and Bristol stakeholders considered entrepreneurial infrastructure such as coworking spaces to be key network facilitators that play an incremental role in urban business connections. In particular, a key Birmingham public stakeholder stressed the value of high-quality interactions and their capacity to enable individuals to co-create, unlocking new innovative experiences as a crucial facet in new sources of competitive advantage. In the context of Birmingham private stakeholders reported coworking spaces to be crucial in ensuring businesses and partners are creating the right conditions for economic development to strengthen the competitive position of the city. In order to facilitate and create opportunities to aid network value business leaders such as Downtown Business partnered with The Festival of Enterprise. An event that hosts over 50 networking events to support businesses and entrepreneurs and provide them with extensive opportunities to access resources to assist business growth, to obtain scale up strategies and connect to experts, clients and suppliers from a range of sectors. An environment

specifically created to encourage interaction between companies, maximise learning experiences and share expertise to generate innovation networks. A Bristol stakeholder emphasised the value and importance of the physical presence of individuals in professional social environments to facilitate face-to-face interaction opportunities with likeminded individuals. In the case of all three cities coworking spaces were recognised as hotbeds of innovative entrepreneurship. The competitiveness of innovative and entrepreneurial spaces was seen to be beneficial to the business community; stakeholders placed significant emphasis on the importance of knowledge and talent to increase efficiencies and establish a competitive advantage. Private stakeholders in Bristol touched on the establishment of directly and indirectly connected firms assisting the creation of an ‘information society’, through interconnected links that are able to circulate referrals and spillovers, a particularity cost effective method of knowledge and innovation.

All public stakeholders supported coworking spaces and the valuable support they provide businesses, cultivate networks, harness an entrepreneurial business culture and promote entrepreneurial activity and skill development (Mody, 1993; Ciborra, 1991). Coworking spaces were considered to have an influential role in fostering community capital and in influencing entrepreneurial cultures. The spaces serve as platforms for collaborations and cooperative alliances cultivating synergies between sectors (private, higher education and public). In accordance with Moriset (2013) and Coe and Helpman (1995), stakeholders considered the value accidental or informal meetings (externalities) can have in facilitating support through impromptu knowledge spillovers that can accelerate problem solving, innovative activity and the discovery process. Informal and often impromptu interactions were considered to be crucial in creating new business opportunities, accessing resources including finance and IP that can overcome barriers and assist productivity in the creation of innovative opportunities (Spinuzzi, 2012; Parrino, 2013; Stam and Spigel, 2016).

Table 6.12: Business relationships stimulated new knowledge and ideas

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	Sample (N)
Birmingham	22.9%	60%	15.7%	0%	1.4%	70
Bristol	27.7%	55.3%	12.8%	4.3%	0%	47
Cardiff	32%	42%	20%	4%	2%	50
All	27.5%	52.6%	16.1%	2.8%	1.1%	167

Network relationships were perceived to have proven useful or beneficial at **stimulating new knowledge and ideas** (Birmingham, 60%; Bristol, 55.3%; Cardiff, 42%) (Table 6.12). Notably, networks in Birmingham were perceived to be the greatest at stimulating new knowledge and ideas. Accordingly, the findings demonstrated business networks have been of particular importance for business innovation, KBFs aptitude to inter-link with other network actors and their ability to access local information across the cities. A particularly interesting finding in that network relationships in the three cities were perceived to provide significant knowledge benefits.

The public sector in Birmingham shared their supportive collaborative approach in the development of Birmingham as an entrepreneurial city to learn, work and invest in, *“I think it's definitely about working in partnership and just make sure people can [informally] promote it in that way”* (Public stakeholder, Birmingham). Birmingham City Council’s director for the economy regularly meets with businesses to make sure their views are taken into account in the future development of sectors, and to understand how the business community interprets service provisions across the whole council. However, from a Birmingham private stakeholder perspective there is a need to increase network engagement particularly larger established businesses. Stakeholders shared the view that some firms have a preconceived traditional perception of the value entrepreneurs, SMEs and competitors can have on their value production, potentially obstructing new sources of competitive advantage. According to a number of Birmingham private stakeholders there is the assumption among larger established businesses that start-ups are not going to have a significant impact on their value creation, nonetheless they could be a vital source of competitive advantage to breach a gap in the market.

The findings have demonstrated that coworking spaces facilitate a more structured approach to environments fostering networks and business connections creating communities of interest where individuals are able to exchange ideas, problems solve and collaborate. In Bristol, private stakeholders considered these spaces to commonly circulate success stories to build aspirations and increase awareness of innovative and entrepreneurial activity. Indeed, all Cardiff private stakeholders highlighted the importance of informal social interactions with people from varied business backgrounds. The majority of stakeholders in each of the cities continued to state co-working spaces have had a significant impact and role in building networks. In particular, these spaces were reported to provide an opportunity for entrepreneurs to coexist and collaborate enabling individuals to support themselves through network dynamics. Interestingly, a number of Cardiff private stakeholders considered informal contact to be the most productive, a premise shared by another private stakeholder in Cardiff who stated that coworking spaces are a key component of the community. In Birmingham’s case network coordinators are seeking to encourage the council and Birmingham’s larger businesses to unite and establishment a facility or platform for businesses to interact. To use their standing to break

down the barriers that coworking spaces are unable to achieve in isolation and instead require buy-in from leading corporates to help change traditional entrepreneurial mind-sets, *“to almost break down some of the barriers that actually big corporates only talk to big corporates, small business owners, talk to small businesses”* (Private stakeholder, Birmingham). An aspect that demonstrates how network actors in Birmingham are key enabling facilitators encouraging a diversity of likeminded individuals to come together in a collaborative environment. A closed business mentality private stakeholders posited to be attributable to the size of the city and as a result of an influx of in-migration from London entering the economy with a closed off competitive mentality, that with time requires reshaping to fit the city ambition for a joined up collaborative local business community.

In Bristol over the last 10 years a local government intervention incorporated collaborative co-creation facilities and entrepreneurial spaces, with the intention to help support the creation of a self-supportive ecosystem of likeminded individuals. In particular, Bristol public stakeholders affirmed the council’s support for a number of innovative enterprises such as the cross-artform venue Watershed, reported to have stimulated a vast amount of creative activity around the cultural arts. In the case of Cardiff, the majority of stakeholders concurred that Cardiff has a range of regular networking activities of various sizes taking place among businesses throughout Wales. These have been characterised as events that tend to be relatively small scale “business card” networking events of approximately 35 to 50 people, and master class activities which provide a technical look at business issues to help individuals get their heads around business “issues of the day”. Creative Cardiff, a creative community network, was stated to have injected creative and entrepreneurial support into Cardiff’s business community. Supporting the ‘coworking collective’ that is stated by public and private stakeholders to have brought coworking groups across Cardiff together to share best practices to build a stronger creative ecosystem to deliver a wider collective joined up impact. This has established a collective approach in connecting and engaging with the business community to build a supportive environment, cultivating a culture of collaboration within the community connecting entrepreneurs. It is recognised by a private Cardiff stakeholder that there is some sense of competition between them, but not as much as you would expect and as a result there is a much more collaborative culture between the parties. Notably, there was an identifiable difference in the size and complexity of Birmingham and the nature of its networks. To illustrate the complexity and scale of Birmingham’s ecosystem a private stakeholder stated that unlike Cardiff and Bristol, Birmingham was similar to London in the sense that, *“you wouldn’t expect to go and meet somebody in London and then be able to tell you all of the gatekeepers in London”* (Private stakeholder, Birmingham). Whereas private stakeholders considered the opportunities for entrepreneurs in Birmingham to reach far deeper than the other cities, in the sense that the city is a larger scale and thus it was reported that the depth, breadth and richness of Birmingham’s diversity of networks, actors and resources is greater.

In terms of the influence of hubs and coworking spaces they were widely considered by all private stakeholders to have a strong responsibility as determinants of entrepreneurial activity and leadership symbols. The spaces were reported to increase network visibility and raise the profile of the business community advocating for the needs of the local business community and celebrate enterprise achievements. Isenberg (2010) who discussed how the showcasing of sector achievements can have a stimulating effect on local businesses to: “*help reduce the perceptions of entrepreneurial barriers and risks and highlight tangible rewards*” (2010:7). Whereby the celebration of thriving entrepreneurial ventures can inspire and reinforce a positive psychological attitude towards entrepreneurial aspirations igniting the imagination of the public and building a strong entrepreneurial spirit across its ecosystem.

6.4.2 Facilitative Capacity

Table 6.13: Business relationships increase in turnover, competitiveness and productivity

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	Sample (N)
Birmingham	24.3%	50%	20%	4.3%	1.4%	70
Bristol	19.2%	53.2%	25.5%	2.1%	0%	47
Cardiff	1.85%	7.4%	59.3%	20.4%	11.1%	50
All	15.1%	36.9%	34.9%	8.9%	4.2%	167

Ultimately the existence of networks is typically argued to be a key source of competitiveness (Huggins, 2000). The survey data revealed business networks were perceived to have **increased turnover, competitiveness and productivity** (Bristol, 53.2%; Birmingham 50%; Cardiff 40%) (Table 6.13). Network relationships are, therefore, perceived as a key-contributing factor to the competitiveness and overall productivity of KBFs. A premise that accords with Rui Baptista and Joao Leitao (2015), who found evidence that network characteristics are a valuable source of entrepreneurial activity.

In the case of Cardiff, networks were seen to serve a crucial role in facilitating entrepreneurial behaviours, communicating and building connections with local entrepreneurs (Aldrich and Zimmer, 1986). Private stakeholders in Cardiff noted the advantage of Cardiff ‘s compact size and recognised the network advantage of proximity with peers both in terms of professional affiliations and general business opportunities. In comparison to Cardiff, due to the geographic scale of Birmingham both public and private stakeholders considered they city’s business community to be more dispersed and

pooled across the city with few synergies through different neighbourhood or sector-based networks, “*it's such a huge place and you've got so many local communities and centers*” (Public stakeholder, Birmingham). Such clusters of likeminded communities of entrepreneurs were widely perceived to have a greater depth, breadth and volume of network connections on offer than smaller urban contexts. The current challenge identified by a combination of public and private Birmingham stakeholders was the need to bring entrepreneurs from different network communities together. However, due to the compact size of Bristol and Cardiff their networks and key actors appeared to be easily identifiable with a strong sense of familiarity and network awareness. Whereas in Birmingham networks were reported to be quite concentrated, stakeholders acknowledged their experience of network characteristics were not necessarily representative of Birmingham as a whole. Notably, Birmingham stakeholders were only able to make reference to the networks they were tied to or engaged with. This was a notable contrast between the scale of urban contexts and the visibility of networks; Bristol and Cardiff were able to refer to collaborations between key network actors and provide an overview for the feel for their business community and associated networks. Conversely Birmingham stakeholders would discuss specific neighbourhoods but also their limited visibility of the scale of Birmingham’s networks, “*I suppose probably there's a lot [networks] that is hidden as well. That's going on which policymakers just aren't aware of*” (Public stakeholder, Birmingham). A discovery that highlights spatial variances in the visibility of network community connections, an aspect further associated with the degree of permeability of these networks.

All Cardiff public stakeholders were unanimous in their perception that Cardiff’s business community has been welcoming and appreciative of their support, provisions and guidance: “*From a public stakeholder perspective I'd say the business community have actually been brilliant in responding to us promoting networking and linking with each other*” (Public stakeholder, Cardiff). Markedly, private stakeholders in each of the three cities were unanimous in their views that there are a number of affiliations, organisations and projects in place, which are effectively supporting networking and businesses. It was noted that some are explicitly trying to support businesses to come together to stimulate exchanges to learn from each other and promote collaborations to facilitate increased competitiveness (Porter, 1998; Steiner, 1998). Nonetheless, across each of the three cities it was found that although public and private sector actors might not endorse their promotional activities, they do carry out promotional work behind the scenes.

It became evident that, in Cardiff, organizations such as the Institute of Directors, CBI amongst others were seen to be contributing to the promotion of business connections across Cardiff. These organisations were recognised by the majority of private stakeholders for holding relevant and informative events throughout the year on relevant subject matter with quality speakers that attract

business leaders from all sectors in Cardiff and the wider region. These organisations collaborate and work in partnership with others to ensure valuable activities are taking place to facilitate network opportunities (Lee, 2011; Harisalo and Miettinen, 2010; Hong, et al. 2010). Network facilitators undoubtedly play a crucial role in establishing business connections and assist in capturing network efficiencies in Birmingham, Bristol and Cardiff. The action-orientated nature of these facilitative network organisations was widely reflected by all private stakeholders, highlighting the diversity of opportunities to meet and network with likeminded individuals. The majority of public and private Birmingham stakeholders suggested business connections were a valuable forum of co-creation and co-extraction that enable organisations to unlock new sources of competitive advantage (Keeble, 2000; Chesnais, 1996). To illustrate, through the close collaboration of Innovation Birmingham, Alta Innovations and the university of Birmingham they have delivered a programme of technical support and mentoring through entrepreneurs-in-residence to aid start-up survival rates. The organisations recognised the need to connect to support the growth of the rapidly expanding start-up economy and the city' skilled, youthful and ambitious workforce. A Birmingham private stakeholder stated that through the establishment of the intervention collaboration they were able to assist their own organisations by providing strong resources, (such as attracting finance, investors, innovators, customer contacts etc.) and access to provisions for entrepreneurs and business (Porter, 2000; Markusen and Schrock, 2006; Steiner, 1998).

A number of private and public stakeholders in Cardiff identified a key difficulty in the promotion of business connections in Cardiff. In Birmingham there was a concern that businesses do not necessarily appreciate the value of networking and the positive contributions of cross sector associations, and often events in Bristol and Cardiff would have the same 'usual suspects'. Indeed, a private stakeholder acknowledged more could be done in Cardiff to facilitate networks but acknowledged the difficulty of facilitating supportive networks on a relatively small budget in a volunteer-istic approach. Whilst it was recognised that stakeholders are unable to socially engineer entrepreneurial networks there is an opportunity to endorse reinforcing community support:

“You've got to explain the benefits of it. You can't socially engineer entrepreneurial networks such as CBS. You do a bit through things like business incubator tops. You say, “If you're going to come in here, you're going to talk to the other people.” For example, where probably the agency is providing finance, you can also say the condition of that is to say you will then be working with a mentor, or you might be working in an action-learning group. We have the assurance that you're actually a group of people around you supporting you through this growth process, rather than just frittering away the money we're about to lend you.” (Private stakeholder, Cardiff)

However, a number of Bristol private stakeholders expressed their concern that if you are not engaged within a network or coworking space you would not necessarily be aware of opportunities available to you.

