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Investigating the implementation of SME-friendly policy in public procurement

Public sector employees with responsibility for purchasing are under increasing pressure to implement SME-friendly policies. Such policies are intended to make it easier for small and medium enterprises (SMEs) to compete for and win public sector contracts. In spite of the socio-economic importance of this issue, there remains a dearth of evidence on what is happening in practice. Using primary survey data from 271 public buyers in Ireland, this paper examines the extent to which SME-friendly procurement policy is being implemented and the individual and organization factors that affect implementation. The findings reveal a gap between what government policy recommends public buyers and their organizations should do to facilitate SMEs versus what they are actually doing. Policy familiarity, procurement involvement, organization size and the maturity of the procurement function are shown to be positively associated with the implementation of SME-friendly policy. For managers and legislators, the findings underline the need to invest in the human capital dimension of public procurement if policy implementation rates are to improve.

Keywords: SME, procurement, policy, public sector.

Introduction

Policies to promote SME involvement in the public sector marketplace are in place in the majority of developed economies (OECD, 2013). Political initiatives of this kind are a direct response to the almost universal under-representation of SMEs as suppliers to public sector organizations. The available data shows that in comparison to large firms SMEs are less likely to compete for public contracts (Office for National Statistics, 2012) or emerge as the eventual winners (House of Commons Library, 2015; PwC, 2014). Given the centrality of SMEs to employment creation, entrepreneurial activity and economic growth, their under-representation in public procurement is an ongoing source of concern (European Commission, 2008; Glover, 2008). What it means, essentially, is that opportunities to leverage public procurement for strengthening the small business sector and promoting SME-driven economic growth are being missed (Preuss, 2011).

Not surprisingly, the increased attention accorded to SME-friendly procurement at political level has come to inflect academic research. For the last two decades scholars have sought to identify the barriers to SME participation in public contract competitions. Relevant here is excessive risk aversion and low standards of professionalism among public buyers, bureaucratic tendering processes, qualification criteria that favour large firms and a mismatch between the size of public sector contracts and the resources and capabilities of small suppliers (see Loader, 2013 for a full review). At the same time researchers have compared and critiqued the various policy initiatives designed to remove, or at least reduce, these same barriers (Anglund, 1999; Kidalov and Snider, 2011; Nicholas and Fruhmann, 2014). Undoubtedly, there has been extensive engagement with both the causes of SMEs' difficulties in public procurement and successive government policies designed to tackle them.

Much less attention has been paid to the translation of these policies into practice. In other words, interest in SME-friendly procurement policy has not been matched by evidence on its implementation. This led Flynn and Davis (2015a) to opine that we know more about the rhetoric of SME-friendly procurement than we do about the reality. The importance of looking beyond government pronouncements to what is happening in practice is vital. As scholars have long argued, government policy is not self-executing and what is realized in organizational practice often differs from what was originally intended by legislators and policy makers (Beyer, Stevens and Harrison, 1983; Lipsky, 1980). In the context of SME-friendly

procurement policy, public buyers may be unable or unwilling to act as legislators and other stakeholders envisaged (Georghiou et al. 2014). This, in turn, has direct implications for efforts to facilitate SMEs in the public sector marketplace.

Our study is motivated by the dearth of knowledge on SME-friendly procurement policy and its implementation. It is guided by two research questions. The first focuses on the extent to which public buyers are implementing SME-friendly policy. The second examines the individual and organization factors that affect implementation. The study makes its primary contribution by providing evidence on how and why public sector employees are responding to institutional pressures for greater SME participation in contract competitions. It extends foregoing lines of inquiry in this area, particularly Flynn and Davis (2015a, 2015b), by specifying a new predictive model and by creating a more comprehensive index of SME-friendly procurement policy than currently exists. As part of this undertaking it utilises survey data gathered in 2015, which builds on earlier findings from Flynn and Davis (2015b), GHK and Technopolis (2007) and Loader (2015). Along with its scholarly contribution, our study offers an up-to-date assessment for public administrators and business representatives groups of what has been achieved and what has yet to be achieved in reforming public procurement for SMEs' benefit.

The paper takes the following format. The next section describes the rationale for encouraging SME participation in public procurement. The third section discusses policy implementation in the context of public procurement and then puts forwards a predictive model of SME-friendly policy implementation. The fourth section sets out the research design, which covers the measurement of variables, the survey process and the profile of respondents. The fifth section reports on the findings. The sixth section discusses the findings and what they mean for scholarship and practice. The paper concludes with a summary of its contribution.

SME participation in public procurement

Government action to promote SME competitiveness now encompasses public procurement as a matter of course. The reason for this is simple. Public procurement constitutes, on average, 12.8 per cent of GDP and 29 per cent of government expenditure across developed economies (OECD, 2013). To give some indication of what this means in financial terms, the UK spends approximately £240 billion on public procurement and the EU spends €1,900 billion. This represents a significant marketplace for suppliers. Moreover, it is a marketplace that is under the control of law makers and can be leveraged in pursuit of socio-economic objectives, one of which is strengthening the SME base (Preuss, 2011). Knutsson and Thomasson (2013) provide a recent example of this in relation to local government procurement in Sweden. There the use of an enlightened approach to sourcing food supplies ensured that five small local firms were selected as the preferred bidders.

