

OXFORD ECONOMICS

Economic outlook and scenario for North Lanarkshire

2013-2038

Final report

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1 Introduction

North Lanarkshire Council commissioned Oxford Economics to provide a socio-economic analysis and economic forecast report on North Lanarkshire, including assessing the implications for an alternative scenario.

The report builds upon our recent work for Glasgow and the Clyde Valley Strategic Development Planning Authority, which provided an economic profile and forecasts for the Glasgow and the Clyde Valley city region. This report has 4 sections:-

- 1 **The North Lanarkshire economy:** this section includes an analysis of North Lanarkshire at present by examining the current economic structure of the area;
- 2 **Economic Outlook:** this section provides an assessment of the current outlook for North Lanarkshire. The baseline forecasts represent Oxford Economics' view of the scale and impact of the recession on North Lanarkshire and what shape the recovery might take;
- 3 **Alternate scenario for North Lanarkshire:** this section contains analysis of how the outlook for North Lanarkshire would change if alternative assumptions about key influences on the local economy were changed;
- 4 **Report summary:** brief synopsis of the key findings.

The annexes to this report provide a technical section setting out details of the forecasting model structure as well as information on data sources and assumptions.

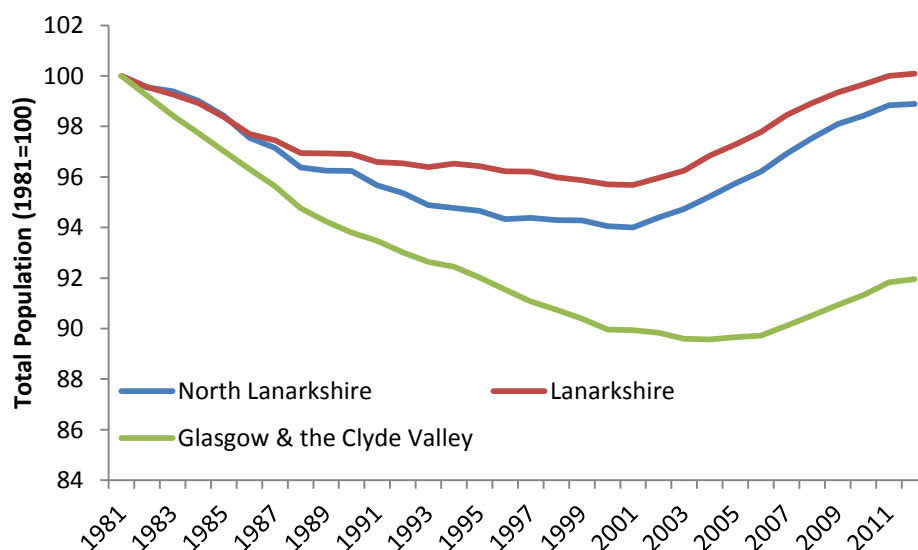
2 The North Lanarkshire economy

This section gives an overview of the demographic and economic structure of the North Lanarkshire, focusing on population, the labour market, entrepreneurship and GVA. Comparisons are drawn between North Lanarkshire, Lanarkshire and Glasgow and the Clyde Valley city region. The historic and recent economic performance of North Lanarkshire outlined in this chapter provides the basis of the forecast presented later in the report.

2.1 Population and migration

The population of the North Lanarkshire local authority was 340,000 in 2012, approximately the same as it was in 1981. However, in the intervening years the population did not remain stable, first declining throughout the 1980s and 1990s before rising after the turn of the millennium. This trend was consistent with that in Lanarkshire and Glasgow and the Clyde Valley city region. However, Glasgow and the Clyde Valley city region experienced a much steeper decline in population during the 1980s and 1990s owing to its greater levels of outward migration. The population rise in North Lanarkshire over the past decade is representative of the general trend across Scotland as a whole. And whilst this recent trend is also reflected in the Lanarkshire and Glasgow and the Clyde Valley city region, whereas North Lanarkshire has since recovered to population levels experienced in the early 1980s, the steeper decline within Glasgow and the Clyde Valley city region during the 1980s and 1990s has meant it has failed to regain this benchmark. Population growth in North Lanarkshire in the historical period, 1981 to 2012, has remained flat, falling marginally behind the Scottish average of 0.1% per year.

Figure 2.1: Population – North Lanarkshire, Lanarkshire & Glasgow and the Clyde Valley city region, 1981 – 2012 (1981=100)

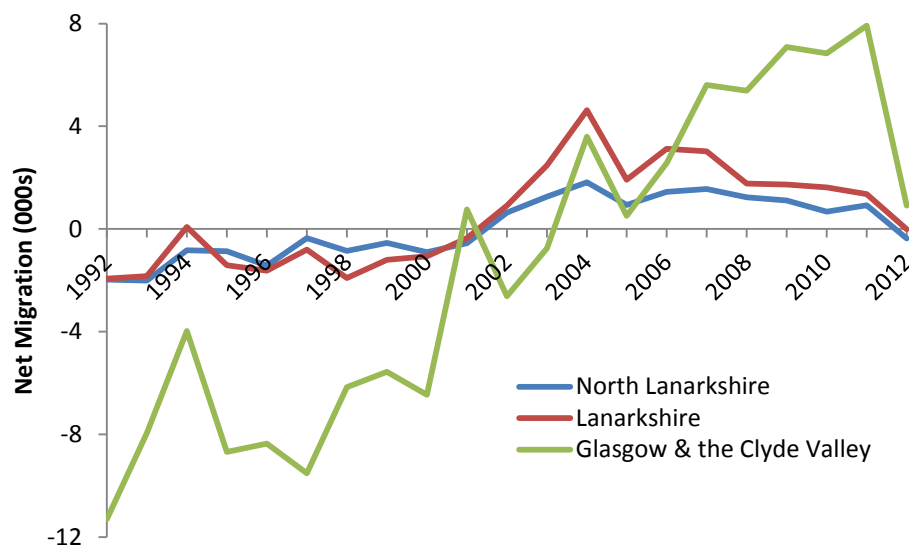


Source: National Records of Scotland

The turnaround in North Lanarkshire's population post-2000 was underpinned by a change in migration patterns in the local authority. Figure 2.2 shows that in the 1990s North Lanarkshire experienced outward

migration. This pattern changed in the following decade when the local authority experienced net in-migration. North Lanarkshire is situated between Glasgow and Edinburgh making it very accessible to Scotland's two largest cities. Net in-migration was experienced across North Lanarkshire, Lanarkshire and Glasgow and the Clyde Valley city region in the period 2004 to 2011. Net in-migration fell substantially in 2012 in Glasgow and the Clyde Valley city region and Lanarkshire, whilst North Lanarkshire experienced marginal net out-migration. This trend was reflective of Scottish migration as a whole, which saw a sharp decline in net in-migration from over 30,000 in 2011 to fewer than 13,000 migrants in 2012. Net migrants from within Scotland marginally increased in 2012, but these gains were offset by a large decline in net migration due to international migrants.

Figure 2.2: Net migration – North Lanarkshire, Lanarkshire & Glasgow and the Clyde Valley city region, 1992-2012



Source: National Records of Scotland

Note: includes other changes

2.2 Labour Market

2.2.1 Total employment

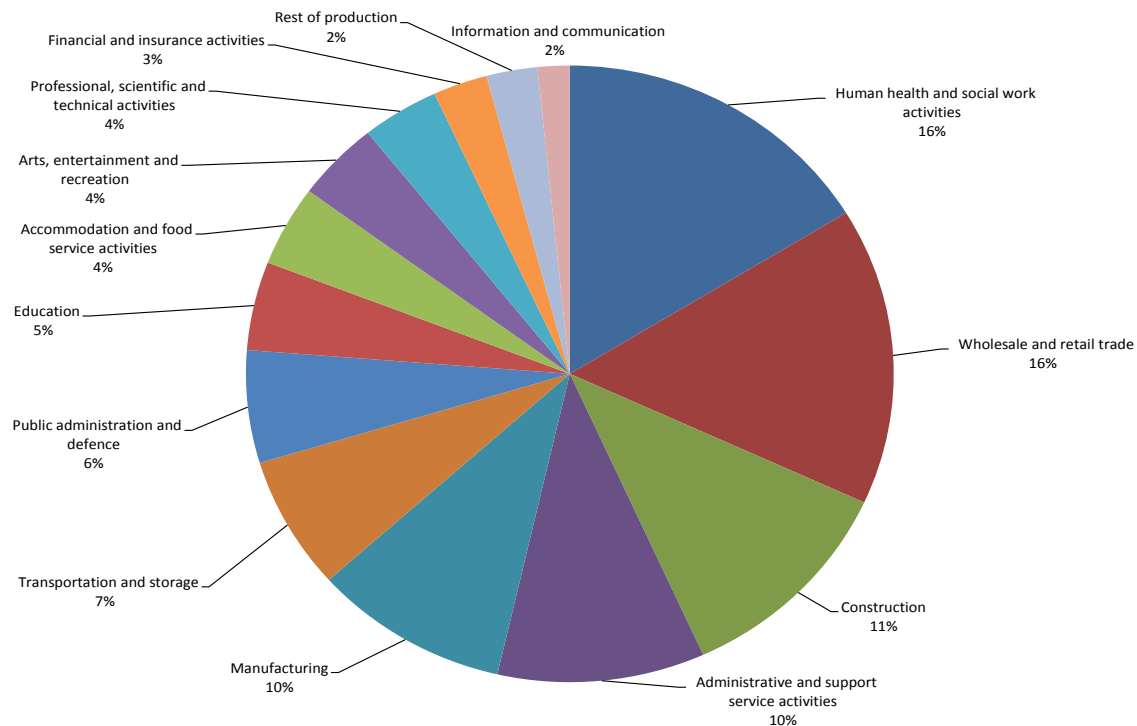
Total employment in North Lanarkshire was 133,000 in 2012, equivalent to an employment rate of 60%. Employment was estimated to have grown by 1.1% in 2013 to 135,000, with the employment rate rising to 61%. In 2012 North Lanarkshire accounted for 51% of total employment in Lanarkshire and 15% in Glasgow and the Clyde Valley city region. Further employment comparisons between North Lanarkshire, Lanarkshire and Glasgow and the Clyde Valley city region can be found in sections 2.2.3 & 2.2.4.

2.2.2 Industrial structure of employment

Providing almost a third of all jobs, the health & social care and wholesale & retail sectors are the largest employers in the North Lanarkshire, each accounting for 16% of total employment (see figure 2.3). The dominance of the health & social care sector reflects the growing role of care provision by authorities, in part owing to an ageing population. Employment in the sector has grown from 12,000 (10% of total employment) in 1991 to 22,000 (16%) in 2012. The third largest sector in terms of employment is construction, accounting for 11 % of jobs, showing the sector remains an important employer in North Lanarkshire despite a period of

weak growth in the sector. Administrative and support services comprise 10% of jobs, as does the manufacturing sector, showing that despite falling employment in manufacturing over the last three decades, it continues to employ a significant proportion of the labour force.

Figure 2.3: North Lanarkshire employment structure, 2012



Source: BRES, Oxford Economics

The employment structure in North Lanarkshire is typical to Scotland in that the health & social care and wholesale & retail sectors are the largest employers, but quite different in the employment contribution of the majority of other sectors. Construction's share of employment at 11% is 5% higher than in Scotland as a whole, whilst administrative and support services and transport and storage are 3% more concentrated in North Lanarkshire than Scotland. Financial services are underrepresented in North Lanarkshire, with a 4% lower share of total employment than in Scotland.

The construction sector refers to the development of residential and non-residential buildings, civil engineering activities (building of road, bridges and utilities) and any other specialised construction activities. Administrative and support services includes employment agencies, rental and leasing activities and travel agencies. Also included are business support services such as cleaning services, security services and call centres. Transport and storage refers to passenger and freight transport by air, land and sea, as well as warehousing and postal activities.

