'Offshoring Processes' – understanding the impacts of global trade in services for Wales and the UK

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Introduction

Over the last decade or so, enabled by technological change, business services have been increasingly 'offshored'. Such relocations typically apply to IT based business services or other 'back-office' functions. Offshoring is a potential threat to the 32,000 people currently employed in contact call centres in Wales[1]. Media interest in offshoring has also raised fears of job losses and a lack of competitiveness of the UK economy. Recently, such fears are being countered by commentators pointing to the long term productive and consumer benefits of offshoring for the UK economy.

Some household names in UK business such as British Airways, Barclays Bank, and HSBC have offshored significant elements of their organisation over recent years. A lack of data makes the scale of job losses through offshoring in the UK difficult to estimate. However, to illustrate, imports of services into the UK rose from £6bn to £8bn in nominal terms between 1995 and 2001[2]. It appears that the trend will continue, with the market for offshore contact centres growing by 20% between 2005 and 2006[3].

The drivers of business services offshoring

The central motivation for companies to offshore appears to be cost saving. A recent survey of contact centre managers showed that 49% of managers believed the key driver for offshoring was cost reduction[4]. Primarily cost savings relate to labour costs. For contact centres, labour typically represents approximately 70% of total operating costs. In addition to differences in wage rates, the costs of additional benefits such as pension contributions are likely to be much higher in the UK than in prospective offshore locations, as are rental values and other capital costs.

Disparities in global wage rates are hardly a recent phenomenon, whilst service offshoring has only become a significant factor over the last decade. In manufacturing industries, enabled by the ease of transporting goods across the world, offshoring and global competition has been a major driver of structural change for some time. This process has had a remarkable and irreversible effect on the UK economy, driving the shift in employment away from manufacturing towards services. Similarly, the current wave of 'white collar' outsourcing has been enabled by both technological and regulatory change. The information technology revolution now allows information to be processed in any location and transferred instantly at near zero cost. For a huge range of IT and telephone based functions, location no longer matters. Technological change has been accompanied by a shift towards free trade and the free movements of goods and capital across borders. Removal of such barriers has enabled firms to take advantage of cost savings. Therefore, offshoring is both driven by and causes globalisation.

Offshored service activities tend to be labour intensive, and the more labour intensive the activity, the greater the potential cost saving for the firm. In addition, offshored service functions are most often those which are IT or communications based, and hence no longer rely on location or face-to-face contact. Processes which are highly transparent and 'codifiable' are also more easily relocated as they require less specialist training and can be managed from a distance. These factors determine that offshored service activity tends to be limited to 'back office functions' such as data processing, IT services and, as in this example, contact centre operations.

Short Run and Long Run Effects

There is a clear distinction between the short and long run effects when considering the impact of offshoring on the economy of the UK. In the short run offshoring represents a direct loss of employment in services in the UK economy. A high proportion of workers are unlikely to find employment within the same company and therefore face unemployment. Over 40% of contact centre operators have no formal qualifications[5]. This group is likely to find it more difficult to find re-employment without re-training. In more extreme cases, individuals may find themselves without work for a significant duration. Unemployment and the threat of unemployment can have the effect of reducing wages. Reduced spending by laid off workers and as a result of lower wages compounds the negative local economic impact.

Neoclassical trade theory suggests that offshoring will have positive effects on economic performance in terms of output in the long run. Offshoring is effectively a form of international trade. International trade shifts resources to the production of goods for which the UK has a comparative advantage. The argument is that the UK will specialise in skill intensive, high value added production whilst India, for example, will specialise in labour intensive, IT related production. The result will be increased productivity and wealth in both countries.

Offshoring reduces the costs of production for the firm. Cost savings will impact on firm profits and should be, at least in part, reflected in lower prices. Lower prices will benefit the consumer and will increase the sales or market share of the firm. In addition, a proportion of increased firm profits are likely to be re-invested in the UK or realised in terms of share dividends gained by UK citizens. Re-invested profits will be of benefit to UK firms in industries such as construction and IT services.