“It's not massively hands on an, you'd need to go look for it rather than it being thrust at you. If you weren't engaged in the newsletters and things that come out from places, you might get overlooked and have to go looking for it, but if you're engaged with networking groups and the bits that come out from the council and business works, the federation of small businesses, the institute of directors. Then there is plenty of stuff out there that is collaborative working.” (Private Stakeholder, Bristol)

As argued by Beckman, et al. (2004) it was recognised that a well-integrated and interconnected business community of tight networks could have its drawbacks (Huggins and Izushi, 2007). A number of private stakeholders identified that whilst organisations are facilitating opportunities for individuals to engage with the community, differentials were raised in the perceived access of these network opportunities for ‘insiders’ and ‘outsiders’ (Grabher, 2006; Beckman, et al. 2004). Concern was expressed that there was a perception of exclusivity, stressing that while a number of events are being facilitated across the city, a lot of which are free, it can be an intimidating environment to approach.

“The perceived barrier can be high. It's not cliquy. It's just people are actually very friendly, and you could go. I've been into places elsewhere in the country, go and join the conversation in a room full of people and half of them will walk off.”
(Private stakeholder, Bristol)

“If you go to an event here, you'll be welcomed in. If you're boring, then someone will make a polite exit. It's just more open. Of course, that is a perceived barrier for a lot of people. If you're the wrong colour, or you just think, well, that's for posh- that's where people the other side of the river. Those are quite strong perceived barriers, and therefore, they are barriers.” (Private stakeholder, Bristol)

“The inequality in the city for some that they may feel that they can't approach. They may feel blocked out even though actually, the doors are open. There's the psyche that, "I'm from this community I'm not going to be accepted into the way.”
(Private stakeholder, Bristol)

As discussed earlier inter-organisational business networks within Cardiff are considered to be a crucial element underlying knowledge flows and urban economic development. It was proposed that network capital is indirectly linked to economic efficiencies and knowledge transfers cultivating an environment rich in creativity and innovations (Huggins and Thompson, 2014; Romer, 1986). In the case of all three cities the majority of networking events are private sector led, whilst the public sector run events in Bristol and Cardiff tended to be highly knowledge intensive and specifically set up to provide expertise or skill development on pertinent topics. Interestingly in Birmingham there was an additionally strong

stakeholder emphasis on the interaction of the business community and alliances. Drawing on the concept of network capital, business connections and collaborations are increasingly seen as an agent of economic advantage by all stakeholders in each of the three cities (Barnes, et al. 2002; Ankrah and Al-Tabbaa, 2015). Notably, each city has a range of network opportunities consisting of exclusive formal and informal networks. In the context of Cardiff, a couple of private stakeholders identified that there are a number of formal (closed) networks that facilitate elite network ties (Beckman, et al. 2004):

“The more formal networks such as Cardiff Business Club with high net worth individuals coming together to toast the Queen and the greatest innovation of the last five years that they allowed people not to wear ties. It's very blokey. It's very establishment. When I go there, the younger people that are there are from professional services. Outside that, most of the more entrepreneurial-minded people that I know just wouldn't be there, they don't see it as relevant. So, I think that is a probably a dated model of a business network.” (Private stakeholder, Cardiff)

“Cardiff Business Club is a, be careful now because I parked close to them, I wouldn't-- it'll turn my views. It's not fair to say elitist. That would be unfair. I think the word I'm saying is it's not as open as it could be and it shouldn't be because you gotta be a member and all this but you can turn up and you can come to the seminars. That's sort of been the case for over 100 years.” (Private Stakeholder, Cardiff)

“Some of them can feel very exclusive, put aside Cardiff Business Clubs, some of them can feel a little bit exclusive and that can be quite off-putting, particularly, if you're younger and getting into business. I don't want to be stereotypical, but if you're a young female business owner walking into something, particularly, something like Cardiff Business Club. I remember speaking to a lady who said, "I thought I'd come and give this a go, I'm never coming again.” (Private stakeholder, Cardiff)

A considerable benefit of the concentration of business communities within the compact geographical areas of Cardiff and Bristol are the proximity benefits that have been found to assist collaborative opportunities and prevent intercity partitions from forming. As argued by Dodgson (1993) it is believed that businesses are able to take advantage of the geographic concentration of businesses (reinforcing the significance of scale) and entrepreneurial activity (Porter, 1998; Steiner, 1998). The presence of an interconnected network of likeminded entrepreneurs and businesses is said to encourage collaborative behaviours (Huggins and Thompson, 2015). Indeed, the majority of Cardiff stakeholders perceived there to be a strong willingness to open up, be supportive and help put individuals in touch with others to create partnerships and make appropriate collaborations to create a better-networked economy (Feldman, et al. 2012; Bridger, et al. 2006). In the context of Cardiff references to cooperation were stated to refer across the whole city not just a single neighbourhood or community. Cardiff and Bristol private stakeholders considered face-to-face interactions to be popular and quite commonplace indicative of a community that is content to give up time to support others. Stakeholders acknowledged

that Birmingham is still a siloed city and still in the process of a transformation. Notably, Birmingham private stakeholders recognised that there was a distinct lack of investment and high-quality engagement from large businesses into Birmingham SMEs community; their traditional approach did not recognise the value of start-ups and have proven reluctant to take innovative risks in entrepreneurs and small businesses. On a strategic level, Birmingham public stakeholders expressed a commitment to work with the business community to do everything they can to foster entrepreneurial innovation. According to Birmingham public stakeholders there was a strong cooperation between the public sector and key organisations or bodies to work in collaboration to deliver a more resilient economy, however this was not necessary felt by all private stakeholders. Within Bristol the business community was considered to be highly competitive and a hotbed of innovation. The city was home to a diverse range of physical and virtual networks, which proved to be a competitive industry in itself. Network operators had recognised the need to work in cooperation and communicate on a regular basis to deliver an ecosystem of specialised support, to collaborate rather than compete (Attia, 2015; Serbanica, 2011). Similar to Cardiff, Bristol had clear proximity benefits and was found to offer a collaborative and cooperative private sector (visible) networks with likeminded individuals (Williams, et al. 2015).

Indeed, a Cardiff private stakeholder stated that if you have an entrepreneurial spirit and an entrepreneurial mind-set you will find what you are able to look for in order to help and support your needs. Private stakeholders highlighted the popularity of online collaborations in Cardiff such as Cardiff Start a platform considered to be more transactional, whereas a lot of face-to-face interactions come from events, coworking environments or the need to meet and talk with others. Although a significant private stakeholder recognised that while Cardiff is small more needs to be done to facilitate collaborative opportunities. The concern was raised that the networks themselves do not join together and there is a need to provide better signposting for support and to connect existing networks to build greater collaborative opportunities (Miettinen, 2010, Hong, et al. 2010; Lee, 2011), this was particularly emphasised in Birmingham. To facilitate opportunities for entrepreneurs and likeminded individuals to be exposed to one another and to create links within and across networks and industries, an important aspect of the innovative process (Audretsch, 2000).

Key actors or facilitators of enabling spaces within Bristol and Cardiff have been found to have strong inter-connections (Mody, 1993; Ciborra, 1991). These firms unanimously seek the common growth and advancement of industries and the wider city to carry out the efficient sharing of knowledge (Ciborra, 1991; Steiner, 1998). The businesses possess strong networks of communication, routinely meeting up monthly with some meeting weekly to discuss the development and goings on in the local business community. Porter (1998) considered the above to strengthen local agglomerations of businesses and provide opportunities, as stated by private stakeholders, to overcome difficulties and identify strengths

to assist the council's strategic development (ibid). The collaborative nature is business motivated with few meeting for social purposes. In Birmingham the cross-fertilising of business communities required further development. On the whole stakeholders considered coworking spaces could do more to connect and cross-fertilise communities, on the basis that they were recognised as one of the most valuable resources for entrepreneurship (Fabbri, et al. 2014; Pearce-Neudord, 2014; Spinuzzi, 2012). A premise reaffirmed by Lee, et al. (2004) who contends networks facilitate a supportive and productive business climate reinforced by independent minds coming together to identify entrepreneurial opportunities and overcome barriers. Accordingly, the results identified the need for a wider joined up approach in the development of Birmingham's business community, utilising both public and private channels. The research identified coworking space to be fundamental network and entrepreneurial enablers by creating the hard infrastructure that generates soft intangible assets (Spinuzzi, 2012).

6.5 Conclusion

The chapter draws on critical realism to illuminate the influence urban scale has on the connectivity and permeability of networks across each of the three case studies. By drawing on critical realism the researcher was able to produce in-depth discoveries of the underlying social structures at play and their causal mechanisms. In Bristol and Cardiff's case the compact size of the geographical locations appears to have assisted the connectivity of actors, assisting the collaborative and cooperative nature of the business community and its networks. Whereas in the context of Birmingham, the second largest city in the UK, the findings suggest the city is working to establish a more collaborative and connected ecosystem of business networks and communities, a vision that is still underway but anticipated to take time to develop organically.

The findings have highlighted a significant tension between the private sector expectation of the role of the public sector in catalysing entrepreneurial innovative activity in both Bristol and Cardiff, and the supportive role undertaken by the public sector. Whereby the public sector did not consider their skills and expertise best suited to guide entrepreneurs. Instead, public stakeholders across the three cities considered the facilitation of networking and the nurturing of the entrepreneurial business community to be provided through co-working spaces and self-organised networks. Notably the value of coworking spaces in the process of innovation and value production reinforces the power of proximity within a networked economy. This chapter finds that coworking spaces (flexible community-oriented workspaces occupied by professionals from diverse sectors) are integral to the promotion, creation and development (capacity building) of entrepreneurs and businesses. Coworking environments were found to facilitate geographic concentrations of likeminded individuals, encourage collaborations, cultivate a community culture and promote productive entrepreneurial business environments. These facilitative

spaces were found to facilitate dynamics similar to firm agglomerations fostering talent networks and business connections across a diversity of networks, creating communities of interest. Moreover, network facilitators are a crucial component in the promotion of entrepreneurship, building communities of connected local talent. In doing so, the empirical evidence highlights the link between a networked economy and entrepreneurial opportunities, characteristics strongly associated with urban competitiveness and economic development. Thus, the findings suggest networked business communities are more conducive to innovative entrepreneurship.

A wider joined up collaborative approach was found to be an essential factor of productive entrepreneurship. The empirical analysis identified the need for greater coordination across networks and partnership working in Birmingham as crucial drivers of innovative entrepreneurial activity. A significant shortfall was identified in the need to address perceptions of network exclusivity, to empower minorities and tackle rising inequality through equal access to entrepreneurial support and opportunities. Overall, the findings demonstrate business networks are crucial in the development of entrepreneurial environments through the provision of intangible assets. Firms no longer innovate in isolation but require interactions with a variety of actors and knowledge sources. The chapter concurs a networked collaborative approach to business is an essential factor of entrepreneurial success (Chapter 2).

CHAPTER 7

CONCLUSION

CHAPTER 7

Conclusion

7.1 Introduction

This chapter considers the previous chapters to draw on the theoretical and empirical evidence to demonstrate the thesis's contributions to academic theory and policy practice. The application of a critical realist approach facilitated an understanding and explanation of the disposition of the interplay between institutions, infrastructure and networks as determining factors for entrepreneurial efficiencies and variations. The approach went beneath the surface to explore the social structures, mechanisms and complexities as to how variations in contextual factors shapes variations in entrepreneurship. The study has identified key contextual determinants and the influence they have in enabling or impeding entrepreneurial activity across three urban contexts, to acquire a better understanding of variations in entrepreneurship. This then led the analysis to understand how formal and informal institutions (moderate) constrain or enable the relationship between entrepreneurship and context. Lastly, the research explores the influence of networks as an institutional determinant of entrepreneurial activity and behaviours in three unique urban contexts. Overall, the analysis has identified and examined how contextual determinants, institutions and networks shape urban entrepreneurship through a multi case-study approach, the findings uncover a number of contributions with significant methodological, theoretical and policy implications.

This chapter brings the seven chapters together to draw the thesis to a close and is structured as follows: the first section synthesises the research journey, recognising the complexities of the interrelated concepts. Then the central theoretical contribution of the research is presented exploring the key concept context, institutions, networks and entrepreneurship to advance theoretical discussions. This leads onto the policy and methodological implications of the research; lastly future areas of research and the challenges are considered.

7.2 Thesis summary

As argued by Morgan (2007) the institutional configuration of urban environments differs substantially, attributable to contextual settings and strongly correlated with variations in socio-economic performance (Hall and Jones, 1999; Alesina, 1998). In the previous chapters, the theoretical framework identified that entrepreneurship is widely accepted as a crucial factor of contemporary economic development, a critical component for the diversification and capacity building of economies (Vorley and Williams, 2014). The literature demonstrates that institutions matter (Williamson and Kerekes, 2008; Acemoglu, Johnson, and Robinson, 2001). The formal and informal institutional make-up of cities shapes economic activities in important and often unexpected ways influencing entrepreneurial environments (Storey and Thurik, 2006). Networks stimulate business growth through access to a diverse pool of knowledge, a crucial resource to strengthen innovative performance and entrepreneurial decision-making (Keeble and Wilkinson, 1999; Porter, 2003; Turkina, et al. 2016). Hence, networks were identified as a valuable explanation of entrepreneurial success, which promotes innovation and reduces uncertainty (Boschma and Frenken, 2009; Huggins and Thompson, 2013). The review identified the value in understanding the consequences of the entrepreneurial economy and the implications this can have on the development of cities and its individuals. Scholars have provided extensive discussions on the relationship between the promotion of entrepreneurship and economic development yet conflicting evidence can be found (Scott, 2007; Rodríguez-Pose and Storper, 2006; Pike, Rodríguez-Pose and Tomaney, 2006; Boschma, 2005). The literature review identified the need to examine the concept of entrepreneurship in different contexts to advance theoretical knowledge. The research is aimed at improving understandings of place specific entrepreneurial dynamics for the development of the city and its individuals, with a specific focus on business and stakeholder views.