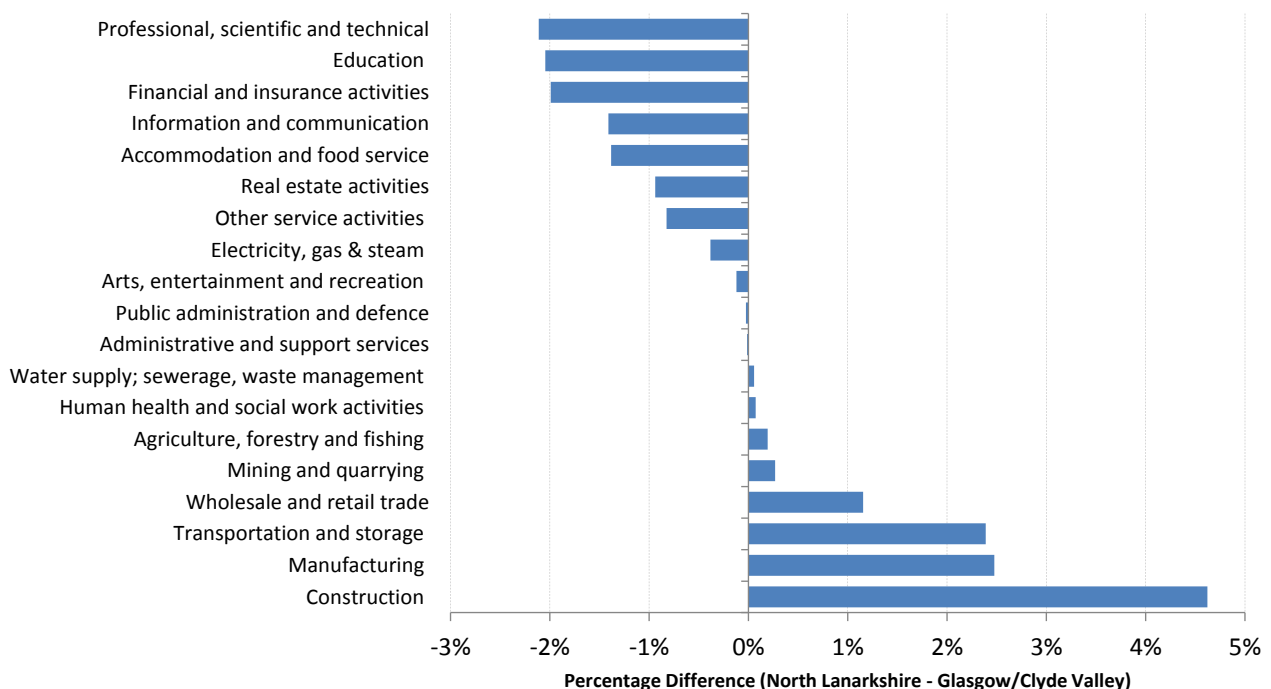
Figure 2.4 compares the employment structure of North Lanarkshire with that of the Glasgow and the Clyde Valley city region, displaying the relative sectoral employment concentrations of each area. As noted above, the construction sector accounts for a large proportion of total employment in North Lanarkshire despite the recent downturn in the sector at a Scottish and UK level. The importance of the sector to the North Lanarkshire economy is further explained by its contribution, almost 5% more to employment totals than

across the Glasgow and the Clyde Valley city region. North Lanarkshire also has a relatively high concentration of manufacturing and transport & storage. The accessibility of North Lanarkshire, with its location on the main Glasgow to Edinburgh road, would make it attractive to the manufacturing sector which would need to distribute its products, whilst its centrality makes it appealing to firms in the transport & storage sector.

The construction and transport & storage sectors are more highly concentrated in North Lanarkshire than Lanarkshire. This highlights the local authority's reliance on a small number of sectors for employment, which could be a potential risk if further shocks were to be experienced in these sectors in the future. The over-reliance on these sectors is illustrated when their sectoral concentrations are compared to the Scottish average. The construction sector's share of employment at 11% is over 4% above the Scottish average, whilst the transport & storage sector's 7% share of employment is far above the Scottish average of 4%.

Employment in North Lanarkshire is comparatively less heavily concentrated in the professional, scientific & technical, education and financial services sectors, all of which attribute 2% less to total employment than is the case across Glasgow and the Clyde Valley city region. The lower concentration of employment in education can be explained by the high offering of universities and colleges within Glasgow and the Clyde Valley city region. Financial services are less heavily concentrated in North Lanarkshire due the sectors tendency to locate in urban centres, particularly in specialised quarters such as Glasgow's International Financial Services District (IFSD). Much of the same can be said for professional, scientific and technical activities.

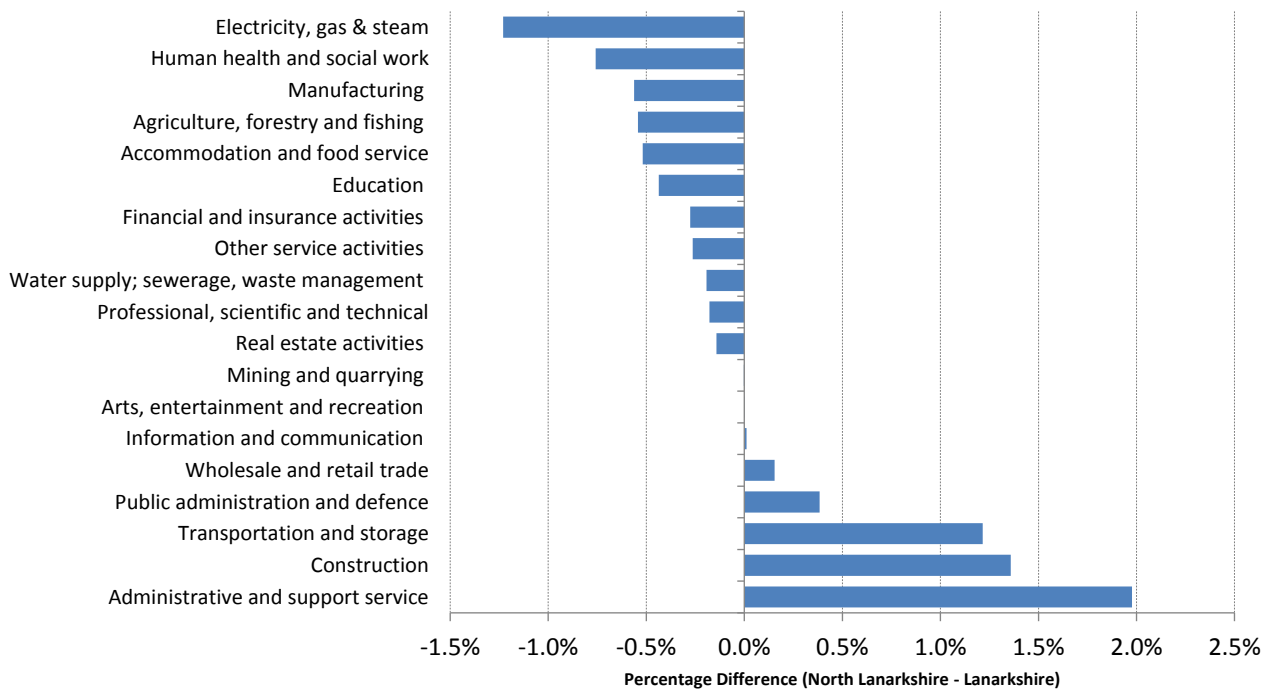
Figure 2.4: Relative employment concentration – North Lanarkshire, difference from Glasgow and the Clyde Valley city region, 2012



Source: Oxford Economics

Figure 2.5 displays the relative sectoral employment concentrations of North Lanarkshire to Lanarkshire. As might be expected the sectoral employment compositions of North Lanarkshire are more closely aligned with Lanarkshire than the Glasgow and the Clyde Valley city region. Administration and support services are more highly concentrated in North Lanarkshire, with a 2 percentage point greater concentration than in Lanarkshire.

Figure 2.5: Relative employment concentration – North Lanarkshire, difference from Lanarkshire, 2012



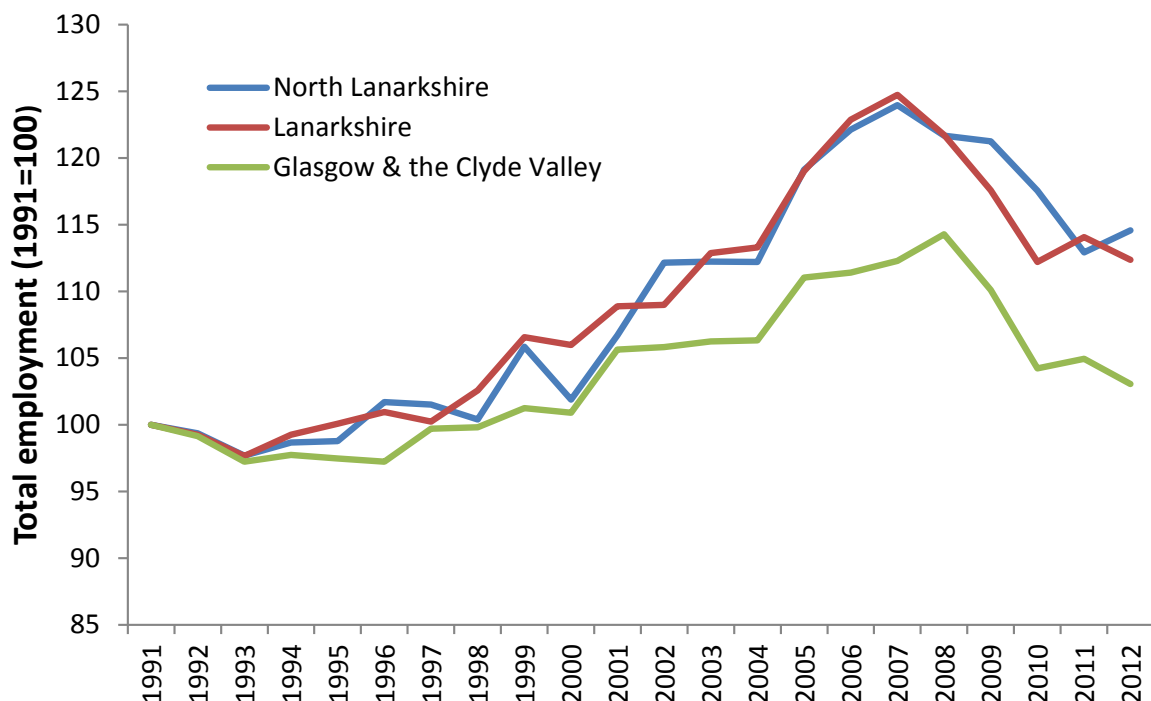
Source: Oxford Economics

2.2.3 Recent trends in employment

North Lanarkshire's employment trends over the past two decades relative to Lanarkshire and Glasgow and the Clyde Valley city region is illustrated in figure 2.6. The broad trend in total employment over the past two decades is similar across all three areas, though weaker growth was recorded in Glasgow and the Clyde Valley city region over the period. North Lanarkshire and Lanarkshire shared a much closer pattern of growth with average annual growth rates of 0.6%, Glasgow and the Clyde Valley city region experienced much weaker growth of 0.1% per year.

In the period 2000 to 2008, total employment grew by 19.4% in North Lanarkshire, exceeding growth of 14.8% in Lanarkshire and 13.3% in Glasgow and the Clyde Valley city region. Strong growth in North Lanarkshire over this period was underpinned by a strong expansion of the human health and social care sector with more moderate growth in administrative and support services, wholesale and retail and construction. Relatively modest manufacturing declines in North Lanarkshire relative to the two other locations eased the impact on total employment growth over the period. North Lanarkshire has experienced a contraction in total employment in 3 out of the past 4 years, cumulating in a 5.8% decline since 2008. Though the labour market has suffered in this period, the loss of jobs was more severe across Lanarkshire (7.7%) and Glasgow and the Clyde Valley city region (9.8%). But job losses in all three locations were sharper than in Scotland where total employment contracted by a more moderate 2.6%

Figure 2.6: Total employment – North Lanarkshire, Lanarkshire and Glasgow and the Clyde Valley city region, 1991 – 2012 (1991=100)



Source: BRES, Oxford Economics

Note: Includes self-employed

Employment change broken down by sector in the period 2008-2012 is shown in Table 2.1. The wholesale and retail sector was hardest hit with the loss of 2,500 jobs, a decline of 11%. This rate of decline was similar to that experienced in both Lanarkshire and Glasgow and the Clyde Valley city region. The accommodation and food services sector contracted by 30% in North Lanarkshire with the loss of 2,400 jobs, well above the contraction in Lanarkshire (22%) and Glasgow and the Clyde Valley city region (17%). Manufacturing suffered significantly in the period with the loss of 1,700 jobs, a contraction of 12% - though employment in the sector has declined over the two decades prior to 2008. Information and communication also performed relatively weakly between 2008 and 2012 with the loss of 1,600 jobs, reducing the sector by 44%. The sector's contraction in North Lanarkshire was more severe than the 34% decline in Lanarkshire, whilst employment in the sector in Glasgow and the Clyde Valley city region remained relatively flat.

Table 2.1 shows the resilience of North Lanarkshire's construction sector in the period 2008 to 2012, helping to explain the sectors relatively more robust labour market performance over the last few years. North Lanarkshire's construction sector grew marginally in the period 2008 to 2012, expanding by 3% and creating 500 jobs. By contrast employment in the construction sector in Lanarkshire and Glasgow and the Clyde Valley city region fell by 22% and 19% respectively. Stable employment in construction was accompanied by rising employment in the professional, scientific and technical and administration and support sectors in North Lanarkshire, against the Scottish trend, and this helped to offset losses in other sectors.

Table 2.1: Change in employment – North Lanarkshire, Lanarkshire and Glasgow and the Clyde Valley city region, 2008-2012

	North Lanarkshire		Lanarkshire		Glasgow / Clyde Valley	
	(000s)	(%)	(000s)	(%)	(000s)	(%)
Agriculture, forestry and fishing	0.1	7%	0.3	8%	0.4	8%
Mining and quarrying	0.1	33%	0.4	53%	0.4	44%
Manufacturing	-1.7	-12%	-5.0	-16%	-8.8	-12%
Electricity, gas, & steam	-0.5	-39%	2.6	129%	2.3	40%
Water supply; sewerage, waste management	0.6	103%	0.5	25%	-0.6	-8%
Construction	0.5	3%	-6.1	-19%	-16.4	-22%
Wholesale and retail trade	-2.5	-11%	-5.0	-11%	-16.1	-11%
Transportation and storage	0.3	3%	-0.9	-5%	-5.6	-12%
Accommodation and food service activities	-2.4	-30%	-3.6	-22%	-10.1	-17%
Information and communication	-1.6	-44%	-2.2	-34%	0.2	1%
Financial and insurance activities	-0.1	-4%	-1.2	-17%	-8.3	-20%
Real estate activities	-0.1	-9%	0.1	5%	-0.3	-2%
Professional, scientific and technical activities	1.2	31%	2.3	28%	-0.5	-1%
Administrative and support service activities	0.9	7%	-3.1	-12%	0.2	0%
Public administration and defence	-0.6	-7%	-1.8	-11%	-9.5	-16%
Education	-0.5	-7%	-1.1	-7%	-10.3	-15%
Human health and social work activities	-1.4	-6%	4.1	10%	-4.2	-3%
Arts, entertainment and recreation	0.0	0%	-1.4	-17%	-1.9	-8%
Other service activities	-0.5	-20%	-0.8	-14%	-4.4	-17%
Total	-8.3	-6%	-21.8	-8%	-93.7	-10%

Source: BRES, Oxford Economics

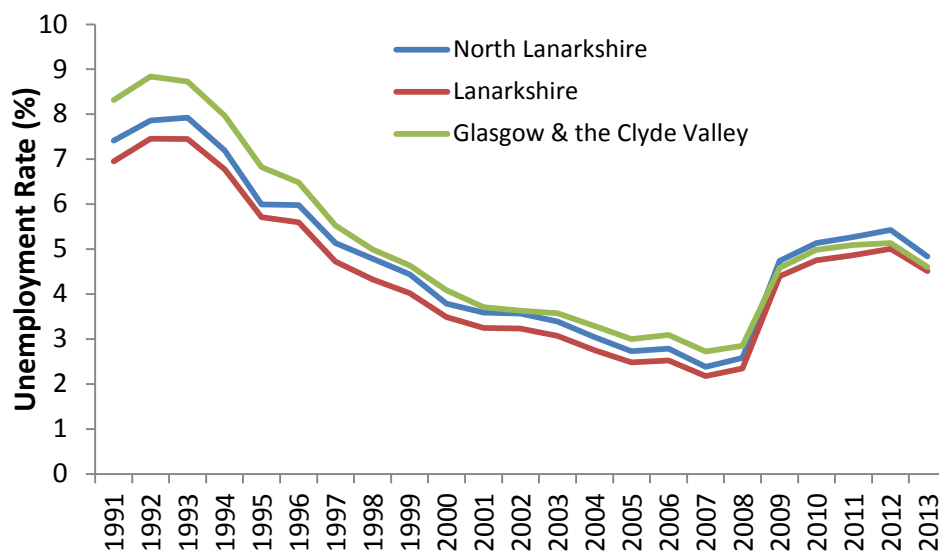
Note: Includes self-employed

2.2.4 Unemployment

Consistent with employment rises in North Lanarkshire, the unemployment rate fell steadily from the early 1990s to the beginning of the financial crisis in 2008 (figure 2.7). The unemployment rate in North Lanarkshire fell from a peak of 7.9% in 1993 to a low of 2.4% in 2007. Since 2007 the unemployment rate in North Lanarkshire rose for 5 consecutive years reaching 5.4% in 2012, before easing to 4.8% in 2013 – still twice as high as in 2007. Compared to the Scottish average, North Lanarkshire has experienced quite high unemployment rates. In 2012, the Scottish unemployment rate hit a more moderate peak of 4.1% before falling to an estimated 3.7% in 2013. However, Scotland as a region fared better than the UK with an unemployment height of 4.8% in 2012, which is estimated to have fallen to 4.2% in 2013.

Figure 2.7 shows that trend in unemployment rates across North Lanarkshire, Lanarkshire and Glasgow and the Clyde Valley city region have been broadly similar over the past two decades with only marginal differences in rates throughout this period.

Figure 2.7: Unemployment Rate – North Lanarkshire, Lanarkshire and Glasgow and the Clyde Valley city region, 1991-2013



Source: Nomis

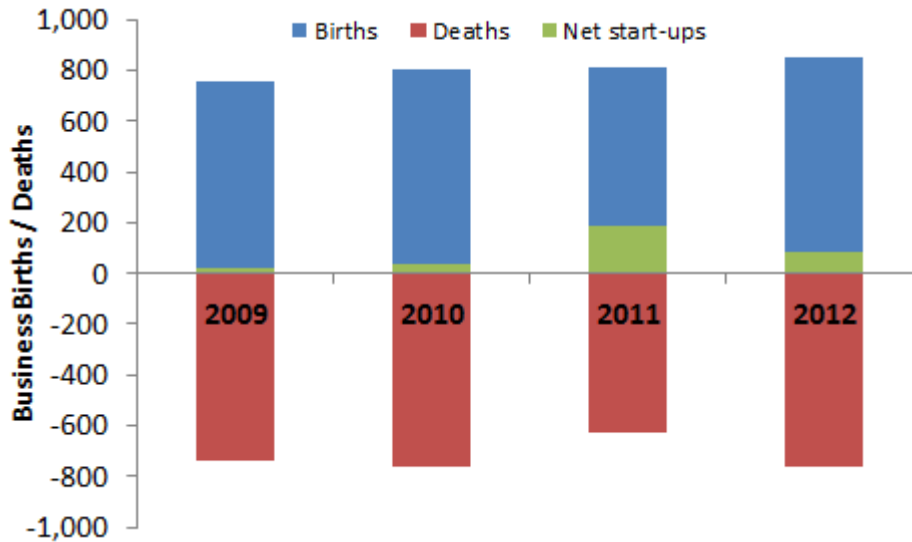
2.3 Entrepreneurship

In the wake of the financial crisis the labour market across the UK experienced a steep decline in total employment and a shift towards those in part time work seeking longer or full-time work, and people classed as economically inactive but seeking work. Another key feature has been the increasing level of self-employment across the UK. In North Lanarkshire the number of self-employed rose from 12,300 in 2008 to 13,900 in 2012, growing at an average rate of 2.9% per annum.

Figure 2.8 shows business births and deaths in North Lanarkshire over the past 4 years. Business births rose from 760 to 850 in the four years from 2009 to 2012 – averaging growth of 3.8% per annum. Business births also rose in Lanarkshire between 2009 and 2012, but with growth slower at just 2.5%. Business start-

ups in Glasgow and the Clyde Valley city region grew by an average of 4.3% per year between 2009 and 2012, surpassing the rate in North Lanarkshire

Figure 2.8: Business Births/Deaths in North Lanarkshire, 2009-2012



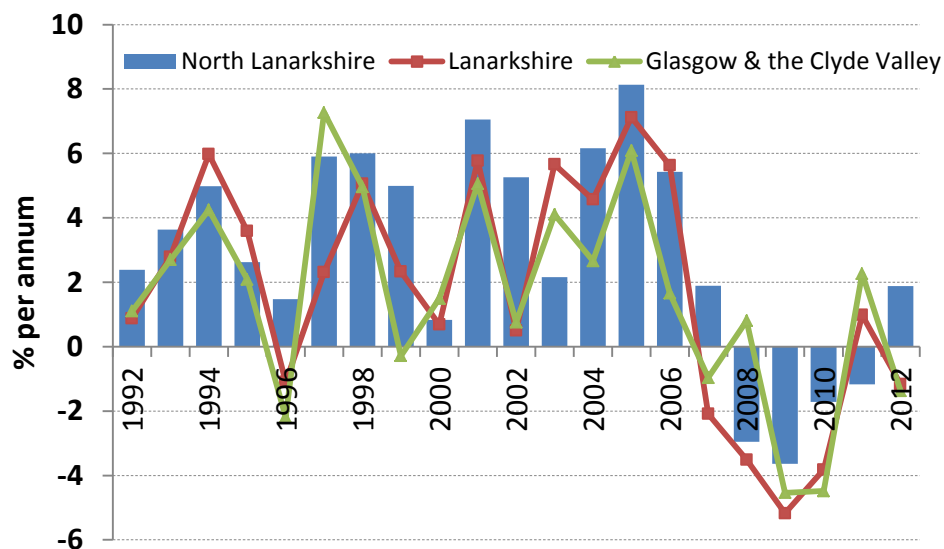
Source: ONS, Oxford Economics

Net business creation is constrained by similar levels of business deaths in North Lanarkshire. Business deaths have only grown marginally in the recovery, rising from 740 in 2009 to 765 in 2012 – average growth of 1.1% per annum. On average 83 net businesses were created each year in North Lanarkshire between 2009 and 2012, representing growth in the number of businesses of 1.2% in the same period. This rate of growth was double the Scottish and Lanarkshire average of 0.6% in the period. Whilst growth in Glasgow and the Clyde Valley city region was relatively flat in the four years to 2012, with average net growth of only 10 business per year – 0% growth in the period.

2.4 Gross Value Added (GVA)

Figure 2.9 shows annual GVA growth in North Lanarkshire relative to Lanarkshire and Glasgow and the Clyde Valley city region over the past two decades. In the pre-crisis period 1992-2008, GVA growth in North Lanarkshire rose at an average rate of 3.8% per annum. This was stronger than the performance of Lanarkshire which posted average annual growth of 2.7%, and ahead of 2.4% in Glasgow and the Clyde Valley city region. Since 2008 GVA in North Lanarkshire has dropped from £5,110m (2010 prices) to only £4,873m, equal to an average decline in output of 1.2% per annum. The contraction in GVA was sharper in Lanarkshire and Glasgow and the Clyde Valley city region, falling on average by 2.3% and 2.1% per annum respectively.

Figure 2.9: Annual GVA Growth – North Lanarkshire, Lanarkshire and Glasgow and the Clyde Valley city region, 1992-2012



Source: ONS Regional Accounts, Oxford Economics

Note: GVA data is not available below NUTS3 geographies. Oxford Economics have constructed this data for the local areas based upon sectoral employment, relative earnings in each local area and Scottish sectoral productivity. Over history the estimates can be rather volatile and should be interpreted with caution. Spikes in the data will be the result of fluctuations in the sectoral employment data at the local level.

3 Economic Outlook

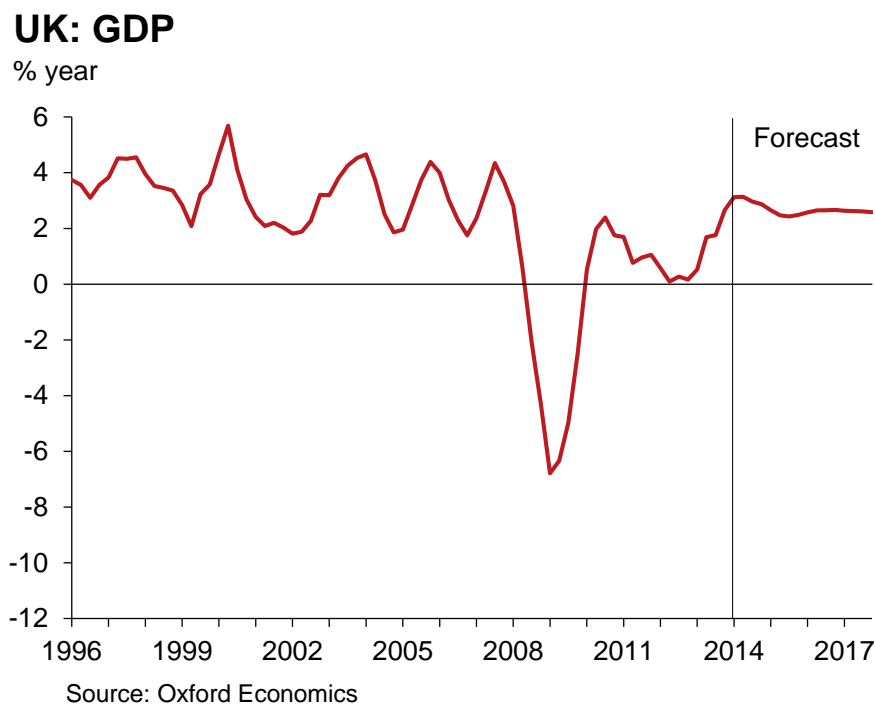
In this section we analyse the UK and Scotland forecasts before providing a summary of North Lanarkshire's economic outlook.

3.1 Economic recovery gathers pace

The latest data confirmed that GDP grew by 0.8% in 2014 Q1 confirming the UK is now in a period of sustained economic growth. GDP was 3.1% higher in 2014 Q1 compared with the same quarter in 2013, outstripping annual growth of 1.7% in 2013, making it the fastest annual increase in GDP since 2007. Due to the positive signs in the UK economy, Oxford Economics' May release has been strengthened over the short run relative to the forecasts presented in the Glasgow and the Clyde Valley city region report.

In 2014 Q1 GDP was still 0.6% lower than its peak in 2008 Q1 and approximately 18% lower than would have been the case had trend growth been achieved since then. GDP per capita in the UK is currently 5.5% below that recorded at the beginning of 2008 as modestly larger GDP is associated with a larger population.

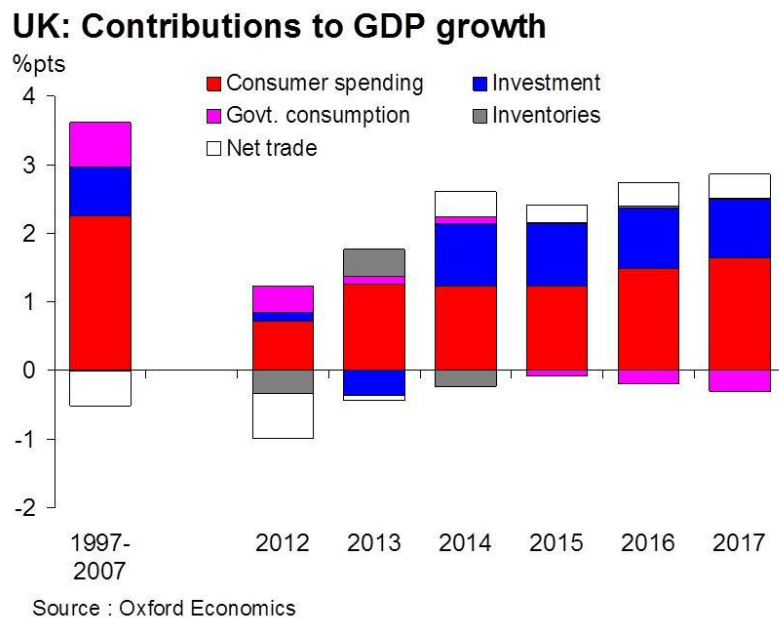
Figure 3.1: Annualised GDP Growth, UK, 1996 - 2017



Strong recoveries are usually driven initially by strong consumer spending, but weak real incomes, high unemployment and tight credit conditions have limited the rebound of consumer spending and its ability to help power the recovery. More robust consumer spending growth in the short-term looks unlikely with the forecasts suggesting rises of 1.8% in 2014 and 3.2% in 2015. Future growth may depend more heavily on investment than in previous recoveries. After a drop in investment of around 20% post-2008, there is scope for a strong investment bounce back and this is reflected in the large increase in mergers and acquisitions (M&As) and initial public offerings (IPOs) over the last few years. UK growth will broaden to include export growth, with world demand weighted by UK trading partners expected to rise by 4.1% in 2014 and 5.5% in

2015. Though sterling recently touched a five year high against the US dollar and on a trade-weighted basis, there is cause to believe that exports have become less sensitive to exchange rate movements, at least in the short term. Figure 3.2 shows the contribution to GDP growth broken down by component.

Figure 3.2: Improving and more balanced growth in outlook



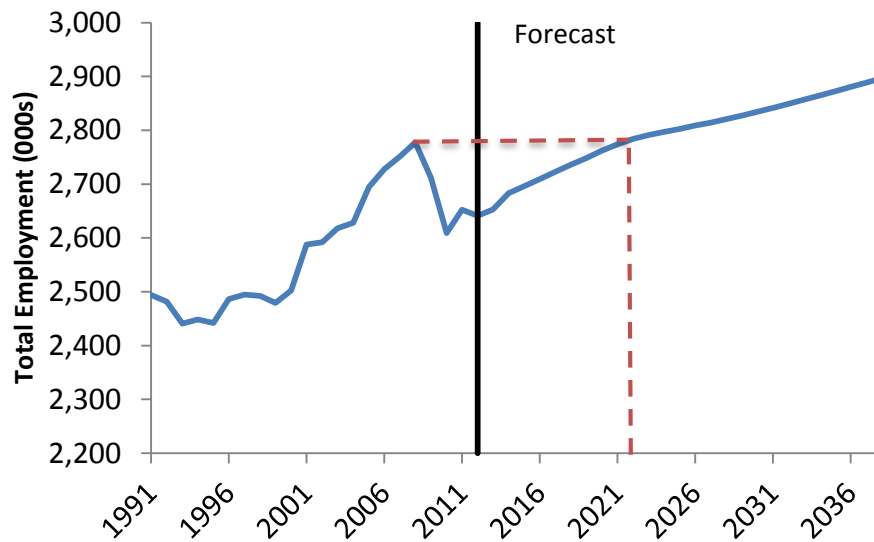
The housing market has also played an important role in the UK recovery and will continue to do so into the future. The Bank of England's 'Funding for Lending Scheme' and the government's 'Help to Buy' initiative have helped to increase the availability of mortgages, adding confidence into the housing market. In addition to the direct benefits of greater mortgage credit, associated indirect benefits include boosted activity in the wider real estate sector and increased consumer confidence on the back of rising house prices.

So far wage growth has remained stagnant during the recovery with headline average earnings growing at 1.7% in the month of March, just ahead of the rate of inflation (1.6%) experienced in the month. The slack earnings growth is in spite of a tightening labour market which has experienced a rise in employment of 280,000 in Q1 2014 – with unemployment falling from 6.9% to 6.8% over the same period. As labour market conditions tighten we predict wage growth will start to grow helping bolster consumer confidence and keep growth on track.

3.2 Scottish outlook

3.2.1 Employment growth to gather pace

Figure 3.3: Total employment in Scotland, 1991-2038



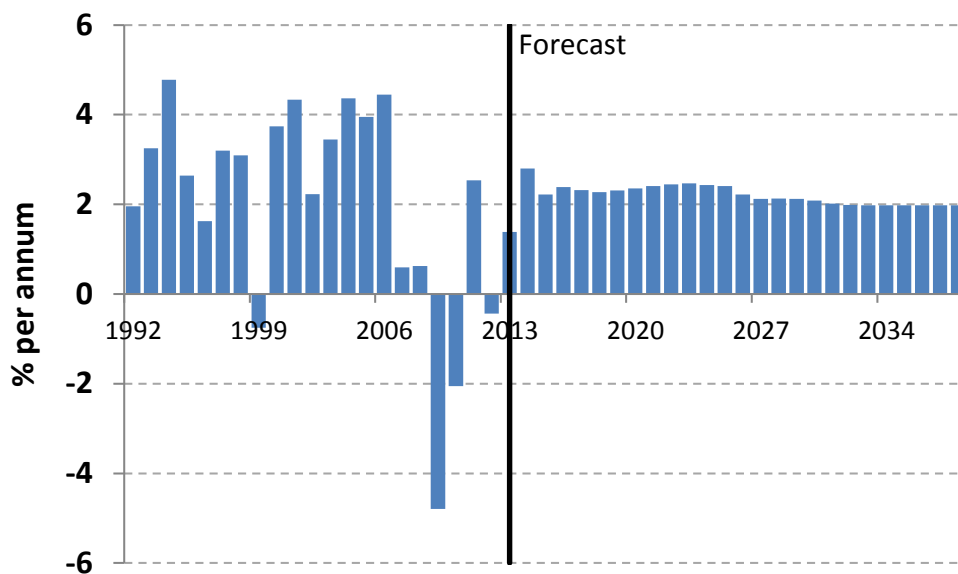
Source: Oxford Economics

After an estimated rise in total employment of 0.4% in 2013, Scottish employment is forecast to rise by a further 1.1% in 2014. Though a sustained period of growth is predicted, as shown in Figure 3.3 (above), we do not expect the pre-crisis employment peak of 2008 (2,777,000) to be reached until 2022. In the decade ahead to 2024, employment growth is forecast at an average rate of 0.4% per annum, rising from 2,680,000 in 2014 to 2,800,000 in 2024. Over the longer term, employment growth will slow, with Scottish employment projected to reach 2,900,000 by 2038.

3.2.2 GVA growth to pick up

After five years of volatile growth GVA is forecast to grow at 2.8% in 2014, double the 2013 rate. Over the five years to 2018, Scottish GVA is predicted to grow at an average rate of 2.4% per year. Figure 3.4 (below) show that in the longer-term to 2038, growth slows to 2.2%. On this basis Scottish GVA is set to return to the 2008 peak by 2015. The forecasted growth rates are below the historic average (1991-2007) of 2.9% as we assume smaller contributions from the extraction industry (onshore element of North Sea Oil) and an unfavourable impact from public sector cuts.

Figure 3.4: GVA growth in Scotland, 1992-2038



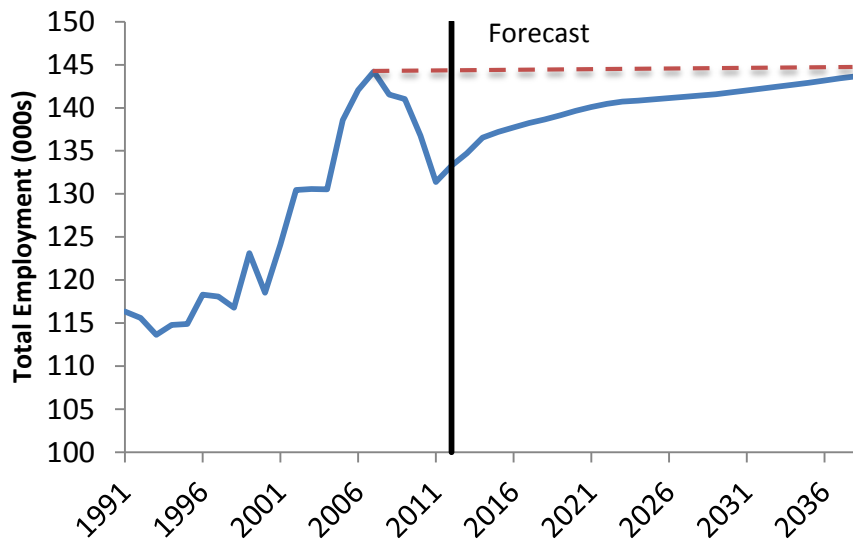
Source: Regional Accounts, Oxford Economics

3.3 North Lanarkshire outlook

3.3.1 Employment

We estimate that total employment grew by 1,400 in North Lanarkshire in 2013, representing an increase of 1.1%. This growth rate exceeded our estimate for Lanarkshire (0.2%) and Glasgow and the Clyde Valley city region (0.6%) and was almost three times the Scottish average of 0.4%. Employment is forecast to rise faster in 2014 in North Lanarkshire, at a rate of 1.4%, with the creation of 1,800 jobs. Lanarkshire is predicted to narrow the growth disparity in the year ahead with total employment rising by 1.0%, whilst Glasgow and the Clyde Valley city region is set to see employment grow at the Scottish average of 1.1%. In figure 3.5 it can be seen that over the long term, employment growth in North Lanarkshire is forecast to slow to 0.3% per annum, in the period to 2038, modestly below the Scottish average of 0.4%. On this basis, it is unlikely employment in North Lanarkshire will return to its pre-recession peak of 144,000 until 2038.

Figure 3.5: Total employment in North Lanarkshire, 1991-2038



Source: BRES, Oxford Economics

In the decade ahead to 2023 total employment in North Lanarkshire is forecast to rise by 6,000 jobs - equivalent to an average rise of 0.4% per year. The construction sector is forecast see the largest rise, creating 2,800 additional jobs over this period, equivalent to an average rate of 1.7% per annum. Between 2023-2038, the construction sector is forecast to add another 2,600 jobs at a slower average annual rate of 0.9%. Our forecasts highlight the continued dependence of North Lanarkshire on the construction sector as a key driver of job creation. The over-reliance on construction could pose a risk if the sector endured another weak period of growth - a more broad based sectoral growth spread would help diversify away this risk.

In Glasgow and the Clyde Valley city region and across Scotland, a significant proportion of employment growth is dependent on the professional, scientific and technical and administrative and support service sectors. In North Lanarkshire only administrative and support services are expected to record notable rises in employment. Growth is expected to continue in the decade to 2023 with the addition of 2,700 jobs, then adding a further 1,700 jobs in the 15 years to 2038. Over the entire forecast period between 2013 and 2038, North Lanarkshire is expected to experience average annual employment growth of 1.0% in administrative and support services, marginally behind Glasgow and the Clyde Valley city region at 1.2% and Scotland at 1.1%. Though growth is expected to be lower for professional, scientific and technical activities in North Lanarkshire the sector is forecast to rise from 5,200 jobs in 2013 to 6,800 in 2038.

Table 3.1: Sectoral employment change in North Lanarkshire, 1998-2038

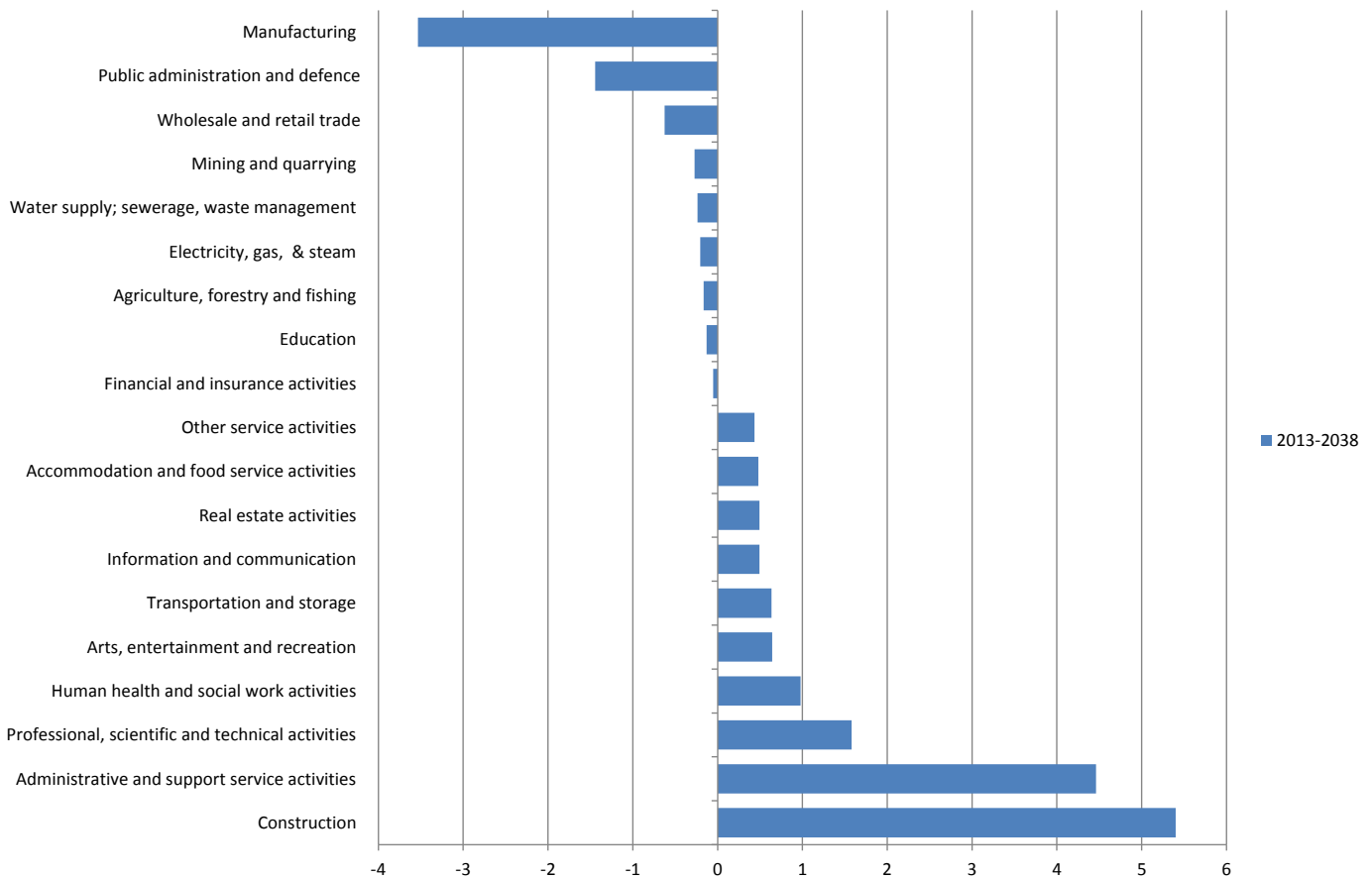
	1998-2008 (000s)	2008-2013 (000s)	2013-2023 (000s)	2023-2038 (000s)
Agriculture, forestry and fishing	0.5	0.0	-0.1	-0.1
Mining and quarrying	-0.1	0.1	-0.1	-0.2
Manufacturing	-5.4	-1.7	-1.1	-2.5
Electricity, gas, & steam	-0.3	-0.5	-0.1	-0.1
Water supply; sewerage, waste management	-0.3	0.5	-0.1	-0.1
Construction	4.9	0.4	2.8	2.6
Wholesale and retail trade	2.6	-2.3	0.1	-0.7
Transportation and storage	-1.8	0.2	0.9	-0.3
Accommodation and food service activities	2.1	-2.5	0.5	0.0
Information and communication	1.8	-1.7	0.4	0.1
Financial and insurance activities	0.9	-0.1	0.0	0.0
Real estate activities	0.8	0.1	0.3	0.2
Professional, scientific and technical activities	0.0	1.3	1.0	0.6
Administrative and support service activities	4.4	2.4	2.7	1.7
Public administration and defence	4.3	-0.7	-1.4	-0.1
Education	-2.0	-0.4	-0.3	0.1
Human health and social work activities	11.2	-1.6	-0.3	1.3
Arts, entertainment and recreation	0.3	0.0	0.5	0.2
Other service activities	1.0	-0.4	0.3	0.2
Total	24.7	-6.8	6.0	3.0

Source: BRES, Oxford Economics

Government budget cuts are expected to hit the public sector hard with the Treasury trying to reduce the national deficit. Following 2,700 jobs losses between 2008 and 2013, it is expected the public sector will lose an additional 2,000 jobs by 2023. This is equivalent to an average contraction of 0.6% per year, representing losses at a faster pace than in Lanarkshire and Glasgow and the Clyde Valley city region, both 0.5%, and twice the Scottish average of 0.3%.

This forecast suggests a reduction in public sector employment in North Lanarkshire from 27% of total employment in 2008 to 24% in 2023. However, looking beyond 2023 to 2038, we forecast that 1,300 jobs will be added to the public sector with these jobs almost exclusively confined to the health and social care sector.

Figure 3.6: Sectoral employment change (000s), North Lanarkshire, 2013-2038

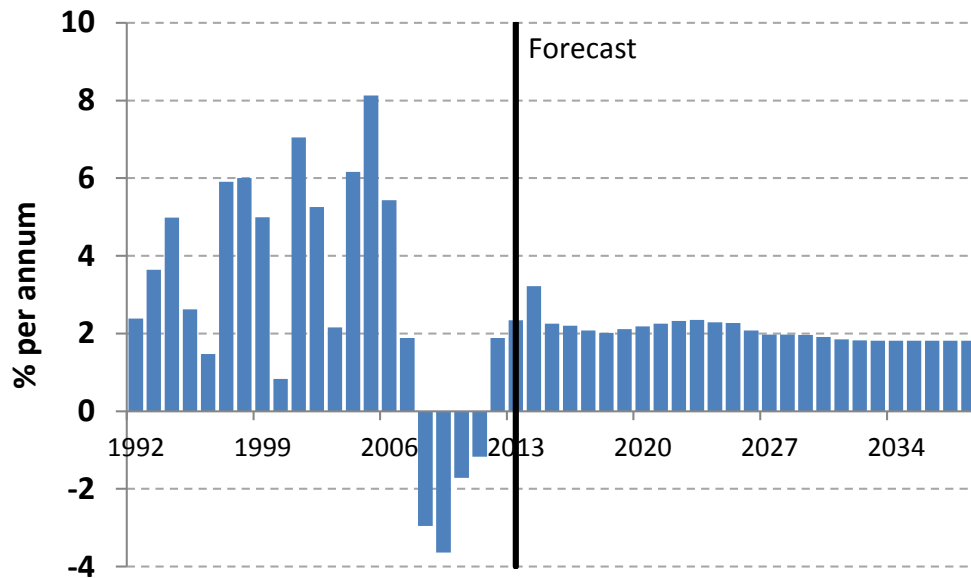


Source: Oxford Economics

As seen in figure 3.6 above, the sustained decline in manufacturing employment witnessed in North Lanarkshire in recent years is projected to continue. Over the next 25 years to 2038, a loss of 3,600 jobs is forecast – equal to an average yearly decline of 1.3%. The decline over the period is representative of employment in the sector generally, with employment falling in Glasgow and the Clyde Valley city region and Scotland on average by 1.5% per year in the period. Though employment in manufacturing is continuing to decline, the sector continues to play an integral role in the economy. The production methods used now however are less labour-intensive, with competitiveness and increased productivity dependent on a more integrated use of technology

3.3.2 GVA

Figure 3.7: GVA growth in North Lanarkshire, 1992-2038



Source: Regional Accounts, Oxford Economics

GVA growth in North Lanarkshire is forecast at 3.2% in 2014, ahead of the Scottish average of 2.8%. In the decade ahead GVA growth is forecast to average 2.3% per annum in North Lanarkshire, broadly in line with expectations for Lanarkshire (2.2%) and Glasgow and the Clyde Valley city region (2.4%). Despite the continued decline in employment levels, manufacturing provides the largest boost to GVA in the period – adding £197m in output and growing at an average rate of 2.3%. The two key drivers of employment, administration and support services and construction, are also key contributors to output growth. Administration and support services is forecast to grow by £183m – equal to a rise of 4.1% per year, while construction is projected to add £176m to the local economy, growing at an annual rate of 2.9%.

Table 3.2: GVA output, 2013 and 2038; GVA annual average growth, 2013-23 and 2023-38

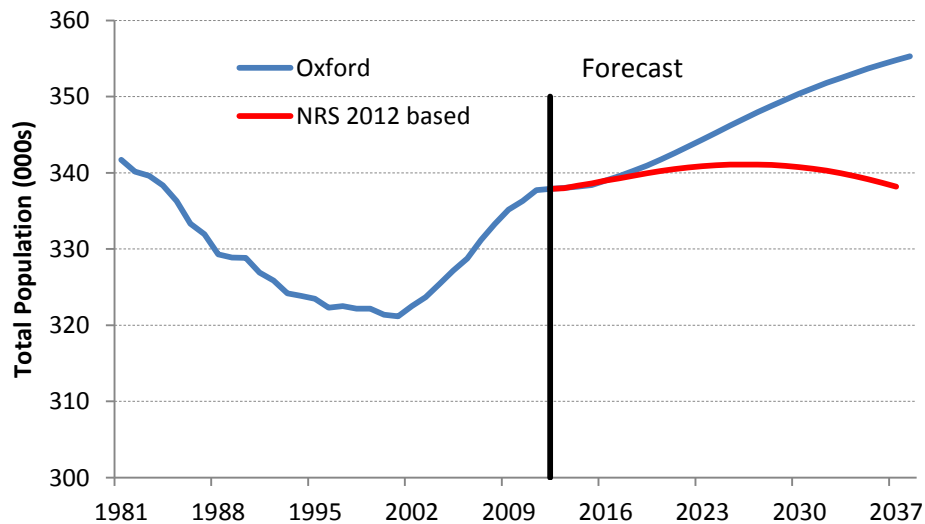
	2013 (£m, 2010)	2038 (£m, 2010)	2013-2023 (%)	2023-2038 (%)
Agriculture, forestry and fishing	15.3	20.7	1.4	1.0
Mining and quarrying	48.2	52.8	0.6	0.2
Manufacturing	778.5	1,170.2	2.3	1.2
Electricity, gas, & steam	83.0	125.3	1.0	2.0
Water supply; sewerage, waste management	104.0	159.9	1.7	1.6
Construction	534.8	979.6	2.9	2.0
Wholesale and retail trade	613.9	1,015.1	2.2	1.8
Transportation and storage	351.8	562.2	2.2	1.6
Accommodation and food service activities	96.9	166.4	2.3	2.0
Information and communication	103.0	252.2	4.2	3.1
Financial and insurance activities	216.7	397.5	2.5	2.3
Real estate activities	248.8	501.7	3.2	2.5
Professional, scientific and technical activities	173.7	438.2	4.1	3.4
Administrative and support service activities	370.3	888.0	4.1	3.0
Public administration and defence	300.0	327.5	0.0	0.6
Education	199.0	222.0	0.3	0.5
Human health and social work activities	561.2	945.1	1.5	2.3
Arts, entertainment and recreation	107.1	155.4	1.9	1.1
Other service activities	81.0	116.3	1.7	1.2
Total	4,987.2	8,496.2	2.3	1.9

Source: Oxford Economics

In the years 2023-2038, economic growth in North Lanarkshire slows to an average of 1.9% per year, a little below the Scottish average of 2.1%. Output growth in the period will also lag Glasgow and the Clyde Valley city region, with forecast GVA growth of 2.3% per annum, though it is broadly in line with the average increase of 2.05% per year in Lanarkshire. The administration and support and health and social care sectors become the key focus of growth in this period, though administration and support services slows to an average rate of growth of 3.0% per year.

3.3.3 Population

Figure 3.8 Total population, North Lanarkshire – Oxford v official



Source: National Records of Scotland, Oxford Economics

Figure 3.7 sets out the population forecasts for North Lanarkshire compared with the official projections. Oxford Economics' forecasts are economically driven and are higher than the official projections suggest. Oxford Economics' forecast the total population in North Lanarkshire will rise from 338,000 in 2013 to 344,000 in 2023 before reaching 355,000 by 2038 – representing an average annual growth rate of 0.2%, below the Scottish average of 0.4%.

Official projections for North Lanarkshire predict that population increases in the decade ahead will be cancelled out by a drop in the longer-term, such that population remains relatively unchanged by the end of the period. This flat growth falls below the Scottish average of 0.3% predicted by the official population projections in the period 2013 to 2037.

3.3.4 Incomes and affordability

The ratio of house prices to earnings is a common measure of affordability. Within North Lanarkshire, the ratio has risen steadily since 2000 until 2007. The onset of the financial crisis resulted in a slight fall in this ratio. At present within the area house prices are 5.4 times average earnings. This compares to 5.5 times earnings within Lanarkshire and 5.9 within Glasgow and Clyde Valley region.

Table 3.3 Earnings and house price growth, North Lanarkshire, 2013-2038

	House prices	Workplace based earnings	Residence based earnings
North Lanarkshire	3.7	3.9	3.9
Lanarkshire	3.9	3.9	3.9
Glasgow and the Clyde Valley	4.1	4.0	3.9
Scotland	4.6	3.9	3.9

Source: Oxford Economics

Residence based earnings are forecast to grow by 3.9% per annum, compared with 3.7% growth in house prices, thus the ratio of house prices to earnings is expected to fall slightly to 5.1 by 2038 in North Lanarkshire. This is expected to remain below the Lanarkshire ratio and also the average across the Glasgow and Clyde Valley region.

4 Alternate futures for North Lanarkshire

4.1 Could the outlooks be different?

With the economic uncertainty experienced since the financial crisis and the unpredictability of migration patterns in current economic conditions it is prudent to consider alternative future scenarios that may lie ahead for North Lanarkshire.

4.2 A re-balanced economy

The alternative scenario envisions an outlook with different sectoral outlooks that are credible for the UK and thus provide alternate macro impact on Scotland and North Lanarkshire. The Oxford Economics model uses the past performance of sectors to model projected future growth of each sector, such that sectors with stronger past performance will have faster growth in the future. The alternative scenario is based on the assumption that the UK, Scotland and at a lower level North Lanarkshire, would invest and grow in alternative sectors – re-balancing their economies away from their most concentrated sectors.

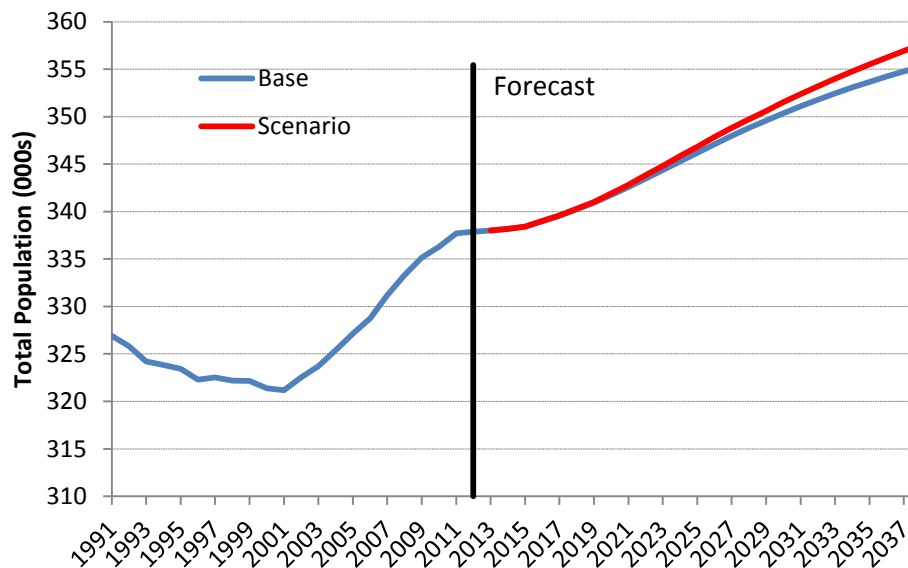
To construct the re-balanced economy scenario the sectoral composition is based on the assumption of increased investment and export potential for the UK helping to boost high-tech manufacturing and agriculture. The scenario also assumes that visitor numbers to the UK rise boosting the accommodation, leisure and cultural sectors. Key scenario assumptions;

- Job growth in high tech manufacturing sectors (bio / electronics / chemicals).
- Agricultural employment stabilising.
- Stronger tourism growth.
- Growth in leisure, film and cultural sectors.
- Recycling, waste and environmental sector expanding more rapidly.
- Extraction and utilities stabilising.
- Modestly less growth in financial and professional services – reflecting transferring of skills to other sectors.

4.3 Scenario outputs

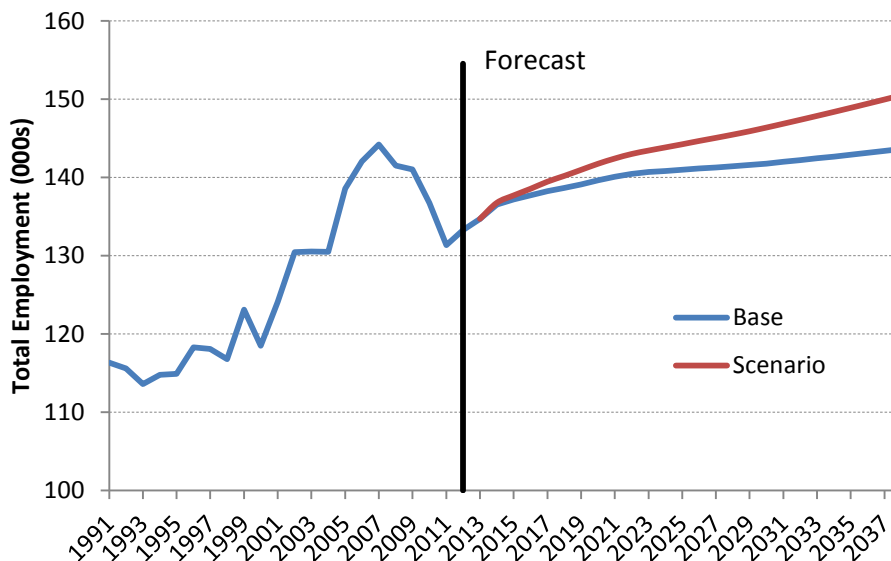
The scenario only has a moderate impact on population in the long-run. In the short-term, the additional employment opportunities are met by spare capacity in the local labour market and there is only a limited increase on inward migration. Over the longer-term migration reacts to meet the extra demand for workers – population is estimated to rise by an additional 2,300 by 2038 under the scenario.

Figure 4.1: Comparison of scenario to base – Total population in North Lanarkshire



Source: Oxford Economics

Figure 4.2: Comparison of scenario to base – Total employment in North Lanarkshire



Source: Oxford Economics

Under the scenario total employment in North Lanarkshire reaches 151,000 by 2038, almost 7,000 higher than forecast in the baseline. Under the rebalancing scenario employment in manufacturing and wholesale and retail remains relatively flat which is in contrast to the baseline forecast of job losses.

Table 4.1: Additional jobs by 2038

(000s)	Base	Scenario	Difference
Agriculture, forestry and fishing	0.8	1.0	0.3
Mining and quarrying	0.3	0.5	0.2
Manufacturing	9.5	11.9	2.4
Electricity, gas, & steam	0.5	0.6	0.1
Water supply; sewerage, waste management	0.8	0.9	0.0
Construction	20.5	20.9	0.3
Wholesale and retail trade	20.3	21.2	0.9
Transportation and storage	9.8	10.3	0.5
Accommodation and food service activities	6.0	6.2	0.3
Information and communication	2.6	2.7	0.0
Financial and insurance activities	2.6	2.6	0.1
Real estate activities	1.7	1.7	0.1
Professional, scientific and technical activities	6.8	7.0	0.2
Administrative and support service activities	19.7	20.3	0.6
Public administration and defence	6.3	6.7	0.4
Education	6.1	6.2	0.1
Human health and social work activities	22.5	22.7	0.1
Arts, entertainment and recreation	4.1	4.3	0.2
Other service activities	2.7	2.8	0.1
Total	143.7	150.5	6.8

Source: Oxford Economics

A significant proportion of the additional jobs under the scenario will be taken by local residents either from unemployed or inactivity. The employment rate in North Lanarkshire is expected to increase from 63.8% under the baseline to 65.8% under the scenario by 2038. In terms of production, the GVA outturn rises from 2.1% under the baseline to 2.6% under a re-balanced scenario, in the forecast period to 2038 – producing an additional £1.0bn of output.

Table 4.2: Summary of scenario outputs, 2038

	Base	Scenario
Population (000s)	355	358
Total employment (000s)	144	151
GVA (£m, 2010)	8,345	9,364
% per annum (2013-38)	Base	Scenario
Population	0.2	0.2
Total employment	0.4	0.4
GVA	2.1	2.6

Source: Oxford Economics

In the current economic climate we assign a probability of 50% to our baseline forecasts. However, there are numerous possible outcomes that could lie ahead and the rebalanced scenario is only one of many such alternative scenarios. It is worth remembering there are a range of risks which abound that could alter the outlook significantly.

5 Summary - sustainable growth reliant on investment and exports

Strong recoveries are usually driven initially by strong consumer spending, but weak real incomes, high unemployment and tight credit conditions have limited the rebound of consumer spending and its ability to help power the recovery. With savings ratios near historically low levels there is little capacity for further increases without a rise in wages. Sustainable growth will thus depend more heavily on enhanced corporate investment and an expansion in export sales than in previous recoveries.

In terms of output, North Lanarkshire is forecast to enjoy strong growth in 2014 and 2015 – outpacing Lanarkshire, Glasgow and the Clyde Valley city region and Scotland. Moving into the longer-term growth in North Lanarkshire will slow. In the period 2013-2038, North Lanarkshire will grow by 2.1% per year marginally lagging the Scottish average of 2.2% and Glasgow and the Clyde Valley city region at 2.3%.

The labour market in North Lanarkshire has been severely impaired since the onset of the financial crisis, dropping from a peak of 144,000 in 2007 to a low of 131,000 in 2011. During the recessionary period unemployment more than doubled, however it is showing signs that it is beginning to decline. The return to job growth is a much welcomed development; however the forecasts suggest that peak employment levels will not be reached until 2038.

An economic recovery is underway but it is only just being established and the outlook is still uncertain. The solutions to the crisis are experimental and their effectiveness can only be measured over a longer-term, thus the ability to judge their success is challenging. With this in mind it is sensible to explore alternative scenarios that may arise to consider their potential economic impact – for example a re-balancing of the UK economy. If such a scenario were to happen North Lanarkshire would experience faster growth in the forecast period to 2038, in both employment and output – with the creation of 7,000 additional jobs and GVA growing at 2.6% rather than 2.1%. The likelihood of an improved growth forecast is limited but not impossible, in reality it would require North Lanarkshire to attract a larger share of inward investment and raise exporting levels in applicable sectors.

6 Annex A

6.1 List of Abbreviations used

ABI	Annual Business Inquiry
AES	Annual Employment Survey
APS	Annual Population Survey
ASHE	Annual Survey of Hours and Earnings
BRES	Business Register and Employment Survey
CBI	Confederation of Business Industry
GDP	Gross Domestic Product
GVA	Gross Value Added
LFS	Labour Force Survey
LHS	Left Hand Side
MYE	Mid-Year Estimates
NES	New Earnings Survey
NRS	National Records of Scotland
NUTS	Nomenclature of Units for Territorial Statistics
NVQ	National Vocational Qualification
ONS	Office of National Statistics
PMI	Purchasing Managers Index
RHS	Right Hand Side
SIC	Standard Industrial Classification
UK	United Kingdom
US	United States
WFJ	WorkForce Jobs

7 Annex B – Data sources and assumptions

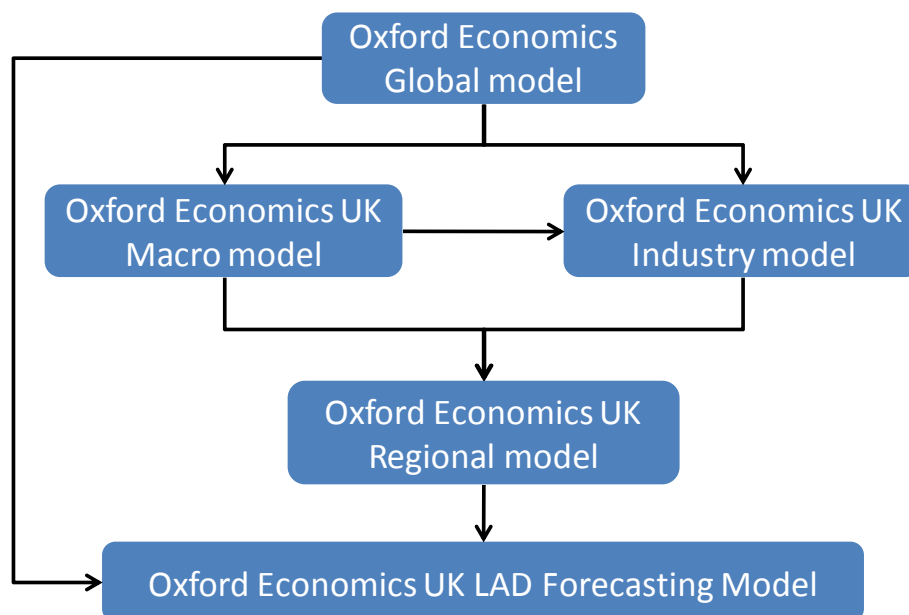
7.1 Model overview

This note provides technical information on the structure of Oxford Economics Local Authority District Forecasting Model and details of the data sources and definitions of variables within the model. The model should be viewed as one piece of evidence in making policy decisions and tracking economic and demographic change. It is not intended to be used on its own to set employment targets for local authority areas. Such targets will need to take account of local opportunities, constraints and community aspirations. As with all models it is subject to margins of error which increase as the level of geographical detail becomes smaller, and relies heavily upon published data.

Models, though predominantly quantitative, also require a degree of local knowledge and past experience, or more generally forecasting art, to make plausible long term projections. To this end the Oxford model has been developed by a team of senior staff who have a long history in model building and forecasting at both local and regional levels.

The Local Authority District Forecasting Model sits within the Oxford suite of forecasting models. This structure ensures that global and national factors (such as developments in the Eurozone and UK Government fiscal policy) have an appropriate impact on the forecasts at a local authority level. This empirical framework (or set of 'controls') is critical in ensuring that the forecasts are much more than just an extrapolation of historical trends. Rather, the trends in our global, national and sectoral forecasts have an impact on the local area forecasts. In the current economic climate this means most, if not all, local areas will face challenges in the short-term, irrespective of how they have performed over the past 15 years.

Figure 6.1: Hierarchal structure of Oxford Economics' suite of models



Source: Oxford Economics

The Local Authority District Forecasting Model produces base forecasts, which can be compared with other published forecasts (though care should be taken over data definition issues), and as a guide to aid commentary or analysis of North Lanarkshire. These forecasts can in one sense be considered to provide baseline 'policy off' projections with which the actual outturn under policy initiatives could be compared. However it must be realised that there are inherent difficulties in using the forecasts as a 'policy-off' baseline. In particular the base projections are 'unconstrained' in the sense that they make no allowance for constraints on development which may be greater than in the past.

Our local forecasting model depends essentially upon three factors:

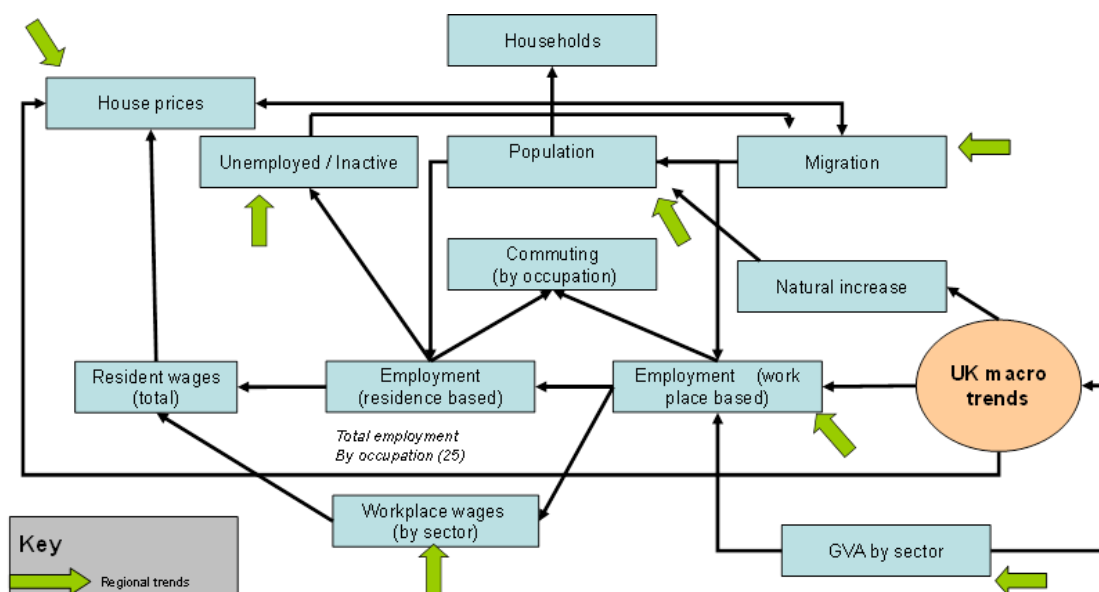
- National/regional outlooks – all the forecasting models we operate are fully consistent with the broader global and national forecasts which are updated on a monthly basis.
- Historical trends in an area (which implicitly factor in supply side factors impinging on demand), augmented where appropriate by local knowledge and understanding of patterns of economic development built up over decades of expertise, and
- Fundamental economic relationships which interlink the various elements of the outlook.

As per your requirements, this report focuses on the outlook between 2013 and 2038. Though it is worth bearing in mind that forecasting becomes more 'trend' based in the long run as there is a greater degree of uncertainty with producing forecasts over a long period. Thus the forecasts post 2023 should be interpreted with caution.

7.2 Model structure

The main internal relationships between variables are summarised in Figure 6.2. Each variable is related to others within the models. Key variables are also related to variables in the other Oxford Economics models.

Figure 6.2: Main Relationships between variables in the LAD Forecasting Model Forecasting



Model

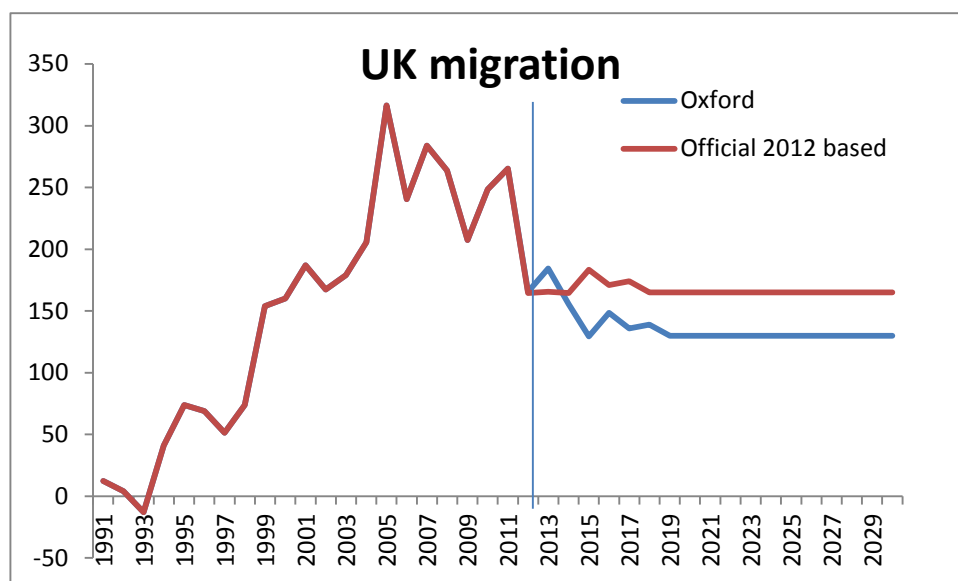
Source: Oxford Economics

7.3 Data sources and assumptions

Population and migration

Population and migration data are collected from the National Mid-Year estimates (MYE) for each area. These have been revised in line with the 2011 Census results. The latest data available is for 2012.

Oxford Economics produce their own forecasts of population which are economically driven and thus differ from the official population projections. Official births and deaths projections from 2012-based population projections are used but we have our own view on UK migration. The chart below sets out the Oxford migration forecast for the UK compared with the 2012-based population projection. Oxford Economics expect UK net migration to average 130,000 per annum compared to 165,000 in the official projections.



The divergence reflects the removal of one-off effects from EU enlargement and weaker economic prospects. Oxford Economics' population forecasts are derived from an economically driven model whereas official projections are trend based and do not consider how demand in the economy (and the likely impact on employment rates) affects migration.

At the local level, migration is linked to the employment rate forecast. If the employment rate within an area is falling too fast, migration reacts as the model assumes that people would not be attracted into this area to live, given that the employment prospects are weak. This approach ensures that the relationship between the labour market outlook and the demographic forecasts is sensible. This series is scaled to be consistent with the migration forecast for Scotland from the UK Regional Model.

The total population forecast is then constructed using the forecast of migration and the natural increase assumptions. Natural increase for local areas is forecast based upon recent trends in both the historical data and the official projections.

Working age population

Working age population data is also collected from the Mid-Year estimates (MYE) for each area up to 2012. It is defined at all people aged 16 to 64.

The share of working age to total population is forecast using both trends in the official projections and trends in the Scotland forecast from our UK Regional Model. This is applied to the total population forecast and scaled to be consistent with the working age population for Scotland.

Employees in employment

There are two key sources for the employee jobs data – ONS Workforce Jobs (WFJ) and the Business Register and Employment Survey (BRES):

- The WFJ series is reported on a quarterly basis, providing estimates of employee jobs by sector (based on the 2007 Standard Industrial Classification – SIC 2007) for the UK and its constituent government office regions, over the period 1981 Q3 to 2013 Q4.
- The BRES is an employment survey which has replaced the Annual Business Inquiry (ABI). Similar to WFJ, BRES data is based upon SIC 2007, but it is only published for the years 2008-12. Prior to this, ABI and Annual Employment Survey (AES) data is available for employee jobs data, however this is based on an older industrial classification (SIC 2003). Data is available at local authority level and more detailed sector definitions. It is worth noting that the BRES is first and foremost a survey and is therefore subject to volatility, particularly when the level of detail becomes more refined. The survey is collected in September of each year and not seasonally adjusted.

There are a number of steps in constructing regional employee jobs, due to changes in sectoral classifications across the various sources, and restrictions on data availability over particular periods of time. Initially, we take employee jobs data for each sector directly from the BRES over the years 2009-12, which reflects recent methodological changes to the BRES in accounting for working proprietors. This relates to September figures and is based upon SIC 2007 sectors. In 2008, levels of employee jobs are constructed by extrapolating back the trend in the old BRES. Data from the ABI and AES is used to construct the data back to 1991.

This constructed local dataset is then scaled to be consistent with the UK employee jobs series from WFJ, by applying an adjustment factor to all sectors which converts the data to annual average values (seasonally adjusted). This is measured on a workplace basis.

The starting point in producing employment forecasts is the determination of workplace-based employees in employment in each of broad 19 SIC2007 based sectors consistent with the Scotland and UK outlooks. At local authority level some of the sectors are driven predominantly by population estimates, others by total employment in the area and the remainder relative to the regional performance (largely exporting sectors). All sectors are also influenced by past trends in the local area. Taken in totality, employment is cross referenced with a number of variables (including population, relative performance across similar areas, historical cyclical performance and known policy) for checking and validation purposes. Where necessary, manual adjustments are made to the projected trends to reflect this validation process. The methods of sectoral projection are as follows, each of which are forecast based upon recent trends:

- Agriculture - share of the Scotland
- Mining and quarrying - share of the Scotland
- Manufacturing - share of the Scotland
- Electricity, gas, & steam - share of the Scotland
- Water supply; sewerage, waste management - share of the Scotland
- Construction - location quotient based upon total employment
- Wholesale and retail trade - location quotient based upon consumer spending
- Transportation and storage - location quotient based upon consumer spending
- Accommodation and food service activities - location quotient based upon consumer spending
- Information and communication - share of the Scotland
- Financial and insurance activities - share of the Scotland
- Real estate activities - location quotient based upon total employment
- Professional, scientific and technical activities - location quotient based upon total employment
- Administrative and support service activities - location quotient based upon total employment
- Public administration and defence - location quotient based upon population
- Education - location quotient based upon population
- Human health and social work activities - location quotient based upon population
- Arts, entertainment and recreation - location quotient based upon consumer spending
- Other service activities - location quotient based upon consumer spending

Self-employment

Self-employment data for the Scotland is taken from Workforce jobs (19 sector detail). The data is broken down into detailed sectors using both employee trends and the UK data for self-employment by 2 digit SIC2007 sector. Data for the local authorities is Census based (and scaled to the Scotland self-employed jobs estimates) and is broken down using the employees in employment sectoral structure. The sectors are forecast using the growth in the sectoral employees in employment data and the estimates are scaled to the regional estimate of self-employment by sector.

Total employment (jobs)

Total employment includes employees in employment, the self-employed and Her Majesty's Forces. This is measured on a workplace basis. No specific forecasting for this measure is required - it is calculated from the forecasted elements discussed above.

Note that this estimate is a jobs and not people measure (i.e. one person can have more than one job and would be counted more than once in this indicator).

Unemployment

Claimant count unemployment data is taken from ONS, via NOMIS. Annual average values are calculated from the monthly data. The latest data available is April 2014.

Unemployment (claimant count) is projected based on regional trends and a measure of overall labour market tightness (relative employment rate) in the local area. It is not at present directly affected by migration

though they do impact indirectly through the employment rate (which has working age population as its denominator).

Unemployment rate is defined as claimant count unemployment as a percentage of the working age population. No specific forecasting of this measure is required.

Resident employment

This is a measure of the number of people living in an area who are in work. Resident employment data is taken from the Annual Population Survey. The latest year of available data is 2012. Given that this data is survey based and tends to be very volatile, data is 'smoothed' by taking a 3 year average.

Residence employment is based on a commuting matrix taken from the 2001 Census. This matrix tells us where employed residents of an area work. Using this information each available job (see workplace employment people based above) is allocated to a resident of a given authority. This method assumes the proportions of commuting do not change over time.

Employment rate is defined as residence employment as a percentage of the population aged 16 plus. No specific forecasting of this measure is required.

Labour force

Labour force is the sum of resident employment and unemployment (claimant count). No specific forecasting for this measure is required - it is calculated from the forecasted elements discussed above.

Gross Value Added

GVA forecasts are available for detailed sectors for the Scotland region from our UK Regional Model. For areas within the region, data on total GVA is available at NUTS 3 level. This includes counties and former Metropolitan counties. Our forecasts at local authority level are obtained firstly by calculating an 'expected' GVA in each area. This is calculated by multiplying the Scotland region's GVA per employee in each sector by workplace employment in each sector within each local authority area. An adjustment factor based upon relative earnings is also applied as areas with higher wages should produce higher levels of GVA. Expected GVA is then scaled to add the GVA at NUTS 3 level and the Scotland sectoral forecasts from the UK Regional Model.

Workplace based wages

Scotland data on average wages by sector is available from the Annual Survey of Hours and Earnings (ASHE), the latest year of data is 2013. At the level of individual local authorities estimates of total wages on a workplace basis and a residence basis are also available from the NES and now ASHE.

The growth in UK wages by sector is applied to the local area sectoral wage series (constructed using ASHE totals for authorities and regional industry totals) to give an estimate of wages within each sector. An adjustment factor is applied to reflect the relative occupation structure of each area. Hence areas where higher paying occupations are growing faster than the regional average will have higher wages. These wages estimates are then scaled to be consistent with regional wage totals.

Residence based wages

Residence based wages are constructed within the model by adjusting the workplace based wages for local areas. An adjustment factor, which is based upon ASHE workplace based and residence based data, is applied to ensure consistency with the published data. This factor is held constant but can be adjusted for scenario purposes.

House prices

Local Authority house price data is taken from the Registers of Scotland and are forecast based upon the unemployment and earnings forecasts within each local area. The forecasts are controlled to the regional and national house price forecasts which take into account macro factors such as interest rates. Data for North Lanarkshire are constructed as a weighted average based upon population.

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