In the long run offshoring has the potential to increase exports to partly offset the 'importation' of the offshored activity. First, increased imports due to offshoring will be an additive to the UK's trade deficit. The value of the pound should, in theory, fall to counteract the imbalance. The cheaper pound will make UK goods more competitive abroad, therefore increasing exports. In addition, the effect of investing in foreign countries such as India will encourage more rapid economic growth in the offshore location. As GDP per head increases in the offshore location,

[1] Labour Force Survey 2005 in *Offshoring and the Labour Market: the IT and Call Centre Occupations Considered*.
[2] *Offshoring of Business Services and its Impact on the UK economy*, Advanced Institute of Management Research 2004
[3] *Merchants Global Contact Centre Benchmarking Summary Report 2006*, Dimension Data
[4] Ibid.
[5] Labour Force Survey 2005 in *Offshoring and the Labour Market: the IT and Call Centre Occupations Considered*.

new export markets could be opened up for UK firms.

Winners and Losers
Occupational Groups
Focusing on headline employment and production effects hides the fact that whilst there may be winners from offshoring, there may also be losers. Even if the effect of offshoring is to increase GDP per head, some individuals may suffer through extended periods of unemployment and dislocation as well as lower relative incomes. Business services offshoring can put downward pressure on wages of contact centre, data processing, IT services and other low skill, white collar occupations.

The Welsh Case and the Regional Context
The effects of offshoring are complicated when the unit of analysis is a region or small economy. The regionalisation of economic policy determines that a regional, or in this case Welsh perspective is extremely relevant to the policy debate. The complicating factor at the regional level is that service firms in the UK locate different functions in an area like Wales. In the UK, it is often the case that managerial functions, and therefore managerial occupations, are concentrated in London and the South East, while business processes employing a lower paid, lower skilled workforce are located in other regions. Therefore, when a firm takes the decision to offshore a back office function the negative impact of lost employment may be concentrated within a particular region. In the long run, the positive effects of lower production costs will accrue to the firm based in the South East. The region affected will have all the short run negative effects of offshoring but the long run positive effects will be, at best, diluted. As noted, certain occupations are clearly more susceptible to offshoring than others. Where occupational shares are not evenly distributed across regions, there may be imbalances in the effect of offshoring.

Figure 1 gives the ratio of Customer Service, Administrative and Secretarial Occupations to Managerial, Professional and Technical Occupations for selected UK regions. The figures shows that the North East, North West and Wales are amongst regions which have most to lose from the negative effects of offshoring, while London and the South East perhaps have the most to gain from the positive effects.

Of course, economies like Wales also benefit from relocation of service activities and promote themselves as potential 'near shore' locations. As shown in Figure 2 Wales, compared to many other regions in the UK, is a relatively low cost region in which to do business.

Macro-level Evidence
An assessment of the economic effects of offshoring requires an examination of evidence at both the macro and micro level. At the macro level, what are the overall trends in performance, competitiveness and employment in services? At the micro level, what are the impacts of a specific offshore relocation?

In response to fears of job losses due to offshoring, many commentators point to the strong performance of the service industry in the UK. Services have been, and continue to grow at a substantially faster rate than manufacturing. In terms of employment, the UK economy continues to become more service-orientated.

Service industries employ over three quarters of workers in the UK workforce. Banking, finance and insurance also shows an increasing share of employment. Furthermore, the UK maintains a significant trade surplus in business services, that is, we continue to export more than we import[6]. As trade flows in services have increased, so has the UK's trade surplus, suggesting that the UK is benefiting from freer movement of services.

In Wales, data relating to trade in services is limited. However, in line with the UK, Wales shows an increasing share of employment in services and also rising labour productivity in services (Figure 3).