The study was designed on the basis that spatial context matters and contributes to variations in entrepreneurship. To explore the research aim and questions the phenomenon was explored within a city context (Birmingham, Bristol and Cardiff) to understand the complexities at play within varying contextual, entrepreneurial and institutional settings. Within the cases multiple perspectives were sought to understand the performance and influence of key determinants of entrepreneurship, to do so a structured business survey was administered, and semi-structured stakeholder interviews were conducted.

The relationship between the effectiveness of institutional dynamics and entrepreneurial business activity has been explored through the lense of critical realism. The approach facilitated the exploration of both the observable and the unobservable between the interplay of the concepts to understand how they can be a determining factor for variations in entrepreneurship. The empirical evidence found that a

combination infrastructural determinant affects the performance of entrepreneurial business activity and wider urban economic development (Farole, et al. 2011; Acemoglu, et al. 2001; Rodrik, et al. 2004; North, 2005). These context-based determinants are fundamental in understanding, (1) the contextual environments in which entrepreneurial activity takes place, (2) more specifically the factors (hard and soft) that influence entrepreneurial activity, (3) the challenges presented to both KBFs (as defined in Chapter 2) and stakeholders within urban contexts, and (4) the impact (and the interrelated consequences) of these contextual factors on entrepreneurial activity. The findings demonstrated that the cities were restricting the growth of the entrepreneurial business community through the limited provision of hard determinants, but that the cities were making up for it in their strong provision of soft determinants.

In large, formal institutions in the three case studies had negative effects in delivering business and private stakeholder expectations. Inefficient formal institutions can increase barriers and reduce the ease of entrepreneurial business activities and constrain aspirations, hindering the entrepreneurial performance of business communities (Veciana, et al. 2008; Vorley, 2015). The poor institutional environment incentivised informal institutions to intervene as a substitute for the limited presence of formal institutions as an enabling force for entrepreneurial activity, providing the lubrication to heighten network dynamics to mobilise resources conducive to entrepreneurship. Overall formal institutions were found to constrain entrepreneurial activity, while the performance of informal institutions was found to enable entrepreneurial activity and moderate against the deficient formal institutional performance.

In terms of the influence of network dynamics in the promotion of entrepreneurship, the empirical evidence illustrates the importance of interactions and the collaborative and cooperative nature of network dynamics as a resource. Most significantly, coworking spaces were identified as crucial enabling spaces harbouring local ecosystems of entrepreneurial activity (DeGuzman and Tang, 2011; Fuzi, 2015; Rios-Carmenado, et al, 2016). The spaces facilitated hard infrastructure that coordinates and harnesses informal institutional dynamics and intangible assets fruitful for entrepreneurial activity. Across each of the case studies networks were considered to be a fundamental determinant of entrepreneurial behaviour and activity (Parrino, 2013; Pearce-Neudorf, 2014).

In short, this study has presented the key empirical findings stemming from stakeholder interviews and KBF business surveys and builds on the contextual narratives established in the previous chapters. The research has contributed to the literature on institutions, entrepreneurship and networks by demonstrating how variations in each can have a positive or detrimental impact on entrepreneurial activity, and ultimately urban economic development. A combination of hard and soft determinants of entrepreneurial activity were identified, for which the former was considered operational requirements

while the latter provides an entrepreneurial advantage in business activities. The formal institutional environment was not perceived to be effectual but counterproductive to business needs, the informal institutional environment facilitated a strong sense of collaboration and cooperation within the city's business communities. All public stakeholders supported the promotion of entrepreneurship with an increased emphasis on strategic alliances and partnerships. Enabling spaces were identified as valuable drivers of informal institutional dynamics that are perceived to have a positive influence on entrepreneurship and business productivity. The facilitative spaces act as collaborative agglomerations that harness a diverse pool of knowledge and resources. The thesis has found that a number of determinants are important in the entrepreneurial performance of a city, but that the system can work without having every element (such as a strong formal institutional presence). This raises the discussion that perhaps it is not possible for an urban context to secure all determinants of entrepreneurship, but it is a trade-off for those that achieve the greatest efficiency.

This thesis contributes to entrepreneurship in urban economic geography by investigating KBFs and stakeholders' perceptions of the importance of key determinants of entrepreneurship. To do so, the research sought to understand how context, institutions and networks shape urban entrepreneurship across three UK Core Cities, the research explored:

- How contextual determinants influence urban entrepreneurship?
- How formal and informal institutions (moderate) constrain or enable the relationship between entrepreneurship and context?
- How networks influence entrepreneurship in an urban context?

7.3 Why Context(s) Matters

The research has demonstrated a difference in the contextual determinants of entrepreneurship; a key strength of this research has been the assessment of key theoretical concepts (entrepreneurship, institutions and networks) within the urban environments they exist. The research has proven the importance of the interplay of the concepts highlighting the crucial importance of observing the theoretical framework within the variations of their contexts, as the phenomenon does not work in isolation. A key facet uncovered was the interplay between formal and informal institutions, wherein the underlying role of informal institutions in the development of a strong entrepreneurial business culture appears to have been established in the absence of formal institutional effectiveness. It has been verified that the presence of a strong entrepreneurial spirit and creative culture was an attractive trait for businesses and private stakeholders. A particular insight revealed the need for institutional asymmetry to develop heightened entrepreneurial activity and socio-economic productivity.

A principle weakness across the cities is the performance and impact of formal institutions. In particular, the findings revealed the councils of the three case studies were not key factors influencing business activity or involvement in entrepreneurial activities, this particular insight revealed the significant benefit of examining three urban contexts to acquire a wider awareness behind the quality of informal institutions and formal institutional shortfalls. The results have demonstrated that entrepreneurship is a function of the quality of the institutional environment, and where formal institutions fail the interplay between institutions will be notable with the function of informal institutions driving innovative entrepreneurship and in Bristol's case (with the weakest formal institutional context) a strong business community. A further determinant crucial to the development of entrepreneurship in urban contexts was the performance and function of enabling spaces, encouraging the agglomeration of likeminded entrepreneurial talent within a supportive informal institutional context. The networks established within the enabling spaces cultivated a sense of business companionship, a fundamental asset in the entrepreneurial process. Ultimately, networks and their dynamics were identified as an important institutional factor in entrepreneurial activities and economic development more widely. Interestingly both hard and soft determinants were identified to be crucial to the promotion of entrepreneurial activities, with the research further demonstrating that the three case studies identified a number of consistent hard and soft locational preferences. Hard infrastructure was considered an operational necessary with the provision often cited to be reliant on the performance of formal institutions that could in turn promote soft determinants. Overall the study has demonstrated the contextual setting shapes and cultivates the institutions and networks existing within urban contexts.

7.4 Conclusion: How Context, Institutions and Networks Shape Urban

Entrepreneurship

7.4.1 Contextual Determinants of Entrepreneurship

The findings highlight a range of influences that could explain variation in entrepreneurship across urban contexts. The research explored the importance of hard and soft locational determinants in the promotion of entrepreneurship, from which the empirical analysis suggested differing entrepreneurial performances are dependent on the conditions prevailing in each of the case study environments. The empirical analysis indicates the performance of hard and soft determinants are intrinsically linked, this implies that competitive entrepreneurial business destinations are typically characterized by a combination of both hard and soft determinants. In this sense the analysis revealed hard determinants were perceived as essential locational requirement from which soft determinants are able to come into

play, and generate entrepreneurial dynamics such as innovation, social capital and heightened productivity etc. For both KBFs and private stakeholders, the hard-locational factors identified (access to finance, office space to support growth and transportation links) are crucial operational requirements that enable a business destination to perform effectively. This is not to suggest that soft locational determinants have less of an influence on a locality's entrepreneurial performance but that to some extent, it could appear that hard determinants are viewed as operational necessities and more straightforward to resolve than intangible assets. As previously indicated, the benefits of an entrepreneurial business culture and business support are crucial elements to foster entrepreneurship, an assertion supported by Huggins and Thompson (2014) whereby the presence of a community culture was found to positively influence business growth. Similarly, in accordance with Florida (2012) the attraction and local supply of skilled workers are crucial assets promoting entrepreneurially driven activities.

In light of the above, the empirical and theoretical analysis indicates the significance of the interconnectivity of "hard" and "soft" locational determinants. Ultimately, the rate of entrepreneurship is dependent on the conditions prevailing in each of the case study environments.

7.4.2 Institutional Dynamics and Entrepreneurship

Overall, there is strong evidence to suggest that the presence of both formal and informal institutional dynamics have an influential role in the uptake of entrepreneurship and the quality of support available for entrepreneurial activities in each of the urban contexts. The rate and growth of entrepreneurship appears to be dependent on a combination of formal (educational programmes, finance, supportive policies etc.) and informal (community culture, culture of inventiveness etc.) determinants prevailing in each of the case study environments. Most pertinently in the circumstance of the three case studies the formal regulatory setting was unsupportive of entrepreneurial business activity. Consequently, the informal institutional setting has cultivated a local business culture that reinforces innovative business activity and a sense of entrepreneurial dynamism. More so, the findings demonstrate the effects produced by informal institutions acting as a catalyst of entrepreneurial business communities.

In terms of the performance of cities as environments conducive to business activity, informal institutional dynamics harnessed network characteristics to establish community capital. Network characteristics are shaped and reinforced by the local institutional context. This is potentially important in understanding how the local institutional culture has a powerful influence on the characteristics of local business network, and how network characteristics are having a wider influence providing a dynamic entrepreneurial environment. The findings have demonstrated that in the absence of supportive formal institutions the embeddedness of informal institutions (the local culture) underpinning business

activities can aid the economic performance of an urban context (Baumol, et al. 2009). The study recognised that the presence of formal and informal institutional dynamics plays a significant role in the quality and quantity of entrepreneurial activity.

7.4.3 Urban Entrepreneurial Networks

An entrepreneurial business community underpins local aspirations and enterprise, notably the research indicates that this is often a product of urban historic legacy. In terms of the nature of network interaction across the case studies business relationship were found to be conducive to characteristics that incite entrepreneurial opportunities and business growth. Furthermore, there was a strong presence of community capital reinforcing the business community and its networks inciting a strong network structure. The research identifies coworking spaces as crucial enablers of network activity and entrepreneurial activities. The findings identified that the interplay between networks and coworking spaces whereby the entrepreneurial nature of coworking spaces has proven to be conducive to business networks and productivity. Moreover, coworking spaces were recognised as crucial enabling infrastructure that is able harness intangible assets conducive to entrepreneurial business activity.

7.5 Theoretical Contribution

7.5.1 Informal Institutional Edge

The study was designed to capture contextual perspectives of urban entrepreneurship, to move beyond the separation of “context” and “entrepreneurship” and the tendency for an ‘all-are-alike’ approach, to arrive at a more holistic understanding of the nature of entrepreneurship in cities (Welter and Gartner, 2016). Previous research has struggled to find commonalities among entrepreneurial circumstances instead uncovering variations in occurrences (Hjorth, Jones and Gartner, 2008; Zahra and Wright, 2011). This thesis addresses the need to understand the influence of the multiple dimensions of context on the entrepreneurial nature of cities. It was the principal aim to enrich current understandings of the interplay between contextual determinants and urban entrepreneurship through a closer exploration of three unique contexts, to understand how contextual determinants have implications for the nature and extent of urban entrepreneurship.

Context matters as demonstrable in the influence of institutions, networks and infrastructure. In accord with Brown and Mason, (2017), Zahra, et al. (2014) and Welter (2011) variances in contextual conditions act as a considerable explanatory determinant of entrepreneurship. The composition of an entrepreneurial environment varies from location to location. This was demonstrated in the accessibility

and openness of Cardiff's business community, the competitiveness of Bristol's entrepreneurial market and innovative community, and the fragmented nature of pockets of entrepreneurial activity across Birmingham. Variation in contextual settings and their interplay has been found to enable or constrain entrepreneurial behaviours, aspirations, activities and opportunities (Spedale and Watson, 2013; Welter, 2011). To illustrate, the connectedness of Cardiff's compact networks heightens accessibility, whereas the spatial scale of Birmingham contributes to the disconnect of entrepreneurial activity. Undeniably, differing entrepreneurial performances are linked to the conditions prevailing in urban contexts (Powell, et al. 2012; Bettignies and Brander, 2007; Harper, 1998; Shane, 1996). The findings identified institutions, infrastructure and networks and their interconnected nature to be key contextual determinants of entrepreneurship. The study has proven the interplay between the concepts is a key determining factor for the nature of urban entrepreneurship.