Public contracts are attractive to SMEs on many levels. For a start, they offer stable and predictable sources of demand that come with the near guarantee of payment (Cabras, 2011; Loader, 2005; MacManus, 1991). Supplying large public sector organizations enables SMEs to diversify and professionalize their operations (Ram and Smallbone, 2003) and can even lead to the commercialisation of new product and service solutions by SMEs (Georghiou et al. 2014). What is good for SMEs is also good for economic competitiveness in terms of job creation, GDP growth and entrepreneurship (European Commission, 2008). Having more SMEs bidding for public contracts is equally in the interests of public sector organizations. Facilitating their participation through sophisticated procurement strategies intensifies the competition for contracts, which leads to improved choice and better value for money for the buying organization (Caldwell et al. 2005).

Mutually beneficial as it is for SMEs and public sector organizations to do business, in reality SMEs are under-represented in public procurement and struggle to compete effectively. Evidence of this, small firms are known to be only half as likely as large firms to use the internet to either access public contract documentation or sell to public sector agencies (Office for National Statistics, 2012). As regards performance outcomes, SMEs' share of above-threshold contracts [1] in the EU currently stands at 29 per cent – only half that of their GDP contribution; although their share of below-threshold contracts is estimated to be in the region of 58-59 per cent (PwC, 2014). National level data points to a similar disparity. In the UK, for instance, approximately 26 per cent of the value of public contracts goes to SMEs as against 74 per cent for large firms (House of Commons Library, 2015).

Why SMEs struggle with public procurement has been subject of extensive research and investigation over the last two decades. The problem is said to reside not only in the tendering process, which is bureaucratic and resource intensive from the perspective of small firms (Centre for Economic and Business Research and Gatewit, 2013; Fee, Erridge and Hennigan, 2002) but also in onerous qualification criteria, overly prescriptive requirements and poorly written tender specifications (Loader, 2015). In addition to this is a public sector culture that is conservative in its approach to supply chain management and populated by under-professionalized buyers (Loader, 2005; OECD, 2013). The gap between the capacities and capabilities of small firms and the idiosyncratic requirements of public sector organizations is another acknowledged barrier (Chapman, Brown and Crow, 2008; Flynn, McKeivitt and Davis, 2015; Karjalainen and Kempainen, 2008). Thus, they are systemic, cultural and organisational causes of SMEs' under-representation in the public sector marketplace.

SME-friendly procurement policy

In direct response to SME under-representation, so-called SME-friendly policies have started to appear at national and international level. Indicative of this trend, the OECD reported that twenty-nine of its thirty-two member states have introduced plans to support SME involvement in public procurement and eleven of these have enacted policies or made specific legislative provisions (OECD, 2013). Such policies represent a corrective mechanism for low SME involvement in public procurement (Anglund, 1999). The form and intent of SME-friendly policy varies by jurisdiction. In the EU the emphasis is on creating a “level playing field” for all suppliers regardless of size (European Commission, 2008). Equality of opportunity rather than equality of outcome is the guiding policy principle and all EU Member States are bound by it under Procurement Directive 2014/24/EU. By contrast, the USA and other non-EU countries pursue more interventionist strategies such as set-asides for domestic SMEs (Kidalov and Snider, 2011).

Government formulation and adoption of SME-friendly policy does not automatically bring about change in public procurement. Rather, for change to come about public buyers have to act on policy and embed it in their everyday procurement practice; that is, they have to assume the role of policy implementers (Beyer, Stevens and Harrison, 1983; Lipsky, 1980). As Georghiou et al. (2014, 10) have observed, procurement policies are “owned by ministries and agencies” but their successful implementation ultimately depends on the initiative of public buyers. Ability and willingness to act on policy cannot be taken for granted. Policy implementation presupposes that public servants have the requisite knowledge, skills, experience and organization support to make it succeed (Blount and Hill, 2015). It also presupposes that public servants have a sense of ownership and attachment to a particular policy (Tummers, Bekkers and Steijn, 2009) and do not experience conflicts between implementing it and existing obligations to their organizations or clients (Tummers et al. 2012).