Trends in wage rates go some way to revealing the equality of outcomes from changes in Wales' service industry. Wages have been rising in the UK over the past few years as they have in Wales (Figure 4). Administrative and secretarial as well as elementary service occupations also show increases in wages. In contrast there has been a slight fall in wages for customer service staff (including contact centre staff) in Wales since 2002 despite employment in this occupational group increasing over the same period.

Figure 1: Ratio of Customer Service, Administrative and Secretarial Occupations to Managerial, Professional and Technical Occupations for selected UK Regions

Source: Labour Force Survey 2005

[6] *Offshoring of Business Services and its Impact on the UK economy, Advanced Institute of Management Research 2004*

Figure 2: Gross Weekly Pay for selected UK Regions

Source: Annual Survey of Hours and Earnings 2006

Figure 3: Productivity Trends in Welsh Manufacturing and Service Sectors

Source: Regional Trends 2005, Annual Business Enquiry 2003:

At the macro level, it would seem that services have performed well over recent years. The extent to which offshoring, separate from other factors, is driving productivity and employment growth is difficult to assess.

Micro-level Evidence – Applying a New Policy Simulation Tool

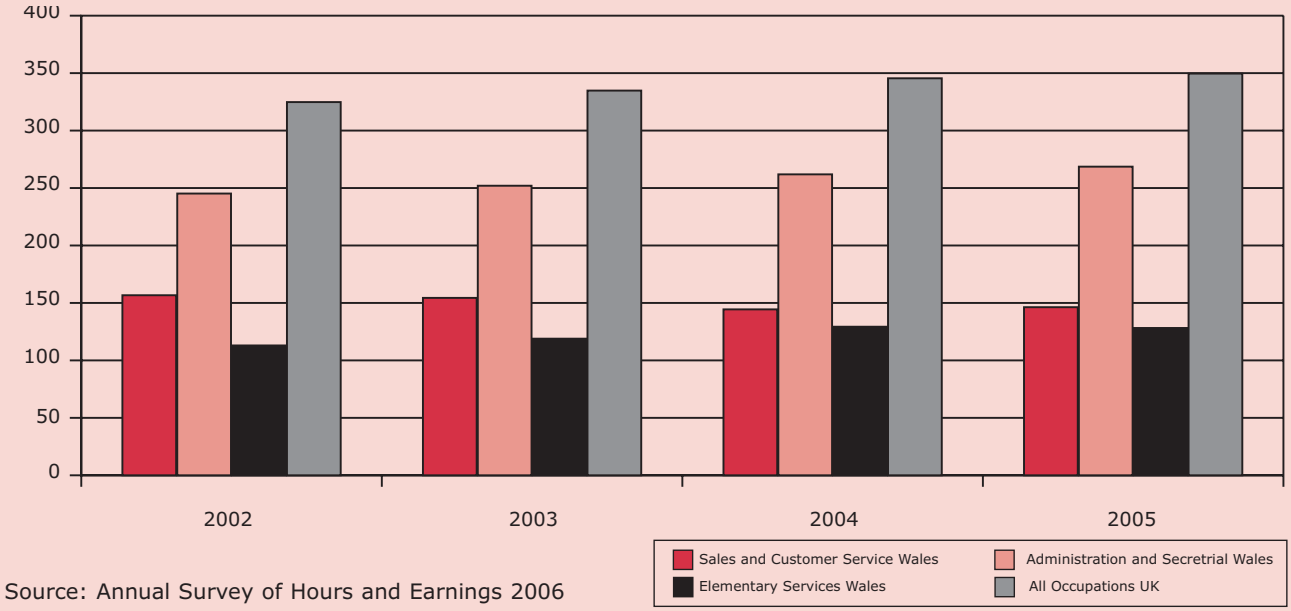
To better understand the effects of a one-off offshoring 'event' a scenario has been constructed reflecting the relocation of a contact centre in the banking and finance sector from Wales to an offshore location. The first scenario relates to a company wholly based in Wales. The second scenario analyses the same offshore event in a case where the company headquarters and remaining employment is situated in an alternative region of the UK. In the first instance, Wales suffers the negative consequences of employment loss in the short term, but also benefits in the long term from reduced production costs (for the company in question), increased investment and increased exports. In the second example, whilst Wales suffers a negative employment shock, long term benefits are only felt indirectly as the production cost savings and investments accrue elsewhere in the UK.