In terms of formal and informal institutional dynamics, the research found the informal institutional performance of cities could contribute to differentials in entrepreneurial capacity (Rodriguez-Pose, 2013; Boettke, 2008; North, 1990). For example, the establishment of Bristol's deep-rooted enterprise culture has heightened the competitive value of entrepreneurial outcomes, as demonstrable in entrepreneurial rankings. Whilst, Cardiff and Birmingham placed emphasis on the development of entrepreneurial mindsets with the potential to address current and future deficiencies, raising aspirations, local innovative capacities and awareness as a viable career. The institutional configuration of an urban context is jointly shaped by the interaction between formal and informal institutions (North, 2005). Notably, informal institutions and the presence of entrepreneurial business culture, community capital, cooperative networks, entrepreneurial spirit, etc. are able to gain significant traction by not being constrained by formal institutions (Zhao, et al. 2012; Mueller and Thomas, 2001). In the case of Bristol, informal institutions, such as its deep-rooted entrepreneurial business community and culture of creative innovation and inventiveness, were understood to counteract ineffective or obstructive formal institutions. For example, where formal institutions demonstrated poor leadership and lacked business friendly regulations the establishment of a strong enterprise culture and entrepreneurial climate supported entrepreneurial activity in each of the cities (Baumol, 1990; North, 1990). As notable with Cardiff's historic dependence on the (risk adverse) public sector a reliance on formal institutions, such as access to resources and financial support mechanisms, entrepreneurial initiatives, etc. can set innovative trajectories behind, it can obstruct or distort the establishment of an entrepreneurial culture and the mobilisation of resources and socio-cultural returns (Estrin, et al. 2016; Williams and Vorley, 2015). Indeed, an unsupportive and ineffective regulatory setting with the absence of supportive and business friendly regulations, can have a detrimental impact on the cultivation of local entrepreneurial conditions (Estrin, et al. 2013). Bristol and Birmingham demonstrated that where informal institutional dynamics (cooperative business networks, embedded culture of innovation, cultural diversity and entrepreneurial business communities) are not displaced by formal institutions and their constraining

mechanisms (burdensome regulatory procedures and constraining regulatory procedures), an innovative entrepreneurial culture and network resources had been established (Williamson, 2000; Licht, et al. 2005). However, the influence of the informal institutional setting was of notable importance across each of the three cities. The research found that when informal institutions are able to flourish, they generate a greater impact and deliver higher levels of entrepreneurial activities (Engle, et al. 2011; Estrin and Mivkiewicz, 2010).

For each of the three cities the availability of capital resources in terms of human, physical and financial capital acted as an operational necessity and a prerequisite for business activity, rather than the promotion of innovative entrepreneurship. The institutional ‘edge’ was found to derive from the quality of the informal institutional environment, such as the presence of informal networks and local cultural norms as opposed to the formal institutional setting.

Although, a stable institutional environment was acknowledged to be an attractive asset the performance of the informal institutional environment was the leading determinant of entrepreneurial productivity in each of the case studies, delivering community culture, an entrepreneurial spirit and collaborative culture of cooperation. Indeed, the research recognised the value of social relationships between business actors and the collaborative and cooperative nature of the business community as valuable determinants of entrepreneurial success that is unable to be replicated (Williamson, 2007; Granovetter, 1985). However, it is important to recognise the limitations of informal institutions in the development of an entrepreneurial business community. Informal community business cultures are problematic to replicate, form, change and affect through policy which can have poor consequences for economic performance, this highlights the value of embedded and naturally occurring informal institutional qualities (Boettke and Fink, 2011). It is crucial to acknowledge entrepreneurial behaviour cannot be forced, nonetheless the cultivation of an attractive informal environment promotes the preconditions (i.e. community culture and civic capital) that cultivates a supportive social environment and entrepreneurial business community, that can play a crucial role in the performance of urban areas (Hall, 2000; Florida, 2012). The study considers the unique value presented by informal institutions as a key determinant of entrepreneurial activity.

The empirical findings have highlighted two key informal institutional ‘edges’ which are evident in two areas: (i) entrepreneurial culture, and (ii) cooperative networks.

(i) *Entrepreneurial Culture*

An environment rich in entrepreneurial cultural values and innovation plays a fundamental role in the promotion of entrepreneurship and the competitive performance of entrepreneurial business

destinations (Baumol, 2002; Schumpeter, 1942). Strong informal institutional settings as demonstrated by the three cities are able to cultivate an entrepreneurial business milieu conducive to a culture of innovative capacity (Audretsch and Keilbach, 2004). The entrepreneurial culture in Bristol, Birmingham and Cardiff was found to be an influential determinant of local business communities aiding the development of entrepreneurial ‘mindsets’, efficiencies, competitive resilience and heightened levels of innovative performance (Sobel, et al. 2010; Lavoie, 1991). The contribution emphasises the relationship between an entrepreneurial culture and its relation to competitive resilience in urban contexts (Eraydin, et al. 2010; Florida, 2001). The presence of an entrepreneurial business culture and entrepreneurial climate prevents economic stagnation, found to be a crucial component of an entrepreneurial economy (Malecki, 1994; Goetz and Freshwater, 2001). The cities entrepreneurial spirit is linked to urban cultures of innovation heightening entrepreneurial ability and problem solving, and their competitive performance of (Carree and Thurik, 2003).

In terms of the informal institutional ‘edge’ the presence of local ‘cultural capital’ as found in each of the case studies is a crucial source of competitive resilience and innovative dynamism (Yew and Ahmad, 2014; Eraydin, et al. 2010). Differences in each of the cities were found to shape the cultural offer and character of cities and their entrepreneurial business culture and vice versa, having a strong influence on the nature of the business environment and culture of entrepreneurship (Williams, et al. 2017; Krueger, et al. 2013). An urban context that lacks the presence of an entrepreneurial culture is anticipated to have a limited entrepreneurial ability and innovative capacity. A cities’ entrepreneurial performance appears to be related to the presence or absence of a strong entrepreneurial spirit and business culture (Baumol, 1968; Leff, 1979; Soltow, 1968). Local informal institutional conditions were found to play a fundamental role in each of the three urban contexts as a source of value creation facilitating the assimilation of knowledge, resources, innovative capacity and networks of local wealth creation, leading to a heightened entrepreneurial performance.

The research observes that the power of culture and social influences on the entrepreneurial psyche of individuals should not be underestimated, influencing individual’s entrepreneurial mindset, spirit and aspirations. An entrepreneurial culture was accredited with being able to inspire entrepreneurs, raise aspirations and instigate an awareness, resilience and confidence in individuals undertaking innovative activities in each of the cities. To illustrate, Cardiff emphasised the value of embedding entrepreneurial skills in early school years, whereas the cultural diversity in Birmingham’s informal networks has developed an ambitious entrepreneurial spirit. A diverse and culturally rich environment for entrepreneurs and businesses to flourish must form a vital part of public policy. This resonates with Hedges (2015) and Centre for Cities (2011) critique of enterprise zones and how they fail to promote lasting economic prosperity. As found across the three cities, the role of culture and informal institutions in individual productivity and the development of social capital was stressed. The

findings expressed the value of community culture as an instrumental element that reinforces a strong entrepreneurial ecosystem (Cantner, et al. 2009; Vorley, et al. 2012). While, entrepreneurship requires a suitable physical environment, it also commands a productive business environment with access to an entrepreneurial business community and social network ties. This donates that a location cannot solely rely on the efficiency of its formal institutional setting to secure innovative entrepreneurship.

(ii) *Cooperative Networks*

The empirical data revealed a strong presence of collaborative business connections. Entrepreneurs and KBFs reported each city to have facilitated good opportunities to access business friendly resources and local support networks. The evidence of social capital in entrepreneurial business connections across the three cities is indicative of the embeddedness of informal institutional structures, such as social networks and mutually supportive local network relationships (Feldman and Zoller, 2012; Putnam, 1993). The cities acknowledged that an entrepreneurial mindset is embedded through avenues of local social network capital, where the actions of communities and key leading individuals promotes the entrepreneurial psyche and the opportunities it can provide (Johannisson, 1987; Schutjens and Stam, 2003; Bridger and Alter, 2006). Indeed, Florida (2012) raised the importance of the informal characteristics of an environment determining the uptake of both entrepreneurial behaviours, and the formal mechanisms in place promoting entrepreneurship. This emphasises cooperative networks and their generation of social capital as a key informal institutional edge in the promotion of entrepreneurship. The research recognised the importance of a diverse and cultural environment as a central catalyst of entrepreneurship and competitive resilience.

The entrepreneurial 'edge' is evident in the honest and reliable nature of business network dynamics across the three cities reflecting the deep presence of 'community capital' (Feldman, et al. 2012; Bridger, et al. 2006; Bosma, et al. 2004). The collaborative network ties as evident across the cities are built on the social embeddedness of values facilitating social units of mutually beneficial exchanges able to reduce uncertainty, aid resource efficiencies and adaptive capacity through the process of knowledge exchange (Camen, et al. 2012). As demonstrated in Bristol, Cardiff and to some extent Birmingham mutually supportive network dynamics (vertical and horizontal) can determine valuable cohesions and complementarities acting as connectors to resource pools and cost efficiencies (Porter, 1998: 81; Huggins and Izushi, 2007:60; Vorley, 2011). Moreover, the establishment of active and trustful business relationships grant access to advantageous opportunities contained within local business community cultures (Porter, 1998: 81; Huggins and Izushi, 2007:60; Vorley, 2011).

As demonstrated in Cardiff's historical reliance on formal institutional support, for access to resources, finance and initiatives, without the presence of strong informal institutional factors collaborative

knowledge networks can be restrictive, reflected in the limited supply of mentors in the scale-up process. In the case of Birmingham, its fragmented network channels can stifle knowledge collisions and mutual recognition where there are opportunities to share common opportunities and threats (Steiner, 1998). Instead, as each of the cities found the presence and support of effective and efficient informal institutional values can strengthen a sense of community capital, where business relationships prosper from trustful, open and reciprocal ties (Ciborra, 1991; Mody, 1993). Naturally occurring informal values, customs and norms are evident in each of the urban entrepreneurial business communities with common community business goals, taking a coordinated approach to achieve cooperative and collaborative action for mutual benefits (Rutten, et al. 2010). The presence of cooperative entrepreneurial business networks is found to enable networks to function effectively and facilitate value creation through shared understandings, which in turn cultivate efficient communication channels able to pursue market changes, overcome knowledge barriers and reduce production risks (Harisalo and Miettinen, 2010; Hong et al. 2010; Lee 2011; Fukuyama, 1997; Chesnais, 1988; 1996; Ciborra, 1991). Ultimately, access to a supportive business community and a network culture are fundamental determinants of entrepreneurship.

The empirical data identified variations in entrepreneurial performance according to spatial aspects of the urban context. The spatial scale of the three case studies had a significant influence on learning and associational practices, and the performance of informal institutions. The compact scale of Bristol and Cardiff was notable in the composition of their learning networks and social ties, the compacted size of the cities facilitated interactions, enabled actor network collisions, collaborations and a sense of familiarity (Rutten, et al. 2010; Feldman and Zoller, 2012) across all the cities networks, which demonstrated greater coordination. In contrast, network dynamics in Birmingham, the second largest city in the UK, were made up of fragmented networks with pockets of business communities broken up according to localities or sector specialisms across the city acting alone and unaware of others associative practices (Cooke and Morgan, 1998). Amongst other benefits a cooperative spirit and collaborative cross-sector fertilisation produces significant complimentary advantages in informal mentoring demonstrating the benefits of social capital, stimulating relationships and synergies, effective support and problem solving, all conducive to innovative entrepreneurialism and economic development (Kwiatkowski and Buczynski, 2011; Spinuzzi, 2012; Parrino, 2013).

More specifically, in Birmingham larger businesses were found to have a traditional business mind-set and were sceptical of the value interactions with firms and entrepreneurs could add to their productivity, demonstrating a closed protective attitude towards their intangible assets and resources. In contrast, the strong presence of social capital in Bristol and Cardiff's collaborative networks appeared to be relatively non-hierarchical based on collective learning (Cooke and Morgan, 1998). To illustrate, business networks in both Bristol and Cardiff would regularly collaborate and liaise on business matters to aid

their innovative capacity. In turn, providing profitable business opportunities and access to knowledge exchange from a variety of business scales, whereas the networks in Birmingham appeared to have limited interactive innovative involvement from established corporates. Interestingly, the presence of weak ties as demonstrable in Birmingham's network dynamics is particularly important for the process of innovation, problem solving and prevention of lock-in (Burt, 1992). The research acknowledges irregular and unconnected business connections in Birmingham can act as a valuable tool to bridge otherwise disconnected actors, broadening access to resources, knowledge and strategic alliances (Granovetter, 2001). Whereas tight networks as found in Bristol and Cardiff can limit access to market changes, wider innovations, limit risk perceptions and stagnate discovery (Boschma, et al. 2009; Colombo, et al. 2011; Malecki, 2011).

Building on the work of Colombo, et al. (2011), the study demonstrated effective business networks provide an important contribution to productivity and innovative activities in urban contexts (Colombo, et al. 2011; Huggins, et al. 2015). All case studies stressed the value of a collaborative and cooperative business community which was indicative of strong business networks. A significant finding demonstrated that a 'collective social order' was optimised and performed at a greater (optimal) capacity in networks at smaller urban spatial scales (Bristol and Cardiff). An arrangement that risked becoming dispersed and disjointed in Birmingham where network characteristics have greater proximity between actors across a larger urban spatial scale (Lorenzen, 2007). A finding that further emphasises the role of proximity in 'social capital' as a significant influence in stimulating interactions, shared learning and in encouraging collaborative entrepreneurial business activity, which is a crucial determinant of the productive performance of network dynamics in cities. This is in contrast to Monge and Contractor (2003) who stated that network capital was less spatially dependent in an increasingly global environment. In turn, this highlights the value of the networks formed as localised social networks rooted in local interactions and physical proximity (Capello and Faggian, 2005; Rutten, et al. 2010).

7.6 Policy Contribution

From a policy perspective, the researcher acknowledges that in most cases it would be problematic to adopt a uniform 'one size fits all' approach across varying contexts (Rodriguez-Pose, 2013). Recognising that the most important consideration in the development and implementation of policy is the careful consideration of the unique place-specific characteristics of a context. The research takes the view that contexts are not static but constantly evolving, reacting and transforming. Thus, this thesis has identified the need for policy approaches which are sensitive to local contexts.

7.6.1 Context Policy Implication

As highlighted in the thesis, the historic legacy of cities was found to influence perceptions of urban environments and have lasting implications on development trajectories. To overcome the constraints of negative legacy perceptions of the performance of economies it is recommended that formal institutions should better celebrate and promote the success of its entrepreneurial business community to heighten national and international awareness. Increased visibility and institutional recognition of entrepreneurship across the cities should demonstrate a societal value placed on entrepreneurial behaviour and the success achieved within the urban context. The acknowledgement and awareness of local entrepreneurial role models across a diversity of sectors has been found to raise aspirations and validate entrepreneurship as a viable career path (Mueller, 2006). To in turn, shift perceptions as to how the wider society perceives entrepreneurship to overcome perception barriers of exclusivity, and risk attitudes to raise local entrepreneurial aspirations and ambition. Resultantly, it is anticipated this would heighten the viability of entrepreneurship as a legitimate career path reducing perceptions of risk and raise the city's profile as an entrepreneurial destination and investment opportunity. However, it is crucial to note that only portions of a population are entrepreneurially minded and able to exploit business opportunities (Baumol, 1990).