Research to date suggests that the implementation of SME-friendly policy in public procurement has not been systematic. Over a decade ago a survey of public buyers across the EU revealed that adoption rates of SME-friendly policy were moderate to low (GHK and Technopolis, 2007). To illustrate, 60 per cent were allowing consortia to jointly fulfil technical or financial requirements, 58 per cent were utilizing e-procurement, 38 per cent were dividing contracts into lots and 10 per cent were publishing Prior Information Notices (PINs). Some years later, evidence adduced by Flynn and Davis (2015a, 2015b) based on public buyers' reported behaviours and suppliers' reported experiences uncovered a similar pattern: implementation was incomplete and some SME-friendly practices were being implemented more than others. The overall impression Flynn and Davis (2015b) drew was that SME-friendly procurement was truncated in form, with everyday practice falling short of policy aspirations. This same trend has been observed of public procurement policies generally. Studies have shown, for example, that the implementation of sustainability initiatives in public procurement has been selective (Walker and Brammer, 2009; Young, Nagpal and Adams, 2016) and that even deviation from legally-binding EC Procurement Directives is not uncommon (DeBoer and Telgen, 1998; Martin, Hartley and Cox, 1999).

Implementing SME-friendly procurement policy

Why public buyers do not always act on SME-friendly policy has received scant attention in the literature. One exception is Flynn and Davis (2015b). They undertook a post-hoc analysis of factors associated with the implementation of a bundle of ten SME-friendly measures. Their findings indicated that attributes of the individual buyer as well as organizational context affect the probability of successful policy implementation. Tangential to this, studies in the procurement field have revealed that both individual characteristics and organization context matter when explaining the implementation of policies and regulations (Blount and Hill, 2015; Gelderman, Ghijzen and Brugman, 2006; Hawkins and Muir, 2014; McMurray et al., 2014). On this basis we put forward a predictive model that understands SME-friendly policy implementation to be a function of individual buyer characteristics such as experience and professionalism and organizational characteristics such as size and public sector type (see Figure 1). Each of the predicted relationships is discussed below.

<Insert Figure 1 here>

Procurement experience is the first of four individual characteristics anticipated to influence SME-friendly policy implementation. Experienced public buyers can reasonably be expected to have the skillset and confidence to interpret and appropriately respond to new procurement policies. As well, the skills and expertise they have accumulated should make them better placed to understand the strengths and weaknesses of smaller and younger suppliers. Novice public buyers, on the other hand, may be less assured of putting new policies into practice or facilitating smaller and atypical firms in contract competitions. Suggestive of this, Hawkins and Muir (2014) found that procurement experience was a significant factor in explaining compliance with rules governing the award of service contracts among public buyers in the USA. Thus,

H1a: There is a positive relationship between procurement experience and implementation of SME-friendly policy.

Procurement professionalism is also expected to be positively associated with the implementation of SME-friendly policy. Several studies have demonstrated that properly trained, qualified public buyers exhibit higher levels of regulatory compliance (DeBoer and

Telgen, 1998; Karjalainen and van Raaij, 2011). Undertaking an approved course of study or training in procurement educates buyers about the regulatory environment and gives them the technical and analytical skills to be able to satisfactorily implement policy. Supportive of such a relationship, findings by Blount and Hill (2015) point to the salutary effect of training on public buyers' adherence to executive orders for the inclusion of ethnic-minority owned firms in their supply chains. Interestingly, a lack of qualifications is considered to at least partly explain the excessive risk aversion of some public buyers and their reluctance to transact with smaller suppliers and/or new market entrants (Glover, 2008). Thus,

H1b There is a positive relationship between procurement professionalism and implementation of SME-friendly policy.

Procurement involvement, by which is meant the extent to which procurement constitutes the role of a public servant, is the third individual characteristic in our model expected to make SME-friendly policy implementation more likely to happen. Procurement in the public sector is notable by the fact that it is often carried out by public servants whose primary work role is something other than procurement (Flynn and Davis, 2015b). The indications are that public servants who spend most or all of their time on procurement-related activity are more likely to act on policy compared with "devolved buyers" i.e. public servants for whom procurement is an ancillary part of their work role (Preuss, 2011). The reason being that the former group is more likely to possess the time, resources and expertise to translate policy into practice (Flynn and Davis, 2015b). Moreover, they have a career interest in conforming to institutional standards. Thus,

H1c There is a positive relationship between procurement involvement and implementation of SME-friendly policy.

The fourth individual buyer characteristic associated with SME-friendly policy implementation is policy familiarity. In order to be able to act on policy one must first be aware of its existence, familiar with its content and appreciative of the expectations it places on them. Not surprisingly, policy and regulatory familiarity is known to be deterministic of compliant behaviour among public buyers. It was the single most important factor in explaining the adoption of sustainable purchasing practices in a study of Malaysian buyers by McMurray et al. (2014). It was also significant in predicting the likelihood of Dutch public buyers complying with EC Procurement Directives (Gelderman, Ghijsen and Brugman, 2006) and USA public buyers' propensity to give effect to environmentally-conscious purchasing (National Institute of Government Purchasing, 2013). Thus,

H1d There is a positive relationship between policy familiarity and implementation of SME-friendly policy.

As well as individual characteristics, organization context can influence the implementation of SME-friendly procurement policy. In the first instance, we contend that the size of the public sector organization is relevant. The prediction is that the larger the organization the more likely it is to implement procurement policy. There are two primary reasons for this predicted effect. First, public servants working in larger organizations are more favourably positioned to respond to new procurement policies, be they in relation to facilitating SMEs, sustainability or any other area of supply chain management. Principally, this is because in larger organizations public servants have greater administrative support, organizational slack, financial resources and information technology capabilities at their disposal (Flynn and Davis, 2015b). Second, large

public sector organizations have a high degree of institutional exposure (Meyer and Rowan, 1977). As a result, public servants working in large organizations are under more pressure to adhere to institutional expectations. Thus,

H2a There is a positive relationship between organization size and implementation of SME-friendly policy.

The maturity of the procurement function is another factor likely to affect SME-friendly policy implementation. The role that procurement plays in organizations can range from an administrative support function at one end of the spectrum to a driver of business strategy at the other end of the spectrum (Reck and Long, 1988). Procurement as an administrative support function implies low status in the organization hierarchy and limited skills and capabilities among its staff. Under such circumstances public buyers may lack the willingness and the ability to translate new procurement policies into everyday practice. Procurement as a strategic partner implies the opposite. It has high status in the organization and is manned by individuals with advanced procurement and business skills. These attributes are more conducive to the realization of government policy. Thus,

H2b There is a positive relationship between the maturity of the procurement function and implementation of SME-friendly policy.

The final contextual factor relevant to SME-friendly policy implementation relates to public sector organization type. The public sector is not monolithic, consisting as it does of central government departments, local government authorities, state agencies, utility companies, education institutions, hospitals and publicly-funded charities. In the context of public procurement, these various categories divide into sub-national and national sources of demand (Pickernell et al. 2011). Sub-national sources of demand, which encompass contracts with local government authorities, education institutes, hospitals, and publicly-funded charities tend to attract smaller, locally-focused firms. As a corollary, sub-national public agencies should be receptive to the SME-friendly policy agenda and be willing to embrace it (Murray, 2001). National sources of demand, which encompasses contracts with central government departments, state agencies and semi-state/utility companies, tend to be oriented to larger and higher growth firms (Pickernell et al. 2011). Smaller suppliers are not as integral to the supply chains of nationally-focused organizations. As a result, SME-friendly policy is less salient for such public sector organizations. Thus,

H2c Local government, education institutions and other locally-focused public sector organizations are more likely to implement SME-friendly policy compared with central government, state agencies and semi-state/utility companies.

Research design

Research context

Ireland is the research context for investigating SME-friendly policy implementation in public procurement. In 2010 the Irish government issued a circular to all public authorities entitled Facilitating SME Access to Public Procurement (Department of Finance, 2010). It contained a suite of “positive measures” designed to make it easier for small firms to compete for public contracts. This initiative came about in the aftermath of a sharp contraction in the Irish economy, which had ramifications for the growth prospects and even survival of many SMEs

(Lawless, McCann and McIndoe Calder, 2014). In 2014 the same SME-friendly measures were reiterated in a follow-up policy document entitled Initiatives to Assist SMEs in Public Procurement (Department of Public Expenditure and Reform, 2014). While not legally binding, all public authorities in Ireland are expected to give effect to SME-friendly policy as contained in the aforementioned documents.

SME-friendly policy in Ireland is derived from the European Code of Best Practices Facilitating Access by SMEs to Public Procurement Contracts (European Commission, 2008). The Code of Best Practices provides guidance for the approximate 250,000 public buyers and their organizations across the EU on how to apply the EC legal framework for procurement in a way that maximizes SME participation in contract competitions. Its effect has been to standardize SME-friendly procurement policy across the EU, so that most Member States now have the same programmes and support structures in place. This is important for our research as it means that the policy measures examined in the Irish context are comparable to those used throughout EU Member States.

SME-friendly procurement policy

SME-friendly procurement policy in this study is operationalized by reference to nineteen individual measures (see Box 1). These nineteen measures constitute Irish SME-friendly procurement policy in its totality and are enumerated in the aforementioned circulars: Facilitating SME Access to Public Procurement and Initiatives to Assist SMEs in Public Procurement. Individually and collectively the nineteen measures are designed to facilitate SME access to public contract competitions. The measures variously seek to widen access to contract competitions, alleviate the administrative burden of tendering, reduce difficulties relating to contract size, ensure proportionate qualification criteria, engender openness to new supply solutions and promote information disclosure by the buying organization.

In the case of each of the nineteen measures public buyers were questioned as to their habitual procurement behaviour. Policy implementation was presented to them in binary terms. Either buyers were acting on a measure consistently and in accordance with government advice or they were not. For example, in the case of the measure that advocates the public advertising of contracts respondents were asked “do you advertise all supply contracts valued above €25,000 and/or works contracts valued above €50,000 on eTenders?” Yes denotes implementation of the measure and was coded as 1. No denotes non-implementation of the measure and was coded as 0.

Thereafter, the nineteen measures were aggregated to create a single index or indicator of SME-friendly policy implementation. The score range for this indicator is 0-19. The decision was taken to weight all nineteen measures equally, which is consistent with the approach taken by other policy scholars employing similar methodologies to ours (e.g. Krause, 2011). The equal weighting approach was deemed the most appropriate strategy in the absence of empirical evidence to justify the use of differential weights. We do acknowledge, however, that the activities and behaviours associated with each SME-friendly policy measure are unlikely to be identical either in their impact on facilitating SMEs in contract competitions or in the level of effort and expertise they demand of public buyers.

<Insert Box 1 here>

Individual characteristics

Procurement experience is understood as the number of years that an individual has been involved in purchasing on behalf of a public sector organization. It is measured on a scale of 1-50 years. Procurement professionalism is operationalized by reference to holding a procurement-related qualification. It is treated as a dichotomous variable where 0 = no qualification and 1 = qualification. Procurement involvement is operationalized as the percentage of work time that an individual spends on purchasing-related activity in a typical week. Four category ranges are used to capture it. These are 0-25 per cent, 26-50 per cent, 51-75 per cent and 76-100 per cent. Policy familiarity is understood as an individual's familiarity with the content of current SME-friendly policy in Ireland as contained in Facilitating SME Access to Public Procurement and Initiatives to Assist SMEs in Public Procurement. Policy familiarity is treated as a dichotomous variable where 0 = unfamiliar and 1 = familiar.

Organization characteristics

Organization size is approximated by total number of employees. In line with EU classification standards four size ranges are used for measurement purposes. These are 1-9 employees (micro), 10-49 employees (small), 50-249 employees (medium) and 250+ employees (large). Procurement maturity is operationalized using the four stages model articulated by Reck and Long (1988). These four stages are as follows: reactive, independent, supportive, integrative. Each of the four stages had a corresponding statement. Respondents were asked to select the statement that reflects the current status of procurement in their organization. Procurement maturity is treated as an ordinal variable wherein stage one is the lowest ranking and stage four the highest. Public sector organization type is measured using six categories. These are as follows: central government departments, state agencies, utility/semi-state companies, local government authorities, education institutes, other public sector organization types. The latter category includes hospitals, publicly-funded charities and small, specialist public service providers. A summary of all predictor variables and their operationalization and measurement is provided in Table 1.

<Insert Table 1 here>

Survey process

Primary data was gathered by e-surveying the population of public buyers in Ireland. The survey was self-administered. This approach allowed easy access to a large and geographically dispersed population. Self-administered surveying does come with caveats, particularly around common method variance. As a precaution against such threats to the validity of the data, advice offered by Podsakoff et al. (2003) was followed. Mainly, this involved only requesting information that buyers could reasonably be expected to know and willing to disclose, interspersing questions on policy implementation with questions on individual and organization characteristics and ensuring that respondents could participate without having to identify themselves or their organization.

Contact details for the buyer population were obtained from the registration database of eTenders, which is the official Irish government website for advertising public contracts. All public buyers with responsibility for procurement are registered on eTenders. When the research was carried out at the start of 2015 there was approximately 3,000 public servants registered on eTenders. An email notification with an embedded link to a questionnaire was distributed to each buyer. Consistent with recommended practice (Dillman, 2007), a reminder notification was issued one week after the initial contact. The survey lasted two weeks. A total of 552 responses were received over this period, equating to a response rate of 18.4 per cent.

A number of data screening procedures were carried out. First, respondent representativeness was assessed using the early versus late respondent technique [2] (Armstrong and Overton, 1977). Independent sample t-tests returned no statistically significant differences between early and late respondents on the variables of procurement experience, procurement involvement, educational attainment and organization size ($p > .05$). Next, duplicate groups were identified using the IP address linked to each response. Duplicate groups refer to instances where there are two or more responses from the same public sector organization. As only one respondent per organization was deemed eligible, duplicates had to be eliminated. This resulted in the loss of 138 responses. Subsequent analysis of the data showed that it made no difference to the findings which duplicate response was removed. The results were the same whether we used the last response or the first response from each duplicate group. Indicative of this, the mean score for policy compliance using the last response from each duplicate group was 12.63 and using the first response from each duplicate group 12.73. The final screening step involved checking the data for completeness. A large number of cases were incomplete ($n = 143$). Incomplete responses skipped more than five of the nineteen questions pertaining to SME-friendly policy implementation. Their removal left the final number of usable responses at 271.

Respondent profile

The profile of the 271 public buyer respondents is as follows. The mean score for procurement experience is 9.58 (std. dev. 8.42). Only a minority of respondents claim to have a procurement-related qualification (32.7 per cent). Regarding procurement involvement, almost six out of ten respondents state that they spend less than 25 per cent of their typical working week on procurement-related activity. By comparison, only one in five spend between 76-100 per cent of their work time on procurement-related activity. This confirms that the preponderance of public servants with responsibility for purchasing are not “dedicated” procurement professionals in the sense that they spend most or all of their time on it. Educational attainment is high among respondents, with 96 per cent having reached tertiary level. Familiarity with the content of SME-friendly policy is moderate, with 68 per cent answering in the affirmative. Respondents work in public sector organizations of various types and sizes. Education institutions account for the highest proportion of respondents (32 per cent) and central government the lowest (8.2 per cent). Approximately 39 per cent of respondents are employed in large organizations (> 250 staff) as against 61 per cent who are employed in either micro, small or medium organizations (< 250 staff). Finally, the maturity of the purchasing function exhibits a wide dispersion. Stage one (reactive) accounts for 22.3 per cent of cases, stage two (independent) 30.5 per cent, stage 3 (supportive) 16.7 per cent, and stage 4 (integrative) 30.5 per cent. Further detail on the profile of the respondents is contained in Table 1.

Findings

The findings are divided into two parts. The first presents descriptive statistics revealing the extent to which public buyers are implementing SME-friendly procurement policy. The second reports the tests results from our predictive model of SME-friendly policy implementation.

Descriptive

At the aggregate level the mean number of SME-friendly policy measures that public buyers are implementing is 12.63 out of 19.00 (std. dev. 2.84). The median figure is 13. The minimum point on the range is five, indicating that all public buyers are acting on at least some of the prescribed measures. The maximum point is nineteen. Apart from a slight negative skew ($z = -.20$), public buyers’ policy implementation scores are normal in their distribution (see Figure 2). The bottom quartile ranges from five to ten. The upper quartile ranges from fifteen to

nineteen. This means that the other 50 per cent of public buyers are bunched in the eleven to fourteen score range.

<Insert Figure 2 here>

Below aggregate level there is considerable variation in implementation rates across the nineteen individual measures (see Table 2). Some policy measures are being implemented by nearly all public buyers, having adherence rates of 85 per cent or higher. These include ensuring that proportionate insurance requirements are specified in the contract (96.9 per cent), advertising supply and services contracts with an estimated value of €25,000 or more on the designated government website (90 per cent), using open or competitive tendering for supplies contracts valued at under €134,000 and works contracts valued under €250,000 (85.2 per cent) and providing feedback to unsuccessful tenderers (85 per cent).

Other measures are securing majority support, although not to the same extent. Among these are ensuring proportionality in turnover requirements (70 per cent), using standard tender documentation (62.3 per cent) and dividing contracts into lots (63.1 per cent). A third sub-group of measures are attracting the support of only a minority of public buyers. Included here is encouraging consortium bidding (48.1 per cent), accepting alternative proof of financial capacity (44.7 per cent), accepting reasonable variants to specifications (43.1 per cent) and publishing PINs (41.9 per cent).

<Insert Table 2 here>

Predictive

Having established the extent to which public buyers are acting on SME-friendly policy, we now turn our attention to the individual and organization factors hypothesized to predict it. In all, seven hypothesized relationships were tested using linear regression. Prior to reporting on the results of the predictive tests, we can confirm that multi-collinearity is not present in the dataset. The lowest Tolerance Value is .58 and the highest Value Inflation Factor (VIF) is 1.70. Inter-correlations between the variables do not exceed .52 (see Table 3).

<Insert Table 3 here>

The four individual characteristics hypothesized to predict policy implementation were entered into the model to begin with. This model is significant at $p < .01$ and accounts for a modest amount of variance ($R^2 = .15$, Adjusted $R^2 = .14$). The first individual characteristic, procurement experience, which was expected to be positively associated with policy implementation, emerges as non-significant ($p = .58$). Also against hypothesized predictions, procurement professionalism is non-significant ($p = .20$). On this basis both H1a and H1b are rejected. The effect of procurement involvement on policy implementation is significant at $p < .05$. This is consistent with predictions on the positive relationship between these two variables, thus allowing us to accept H1c. The fourth individual characteristic tested is policy familiarity. It is found to be significant and positive in its effect on policy implementation ($p < .01$). This leads to acceptance of H1d.

The three organization context variables hypothesized to predict policy implementation were separately entered into the model. This model is significant at $p < .01$ and accounts for a slightly lower level of variance than the first ($R^2 = .12$, Adjusted $R^2 = .10$). Organization size was found to be significantly and positively related to policy implementation at $p < .01$. This allows us to

accept H2a. The second of the organization characteristics, procurement maturity, is also significantly and positively related to policy implementation at $p < .01$. This supports H2b. No support is forthcoming for the hypothesized relationship between public sector organization type and policy implementation. None of the six public sector organization types is significantly related to policy implementation. Moreover, public sector organization types with a sub-national focus, which includes local government and education institutions, are not found to be more likely to act on SME-friendly procurement policy than organizations with a national focus, which includes central government departments, state agencies and semi-state/utility companies. Thus, we must reject H2c.

In addition to their separate testing, the combined effect of individual and organization characteristics on SME-friendly policy implementation was examined. This combined effect model is significant at $p < .01$. The level of variance explained improves on each of the individual models ($R^2 = .21$, Adjusted $R^2 = .18$) but the significance of all predictor variables reduces. While policy familiarity and procurement maturity remain significant at $p < .01$, procurement involvement becomes partially significant ($p < .10$) and organization size loses its statistical significance ($p = .30$). The previously non-significant variables of procurement experience, procurement professionalism and public sector organization type do not change. Detailed results for the effect of each individual and organization factor on the implementation of SME-friendly policy are contained in Table 4.

<Insert Table 4 here>

Discussion

It is clear that public buyers are neither acquiescing with SME-friendly policy nor rejecting it. Instead, their behaviour equates to a compromise approach to institutional conformity in which some but not all prescribed practices are adopted (Oliver, 1991). Van de Ven's (1983) assertion that public professionals tend to act "reasonably" rather than purely "rationally" or "randomly" seems apposite in this case. Progress towards a SME-friendly public market is being made, to be sure, but there is an undeniable gap between what is espoused in government policy versus what is happening at the level of the organization. The realized strategy for the facilitation of SMEs falls short of the intended strategy. Perhaps this is not altogether surprising considering what we already know about the unsystematic implementation of "soft" public procurement policies encompassing socio-economic development goals (Flynn and Davis, 2015a, 2015b; GHK and Technopolis, 2007).

The net effect of the policy-practice gap is that some impediments to SME access will diminish or even disappear while others will persist. For instance, SMEs should find it easier to access contract competitions as 90 per cent of public buyers are advertising supply and works contracts on the designed government contracts site, eTenders. This is important as small firms have traditionally struggled with identifying opportunities relevant to them (Loader, 2005). Equally, SMEs should experience some alleviation in the administrative burden of tendering by virtue of nearly four out of five public buyers permitting them to self-declare their financial capacity and insurance cover. Given that the economic cost of preparing a standard tender exceeds €3,000 (Centre for Economic and Business Research and Gatewit, 2013), improving the efficiency of the process and reducing transaction costs is a welcome development.

There is less cause for optimism when it comes to other facets of SME-friendly policy. In the case of measures designed to address the mismatch between SME capacity and the typical size of a public contract, for example, a sizeable proportion of buyers is still not adhering to policy recommendations. This is in spite of the fact that large contract sizes are among the primary

impediments to SME involvement and success in public procurement (Loader, 2013). In this study it is noticeable that the policy measures requiring least exertion on the part of public buyers have the highest implementation rates e.g. specifying correct level of insurance cover. By contrast, measures requiring greater application have lower implementation rates e.g. conducting pre-tender market analysis or accepting reasonable variants to specifications. It would seem public buyers are targeting the “low hanging fruit” of SME-friendly policy while sidestepping measures that ask more of them in time and effort. Progress towards a SME-friendly public procurement marketplace is likely to be uneven and disjointed as a result. This same phenomenon was previously picked up on by Flynn and Davis (2015a) in their assessment of public buyers’ compliance with SME-friendly policy.

As for what makes SME-friendly policy implementation more or less likely to happen, our research return some interesting findings. To begin with, there are certain individual characteristics that are conducive to SME-friendly policy implementation. Familiarity with policy content is one. Whether in procurement or any other public administration field, policy implementation presupposes an awareness and understanding of what legislators expect public servants to do (Gelderman, Ghijsen and Brugman, 2006; McMurray et al. 2014). Procurement involvement is the other. As expected, the more procurement activity constitutes a public servant’s work role the more able and willing they are to implement policy (Flynn and Davis, 2015b; Preuss, 2011). Surprisingly, neither procurement experience nor procurement professionalism show any statistically significant relationship to policy implementation. In the case of the former, it may be that learned practices and routines derived from years spent working in procurement militate against the behavioural change that the SME-friendly agenda requires of public buyers (Karjalainen and van Raaij, 2011). In the case of the latter, bespoke training rather than generic procurement qualifications *per se* might be what enables SME-friendly behaviour.

Organizational context also has a role to play in influencing SME-friendly policy implementation. Our findings indicate that where procurement is integrated with the strategic objectives of the organization, SME-friendly policy is more likely to be embraced. A strategic role for procurement implies that it has both the employee expertise to operationalize policy and the support of senior management to do so. Notably, such attributes have been cited in other studies as integral to the realization of sustainability-driven procurement practices (Walker and Brammer, 2009; Young, Nagpal and Adams, 2016). That organization size impacts SME-friendly policy implementation is as expected. Large firms experience greater pressure to be institutionally compliant (Meyer and Rowan, 1977). What is more, their superior resource base makes it easier to adjust purchasing procedures according to the new policy dispensation. The unexpected finding is that the focus of public sector organizations, whether predominantly sub-national or national, makes no difference to their response to SME-friendly policy. This is in spite of the greater levels of commercial interaction that have been observed between public sector organizations with a sub-national focus and small suppliers (Pickernell et al. 2011).