The following analysis is enabled by the application of a new and unique regional economic modelling tool to Wales (REMI-ECOTEC Policy Insight Model), which can be used for measuring the impacts of policies, interventions and change, through a combination of techniques (see technical note).

Scenario 1

The average contact centre in Wales has just over 150 employees. The scenario is based on the relocation of 150 full time contact centre jobs from Wales. The vast majority, 140, are contact centre operatives from the customer services occupational group with an average wage rate of just over £14,000 per annum. The remaining ten are assumed to be contact centre managers earning around £26,000 a year. Cost savings accruing to the company are based on a two-thirds labour cost saving and a one-third saving on capital costs

Figure 4: Gross Weekly Wages all by Occupation in Wales



Source: Annual Survey of Hours and Earnings 2006

(primarily rental values). In addition, based on a study of offshoring in the US by McKinsy Global, 5% of the value of the output offshored is returned through increased export opportunities, and 4% of the value of the output offshored is recouped through profits re-invested in the industry[7]. The contact centre is offshored in 2006.

Results

The scenario is run for the years 2005 to 2020. Results are given as the difference between the baseline or control forecast and an alternative forecast incorporating the scenario; effectively the net effect of the offshoring. The negative employment impact is immediate in 2006 but slightly offset by cost savings and investment. Through a combination of reduced costs, increased exports and repatriated profits, the economy recovers relatively quickly and employment begins to bounce back. By 2020, employment exceeds 2005 levels and therefore the long run net effect of the offshoring on employment is positive (Figure 5). However, it is not until 2014, eight years after the initial impact that employment fully recovers.

In reality it is difficult to predict the pace at which re-employment will take place. The most significant factor in employment recovery in this scenario is increased sales or market share in the banking and finance industry resulting from reduced production costs. It is important to note, however, that a long run positive employment impact is not directly connected to laid-off call centre workers who may or may not find new jobs.

Further employment recovery is sparked by lower wage rates in the economy in general. As noted, unemployment tends to have a negative effect on wages. As Figure 6 shows, wages in all other sectors fall and take time to recover. Average wages in banking and finance increase due to the fact that it is relatively (to the industry average) low paid work that has been lost.

Increased productivity drives the economic recovery (Figure 7). By 2020, workers are more productive, employment is higher, wages are also marginally higher, and disposable income per head has increased (Figure 8). In the long run, equality of outcomes aside, the effect of offshoring is positive.

Scenario 2

This scenario is based on the same employment loss assumptions as scenario 1. However, all remaining company functions are assumed to be located elsewhere in the UK. The Welsh economy only benefits in the long run indirectly through cross-regional trade. In Wales this is possibly a more common occurrence that scenario 1.

Results

Under scenario 2, the negative employment impact actually exceeds 150 due to the knock-on effects of reduced income and spending in the economy. The recovery is weak and the overall impact is negative, for all variables, in the short and long run (Figure 9). The slight recovery in employment is a consequence of labour market adjustment through lower wages. It does not take into account of any corrective policy intervention.