To influence historical perceptions of cities and entrepreneurial aspirations it is proposed that there is a need for policy interventions to bridge the gap between actors to facilitate greater collaboration, coordination of expertise and knowledge sharing. There is the opportunity to foster a heightened awareness of entrepreneurial business activity through the provision of funding as a vehicle to incite stakeholder groups to come together, to promote campaigns to raise the profile of business activity and entrepreneurial endeavours. Leading on from this, to ensure the continued development of urban entrepreneurship policymakers should encourage the promotion of a collaborative ecosystem of actors through the provision of incentives (i.e. tax reductions, infrastructure provisions) to encourage anchor companies to collaborate with the local business community. It is further suggested that the public sector should engage with and monitor the impact of collaborations overtime to acquire a greater understanding of the impact of the collaborative economy on entrepreneurship, social inclusion and economic development.

Furthermore, there is a limited awareness across business communities of public sector support for entrepreneurial business activities. In contrast, public stakeholders indicated otherwise. Resultantly, to ensure the public sector is not victim to limited awareness comparable to the 'Brexit syndrome' the public sector must provide greater engagement with the business community to heighten local, national

and international awareness of funding activities through the promotion of supportive initiatives to increase visibility.

7.6.2 Formal Institutional Policy Implication

As highlighted in the thesis, the formal institutional context was perceived to deliver an unsupportive regulatory environment, a characteristic considered to have a detrimental influence on the performance and attractiveness of a city as a business environment (Vorley, et al. 2017). Scholars have widely stressed institutional support is a crucial determinant of productive, unproductive and destructive entrepreneurial activity (Baumol, 1990; Williams and Vorley, 2015; Williams, et al. 2017). The results indicate the rules and regulations in place need to better foster entrepreneurship to become a determinant of business productivity and economic development. However, the research found there was a weak formal institutional environment and as such a formal institutional leadership approach was not the most effective method of catalysing business support. To address the public sectors limited influence in encouraging business activity and involvement in entrepreneurial activities the first recommendation advises a private sector partnership approach, to guide the public sector and secure an effective programme of entrepreneurial support for businesses undergoing the scale-up process. In turn, specifically addressing the availability of support for the scale-up growth stage a key shortfall across the case studies. The implementation of a business-mentoring programme in partnership with the private sector is understood to enable the business community to have a greater voice and influence in the development of business activities. As Chittenden and Robertson (1993) stressed private sector partnerships should increase mentor commitment and the ownership of initiatives, as trust and confidence in the scheme can be a key challenge in informal structures. To encourage business mentors' formal institutions could incentivise large organisations to engage with schemes to facilitate knowledge transfer and mobilise their valuable expertise.

7.6.3 Informal Institutional Policy Implication

As discussed earlier, a key strength identified in each of the case studies was the presence of enabling spaces, which proved to harness a community business culture and demonstrated strong agglomeration benefits. In particular, Spinuzzi (2012) highlighted the importance of coworking communities, which were found to facilitate access to a diverse pool of knowledge and resource opportunities particularly beneficial to entrepreneurial endeavours. This provides key advantages that stress the value of communities of proximity and knowledge pipelines, especially in terms of promoting knowledge

exchange and higher levels of entrepreneurial activity (Huggins, et al. 2015). Moreover, the results have demonstrated the strength in the concentration of communities to support businesses and facilitate enterprise creation and knowledge development (Porter, 1990). With regards to the case studies the empirical analysis indicated that networks in Bristol and Cardiff has cultivated a favourable environment for entrepreneurial exchanges and cultivated social capital, further demonstrated through the citywide coordination across the provisions of enabling spaces. However, notable in Birmingham co-location alone does not necessitate interactions, collaboration, conviviality or cooperation. Although most activities tend to occur naturally, the local culture and community facilitators play a crucial role in reinforcing activity by stimulating relationships and promoting synergies within the trust-based community environment.

A significant focus has highlighted the supportive business climate underpinning coworking environments, serving as self-reinforcing ecosystems of intangible resources critical for the growth of local businesses (Spinuzzi, 2012). Collaborative environments are critical for their ability to reinforce and create cross-sector links to stimulate interactions and reduce transaction costs, raise productivity and facilitate a spirit of cooperation and collaboration (Fabbri, et al. 2014; Pearce-Neudord, 2014). Considering the evidence, coworking spaces serve as crucial policy levers to heighten productivity; knowledge transfer and encourage entrepreneurial exchanges. The research considers the informal institutional economy to be a crucial component of entrepreneurial activity, as such it is recommended that cities must support and encourage the high-growth potential of coworking spaces and informal institutional environments as a mechanism for the promotion of entrepreneurial activities.

7.6.4 Network Policy Implication

Theories founded on the study of isolated factors operating independently disregard the interconnected nature of determinants and the impact contextual influences can have on the performance of entrepreneurship (Granovetter, 1992). Chapter 6 identified the facilitative role of networks as an integral factor of entrepreneurial development facilitating access to human capital and knowledge resources (Vorley, et al. 2011; Viswanathan, et al. 2014). The intangible value of networks was found to facilitate productive entrepreneurship through the mobilisation of complementary assets. While there might be the temptation to increase the provision of supportive coworking spaces to maximise the benefits of their internal networks and ability to reinforce the informal institutional context, it is important not to saturate the market with siloed resources. Instead the empirical analysis identified the limited provision and visibility of business support across the three case studies. Indeed, rather than relying on entrepreneurs experiences of ‘serendipitous discovery’ in coworking contexts, where occurrences and

developments are often discovered by chance, one of the major policy implications of the research is the importance of coordination across enabling spaces to ensure networks are cooperating to maximise the effectiveness of their resources.

The empirical analysis identified resources of entrepreneurial business support are highly fragmented across an urban scale. As part of a wider entrepreneurial business support strategy (to address the public sectors limited business support) the research identified the need for resource providers to coordinate their actions. In order to encourage the engagement of entrepreneurial facilitators within the business community to create a stronger pool of mutually beneficial amenities, to take advantage of potential spillovers for future provision development (Sugden, 1995). It would be the intent to stimulate and build up a connected and coordinated network of formal and informal infrastructure, this would enable actors to efficiently identify suitable resources and improve productivity through cooperative communication. Cardiff provides an example of best practice where it has been shown that actors in the ‘coworking collective’, a task-specific initiative, can work in harmony. An informal cooperative initiative that involves key actors of enabling spaces meeting on a monthly basis to discuss the performance of informal institutions and entrepreneurial business interests. An initiative that has resulted in substantial gains in ensuring events, training, and networks are not competing and activities are not replicated, to ensure a connected citywide provision of entrepreneurial business support. A coordinated inter-network initiative would mobilise specialised (context based) knowledge of the business communities needs and further support and reinforce a citywide culture of collaboration.

7.7 Future Research Directions and Challenges

This section outlines three future research directions to build on the findings of this research.

First, as the promotion of entrepreneurship has been found to be dependent on the conditions prevailing in the specifics of each contextual setting, the theoretical framework developed requires further application to assess the study’s findings in different contexts. This could include an exploration within unstable institutional environments or international best practices where key determinants of entrepreneurship and the performance outcomes of the key concepts (context, institutions, networks) could considerably influence entrepreneurial aspirations, behaviours and activities. The application of the framework is not limited to a UK context and could be applied to economies of international best practice or crisis-hit cities located in the global south to consider how changes in the formal and informal institutional environment and the interplay between the institutions (and the role of networks) could impact entrepreneurship (Getler, 2010; Rodriguez-Pose, 2013). Application of the framework

across wider institutional contexts would enrich understandings of the complexity of the interrelationship between institutional environments and entrepreneurship as a phenomenon.

The second is reflective of the success of public-private partnerships and the ineffective performance of the public sector in the promotion of entrepreneurial business activities. The interview findings demonstrated there is a growing interest in the aptitude of public-private partnerships to promote entrepreneurship and urban economic development. An alliance understood to be capable of bridging sectors and promoting cooperation between a diversity of actors to create entrepreneurial synergies to overcome urban complexities (Rios-Carmenado, et al. 2016). In this context, there is a need to understand the contribution of partnership working through the assessment and evaluation of the performance of public-private partnerships, and the value generated. It is the purpose to better understand how resources can be better harnessed, and to investigate potential differences in the perception between the public and private stakeholders of the tensions, shortfalls and the value created to better mobilise productive partnerships. The results should contribute to future understandings of the complexities of partnership working to understand how the public sector can better incentivise (and govern/manage) partnerships to improve performance efficiencies in the promotion of innovative entrepreneurship. To also use as a tool to pursue sustainable economic development.

Third, the results indicated the value of enabling spaces (throughout the thesis has used the collective term “coworking spaces” to capture shared office spaces, incubators, hubs, accelerators etc.) and the influence of their intangible assets in the development of entrepreneurial behaviours and activities. However, existing research on the importance of enabling spaces and the networks they facilitate for the promotion of entrepreneurship is still rather limited (Kwiatkowski and Buczynski, 2011; Spinuzzi, 2012). Thus, it would be the intention for future research to explore “coworking spaces” as agglomerations within which there is an active actor network to explore various aspects of network embeddedness and their implications for entrepreneurship and business development. Particularly in terms of having a facilitative role in the scale-up process, identified as a key urban issue.

The academic concept of institutions is widely acknowledged to be slippery and elusive; this makes it particularly difficult to operationalise the concepts in a way that can be understood by stakeholder communities. A significant limitation of the study was presented in stakeholder’s inability to verbalise and quantify the impact of intangible assets such as informal institutions. In particular, it was found that public stakeholders had limited exposure and as such awareness of the composition of informal institutions. A further problem was raised in the complexity of measuring the impact of the wider community culture in context. However, they did recognise the importance of the role of informal institutions. The challenge presents a potential future avenue of research to understand what is limiting or difficult to operationalise and stakeholder’s awareness of the presence of these concepts.

Table 7.1: Key findings

	Birmingham	Bristol	Cardiff	All
Context	<ul style="list-style-type: none"> Perceptions underestimated performance of city Strong majority considered good place to do business Some businesses considered the city did facilitate good opportunities for businesses to have a strong voice and influence Businesses influenced by ability to access business support Businesses perceived the city to be a good place to do business. Businesses perceived the city to have the weakest sense of a business community 	<ul style="list-style-type: none"> Strong perception as a dynamic city Over half businesses considered good place to do business Did not facilitate good opportunities for businesses to have a strong voice and influence Majority not influenced by ability to access business support Businesses perceived the city to be a good place to do business, and has a strong sense of a business community 	<ul style="list-style-type: none"> Perception to be transitioning out of public sector reliance Less than half of businesses considered the city to be a good place to do business Did not facilitate good opportunities for businesses to have a strong voice and influence Businesses influenced by ability to access business support Satisfied with low rates of crime 	<ul style="list-style-type: none"> Historic legacy influences development trajectories Feeling of safety important locational factor Importance of good quality housing Poor transportation infrastructure
Formal institutions	<ul style="list-style-type: none"> Policies and regulations are unclear and an obstacle to business success Visible leadership through elected Mayor Locating entrepreneurial support in deprived communities Targeting BAME communities 	<ul style="list-style-type: none"> Businesses and stakeholders not satisfied with business rate costs Policies and regulations are unclear and an obstacle to business success Visible leadership through elected Mayor representing business needs 	<ul style="list-style-type: none"> Visible leadership through devolved government Promoting entrepreneurial mind-sets from primary upwards Good active promotion of entrepreneurship Public sector focus on the development of entrepreneurial mindsets and skillsets of future generations 	<ul style="list-style-type: none"> Regulations were not business friendly Policies and regulations did not increase turnover or productivity Not influencing Business activity or involvement in entrepreneurial activities. Not communicating with firms or ensuring knowledgeable of business situations

	<ul style="list-style-type: none"> • Policies and regulations encourage employment of graduates and apprenticeships 	<ul style="list-style-type: none"> • Businesses did not perceive the location to facilitate good opportunities for businesses to have a strong voice and influence. • Facilitating entrepreneurial support and opportunities for underrepresented communities • Identified need for greater public sector promotion of entrepreneurial activities 		<ul style="list-style-type: none"> • Public-private partnerships • Not engaging or providing support for entrepreneurs • Stable, transparent and attractive regulations and policies were not perceived by businesses to facilitate a stable transparent environment • Identified need to celebrate business success and entrepreneurial role models
Informal institutions	<ul style="list-style-type: none"> • Importance of diverse quality environments (i.e. diversity of the informal institutional economy such as cultural environment, events, diverse population etc) • Benefits from culturally diverse population 	<ul style="list-style-type: none"> • Strong quality of life and entrepreneurial business community • Importance of diverse quality environments (i.e. diversity of sectors, events, cultural atmosphere) • Coordinated and cooperative shared office community • Entrepreneurial activities and creative events reinforce cultural diversity 	<ul style="list-style-type: none"> • Attractive entrepreneurial business destination • Close knit community • Coordinated and cooperative coworking community • Importance of an entrepreneurial culture and mindset 	<ul style="list-style-type: none"> • Urban scale influences connectivity of networks and business activity • Importance of range and quality of events important locational factor • Quality of public spaces, recreational and cultural amenities • Importance of the presence of a culture of innovation and a spirit of entrepreneurialism • Community capital was identified as a crucial facilitative factor
Networks	<ul style="list-style-type: none"> • Fragmented across the city due to urban scale • Personally, and socially supportive • Mutually supportive business interactions 	<ul style="list-style-type: none"> • Compact scale aids connectedness of network resources • The strongest presence of personally and socially supportive networks 	<ul style="list-style-type: none"> • Compact scale aids connectivity and collaborations • Personally, and socially supportive 	<ul style="list-style-type: none"> • Urban scale influences the connectivity of network activity • Need for greater connectivity between network resources • Coworking spaces promote business activity • Shortage of scale up space