Practitioner implications

Three main practitioner implications flow from the findings. First, public sector executives should ensure that all employees with responsibility for procurement are made familiar with the contents of SME-friendly policy. In this study 31 per cent of respondents admitted to being unfamiliar with it. This has direct implications for their ability to properly implement it. By way of action, it is recommended that seminars and webinars are held and guidance documentation published to promote awareness of SME-friendly policy among all relevant individuals. Second, there is a justifiable case for having more public servants working exclusively on procurement. Our findings suggest that public servants who spend most or all of

their time on procurement are more likely to be policy compliant than those for whom procurement is only ancillary to their work role. The same empirical observation was made by Flynn and Davis (2015b). As Caldwell et al. (2005) and the OECD (2013) have argued, the increasingly policy-driven nature of public procurement implies the need for full-time public buyers who are able and motivated to carry out government directives. The third practitioner point concerns the role of procurement. The findings are clear in showing that buyers working in organizations with sophisticated or mature procurement functions are more inclined to act on SME-friendly policy. Thus, government can help to get its own policies implemented by encouraging a strategic approach to procurement across the public sector and by providing the financial, human and informational resources to make this a reality.

Limitations and future research directions

There are several limitations to our research. The first relates to the predictive power of our model. While significant, it still only explains 18 per cent of the variance in policy implementation rates. Hence, there is an opportunity for researchers to re-specify the model and include additional individual and organizational characteristics that improve its predictive power. Alternatively, researchers may wish to build and empirically test new explanatory models. Possibilities in this regard include modelling SME-friendly policy implementation in terms of perceived job discretion (Tummers and Bekkers, 2014) or role conflict (Tummers et al. 2012). The other limitations relate to research design and methodology. As has been the case in related studies (e.g. Gelderman, Ghijsen and Brugman, 2006), we relied on public buyers as sole research informants. The drawback of this approach is that we cannot verify how faithfully they have reported their habitual behaviour. Therefore, we advise researchers to solicit the input of a second respondent cohort, such as departmental managers, to corroborate buyers' reported behaviour.

Consideration should also be given to using tender documentation and contract advertisements as a second source of data on SME-friendly procurement. Arguably, this represents a more objective approach to identifying SME-friendly procurement practices than surveying – one that is not affected by respondent bias. Another limitation of this study is that it confines itself to a single country, Ireland. Ideally, researchers should simultaneously examine two or more countries with a view to comparing and contrasting the findings and identifying national peculiarities. Finally, we investigated buyers' responses to SME-friendly policy without reference to particular product or service categories. It may be that public buyers are better able or willing to implement SME-friendly policy in some categories over others. For example, construction is one sector where SMEs are strongly represented and because of it buyers invariably act in SME-friendly ways when designing contracts (Pickernell et al. 2011). As such, we recommend that category specificity is taken into account in future investigations of SME-friendly policy in public procurement.

Conclusion

SMEs have become central to discourse on public procurement and policies to promote their involvement in it are now a standard feature of the public administration landscape (OECD, 2013). These developments are a direct response to the historic under-representation of small suppliers in the public sector marketplace and the missed opportunities for all stakeholders arising from it (Anglund, 1999). While the content of SME-friendly policies has been pored over (Kidalov and Snider, 2011; Loader, 2013; Nicholas and Fruhmann, 2014), relatively little is known about the implementation of these policies. Hence, we set out to examine how public buyers are responding to SME-friendly policy and the individual and organization factors that affect their responses. The research was motivated not only by the need to address a dearth of evidence on this topic but also by the potential to inform practice.

Overall, the findings leave a mixed impression. Public buyers are complying with some policy measures but rebuffing others. As such, SME-friendly policy is being imperfectly enacted. The environment for small suppliers is improving, although not to the extent that policy makers would like. Individual characteristics in the form of procurement involvement and policy familiarity and contextual factors in the form of organization size and procurement maturity each have a role to play in explaining the likelihood of SME-friendly policy implementation. These insights add to foregoing scholarship concerning the predictors of regulatory compliance and policy implementation in the procurement domain. They also highlight to public managers areas to be targeted and actions to be taken so as to promote the uptake of government procurement initiatives. Going forward, there is a need for researchers to use alternative theoretical lenses when investigating public buyer responses to SME-friendly policy.

Notes

1. Above-threshold contracts refer to supplies and services contracts valued at €134,000 (or €207,000 for public sector entities other than central government) and works contracts valued at €5,186,000. Above threshold contracts must be advertised in the Official Journal of the European Union (OJEU) and procured in accordance with EU Procurement Directives.
2. The early respondent group submitted their questionnaire within 24 hours of first receiving it. Ten days had elapsed before individuals within the late respondent group began to submit their questionnaire, and then only after receiving a reminder email notification.

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