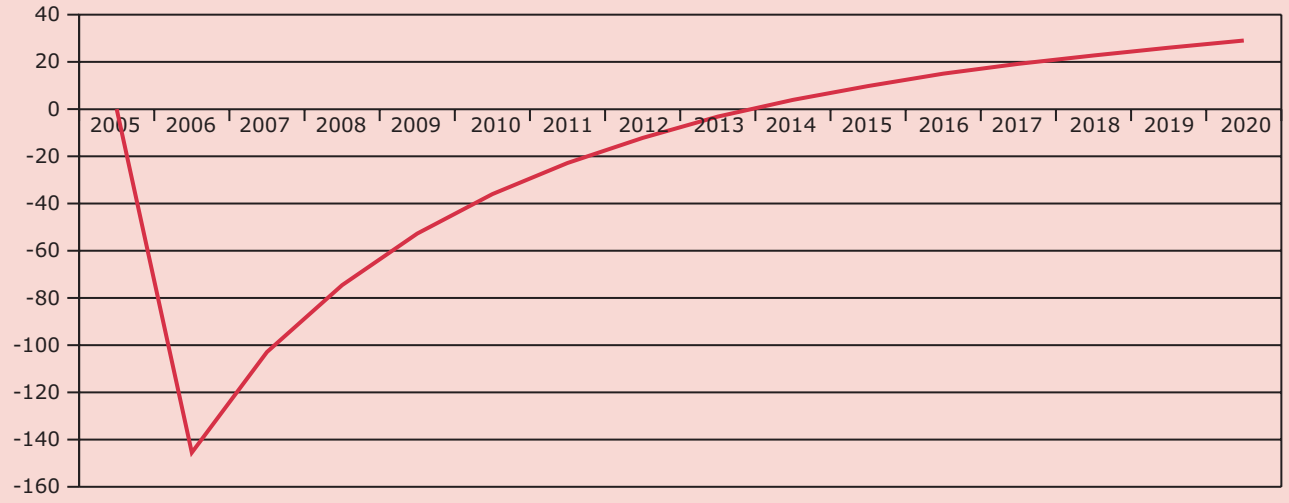
Conclusions and Policy Implications

Service offshoring has become a significant factor in the development of the UK economy. Although each offshoring event is associated with a number of immediate job losses, the service industry as a whole in Wales is performing well and the UK maintains a growing trade surplus in services. The industry has benefited from technological change and free trade which has brought offshoring to the fore. Productivity and wealth is rising as a result, and offshoring should be seen as part of this process. The construction of a simple offshoring scenario confirms the potential long run benefits in terms of wealth and employment. However, policy makers in Wales should take offshoring seriously. It takes time to replace employment lost due to a relocation and offshoring can have highly unequal effects across occupational groups and across regions. Offshoring can also have the effect of lowering wages. The importance of ensuring a level of equality should not be overshadowed by headline trends in income or employment. The nature and pattern of offshoring impacts is such that there is a clear place for well directed policy interventions at the local and regional level.

To an extent, offshoring is inevitable. To reduce or prevent offshoring would require the re-introduction of protectionist measures which are neither desirable nor a policy instrument available in Wales. Governments should not seek to intervene in all cases to prevent offshoring. More effective in the long run is to ensure that Wales' business environment is of the highest