	<ul style="list-style-type: none"> • Private stakeholders did not consider the business environment to be cooperative or collaborative • Less than half of businesses reported strong presence of business community 	<ul style="list-style-type: none"> • The least mutually supportive business interactions • Greatest intensity of interaction rate with suppliers and customers • Mostly work-related contractual agreements • Strong majority of businesses reported presence of business community 	<ul style="list-style-type: none"> • The most mutually supportive business interactions • Least frequent interaction rate with suppliers and customers • Less than half of businesses reported strong presence of business community 	<ul style="list-style-type: none"> • Business interactions are honest and reliable • Mobilises complementary assets (leads, referrals, resources etc.) • Most frequent interactions with suppliers and customers • Businesses seldom interact with private research institutes and consultants • Businesses interact with HE infrequently, once every 2-3 months in average. Whilst most do not interact at all. • Secured reliable information about operating environment • Led to leads & referrals and effective problem solving • Increased innovation and creativity • Work related contractual agreements
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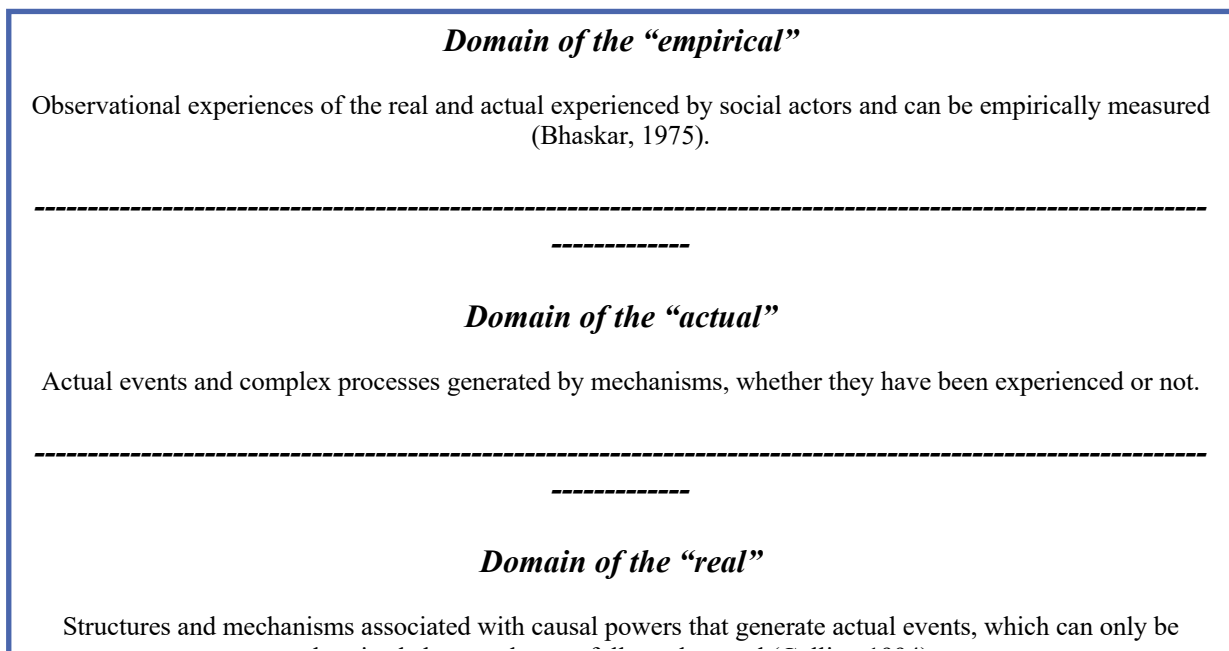
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APPENDIX

Appendix - Chapter 3

Appendix 3.1 – Critical Realism’s Domains of Reality

CR’s three overlapping domains of reality (adapted from Bhaskar, 1979)



Appendix 3.2 – Case Study Selection Process

Case study selection process

Step 1	<i>Selection Process – Core Cities</i>
	On the basis that the research required all cases to be a typical instance of economic and competitive interest, the research identified and explored the UK’s Core Cities as a suitable scale and context to conduct the study and make a suitable selection from.
	<p><i>Rationale</i></p> <ul style="list-style-type: none"> • The research required cases of economic and competitive interest. • Cities are important economical drivers. • The UK Core Cities contribute more than a quarter of the combined wealth of England, Wales and Scotland (Core Cities, 2017).
Step 2	<i>Selection Process – Performance Rankings</i>
	To inform the selection a review of city rankings was conducted based on index and classification categories to allow for a degree of comparability (see Appendix 3.3). Rankings selected were specifically chosen to highlight key theoretical concepts identified in the literature such as, entrepreneurship, social capital, network capital, institutions and urban economic development. With the view to help identify cases that would have theoretical relevance and consequent methodological significance to inform theoretical discussions and its development.
	<i>Rationale</i>

	<ul style="list-style-type: none"> • Varying demonstrable economic, cultural and competitive interest. • Diverse city economies with differing economic and cultural strengths. • Significant areas of intrigue that correlate with the theoretical review of literature.
Step 3	<i>Selection Process – Contextual & Demographic Statistics</i>
	<p>Conducted a review of context-based indicators to establish a contextual profile of each case study. These indicators were primarily sourced from the Office for National Statistics, Centre for Cities, Government and City Council commissioned research. The selection related to historical trends, geographic information (population size and area), economic performance (education, employment, unemployment and Gross Value Added), demographic (age and race), quality of life data and proxy measures for entrepreneurship and innovation (start-up rates, incubators and universities).</p>
	<i>Rationale</i>
Step 4	<i>Selection Process – Review of Policies</i>
	<p>Extensive review of the relevant economic strategy and development policy documents sourced from the Council and government websites. These documents were subject to a keyword analysis to acquire an understanding of the coverage of the themes identified in the literature. This focused on identifying the extent to which they prioritized key areas of the literature such as entrepreneurship, culture, innovation, skills, social capital etc. It was the intent to provide a contextual perspective on the theoretical themes they prioritised and gave emphasis to in their related activities. A summary of the key search terms and phrases used to carry out a thematic content analysis is provided in the appendix.</p> <p>Birmingham</p> <ul style="list-style-type: none"> - Development Plan, Birmingham City Council, 2011-2031 - Big City Plan - Unitary Development Plan, Birmingham City Council, 2017 - Birmingham Skills Investment Plan, 2016-2026 <p>Bristol</p>

	<ul style="list-style-type: none"> - Core Strategy, Bristol City Council, 2011 - Bristol Local Plan, Bristol City Council, - Bristol Central Area Plan, 2015 <p>Cardiff</p> <ul style="list-style-type: none"> - Local Development Plan, Cardiff Council, 2006-2026 - What Matters, Cardiff Council, 2010-2020 - The Corporate Plan, Cardiff Council, 2017-2019 - Economic Development and Regeneration, Welsh Government, 2016 - Cardiff’s Livable City Report, Cardiff Council, 2017 - Cardiff Improvement Plan, Cardiff Council, 2016-2017 - Prosperity for All, Welsh Government 2017 - Draft Local Well-being Plan, Cardiff Council, 2017 - Local Well-being Assessment, Cardiff Council, 2017 - Well-being of future Generations Act, Cardiff Council, 2015 <p><i>Rationale – Key Priorities</i></p> <p>All had no or limited reference to entrepreneurs or entrepreneurship. Strong focus on business and also wellbeing. Some reference to neighboring communities and transportation networks.</p>
<p>Step 5</p>	<p><i>The Selection – Theoretically Interesting</i></p> <p>Decided on Birmingham, Bristol and Cardiff. The three cases have been selected on theoretical grounds to illuminate or illustrate contextual characteristics that have an influence on urban economic development. The interrelated influence of institutions, entrepreneurship and networks is a relatively under researched phenomenon. In this sense the research is primarily exploratory. In this study, the choice of multiple case studies is a preliminary attempt to develop theory in a relatively under theorised area. It acts as a heuristic device that can extend existing knowledge beyond its current frontiers.</p> <p>It was the intent to capture:</p> <ul style="list-style-type: none"> - Variations in formal and informal institutions - Variations in social network capital

	<ul style="list-style-type: none"> - Variations in entrepreneurial capital - Understand how place-based characteristics can influence these variations.
	<i>Rationale</i>
	<ul style="list-style-type: none"> - Importance as economic hubs - Combination of their diverse economic and cultural strengths and proximity to one another - Intriguing contrast in their strengths and historical development

Appendix 3.3 – Review of City Rankings

Step 2 – Summary of review of city rankings

	Ranking	Best performer
UK Competitiveness Index (2019)	7 th Bristol 16 th Cardiff 26 th Birmingham	Bristol
Most entrepreneurial cities in the UK	7 th Birmingham 8 th Bristol 9 th Cardiff	Birmingham
The Top 10 UK Cities For MBA Entrepreneurs	1 st Birmingham 7 th Bristol *Cardiff not included	Birmingham
21 Best Cities in Britain for Business (2019)	2 nd Bristol 7 th Cardiff 9 th Birmingham	Bristol
Happiest cities to work in the UK	3 rd Birmingham 10 th Bristol	Birmingham

(OPP, 2019)	*Fulfilment among employees was reported to be at its lowest in Cardiff		
Pwc Good Growth Indicators “Model your City”, interactive city modeler (2016)	Birmingham	Majority of indicators were average (5: health, work-life-balance, sectoral balance, transport, environment), followed by below average (4: jobs, income, owner occupation, skills) then above average (2:house price to earnings, environment).	Bristol
	Bristol	Majority of indicators are average (7: income, work-life-balance, sectoral balance, house prices to earnings, owner occupation, transport, income distribution) the remainder are above average (4: jobs, health, skills, environment).	
	Cardiff	Majority of indicators were average (6: jobs, sectoral balance, house price to earnings, owner occupation, skills. Environment), followed by above average (3: work-life-balance, transport, environment), and below average (2: income, health).	

Appendix 3.4 - Postal Survey Invitation Cover Letter

Dear Sir/Madam,

I am currently undertaking a research project funded by the Economic and Social Research Council (ESRC) and Cardiff University School of Geography and Planning that aims to gain a better understanding of Cardiff as a business environment. As part of the study I am gathering survey information from a pool of Cardiff's leading companies, in order to contribute to the future understanding of Cardiff as a business environment and its needs. The findings from this research will be used to see how well Cardiff City Council and its partners are doing at delivering the business environment and services that matter most to you, and to decide what needs to be done differently.

The enclosed questionnaire invites you to provide us with some information, which will greatly assist our work. The questionnaire consists mainly of tick box responses and should take no longer than 5 minutes to complete. All responses will remain confidential, with data only used on an aggregate basis. The results of the survey will be used to shape future policy recommendations to help Cardiff's business environment to improve and maintain the competitiveness of its businesses. With this in mind please find enclosed the following documents for your consideration:

1. An information sheet answering frequently asked questions,
2. A short questionnaire regarding your experiences and satisfaction with Cardiff as a business environment, and;
3. A stamped, self-addressed envelope to return the questionnaire.

I am sure you recognise the need for strong and appropriate business support across the UK, particularly during this challenging economic climate, and your completion of the

questionnaire will be of great benefit in helping us achieve our aims. We would be most grateful if you could return the questionnaire in the enclosed stamped and self-addressed envelope within 2 weeks of receipt of this letter. As a small appreciation of our thanks, upon receipt of your response you will be entered into a prize draw with the chance of winning a luxury hamper.

If you have any questions or concerns about taking part in this questionnaire, please feel free to contact myself by email at DickinsonM@cardiff.ac.uk. Finally, I would like to thank you for your time in reading this invitation and hope to hear from you in the near future.

Yours faithfully,

Melissa Dickinson
Ph.D. Researcher
Project Co-ordinator

Appendix 3.4 – Business Survey Question Wording and Content

While the most common ranking scale used in this questionnaire was the use of a one-point or five-point Likert scale question to assess the attitudes of respondents. Typically, this format asks respondents to look at a range of logical and mutually exclusive statements, for instance “where possible promotes local trading” respondents were then asked to “rank” assertions according to the degree to which they were “satisfied-dissatisfied” or “agreed-disagreed” with a particular statement. Further to this, to avoid confusion double-barrelled questions were avoided throughout the design of the instrument as they often lead to ambiguous and unreliable data.

Appendix 3.5 - Online Survey Invitation Cover Email

Dear \${m://FirstName},

I am a PhD student at Cardiff University, and I am undertaking a research project looking into Cardiff as a business environment on behalf of Cardiff University and the Economic and Social Research Council. As such I would appreciate your views on Cardiff as a place to do business and hope that you will be able to spare a few minutes of your time to answer 12 simple survey questions, which **should take no longer than 5 minutes to complete**. Please take this opportunity to have your say.

To participate in this survey: \${l://SurveyLink?d=Please%20click%20here}. Everyone who completes a questionnaire will be entered into a prize draw with a chance to win a luxury hamper and will be provided with a summary of the research findings.

I have set out a little more information on the purpose of the research and the survey below.

The aim of this research is to contribute to the future understanding of Cardiff as a business environment and its needs. The findings from this research will be used to see how well Cardiff City Council and its partners are doing at delivering the business environment and services that matter most to you, and to decide what needs to be done differently in the future.

Please take this opportunity to have your say. It does not matter if you have only just moved into the area or if you do not have an extensive knowledge of Cardiff. Your involvement will ensure that the views expressed are representative of all businesses within the Cardiff Local Authority. We believe it is important that we hear everybody's views.

Most of the questions are multiple choice, asking for your experiences and opinions on conducting business in your local area, (by your local area, this refers to your Local Authority, Cardiff). Please follow the link above to complete the survey online.

As indicated above, everyone who completes a questionnaire has the option to be entered into a prize draw with a chance to win a luxury hamper. The lucky winner will be selected at random from all returned questionnaires and notified via email.

All personal information will be anonymised on receipt (the questionnaire responses will not be attributed to any individual or company), stored securely and treated in the strictest confidence.

I very much hope you take part and thank you very much for your help in advance. If you have any questions, concerns or would like to find out more about this survey or the research please contact myself at SurveyESRC@Cardiff.ac.uk.

[Frequently asked questions](#)

Kind regards,

Melissa

Appendix 3.6 - Survey Frequently Asked Questions

Frequently Asked Questions

1. Why do we need your help?

The more businesses that take part the louder the voice of the Birmingham business community will be. Central and local government, businesses, community organisations and many others need the impartial and up-to date views (and statistics) from businesses. To stimulate research and help them make decisions that affect the lives of everyone living and working within the Birmingham Local Authority.

2. Why me? Why should I take part?

It would not be practical for us to gather information from everyone, so to ensure fairness we select a number of businesses operating in a range of sectors to help us. By ensuring that every type of business is represented, we build a full and accurate picture of society and the economy. We involve you/the business community as we value your contribution and listen to your views when reviewing our survey findings and processes to ensure your views are represented

The purpose of this study is to provide accurate and up to date information about the current economic business conditions within Bristol, Birmingham and Cardiff. The information collected will help to provide the council with a clear picture of the business communities' views, and in turn, help to support local businesses.

2. What is the research about?

The research is looking at Bristol, Birmingham and Cardiff's business community. Investigating how activity orientating towards entrepreneurship and social-business interrelationships shape, promote, and hinder business activity and ultimately economic development.

It is the intent to gain an understanding as to how an urban environment can contribute to or hinder economic development from the perspective of local individuals, businesses and employers, therefore, support from individuals such as yourself is vital and would substantially aid the development of the research project.

3. What do we hope to achieve?

One of the outputs from this research will be to produce recommendations describing what can be done to maximize and improve urban economic development within the cities of Bristol, Birmingham and Cardiff. Through the provision of information and advice regarding the cities identified strengths, challenges and limitations to create an overarching picture.

Given the topical nature of the research, I am hopeful that it will provide valuable feedback and support to the future development of the cities of Bristol, Birmingham and Cardiff, and those involved in the city's ongoing development and success.

4. Will my information be kept safe?

Your information will be treated in the strictest confidence. Any published statistics will not identify any individual or business. We recognise that you are sharing confidential/personal information with us and treat it as confidential. Keeping information secure is a fundamental part of the Economic and Social Research Council's Code of and Cardiff's School of Geography and Planning's business practices.

The research has received full ethical approval from Cardiff's School of Geography and Planning, and will strictly uphold the data protection protocols in accordance with the Data

Protection Act. All participants will be provided with the opportunity to remain completely anonymous, and personal information will not be passed onto any third parties.

Additionally, the research is supervised by world-known researchers, Professor Rob Huggins and Professor Gill Bristow, whom have vast experience in the field.

5. How can I get in contact with you?

If you have any questions or concerns regarding the research request, please feel free to contact myself by email (ESRCSurvey@cardiff.ac.uk) at any point.

Thank you. The success of this project relies on your valued participation in this survey and for this, all participants will be automatically entered into a prize draw with the chance to win a luxury hamper.

Appendix 3.7 - Example KBF Survey



Cardiff Business Questionnaire

In partnership with:

- The Economic and Social Research Council
- The School of Geography and Planning

Throughout this questionnaire we ask you to think about 'your local area'. When answering, please consider your local area as the Local Authority in which you are located. For example, the Local Authority of Cardiff.

SECTION 1: BUSINESS PROFILE

Please mark the appropriate box with an 'x' or fill in the text boxes, as appropriate.

(1) How many people does your company employ at your Cardiff site including both part and full time workers?

SECTION 2: LOCATIONAL QUESTIONS

(2a) Why is your company located in Cardiff? (Please mark all that apply)

On a scale of agreement:	Strongly Agree	Somewhat agree	Neither agree or disagree	Somewhat disagree	Strongly disagree
Personal connections					
Geographic location (proximity to other cities)					
Transportation links & infrastructure					
Financially viable location					
Access to a talented workforce					
Access to customers, partners & suppliers					
Strong business community					
Business-friendly regulations					
A unique culture & local character					

Other (please state):

(2b) Overall, how would you rate Cardiff as a place to do business?

Excellent	Good	Average	Poor	Terrible

(2c) Please expand on your reasons for this answer:

2 of 8

(3) In your experience, does Cardiff facilitate the following?

On a scale of agreement:	Strongly Agree	Somewhat agree	Neither agree or disagree	Somewhat disagree	Strongly disagree
Good opportunities to have a strong voice & influence					
Stable, transparent and attractive regulations & policies					
Partnerships between universities & businesses					
Strong entrepreneurial spirit or a culture of innovation & creativity					
Opportunities to access business friendly resources, advice & local support networks					

SECTION 3: YOUR LOCAL GOVERNMENT CONTEXT

(4) How does Cardiff's Local Authority influence your business activity or involvement in entrepreneurial activities through the following?

On a scale of agreement:	Strongly Agree	Somewhat agree	Neither agree or disagree	Somewhat disagree	Strongly disagree
Good communication with your Local Authority who are knowledgeable about business situations					
Engages with & provides support to entrepreneurial talent & businesses					
Holds business events, inspires interaction, & recognises local entrepreneurs/ businesses					
Encourages business mentoring, accelerator programs, incubators, & university connections					
You are aware of access to financial support (preferential taxes, government grants, equity finance or venture capital)					

(5) In your experience, do the policies and regulations of Cardiff City Council contribute to the following:

On a scale of agreement:	Strongly Agree	Somewhat agree	Neither agree or disagree	Somewhat disagree	Strongly disagree
Provide strategic leadership & proactive approaches to business support					
Assists with business skills & capacity development					
Encourages the employment of graduates & apprenticeships					
Where possible promotes local trading					
Increases turnover/ productivity					
Increases capacity to access new resources					
Is an obstacle to business success with unclear & confusing steps & procedures					

(6) Overall, what are your views on the following aspects of your local area?

On a scale of satisfaction:	Strongly Agree	Somewhat agree	Neither agree or disagree	Somewhat disagree	Strongly disagree
Business rate costs					
Quality & affordability of premises					
Low rates of crime & anti-social behavior					
Ability to recruit the right staff					
Ability to access business support					
Presence of an entrepreneurial business culture					

SECTION 4: YOUR LOCAL BUSINESS COMMUNITY

(7) Does a business community exist in Cardiff? (A 'business community' typical refers to a locally rooted group of individuals with a common interest who collaborate by sharing ideas, information and, other resources).

Definitely	Probably	Maybe	Probably not	Definitely not

(8a) How often do you as a representative of the company interact with the following: (The term 'interaction' typical refers to a reciprocal action, influence or communication between two or more people).

On a scale of occurrence:	Daily	2-3 times a week	Once a week	2-3 times a month	Monthly	Once every 2-3 months	Less often	Never
Other businesses in the same sector/industry								
Other businesses in a different sector/industry								
Private research institutes/consultants								
Higher education/universities/research institutes								
Freelancers/individual talent								

(8b) How would you characterise your interactions?

On a scale of agreement:	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree
Work related contractual agreements					
Leads to effective problem solving					
Provoke creativity & innovation					
Interactions are mutually supportive					
Interactions are honest & reliable					
Interactions are personally & socially supportive					

(9) In practice, how useful or beneficial have your business relationships proven to be?

On a scale of agreement:	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree
Secured reliable information about your operating environment					
Stimulated new knowledge & ideas					
Led to leads & referrals					
Increase in turnover, competitiveness & productivity					
Communication & collaboration results in strategic alliances & enterprise collaborations					
Connect with key influencers in your industry					
Increased innovation & creativity					

SECTION 5: QUALITY OF PLACE

(10) In the context of Cardiff, how important are the following factors for your business and its staff?

On a scale of agreement:	Extremely important	Very important	Moderately important	Slightly important	Not at all important
Range & quality of events in the city					
Quality of public spaces, recreational & cultural amenities					
Access to diverse & creative spaces					
Availability of good quality housing					
Overall feeling of safety					

Please complete the following (all information is confidential):

Name of company	
Please state your position within the business? (For example, managing director, financial director etc.)	
Please state the postcode of your Cardiff site	
Please state the business's Standard industrial Classification (SIC) code? (This can be found on Companies House – for example '6201: Computer Consultancy Activities)	
Please state if you would like to be entered into the prize draw	

Is there anything else you would like to add? (Please state below)

Thank you for taking the time to complete this questionnaire.

Please return via the pre-paid addressed postal envelope enclosed or return to:

**Melissa Dickinson,
School of Geography and Planning,
Cardiff University,
Glamorgan Building,
King Edward VII Avenue,
Cardiff
CF10 3WA.**

If you have any queries please get in touch at DickinsonM@cardiff.ac.uk

Appendix 3.8 – Questionnaire Design and Development

Question themes and rationale

Section 1:
Business Profile

The first section, *Business Profile*, consisted of a single open-ended question to identify the number of employees employed on site for the purpose of identifying the size of the firm.

Section2:
Locational Questions

The first item in the *Locational Questions* section addressed why the firms were located in their respective city, this was presented as an open-ended 5-point matrix question with a choice of nine options followed by an ‘other’ option, measured in agreement. The second item required respondents to rate their city as a place to do business, this was presented in an open ended 5-point Likert scale question ranging from ‘excellent’ to ‘very poor’, they were further asked to give their reasons for their answer. The third item, presented five propositions about their city based on the literature (see Chapter 2) in a 5-point matrix question with a choice of five options measured in agreement.

Section 3:
Your Local Government
Context

The third section, *Your Local Government Context*, asked respondents to consider and answer three matrix questions to indicate their level of satisfaction or agreement with a set of statements made about their local (formal) institutional environment. The questions were shaped by previous studies and the review of literature (Robb and Farhat, 2011; Pws and Demos, 2015; CBI and CBRE, 2016). The first item addressed how their Local Authority influenced their business activity or involvement in entrepreneurial activities through five statements measured in agreement. The second item asked them to rate seven statements (in agreement) on their experience of Cardiff City Councils’ policies and regulations, and a third item required respondents to rate their satisfaction of seven aspects of their local area.

Section 4:
Your Local Business
Community

Section 5:
Quality of Place

In the *Your Local Business Community* section, the first item questioned if a business community existed measured by a 5-point Likert scale ranging from ‘definitely’ to ‘definitely not’. The second looked at the frequency of firm interaction with six key actors measured in frequency ranging from ‘daily’ to ‘never’, to then enquire how they would characterise these interactions with six options informed by the literature measured in agreement. The third explored how beneficial or useful business relationships have proven to be demonstrated by seven options measured by agreement.

In the *Quality of Place* section, respondents were required to express their views on five aspects of their local informal institutional environment based on previous research, such as Landry (2002), Florida (2002; 2012), and Storper (2010), measured from ‘extremely important’ to ‘not at all important’.

Appendix 3.9 - Knowledge Based Firm Standard Industrial Classification (SIC) Codes

SIC2007 4-digit codes for Knowledge Based Firms

<u>4-digit code</u>	<u>Description</u>
1820	Reproduction of recorded media
2110	Manufacture of basic pharmaceutical products
2120	Manufacture of pharmaceutical preparations
2611	Manufacture of electronic components
2612	Manufacture of loaded electronic boards
2620	Manufacture of computers and peripheral equipment
2630	Manufacture of communication equipment
2640	Manufacture of consumer electronics
2651	Manufacture of instruments and appliances for measuring, testing and navigation
2652	Manufacture of watches and clocks
2660	Manufacture of irradiation, electromedical and electrotherapeutic equipment
2670	Manufacture of optical instruments and photographic equipment
2711	Manufacture of electric motors, generators and transformers
2712	Manufacture of electricity distribution and control apparatus
2720	Manufacture of batteries and accumulators
2790	Manufacture of other electrical equipment
3030	Manufacture of air and spacecraft and related machinery

3250	Manufacture of medical and dental instruments and supplies
5821	Publishing of computer games
5911	Motion picture, video and television programme production activities
5912	Motion picture, video and television programme post-production activities
5913	Motion picture, video and television programme distribution activities
5914	Motion picture projection activities
5920	Sound recording and music publishing activities
6010	Radio broadcasting
6020	Television programming and broadcasting activities
6110	Wired telecommunications activities
6120	Wireless telecommunications activities
6130	Satellite telecommunications activities
6190	Other telecommunications activities
6201	Computer programming activities
6202	Computer consultancy activities
6203	Computer facilities management activities
6209	Other information technology and computer service activities
6311	Data processing, hosting and related activities
6312	Web portals
6391	News agency activities
6399	Other information service activities n.e.c.
6411	Central banking
6419	Other monetary intermediation
6420	Activities of holding companies
6430	Trusts, funds and similar financial entities
6491	Financial leasing
6492	Other credit granting
6499	Other financial service activities, except insurance and pension funding, n.e.c.
6511	Life insurance
6512	Non-life insurance
6520	Reinsurance
6530	Pension funding
6611	Administration of financial markets
6612	Security and commodity contracts brokerage
6619	Other activities auxiliary to financial services, except insurance and pension funding
6621	Risk and damage evaluation
6622	Activities of insurance agents and brokers
6629	Other activities auxiliary to insurance and pension funding
6910	Legal activities
6920	Accounting, bookkeeping and auditing activities; tax consultancy
7010	Activities of head offices
7021	Public relations and communication activities
7022	Business and other management consultancy activities
7111	Architectural activities

7112	Engineering activities and related technical consultancy
7120	Technical testing and analysis
7211	Research and experimental development on biotechnology
7219	Other research and experimental development on natural sciences and engineering
7220	Research and experimental development on social sciences and humanities
7311	Advertising agencies
7312	Media representation
7320	Market research and public opinion polling
7810	Activities of employment placement agencies
7820	Temporary employment agency activities
7830	Other human resources provision
9511	Repair of computers and peripheral equipment
9512	Repair of communication equipment

Appendix 3.10 – Piloting the Survey Questionnaire

The questionnaire has undergone numerous stages of alteration and improvement to test the validity, and eliminate any problems with the instructions and design of the instrument before it was distributed to its target audience, directors and managers of knowledge-based firms (Moser and Kalton, 1985; Robson, 2002; Malhotra, et al. 2006; Zikmund, Babin & Griffin 2010).