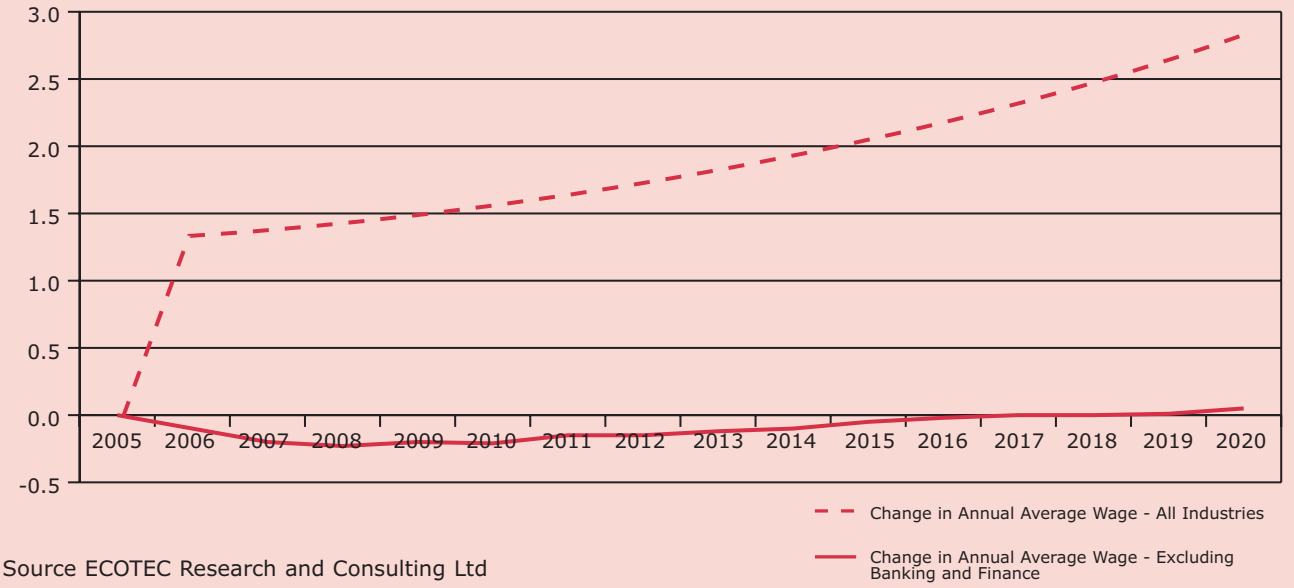
[7] http://www.mckinsey.com/ideas/wef2004/offshoring/index.asp

Figure 5 Scenario 1 Total Employment Impact of Offshoring



Source ECOTEC Research and Consulting Ltd

Figure 6 Scenario 1 - Impact on Wage Rates



Source ECOTEC Research and Consulting Ltd

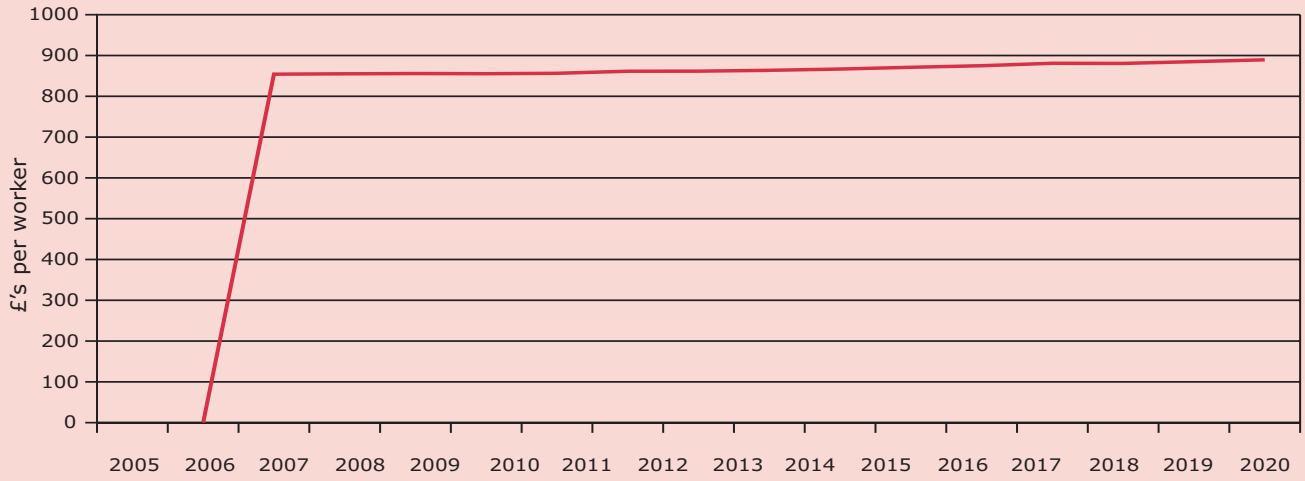
possible quality in order to attract businesses which offer a wide range of employment opportunities so that Wales is seen as a base for business headquarters and management as well as 'back office' functions. In the long run the success of the Welsh economy, and the location decisions of businesses, will be determined by the skills base of the population, quality of life and the willingness of government to invest in training and technology.

There is a clear rationale for short term policies in reaction to offshoring, or indeed any job losses. The key to securing the benefits of offshoring is through the re-employment of laid off workers into suitable and well paid positions. There must be clear pathways and supported recruitment channels in order that workers can be re-employed as quickly as possible. Threats and opportunities for service industry employment should be identified as early as possible to secure a smooth transition. Re-training of workers, even for specifically identified jobs, should be supported by government at the Wales and local level. The longer workers remain unemployed, the further their skills become degraded and the less employable they become. There is nothing wrong with reactive labour market policy to minimise the short term negative impacts as long as, in the long run, the Welsh economy is well placed to benefit from globalised trade in services.

Technical Note – REMI-ECOTEC Policy Insight Model

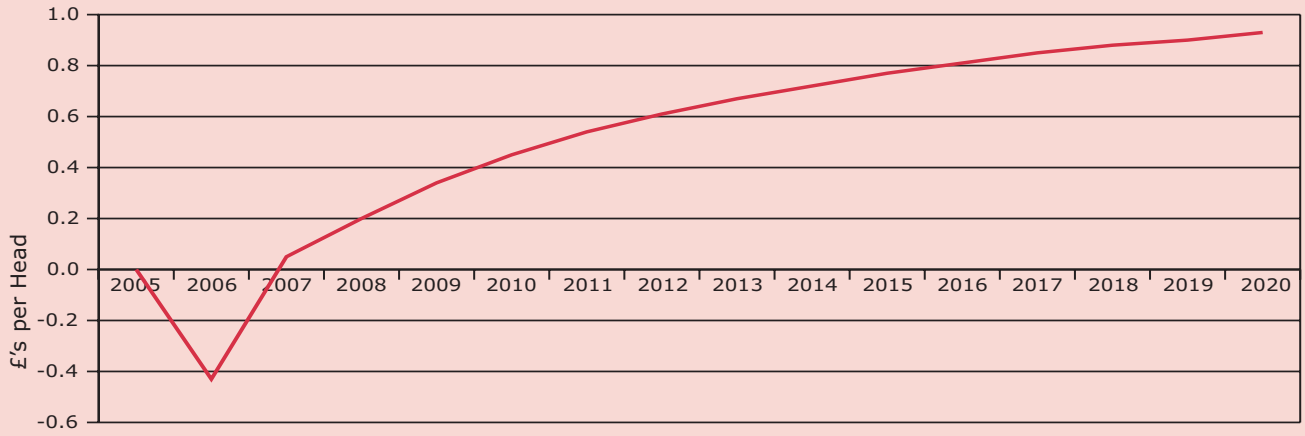
The REMI-ECOTEC Policy Insight Model is an economic forecasting and policy analysis tool for regional economies. It allows the user to alter information entered into a baseline forecast in order to produce an alternative forecast for the economy which shows year-on-year forecasts for the economy for up to 2040. The model incorporates an input-output table for 53 industries in the UK. Indicators in the model are organised across five blocks – output; labour and capital demand; wages, prices and production costs; population and labour force; market shares. The depth of

Figure 7 Scenario 1 - Impact on Labour Productivity



Source ECOTEC Research and Consulting Ltd

Figure 8 Scenario 1 – Increase in Long Run Real Disposable Income



Source ECOTEC Research and Consulting Ltd

Figure 9 Scenario 2 - Impact on Employment

Source ECOTEC Research and Consulting Ltd

indicators allows us to model effects across a vast range of indicators including output, employment, wages, unemployment and inactivity and demographic change. The REMI model has been calibrated using Welsh data from national sources. REMI allows the user to adjust the model's assumptions, for example wage rates or supply chains, in order to accurately reflect the impact of the event.

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End Notes

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