The following stages were undertaken to thoroughly pilot test the questionnaire before dissemination: **Pilot 1:** Initially a Word version of the business questionnaire was pilot tested on two academics considered experts within the field of urban research and economic geography. This was carried out/executed between the months of May 2016 to June 2016, their comments and feedback was used to reduce the number of questions from 26 to 11. The number of categories offered for scaled closed-ended questions was reduced and the technical wordings of some questions were further simplified or clarified. **Pilot 2:** Five revised questionnaires were distributed to research candidates of varying ages and research backgrounds between the months of May 2016 to June 2016. It was the purpose of the pilot to uncover possible typing errors, causes of confusion and doubt, to test the suitability of the layout and ordering, identify misleading questions, repetition, ambiguities, overall clarity and the appropriate use of technical terms (Malhotra, et al. 2006; Zikmund, Babin and Griffin, 2010). **Pilot 3:** The wording of the questionnaire benefitted from a third pilot administered between the months of June 2016 to July 2016 to approximately fifteen individuals of varying ages and professional backgrounds. Their critical reading and suggestions improved the final content and cleared up

any assumptions that had been made in the content and design of the instrument. Based on their responses the third pilot of the instrument was followed by a revised questionnaire, that included clarification of technical terms and verified whether the survey measures and results would provide adequate feedback to inform the overall study's aim (Sekaran, 2004). After the third pilot study had been completed and appropriate alterations made an online version of the survey was built on online software's such as Survey Monkey, Google Forms, Qualtrics and Limewire. From which the latter two proved to be the most suitable due to particular qualities such as the overall quality of presentation, the ability to personalise the instrument, rules of layout, capacity to send personalised emails, and the capability to have introductory and/or guidance text. The final online instrument was built on Qualtrics due to its ease of use and suitability. **Pilot 4:** A final pilot was carried out in August 2016 with five managing directors from a variety of industries in the knowledge-based sector to screen the instrument for appropriateness (Hussey and Hussey, 1997:163; Hair, et al. 2010). Their discussion and comments proved invaluable, especially as they were anticipated to have similar attitudes, motives, experiences and behaviours as the population to be studied (Fowler, 2002). For example, from the comments provided by the fourth pilot the introductory email was reordered and adjusted to further persuade and clarify the reason for participating, moreover participants confirmed the instrument was clear and took approximately five minutes to complete. It follows that based on the feedback of the pilot study the design of the instrument was finalised (see Appendix: Online Business Survey).

Appendix 3.11 – Administration of The Business Questionnaire Survey

Stages of Administration

- | | |
|-----------------|---|
| Stage 1: | The final version of the business questionnaire was distributed alongside a link to a 'Frequently Asked Questions' information sheet to further explain the purpose of the study, the relevance of the information gathered and the strict code of confidentiality the research adhered to. The contact information of potential respondents within the Local Authorities of Birmingham, Bristol and Cardiff within the knowledge-based sector in a directorial or managerial position had been collected from F.A.M.E. The survey was distributed via email as an online link within the emails body of text (Appendix: Email Template) using Qualtrics Research Suite, a advanced online survey software. |
| Stage 2: | One week later a reminder email (Appendix: Reminder Email Template) was sent to prompt respondents who had not yet filled in and sent back their questionnaire. |
| Stage 3: | Two weeks later another reminder email was sent. |

Stage 4: Five weeks later, a replacement email consisting of everything included in ‘Stage 1’ was sent out to respondents who had not yet completed it.

Stage 5: Those who had started their survey were contacted to remind and encourage respondents to complete the online survey form.

Appendix 3.12 – Rationale for Interviewees

Rationale for Interview Respondents

Key Reference Stakeholder Groups	How the selection of participants will inform theoretical discussions
<p>Government Public Sector Officials:</p> <ul style="list-style-type: none"> - City Council - Chamber of Commerce - Civic Associations - City staff (such as economic development, business development, city management and planning, community development, urban 	<p>Interviewing a variety of government representatives enabled the researcher to gain an insight into the research aims for a number of reasons. Firstly, to gather the importance placed on entrepreneurial capital, informal institutions, network capital and urban economic development. Secondly, to acquire a sound understanding of the nature of the relationship between council and government officials and the local business community. For example, speaking with economic development officers allowed the researcher to see how they perceive and interact with the local business community. Thirdly, to acquire an insight as to how policy was formulated and is implemented. Accordingly, these entities have responsibility for socioeconomic opportunities, business development and growth, facilitating collaboration and local business networks. Thus, they should inform the following:</p> <ul style="list-style-type: none"> - Those who affect (determine) a decision, action, policy - Policy priorities & government direction - How decisions are made? - How the business community is approached? - Are these formal institutional frameworks capable, effective and efficient?

<p>regeneration, etc) - Policymakers *Categorised as public stakeholders</p>	
<p>Organizations, Unions & Trade & Industry Associations: - Business Associations - NESTA - Economic Development Companies - Business Councils - Partnerships - Municipal authorities - Community leaders - Advisory bodies *Categorised as private stakeholders</p>	<p>By interviewing managers, major stakeholders and entrepreneurs, the researcher hopes to obtain first-hand, relevant and detailed information about stakeholder management and (lack of) involvement in the development process and core business priorities. To allow the researcher to acquire an inside view as to how private stakeholders perceive themselves, other key stakeholder groups and their work. It enabled the researcher to acquire a knowledgeable view of current events as according Grimble and Wellard (1997), “<i>stakeholder analysis can be defined as a holistic approach or procedure for gaining an understanding of a system (...) by means of identifying the key actors or stakeholders and assessing their respective interests in the system</i>”.</p> <p>To identify:</p> <ul style="list-style-type: none"> - Perceptions of mechanisms in place - Involvement (or lack of) - Foresee potential challenges? And how can these challenges be dealt with? - Acquire personal experiences, knowledge, engagement and opinions - Involvement in networking and community activities - What is (and can be) done in each of the research areas to improve the situation for the better?
<p>Network Facilitators and/ or Enablers: - Creative, Entrepreneurial Business Networks (including entrepreneurs) - Business Community Event Organizers/ Facilitators - Community Economic Development Networks - University Links (Cooperation and coordination) (Bridging and bonding)</p>	<p>The potential influence of economic actors, community initiatives, social networks, partnerships and policy networks in shaping socioeconomic, entrepreneurial and development opportunities and outcomes are the subject of considerable scholarship. As such, it is of significant interest to the researcher to acquire their views, experiences and recommendations.</p>

<p>*Categorised as private stakeholders</p>	
<p>Key Figures & Leading Experts:</p> <ul style="list-style-type: none"> - Public Advisors - University Advisors - Professional practitioners - Academics - Entrepreneurs 	<p>Non-governance stakeholders with interests in a vision of pro-growth, improvement development and the outcomes of development and community projects have become increasingly more active in governance, advisory arrangements and the future development of policy areas (Bulkeley and Betsill, 2013; Taylor, Wallington, Heyenga, & Harman, 2014). Interviewing knowledgeable experts working within the research parameters that had expertise in the sphere of social capital and economic development or have conducted research into the economic development of the case study areas could provide an interesting perspective on the research issues. For partnerships and knowledge networks to flourish, it is critical to understand how diverging interests and specialized knowledge can and have shaped behaviors and the future development of urban areas.</p> <p>To identify:</p> <ul style="list-style-type: none"> - What actions are necessary to overcome the identified limitations and challenges of the case areas? - Policy success, failures and missed opportunities
<p>*Categorised as either public or private stakeholders</p>	

Appendix 3.13 - Example Interview Invitation Cover Email

Dear XXXX,

I am currently undertaking a research project on behalf of the Economic and Social Research Council (ESRC) and Cardiff University that aims to give a better understanding of Bristol as a business environment. The research is investigating how differing urban environments shape and promote business success and ultimately economic development within the cities of Birmingham, Bristol and Cardiff.

As part of this study, I am seeking to gain an understanding as to how key stakeholders contribute to economic development, including those from the business, academic, government spheres, and also the third sector and civil society. Therefore, support from individuals such as yourself is vital and would substantially aid the development of the research project. Given the topical nature of the research. I would very much like to gain your opinions, experiences, reflections and perspectives on this subject based on your role as XXXX. Your support in this research would be vastly valuable and substantially aid the development of the research project. Accordingly, **would you be willing to take part in a single interview that would last no more than an hour at a date, time and place of your convenience?** One of the outputs from this research will be to produce recommendations describing what can be done to maximize and improve Bristol's ongoing development and success through the provision of information and advice regarding the strengths, challenges and limitations identified in each city, thereby providing stakeholders in each city with a comparative analysis.

The research has received full ethical approval from the School of Geography and Planning, and will strictly uphold the data protection protocols in accordance with the Data Protection Act. All participants will be provided with the opportunity to remain completely anonymous, and personal information will not be passed onto any third parties. The research is supervised by world-known researchers, Professor Robert Huggins and Professor Gillian Bristow, whom have vast experience in the field. On request all interview content used can be sent to participants in advanced to be reviewed. If you have any questions or concerns regarding this research request, please feel free to contact me via email Dickinsonm@cardiff.ac.uk.

I hope you find the research of interest and are able to spare time to participate, as your views are pivotal. Finally, I would like to thank you for your time in reading this invitation and hope to hear from you in the near future.

Many thanks,

Melissa Dickinson, Ph.D. Researcher & Project Coordinator

Appendix 3.14 - Example Interview Schedule

Interview Schedule

Introductory questions

- a. How would you characterize or describe Birmingham in terms of the quality of its business environment?**
- b. With regards to the city's development, what are the main priorities and activities of your organization?**

Core questions

- 1. Your view as to why (innovative) entrepreneurship and its promotion is important for the development of Birmingham?**
- 2a. How is entrepreneurship positively promoted by the public sector?**
- 2b. What success can you point to in terms of the actions/ influence of Birmingham City Council to do the above?**

3. Is entrepreneurship generally considered to be an achievable aspiration/option for individual's living/working in the city?

4. How does the promotion of entrepreneurship and the drive towards an entrepreneurial economy impact on the development of the city and its individuals?

5. How is entrepreneurship formally promoted through policy/initiatives/schemes?

6. How is entrepreneurship informally promoted within Birmingham?

7. Are (or how are) business connections positively promoted?

8a. Do you feel that Birmingham offers a collaborative and cooperative environment?

8b. Are you promoting cooperation and collaboration among the business community?

9. How has Birmingham cultivated a business community?

10. From your experience what are the key challenges or difficulties obstructing policies/initiatives from effectively shaping the development of Birmingham

*Notably, the size of the urban context appeared to influence the ability of individuals to provide leads and referrals. For example, in Birmingham it was often the case that stakeholders would not feel comfortable (on strong enough terms) to be able to connect with key actors. Whereas in the case of Cardiff stakeholders would share the contact details and referrals often stating, 'mention my name when you email them'.

Appendix 3.15 – Transcriptions, Coding and Thematic Analysis

In light of the above discussions, the transcribed data was initially coded and analysed manually to acquire a general understanding of the interview data and the issues under investigation. The use of manual analysis permitted the researcher to classify the raw data to cultivate ideas and make connections to the literature to then develop various research themes, concepts and issues organized into a detailed colour coded scheme corroborated with strands/themes identified in the academic review of literature (Kitchin and Tate, 2000: 234). The traditional pen and paper approach enabled the researcher to develop the reciprocal link between analysis and theory, the information extracted enhanced the researchers understanding of theoretical concepts in practice (Strauss and Corbin, 1990:23). The process of analysis led

the researcher to devise a matrix to hold the codes, sub-codes, comments and important quotations; this underwent continuous modifications a process that identified overlaps, subcategories, duplications and patterns, updated throughout the analysis process as more interviews were coded. A system of “theoretical” memos (Layder, 1998) made on post it notes was developed and continued throughout this exercise to make note of and to keep up to date with the researcher’s reflections, linkages and theoretical concepts regarding the analysis of each transcript.

Appendix 3.16 - Ethics Form

Informed Consent Form for Participation in Interview Research

Researcher: Melissa Dickinson

Project Title: The role of formal and informal institutions, entrepreneurship and networks in the development of urban environments?

Project overview: The project is investigating how differing urban environments shape and promote business success and ultimately economic development within

the cities of Birmingham, Bristol and Cardiff. As part of this study, the project seeks to gain an understanding as to how key stakeholders contribute to economic development, including those from the business, academic, government spheres, and also the third sector and civil society. To produce recommendations describing what can be done to maximize and improve Birmingham, Bristol and Cardiff's on-going development and success through the provision of information and advice regarding the strengths, challenges and limitations identified in each city, thereby providing stakeholders in each city with a comparative analysis.

Thank you for your interest in taking part in this research. Before you agree to take part, the person organising the research must have explained the project to you. If you have any questions arising from the research invitation or the explanation already given to you, please ask the researcher before you to decide whether to continue.

Participant's Statement

I agree that:

- I have read the research invitation and understand what the study involves.
- I understand that my participation is voluntary and that if I decide at any time that I no longer wish to take part in this project, I can notify the researchers involved and withdraw immediately.
- I have been given the opportunity to ask questions (face to face or via email).
- I understand that my participation will be tape-recorded, and I consent to use of this material as part of the research project.
- I understand that such information will be treated as strictly confidential and handled in accordance with the provisions of the Data Protection Act 1998.
- I understand the researcher will not identify me by name in any reports using information obtained from this interview, and that my confidentiality as a participant in this study will remain secure. Subsequent uses of records and data will be subject to standard data use policies, which protect the anonymity of individuals and institutions.
- I understand that the information I have submitted will be published as a thesis and I can be sent a copy. Confidentiality and anonymity will be maintained, and it will not be possible to identify myself from any publications.
- I have read and understand the explanation of the research project provided to me. I have had all my questions answered to my satisfaction, and I voluntarily agree to participate in this study.

Name of Participant:

Signature:

Date: