

# State of the Economy

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## State of the Economy

This presentation outlines recent developments in the global, UK and Scottish economies. Updates are provided on a periodic basis.

Data correct up to and including the 20<sup>th</sup> December.

To view previous State of the Economy presentations please visit the following link:

<http://www.scotland.gov.uk/Topics/Economy/state-economy>

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### Summary of Key Conclusions

- More than five years since the height of the global financial crisis, this State of the Economy comes at the end of a year that has seen the recovery become more established. With output growing over the year, and with growth forecast to be stronger next year, Scotland is expected to move beyond 2008 pre-recession levels of output during 2014.
- The improvements in 2013 have been driven by an upturn in economic confidence, with uncertainty reduced and a pick-up in activity due, in part, to the household sector. This has meant that consumption has been the key driver of the recovery, and this trend is forecast to continue in 2014.
- If the recovery is to be sustained into the medium term however, increased competitiveness will be key with private sector investment and external trade needing to contribute more to the overall balance of growth. The improvement in economic conditions this year should lead to a stronger environment for investment, and with increased productivity, consumption growth should be more closely linked to enhanced real wage growth.
- In the short term, even as the recovery gains traction at an aggregate level, specific or localised issues may still appear. Firms in certain industries may face specific constraints and households may also encounter challenges if their personal economic circumstances fail to match the improvement in the wider economy.
- 2013 has seen an improvement in the labour market in Scotland, with employment up and unemployment and economic inactivity down over the year. Looking ahead, the outlook for unemployment and earnings, both in Scotland and the UK, depends on future productivity trends, which remains an area of uncertainty. A rebound in productivity should allow firms in certain sectors to increase output and wages, but with more limited increases in employment. Whereas, if productivity remains subdued, we may continue to see employment and hours increasing, but without any significant movement in real wages.
- In light of these remaining headwinds, the ‘forward guidance’ provided by the Bank of England, in which it has committed to broadly maintaining the current monetary policy stance until a sustained recovery is evident, gives Scottish and UK firms and households a greater degree of certainty.
- This State of the Economy also summarises new data developments in the Scottish economy, including recent new experimental publications on Gross National Income and North Sea exports.

## Recent Global Economic Developments

- Throughout 2013, the global recovery has continued at a moderate – but sustained – pace and the picture is more optimistic than in recent years. The recovery however, continues to display an uneven pattern across regions.
- The US is leading the way. Whilst household consumption has been the principal determinant of US growth, recent data indicates that growth may be starting to broaden through to investment. There are still headwinds, but the fact that the Federal Reserve is considering ‘normalising’ monetary policy highlights a growing confidence in the resilience of the US recovery.
- Although the Euro Area recovery has unsurprisingly lagged behind, the region formally emerged from recession in the second quarter of 2013. However, growth slowed in the following quarter due to weakness in Germany and France, indicating that the recovery remains relatively fragile. The European Central Bank recently lowered interest rates in a bid to provide further stimulus. Alongside this, the longer term imperative for the region remains the need to maintain structural reform to boost competitiveness, revive and sustain growth, create jobs, and bring down record levels of unemployment.
- The UK has seen a relatively solid growth performance throughout 2013, with growth through the year and forecasts revised up. As in the US, household consumption has driven the recovery and, while this is a positive sign of growing household confidence, there is still some uncertainty about its sustainability until we see an improvement in the underlying determinants of consumption. There is clearly still some fragility, but if increasing household and business confidence feeds through to investment, and with a supportive external environment, this could allow the UK to make a more balanced recovery.

## Future Prospects - Global Economy

- Expectations for global growth in 2013 have however, recently been revised down slightly, reflecting a slowing in growth in emerging economies, remaining weaknesses in the Euro Area, as well as the spill-over effects on international confidence from US monetary policy decisions.
- Nevertheless, at the end of the 2013 global economic conditions have significantly improved and the overall outlook is much more optimistic than at the end of the previous year. Global growth is forecast to pick up further in the forthcoming year, which should strengthen confidence and feed through to sustained improvements in other economic indicators.

### **Recent Scottish Economic Developments**

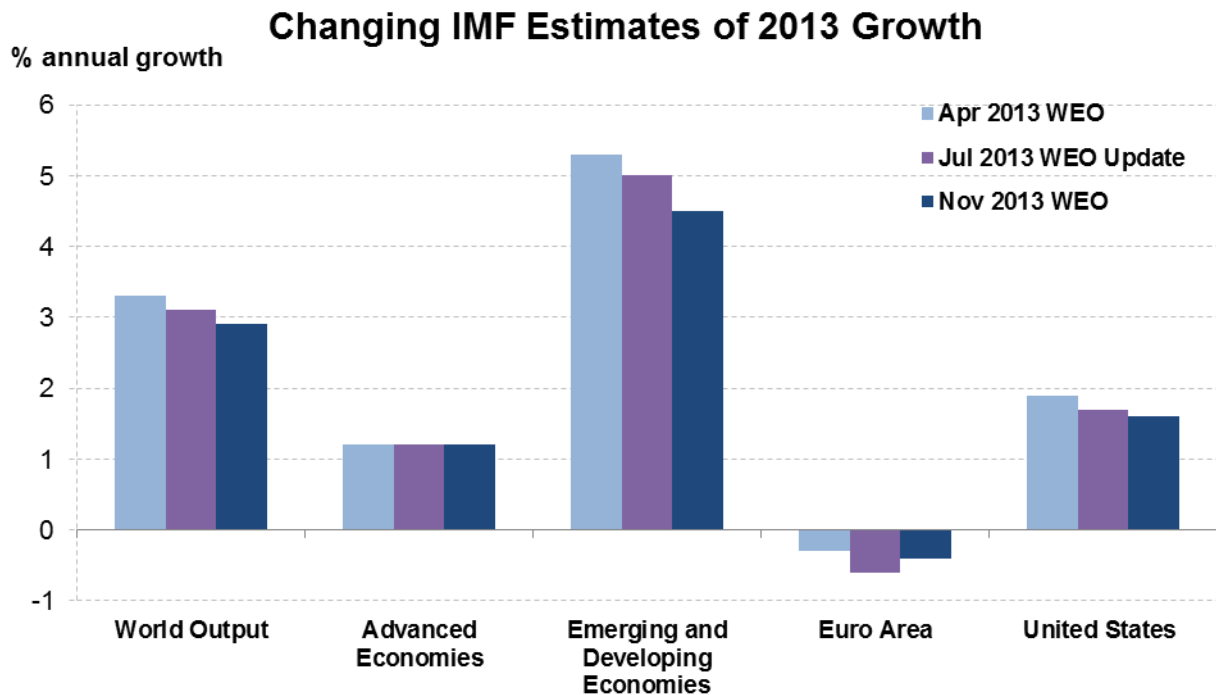
- Economic recovery in Scotland has continued through 2013, and with it we have seen a reduction in economic uncertainty and a boost to household and business confidence.
- The strengthening of the Scottish economy over the year has been reflected in the labour market, with employment continuing to rise, driven by a rise in full-time employment, whilst unemployment and in particular economic inactivity have continued to come down.
- As elsewhere, household consumption has been the main determinant of the Scottish recovery over the past year. For a sustained recovery to take hold there is a need to ensure that such growth is supported by investment and net trade. Exports provided a small, positive boost to growth over the year, with the contribution of net trade picking up more recently.
- Although investment has remained relatively weak over the year, as confidence returns this should help spur investment, and business survey evidence indicates that investment intentions for the forthcoming year are improving, especially relative to 2012 and 2013.

### **Future Prospects – Scottish Economy**

- The macroeconomic indicators for Scotland provide grounds for some optimism, with the economy moving closer to pre-recession levels. The growing recovery in the UK, US, and more recently in the Euro Area also spell positive news, as they are Scotland's most important trade partners.
- Looking ahead, as in the rest of the UK, sustaining the recovery in Scotland into the medium term will require an improvement in underlying competitiveness, linked to a sustained pick up in productivity and real wages.
- With the strengthening in output and the labour market over the year, and a more positive level of confidence across sectors, recent Scottish output forecasts have been revised upwards. Overall, the outlook for next year is more positive than 12 months ago.

# Recent Developments in the Global Economy

# Global Economic Performance



August’s edition of State of the Economy reported growing signs of a global recovery taking root in 2013, particularly compared to a weak performance in 2012. The emerging picture for the second half of 2013 shows that the recovery has continued at a moderate pace, although still displaying an uneven pattern and with evidence of a slight weakening in some key economic regions such as the Euro Area.

The latest global growth estimates from the International Monetary Fund (IMF)<sup>1</sup> predict growth of 2.9% over 2013, slower than in 2012 (3.2%) and a slight downwards revision from both July (3.1%) and April (3.3%) estimates. The downwards revisions were prompted largely by expectations of weaker growth in emerging economies.

However, the overall message from the IMF is that the global recovery should continue and even pick up in 2014, albeit at a slightly more modest pace than previously forecast. Although uncertainty is much reduced, the remaining fragility provides part of the explanation why central banks continue to signal that they will run accommodative monetary policy until they see greater evidence of a sustained improvement in economic conditions.

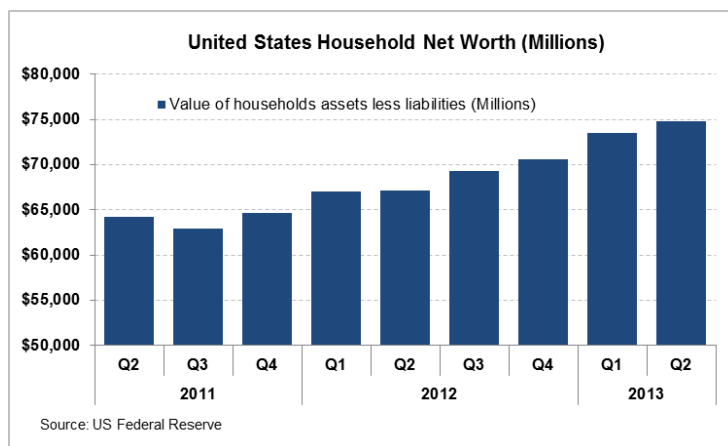
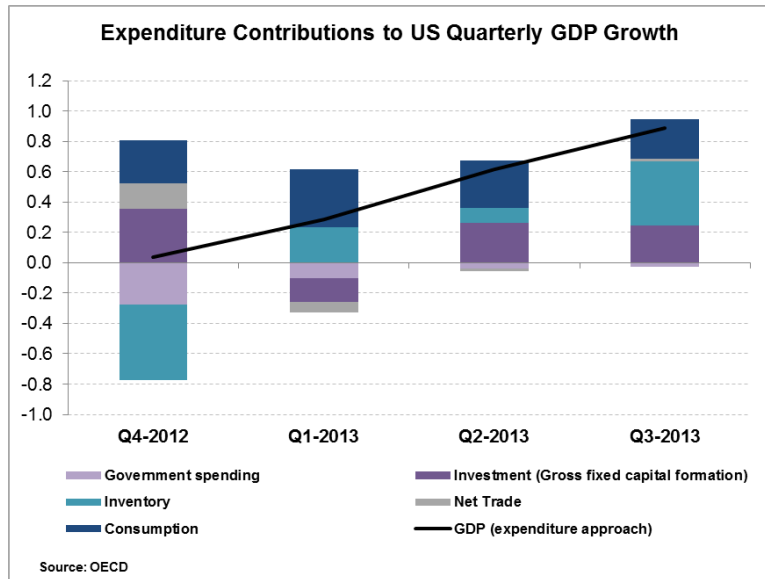
<sup>1</sup> IMF World Economic Outlook, November 2013

## United States

The US, Scotland’s single most important international export partner, has seen an accelerating pace of recovery through 2013, with 0.9% growth recorded in the most recent quarter (Q3), up from 0.6% in Q2.

Economic commentators expect US growth to remain robust in the final quarter of this year and into the start of 2014, although some

downside risks remain. Consumption made the largest contribution to growth in the first half of 2013, but this trend lessened somewhat in Q3 (see chart). The reasons for this are unclear. On the positive side, household balance sheets have improved over the two years to Q2 2013, driven by recovery in housing and financial assets values (see chart)<sup>2</sup>. Also, the economy has continued to create employment opportunities over the year and November’s labour market figures showed a further



rise in employment, building on strong results from the previous two months. The rise in employment in November was accompanied by a fall in unemployment which hit a five year low (7.0%)<sup>3</sup>.

However, earnings growth has been weak in Q2 and Q3<sup>4</sup>, adding to the effects of the reversal of temporary tax cuts in January to constrain real household income. Nevertheless, encouragingly Q2 and Q3 growth figures indicated that growth may be starting to spread more widely, with investment (both in fixed capital and stock building) making a positive contribution to growth.

<sup>2</sup> Federal Reserve, September 2013, Financial Accounts of the United States, available [here](#).

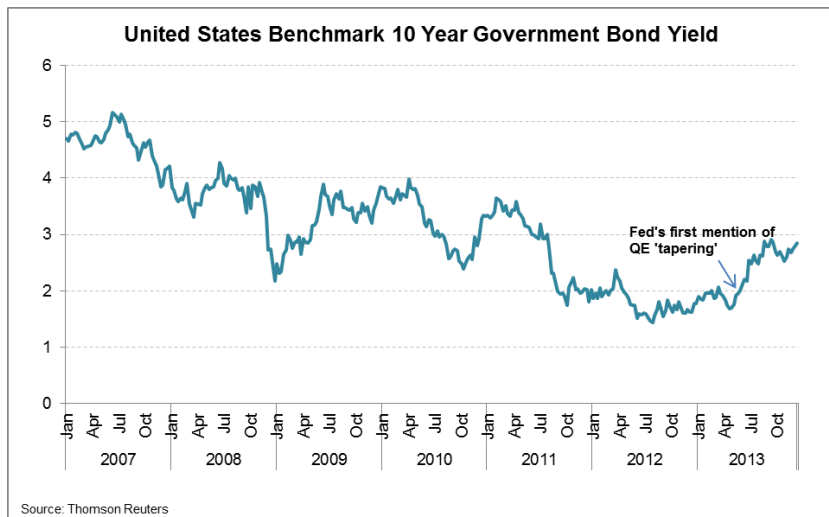
<sup>3</sup> US Bureau of Labor Statistics, available [here](#). The three-month average increase in employment to October 2013 was 202,000 compared to an increase of 143,000 in the three-month period to September.

<sup>4</sup> US Bureau of Labor Statistics, average hourly earnings of all employees, constant prices, seasonally adjusted, monthly data to October 2013.

One uncertainty in the US recovery throughout 2013, highlighted by both the IMF and the Fed<sup>5</sup>, has been its fiscal policy. Alongside the automatic spending cuts (‘the budget sequester’) discussed in the previous State of the Economy, the US government was forced to partially shut down in October due to a funding gap as policy makers negotiated to raise the debt ceiling and avoid default. Although a temporary agreement was eventually reached to reverse the shutdown, the delay undoubtedly had an impact on the recovery process.

Attempts to come to a more lasting political agreement made progress in December when Congress accepted a deal setting out government funding for the next two years. As a result, in its December statement<sup>6</sup> the Federal Reserve noted that the fiscal drag on growth now appears to be reducing.

Following on from the encouraging growth and labour market statistics, in December the Federal Open Market Committee (FOMC) announced that it will commence unwinding (or ‘tapering’) Quantitative Easing in January 2014. The Fed will reduce government bonds purchases by \$5 billion to \$40 billion per month, and mortgage-backed securities by \$5 billion to \$35 billion per month. Importantly, it also signalled that tapering does not mean monetary tightening by reinforcing its forward guidance, stating that interest rates would



likely stay close to zero, even if the forward guidance unemployment rate threshold (6.5%) is reached. There are several likely consequences of this action.

US long-term interest rates (see chart) are likely to begin to ‘normalise’ (i.e. rise) towards pre-QE rates, accompanied by US dollar appreciation as capital invested overseas relocates to the US to take advantage of increasing investment returns. This will have – possibly challenging – implications for some other advanced economies and particularly for emerging markets, discussed in later sections. Nevertheless, the commencement of tapering should be regarded as a positive development, indicating that the Fed has judged the US economy sufficiently resilient to allow it to begin the process of ‘normalising’ monetary policy.

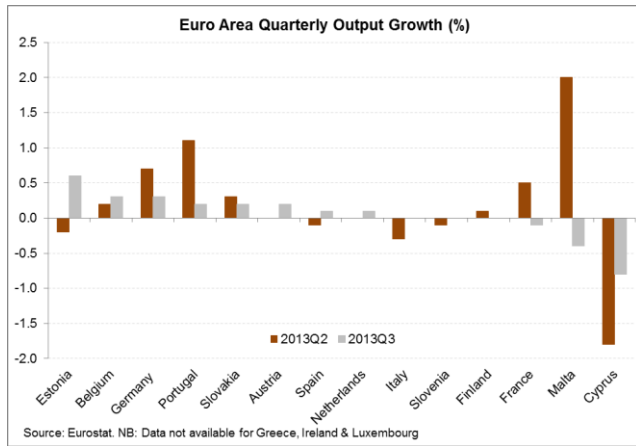
<sup>5</sup> IMF (2013) Concluding Statement of the 2013 Article IV Mission to USA, available [here](#). FOMC Statement October 2013, available [here](#).

<sup>6</sup> FOMC Statement December 2013, available [here](#).



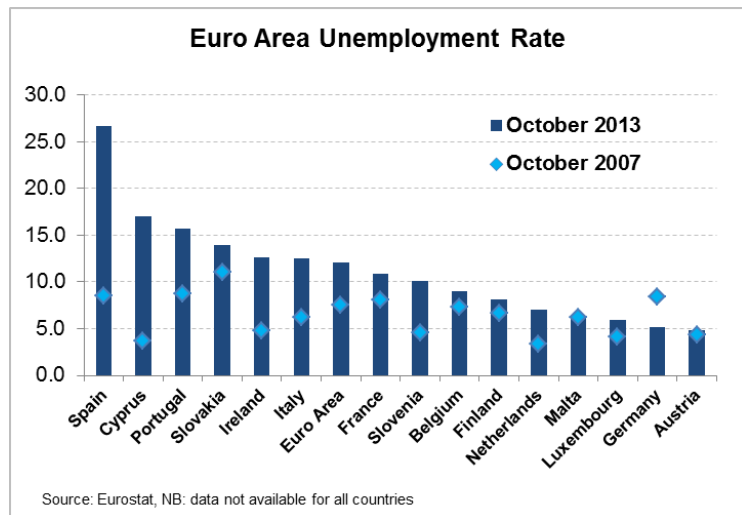
## Euro Area

Turning to the Euro Area, the market for over one third of Scotland’s international exports, its recovery has lagged behind and is expected to remain relatively weak in the near-term. In Q2 2013, after six consecutive quarters of contraction, it emerged from recession with growth of 0.3%, although estimates for Q3 2013 indicated that growth weakened to 0.1%. The slowdown in Q3 was mainly due to weaker growth in the two largest economies, Germany and France. This was partly offset by Spain emerging from recession (albeit with weak growth of 0.1%), the Netherlands also growing (0.1%), and contraction ending in Italy (0.0%). Such numbers remain disappointing.



Looking ahead to the final quarter of this year, business survey indicators for October and November showed a mixed picture across the different countries, indicating a strengthening in Germany, but weakening in France, Spain, and Italy.

October saw a slight fall in the Euro Area unemployment rate to 12.1% (from 12.2% in September) along with the first reduction in unemployment levels since January 2011. However, the labour market across the currency area remains weak, with unemployment still high compared to pre-recession rates, and large differences in unemployment rates persisting between the core and the periphery countries.

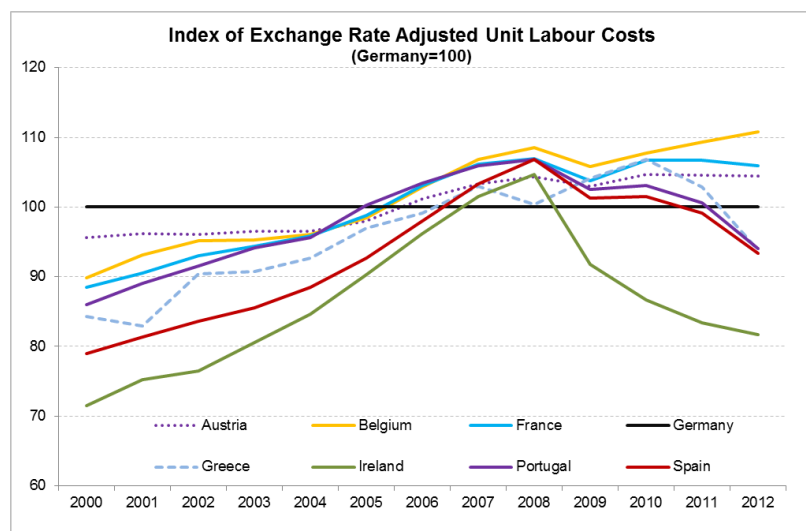


Responding to the weakness in the recovery, in November the European Central Bank took the unexpected decision to lower its key interest rate by 25 basis points to 0.25%. The move followed data indicating a slowing in Euro Area inflation to 0.7% in October (well below the target rate of 2%). Encouragingly, November’s inflation rate edged up slightly to 0.9%, but the November PMI fell to its lowest rate in three months (51.7, down from 51.9 in October), and although it picked up slightly in

December (52.1), the index suggests that the moderation in growth continued into the fourth quarter.

One recent symbolic development in the currency union was in mid-December, when Ireland became the first Eurozone member to successfully exit its bailout. With long-term benchmark Irish government bond yields currently at 3.7% (November 2013), down from a crisis high of 12.5% (July 2011)<sup>7</sup>, Ireland will now seek to finance itself directly through capital markets rather than through the Troika. Although there is still some way to go before its economy makes a full recovery, Ireland’s exit has been welcomed as the first steps toward normality. One issue it has highlighted however, is that as well as a divergence between the core and periphery in the Euro Area, there is also a growing divergence *within* the periphery. For example, there is a concern that two other countries who received a bailout, Greece and Portugal, may require a fresh bailout in 2014.

Overall, alongside any immediate stimulus from the ECB, the longer term economic imperative for the Euro Area remains the reform needed to address structural weakness. These are recognised by the European Commission<sup>8</sup> and the IMF<sup>9</sup> as including: reforms to raise competitiveness and potential output (e.g. labour market reforms); restoring the health of the finance sector to revive investment (e.g. through the Banking Union); and achieving public finance sustainability. Although some progress has been made, there is still a long way to go before such reforms feed through to growth, job creation and unemployment.



### Japan and Emerging Economies

This year has seen the implementation of the Japanese prime minister’s economic stimulus and deflation-combating strategy (‘Abenomics’), consisting of a fiscal stimulus, aggressive monetary easing, and structural reforms to boost private enterprise and competitiveness. The strategy has met with some success in

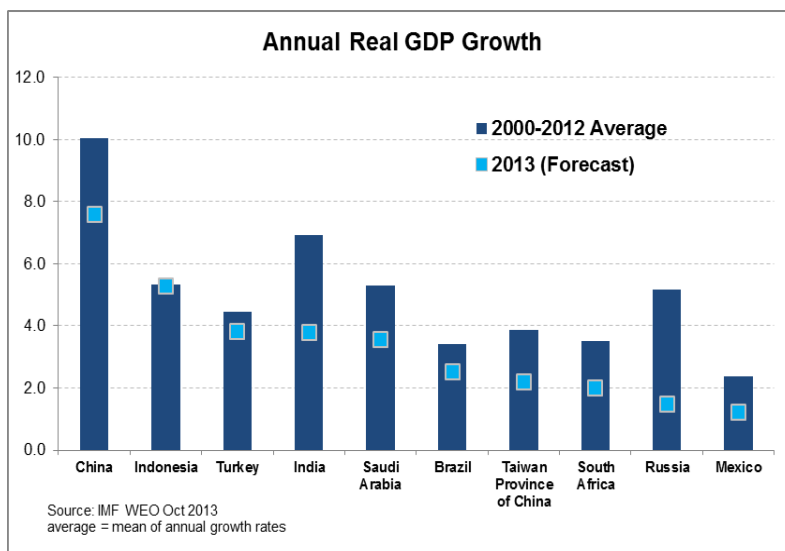
<sup>7</sup> Source: Eurostat 2013.

<sup>8</sup> Annual Growth Survey 2014, European Commission. Available [here](#).

<sup>9</sup> Central, Eastern, and South eastern Europe, Regional Economic Issue, October 2013, IMF. Available [here](#).

boosting inflation towards its target of 2%, with October’s annual consumer price inflation sitting at 1.1%, compared with -0.3% in January<sup>10</sup>. Japan also grew strongly during the first half of 2013, with growth of 1.1% in Q1 and 0.9% in Q2. Q3 growth fell back to 0.3% and is expected<sup>11</sup> to soften further at the end of 2013 into 2014 as stimulus spending is wound down and planned tax increases are implemented.

In emerging economies, although growth rates remain above those in advanced economies, they have slowed compared to long-run averages. This is driven partly by cyclical factors, such as continued weakness in global demand, as well as structural factors which differ across countries. In India and Brazil, capacity constraints generated partly by weak investment and tight labour market conditions have caused



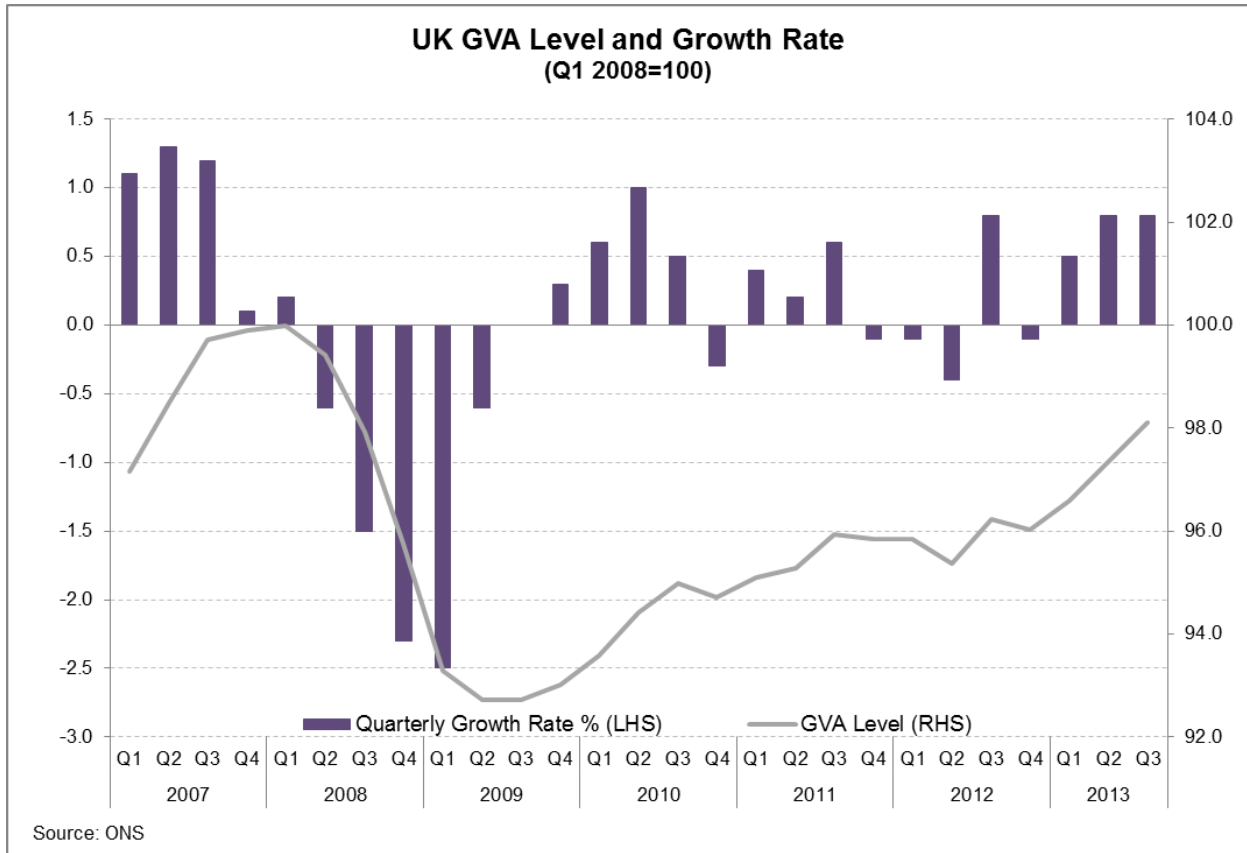
inflation to build, leading the authorities to tighten monetary policy. In China, there is the need to rebalance economic activity away from a reliance on investment and export-led growth toward more domestic consumption, as well as supply side adjustments to boost long-run productivity and maintain competitiveness.

Some emerging economies are vulnerable to the effects of QE tapering in the US. In recent years, many have experienced large capital inflows by investors in search of higher returns as interest rates have been low in advanced economies. As capital flows back to the US on the back of QE tapering, emerging economies could face a mix of rising bond yields, falling asset prices and falling currencies. This could present challenges for those that have become reliant on external capital (e.g. India, Indonesia and Brazil) to fund deficits, and could ultimately lead to slower growth as they have to adjust (e.g. to higher borrowing costs and/ or a reduction in spending).

<sup>10</sup> Source: OECD 2013.

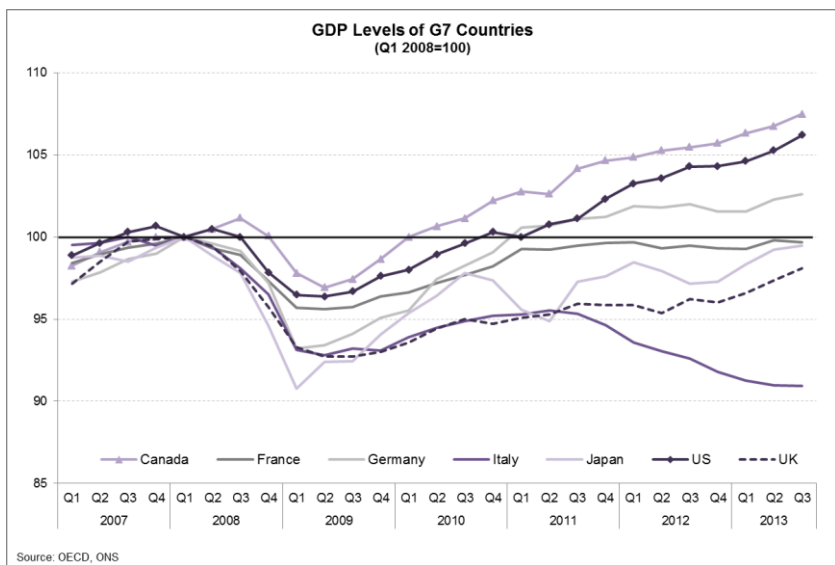
<sup>11</sup> For example, as expressed by the IMF in the October 2013 World Economic Outlook.

# Recent UK Performance



## Output

The UK has seen positive and accelerating growth throughout 2013. In Q1 and Q2, quarterly output growth was 0.5% and 0.8%, with the 0.8% growth maintained in Q3. Expansion was across all main sectors, although the service sector remained the driver of growth. UK output is moving closer



to its pre-recession levels as shown but the recovery is weak by historical standards and relative to other G7 economies such as the US, Germany and Canada.

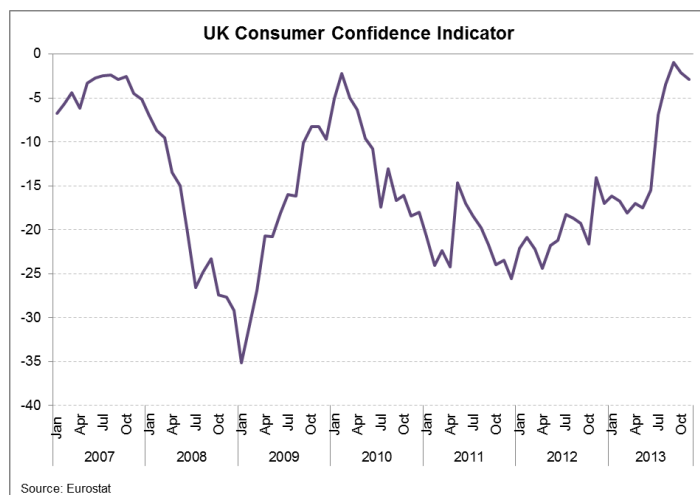
### Composition of UK GDP Growth

There has been a significant amount of commentary around the drivers of UK growth, with concern that recent growth has been highly reliant on consumption. A lack of progress in rebalancing the UK economy away from consumption was highlighted by the Bank of England in its Monetary Policy Committee October minutes. It is not clear whether the recent growth in consumption itself can be sustained, given that the underlying determinants of household income remain weak. Broad-based growth, generated by investment and trade as well as income (and not borrowing) driven consumption, will be required to sustain the recovery into the medium term.

Contribution to growth (percentage points)	Q3 2013 on Q2 2013	Q3 2013 on Q3 2012
Household final consumption expenditure	0.5	1.6
General government final consumption expenditure	0.2	0.3
Gross capital formation	1.2	0.9
<i>of which Gross Fixed Capital Formation</i>	0.2	-0.1
<i>of which Business Investment</i>	0.2	-0.4
Net trade	-1.2	-1
<b>GDP Growth</b>	<b>0.8%</b>	<b>2.0%</b>

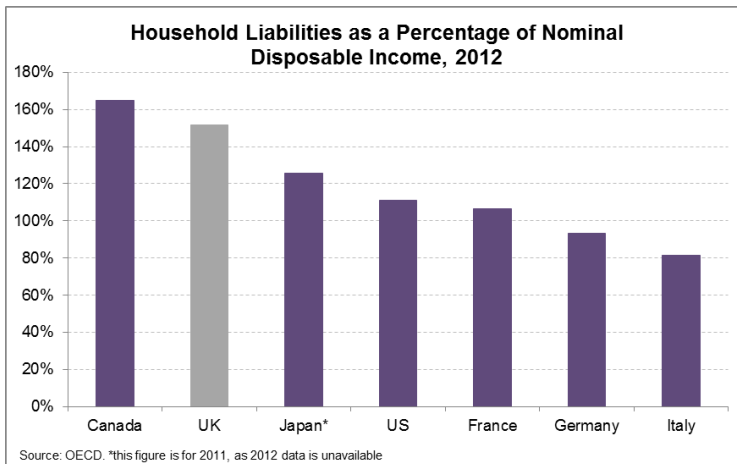
#### Consumption

Household consumption has been the main driver of GDP growth in the UK, expanding 2.5% over the year to Q3 2013 and contributing 1.6 percentage points to aggregate GDP growth. The pace of growth in household consumption has continued to quicken over the year, and in Q3 was growing at its fastest rate since before the recession in Q1 2008.



Despite recent bullish growth, concerns exist regarding the sustainability of consumption as a driver of growth, centred on two main issues. The first is that the growth in real wages remains subdued, driven by a combination of above-target inflation, and nominal earnings growth but constrained by a combination of weak productivity and continued spare capacity in the labour market.

The second issue is that, because income growth has been weak, recent growth in consumption appears to be partly debt-financed, with the household savings ratio recently hitting its lowest level since early 2009. The Bank of England<sup>12</sup> attributes this to credit conditions gradually easing as households’ appetite for borrowing has increased. Household confidence has grown with the moderation in economic uncertainty and improving labour market conditions, so that households’ income expectations have also risen.



The Bank also notes that renewed activity in the UK housing market is likely to have provided a stimulus to consumption spending; through housing investment, greater equity collateral enabling better access to credit, and wealth effects from

an increase in the underlying value of housing assets. However, if UK households, already some of the most indebted in the developed world, have begun to take on more debt before completing the deleveraging process, this potentially leaves them vulnerable to changes in interest rates, asset prices and income<sup>13</sup>, and constrains the capacity for debt-financed consumption to continue to support growth.

### Government

In addition to household consumption, government expenditure also made a small positive contribution to growth over the year to Q3 2013. Although government expenditure grew 1.4% over the year, the on-going fiscal consolidation means that government spending is not projected to be a significant on-going source of growth into the medium term.

<sup>12</sup> Inflation Report November 2013.

<sup>13</sup> Bank of England November 2013 Financial Stability Report, available [here](#).



**The Autumn Statement**

The UK Chancellor delivered his 2013 UK Autumn Statement on Thursday 5 December, accompanied by a revised set of economic and public finance forecasts from the Office for Budget Responsibility (OBR).

**Projections**

The economic and fiscal outlook has improved since the March 2013 Budget. Forecasts for UK GDP growth were revised up to 1.4% in 2013 and 2.4% in 2014. Public sector borrowing was also revised down and underlying public sector borrowing is now expected to be £73 billion lower over the period 2013/14 and 2017/18

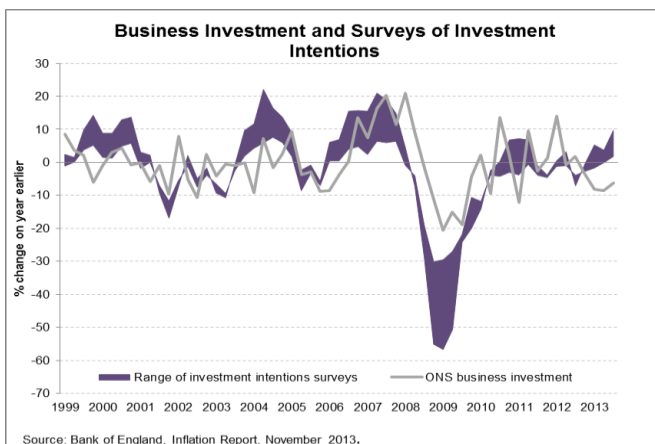
Year	Dec 13 Outturn and Forecast	Mar 13 Outturn and Forecast	Change Mar 13- Dec 13
2011	1.1	0.9	-
2012	0.1	0.2	0
2013	1.4	0.6	0.8
2014	2.4	1.8	0.6
2015	2.2	2.3	-0.1
2016	2.6	2.7	-0.1
2017	2.7	2.8	-0.1
2018	2.7	-	-

**Fiscal Measures**

The UK Government set out a fiscally-neutral Autumn Statement, with no new spending or tax measures announced which alter the overall fiscal stance at a macro level. The Autumn Statement also indicated that the UK Government plans to continue with the process of fiscal consolidation up to 2018-19. As such, Government spending is not expected to make a significant contribution to growth in the near-medium term.

**Investment**

Although gross capital formation as a whole made a positive contribution to UK growth over the year, within it business investment continued to drag growth. Despite returning to positive quarterly growth in Q3 2013 (2.0%), business investment contracted 5.3% over the year to Q3 2013, knocking 0.4 percentage points off annual GDP growth. However, these ONS estimates of business investment have been queried by the Bank of England,



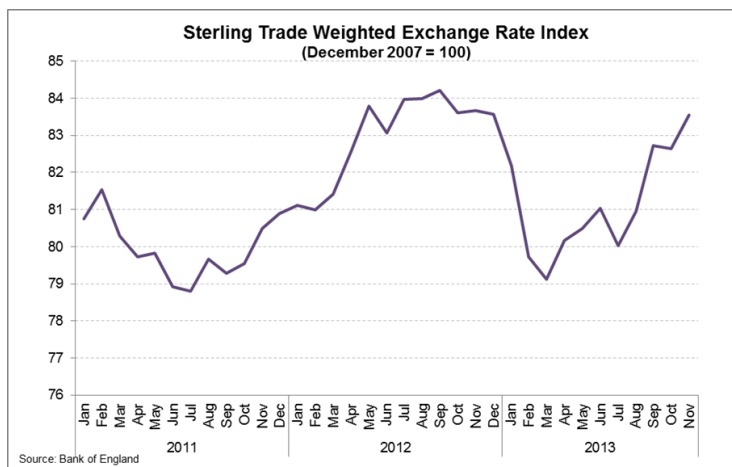
which argues<sup>14</sup> that methodological changes implemented in the 2013 Blue Book have caused business investment data to become more volatile, making it difficult to assess the true strength of such investment. The drivers of investment remain

<sup>14</sup> Bank of England November Inflation Report.

mixed, with net lending to the real economy still negative but the Bank of England<sup>15</sup> report that survey data on business investment intentions indicate modestly positive growth in the forthcoming year (see chart). The OBR also produced optimistic forecasts for investment, which indicate private investment may start making a positive contribution to growth next year with the contribution more than tripling by 2017.

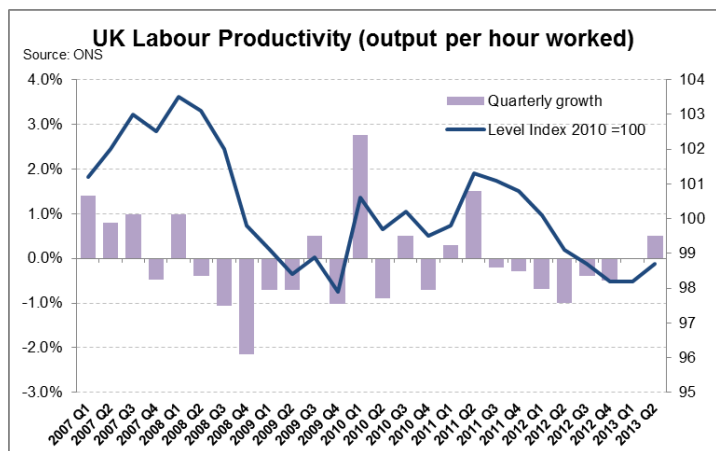
*Net Trade*

The largest drag on GDP growth over the year to Q3 2013 came from net trade. Exports contracted 1.8% over the year to Q3 while imports grew 1.2%, shaving 1.0 percentage points off annual GDP growth (2.0%). UK trade faces constraints both on the demand side, with vulnerabilities in main international export destinations, as well as on the supply side, with weakness in competitiveness (e.g. as a poor productivity performance feeds through to unit labour costs) and an appreciating pound (see chart). In the latest Economic and Fiscal outlook, the OBR forecasts net trade growth to remain relatively weak over the forecast period, projecting it to make a limited contribution to GDP growth over next four years. This is much lower than hoped.



**Productivity and the Output Gap**

The level of productivity in an economy is typically measured in terms of the level of output per hour worked. As productivity increases a greater amount of output can be produced for a given resources, and therefore a country’s level of trend growth can increase. As noted in the previous edition of State of the Economy, UK productivity fell sharply during the

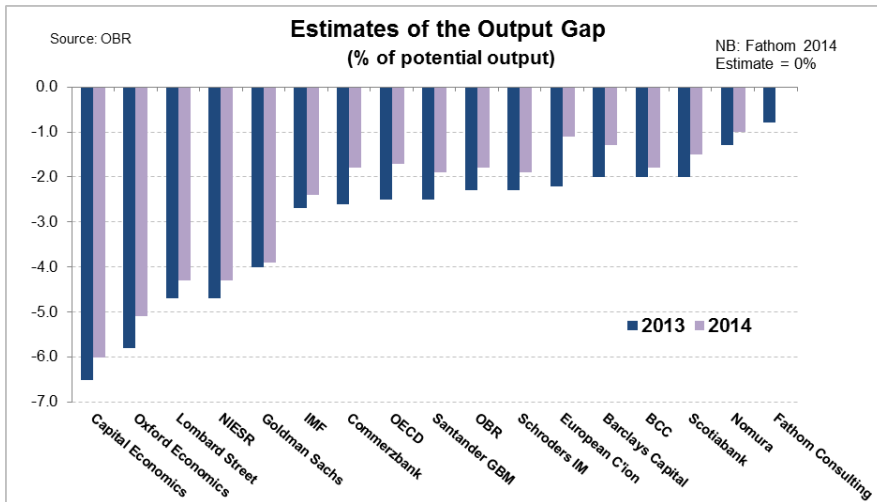


<sup>15</sup> Bank of England Agents Summary of Business Conditions, November 2013. Available [here](#).



2008/09 recession. Encouragingly, in Q1 2013 labour productivity saw its first quarterly growth since Q2 2011, and the growth continued in Q2 2013, although levels still remain significantly below their pre-recession peak. The recent productivity growth is welcome, since the assumption that it continues to recover underpins many of the upbeat economic forecasts for the UK.

The outlook for the UK labour market, in terms of both employment and earnings,



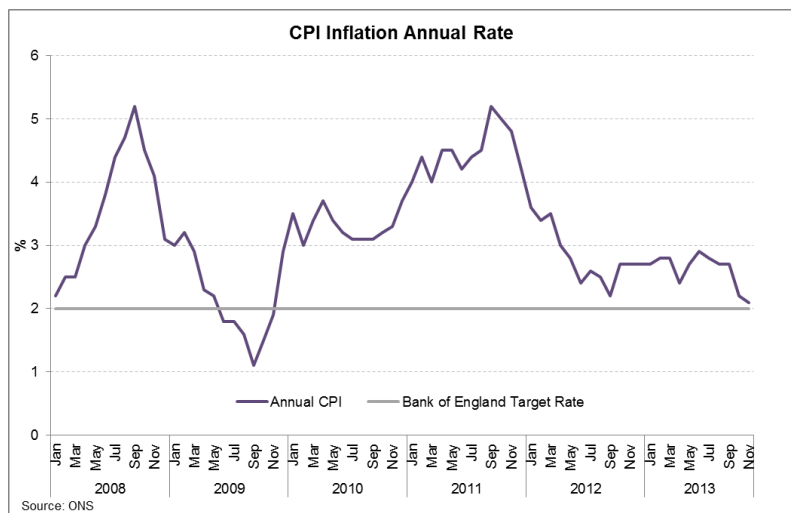
depends on trends in productivity. This remains an area of uncertainty, and is likely to involve trade-offs. A productivity rebound would allow firms affected to increase output and wages, but without necessarily feeding through to increases

in employment (or hours worked). In contrast, in other sectors productivity may remain subdued, so employment and hours could increase if demand increases further, which would have a downward impact on unemployment, but without any significant movement in real wages.

The underlying nature of the productivity puzzle is still not well-understood, reflected in the wide range of estimates of the output gap (see chart), and the degree to which UK productivity picks up represents a key uncertainty in the recovery.

### Inflation and Wages

The Consumer Price Index (CPI) remained above-target throughout the first half 2013, reaching 2.9% in June (see chart). However, since then CPI has fallen continuously, to 2.1% in November. The Bank of England's November Inflation Report suggests the fall was due to general



weakness in prices across goods and services, as well as more specific factors like a recent fall in oil.

The report indicated that the near-term outlook for inflation is also lower than expected in August. Current expectations are for CPI inflation to fall back to around the 2% target over the next year. The Bank attributes the expected decline in inflation to, among other things, a revival in productivity growth gradually bringing a margin of spare capacity to the economy, as well as the recent sterling appreciation reducing import prices.

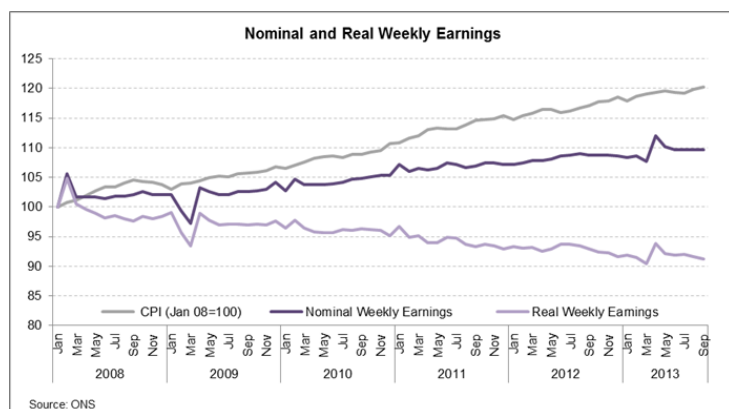
August’s State of the Economy explained how the Monetary Policy Committee made explicit the use of ‘forward guidance’, which involves the Bank being open about the future path of monetary policy subject to given economic indicators. Forward guidance is aimed at households and businesses to provide a greater degree of certainty and encourage investment, by signalling the likely path for interest rates (and in turn borrowing costs) for the foreseeable future.

It was announced that there would be no rise in interest rates or reduction in the scale of QE, until unemployment had fallen to 7.0% or below, or if inflationary pressures and inflation expectations start to build. The Bank initially forecast that this is unlikely to happen before 2016 based on their assumptions of spare capacity in the economy. However it is now forecasting that a 7% unemployment rate may be reached in 2015 or even 2014. Nevertheless, the MPC has emphasised that reaching the unemployment threshold would not necessarily trigger an immediate rate rise, as any decision on interest rates would depend on the outlook for inflation relative to target and on the need to provide continued support to output and employment.

## Wages

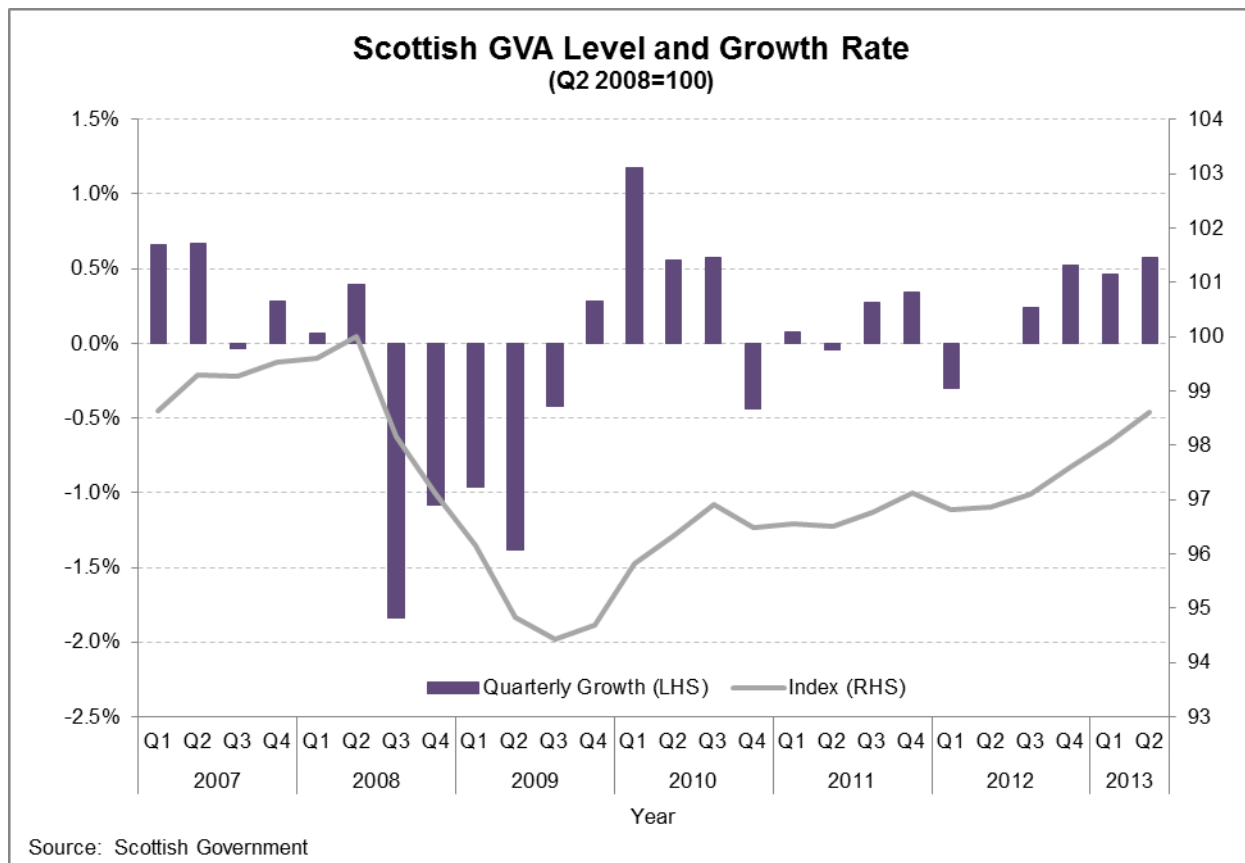
Even though the annual inflation rate has fallen recently, it continues to outpace growth in nominal earnings.

Pay growth was volatile in the first half of 2013; with a spike in average weekly earnings in April 2013, reflecting a one-off effect of bonus payments being postponed until April 2013 to take advantage of the fall in the top rate of income tax (see chart). But this effect has since receded, and nominal earnings have been unchanged since June, so that wages are still falling in real terms.



## Recent Developments in the Scottish Economy

# Recent Scottish Performance



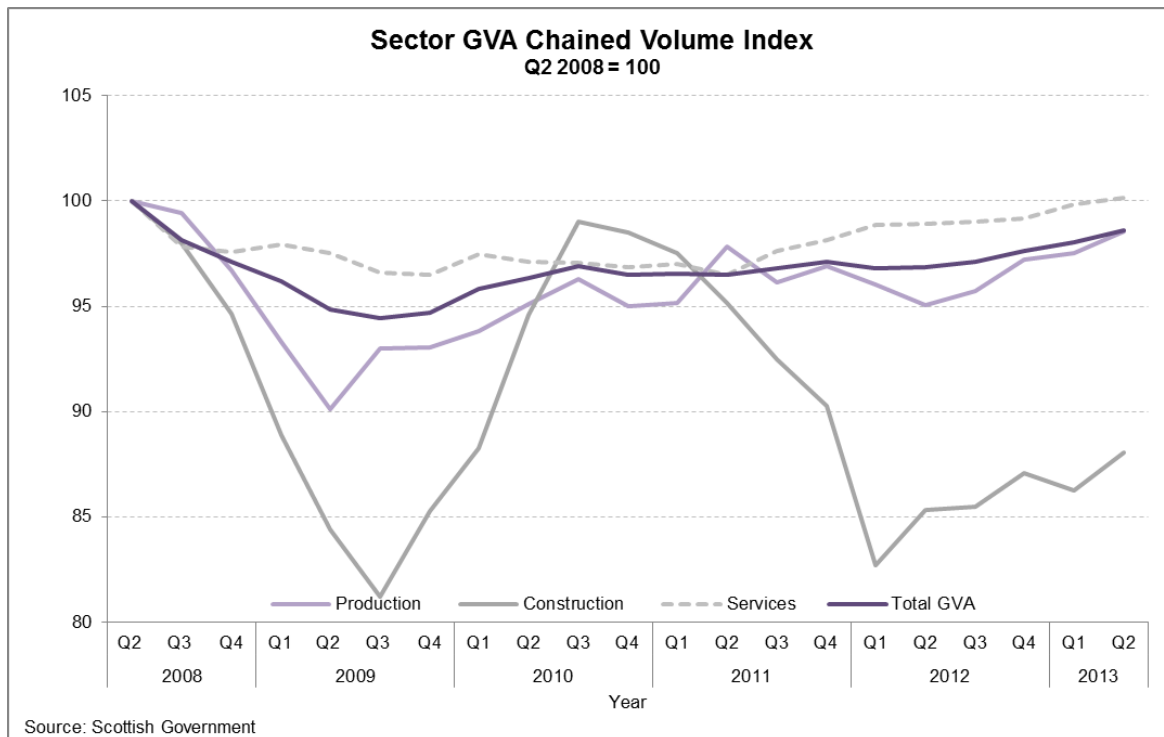
## Output

The August edition of State of the Economy reported that the recovery in Scotland was gathering momentum and this improvement has been maintained through the year.

Scotland has had four consecutive quarters of positive growth up to and including Q2 2013, with quarterly growth in Q2 of 0.6% compared to Q1 growth of 0.5%.

On an annual basis, output in Scotland rose by 1.8% in Q2 2013. The positive growth of the last four quarters has moved the Scottish economy closer to its pre-recession levels of output. At Q2, Scottish output was -1.4% below its pre-recession peak (compared to UK -2.7%), up from -2.0% below in Q1 2013.

The underlying data for Q2 shows that growth in the second quarter of 2013, and over the year, has been relatively broad based across the main industry sectors.



The Service sector continued to expand in Q2 (0.3%), having grown in each quarter since the second half of 2011. Within the sector, a quarterly fall in Transport, Storage & Communication (-0.9%) was more than offset by growth in Distribution, Hotels & Catering (0.8%) and in Business Services & Finance (0.8%).

Looking at growth over the year, the expansion of Services (1.3%), was driven by growth in the Business Services & Finance and Distribution, Hotels & Catering sub-sectors, which grew by 3.4% and 1.3% respectively. Annual growth in Distribution, Hotels & Catering was driven by a pick-up in the Retail & Wholesale sector, which expanded 2.1% over the year to Q2 2013. These findings followed on from the results of the Scottish Retail Sales Index for Q2 2013, which showed that retail sales volumes grew 2.4% on an annual basis. Taken together, these trends have helped the service sector to move beyond pre-recession levels of output.

The Production sector grew 1.0% in Q2 2013, a stronger performance than in the previous quarter (0.3%), driven by a 1.6% quarterly rise in Manufacturing output, alongside a quarterly increase in Electricity & Gas Supply (2.9%). Over the year, Production grew 3.7%, again driven by the Electricity & Gas Supply and Manufacturing sectors. Output in the sector is still 1.4% below its pre-recession peak due to the depth of the fall in output during 2008 and 2009. Nevertheless, the sector has expanded 9.4% since the end of the recession and maintaining this momentum has the potential to lead to further recovery in output and productivity improvements.

August's State of the Economy highlighted continued fragility in the construction sector, reporting a 0.9% contraction during Q1 2013, after positive growth in the

three previous quarters (Q2 2012-Q4 2012). However, construction has since returned to growth, expanding 2.1% in Q2 2013, translating into a 3.2% increase over the year to Q2 2013. Although the sector is still significantly below its pre-recession peak and remains somewhat fragile, it has been following a general upward path since hitting its trough in the first quarter of 2012.

Q2 results from business surveys generally point to a pickup in economic conditions with improving expectations for future months. Moderate improvements were reported in Services, although areas of fragility were highlighted in retail sales (Scottish Chamber of Commerce Survey Q2 2013), which is also reflected in Scottish retail sales figures, discussed in the next section. Surveys also reported mixed results for production, although generally manufacturers reported improvements in new business and output. Survey results for construction in Q2 2013, although stronger than in the same quarter last year, remain weak.

Looking ahead to the third quarter, business survey results indicate a strong third quarter in Scotland as in the UK as a whole. For example, the composite PMI indicator reached record levels in August and September. Initial business survey data for the final quarter of 2014 from the PMI and Scottish Engineering Quarterly Review indicate that some of the momentum may have eased slightly, although conditions remain positive.

#### The Grangemouth Temporary Closure

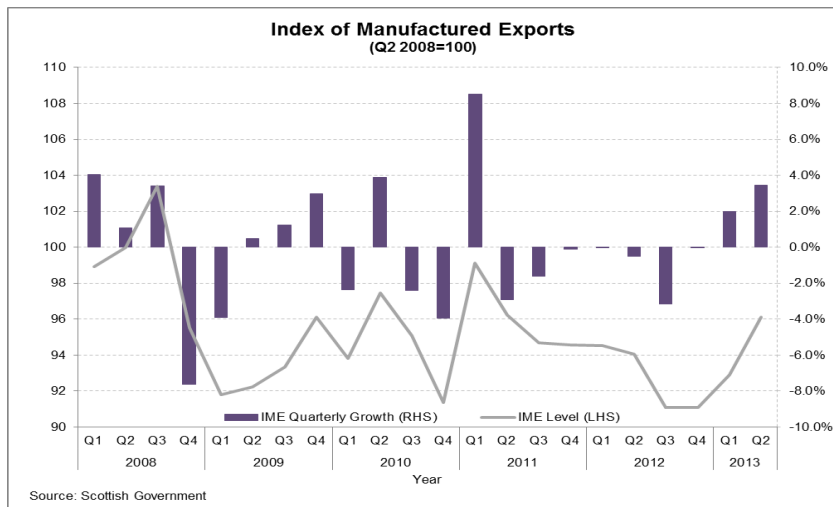
One of the major economic stories in Scotland since the last edition of State of the Economy was the temporary closure in October of part of the petrochemical plant at Grangemouth. The plant has a strong relationship with the wider economy, both through its own output and employment and through its relationship with its supply chain industries and the local economy. The plant is estimated to employ 1,350 people and directly contributes around £500 million of Gross Value Added, around 0.5%, to the Scottish economy. When its wider linkages are included it is estimated that the complex supports around £1 billion of GVA (1% of the Scottish total) and around 6,500 jobs.

Given the plant's importance to the Scottish economy, its temporary closure, along with the time taken for the plant to return to capacity, would be expected to feed through to the core economic data for Scotland, particularly for the fourth quarter of 2013. The closure for part of Q4 would be expected to exert a downwards impact on Scottish production sector output in the final quarter, although it is too early to say whether this will translate into an impact on the headline quarterly GDP growth rate. Similarly, as the plant owners indicated that commissioning the plant back to full operation would take some weeks, further impacts might become evident in subsequent quarters in the form of a bounce-back in production sector output.

Overall, it will take time for the impact of the plant closure to fully emerge in the economic data. However, the Grangemouth story highlights that even as the recovery progresses in Scotland, challenges for individual plants and firms could still occur, for example as a result of longer term structural changes in specific sectors, giving rise to local issues which may in turn feed through to the general economy.

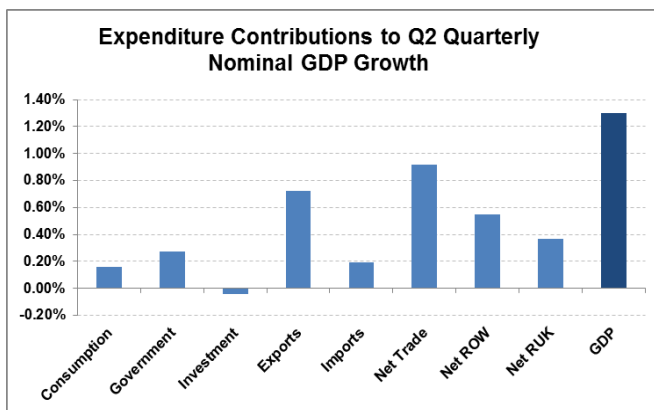
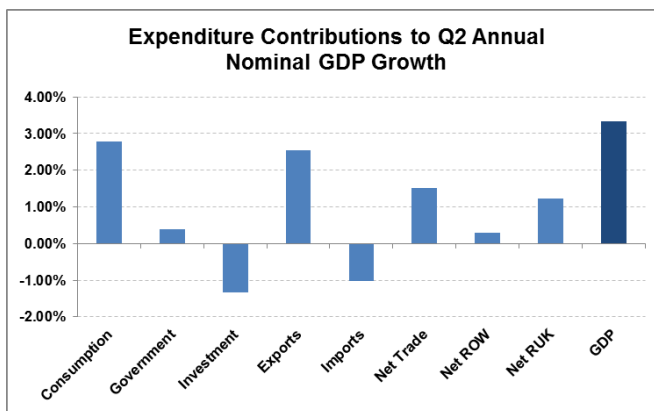
## Exports

Scottish exports figures for the first half of 2013 were relatively encouraging. The Index of Manufactured Exports reported a 3.5% real terms increase in sales during the second quarter of 2013, following growth of 2.0% in the first quarter. The increase was driven by Engineering &



Allied Industries and Refined Petroleum, Chemicals & Pharmaceutical Products, but increases were also seen in most other sectors. Business survey data reports a pick-up in export orders in the second half of 2013

## Drivers of Recent Scottish Growth Performance



The Scottish economy has seen positive growth in each of the four quarters to Q2 2013. As in the UK, much of the recent economic commentary has focused on understanding what is driving growth, and what this can tell us about the prospects for a sustained recovery. Analysing experimental data from the Scottish National Accounts Project (SNAP) provides an insight into the drivers of recent growth in Scotland, and this section highlights the findings and discusses the implications.

Note that SNAP figures are expressed in nominal terms so findings should be viewed in light of the fact that they have not been adjusted for changes in price.



## Consumption

Over the four quarters to Q2 2013, household consumption spending has been the main driver of growth in Scotland, contributing 2.8 percentage points to nominal growth over the same period. This partly reflects the fact that consumption is the largest single component of GDP – 62% on average between 1998 and 2012 – so changes in consumption will have a strong effect on aggregate GDP growth. It also reflects a relative weakness in other sectors. The growth in consumption has been underpinned by several factors.

- Although household incomes saw a nominal decrease of -0.1% over the year to Q2 2013, income from earnings<sup>16</sup>, which accounts for the bulk of household income, actually saw a nominal increase of 2.8% over the year to Q2<sup>17</sup>.
- In line with trends in the UK, gross household savings (i.e. savings and/ or debt repayments) in Scotland fell over the year. As a result, nominal household consumption grew faster than household income, by 4.4% over the year to Q2 2013.

As highlighted in the UK section, similar trends have emerged at the UK level, with the Bank of England noting that credit conditions have eased as consumer confidence has improved and households' appetite for borrowing has increased. The pick-up in UK housing market activity and house prices rises have also provided a boost to consumption. Notwithstanding limitations in data coverage for Scotland on issues like household borrowing, most of these factors are also relevant here. As discussed in the next section, Scottish labour market conditions have seen an improvement over the year, household confidence is improving, and housing market activity is picking up, though it remains below historical levels and has yet to feed through to rising house prices or increased re-mortgaging<sup>18</sup>.

The annual pick-up in consumption is reflected in retail sales figures, which have grown in each quarter of 2013 and saw a total of 3.4% nominal or 2.3% real terms growth over the year to Q2 2013 (quarter-on-quarter). Moving away from the trends over the year to look solely at the most recent quarter, household consumption spending essentially remained flat in Q2 2013, reflected in retail sales figures which

	Volume of retail sales (basic prices)	Quarterly growth (% change on previous quarter)	Annual growth (% change on same quarter previous year)
2012 Q4	101.7	-0.2%	0.7%
2013 Q1	102.5	0.8%	2.2%
2013 Q2	102.9	0.4%	2.3%
2013 Q3	104	1.1%	2.1%

<sup>16</sup> Compensation of Employees (CoE).

<sup>17</sup> Note that this 2.8% annual increase in CoE is greater than CPI inflation in the same period (2.7%). However, this should not necessarily be interpreted as indicating rising real wages. Earnings data in National Accounts is derived from ONS' Average Weekly Earnings series, which as noted earlier, saw an anomalous increase in April 2013 due to a one-off effect of bonus payments being postponed until April 2013 to take advantage of the fall in the top rate of income tax

<sup>18</sup> Scottish Housing Market Review, available [here](#).



indicated that Q2 was the weakest quarter of 2013. However, in Q3 retail sales rebounded with particularly strong quarterly growth of 1.1%, suggesting that household consumption will have recovered to some extent in Q3.

Overall, as in the UK there is still evidence of relative underlying fragility in the drivers of consumption in Scotland. Real wages growth is still weak and, as reported in the previous edition of State of the Economy, although measured labour productivity (output per hour worked) in Scotland have improved, it is still below the level implied by longer term growth trends. Therefore, further recovery in productivity, wages, output and employment in Scotland will be required to continue to grow at a sustainable pace into the medium term.

### Government Spending

Government spending made a small positive contribution to growth, both over the year to Q2 2013 and in the most recent quarter. However, as discussed in the UK section, the outlook for overall government spending remains subdued, and it is unlikely to provide any significant support to growth – at a macroeconomic level – in the near-medium term.

### Investment

As in the UK as a whole, investment continued to act as a drag on growth in Scotland over the year. The Bank of England reports<sup>19</sup> that UK firms' investment intentions are improving as demand has picked up and credit conditions have eased.

Investment Intentions - Scottish Business Surveys							
BCC - sector spending on investment:							
	Q2 2012	Q3 2012	Q4 2012	Q1 2013	Q2 2013	Q3 2013	
Manufacturing	-13.4	-1.3	3.7	-3.6	5	7.9	
Construction	n/a	-26.6	n/a	-31.8	n/a	5.2	
Wholesale Distribution	-22.7	-16.7	-11.1	-18.7	-21.4	6.7	
CBI - respondents' 12 month forecast of spend on:							
	Jul-12	Oct-12	Jan-13	Apr-13	Jul-13	Oct-13	
product/ process innovation	32	1	11	21	19	32	
training/ re-training	15	29	-6	23	7	28	
buildings	-27	-14	-12	-6	-33	-24	
plant/ machinery	-15	-5	0	-32	-32	-7	
nb: figures refer to percentage balances of respondents (i.e. positive responses less negative responses)							

Scottish business survey data suggests that business confidence is also gradually returning and that investment intentions for the next twelve months remain muted but

are improving, especially relative to 2012. Firms report that they are planning to increase investment in innovation and training, although investment intentions in physical assets remains weak.

<sup>19</sup> Bank of England Inflation Report November 2013.

### *Net Trade*

Net trade made a positive contribution to nominal GDP growth over the year to Q2 2013, driven by exports rising faster than imports. On an annual basis, the positive contribution from net exports was mainly due to trade with the rest of the UK, but the most recent quarter (Q2) saw a relatively stronger contribution from net trade with the rest of the world. This is a positive development which, as highlighted in the Global Economy section, coincides with a strong Q2 performance in the United States and a return to growth in the Euro Area, Scotland's two most important international export markets.

### *Implications*

Looking ahead, in common with the rest of the UK, sustaining the recovery in Scotland into the medium term will require a sustained pick-up in employment, productivity and real wages, the underlying drivers of household income and consumption. Alongside this, there is a need for growth to be broadened across investment and net trade, particularly given that government spending is expected to remain subdued for the foreseeable future.

As highlighted in this section and in previous editions of the State of the Economy, the main headwinds to the recovery in Scotland, as in the UK as a whole, remain:

- a need for strengthening in the underlying drivers of household spending (i.e. further employment and productivity growth, allowing real wages to grow);
- a recovery in private sector investment, driven by a pickup in business confidence and lending;
- a supportive external environment, particularly in Scotland's key export partners, the UK, the Euro Area and the United States.

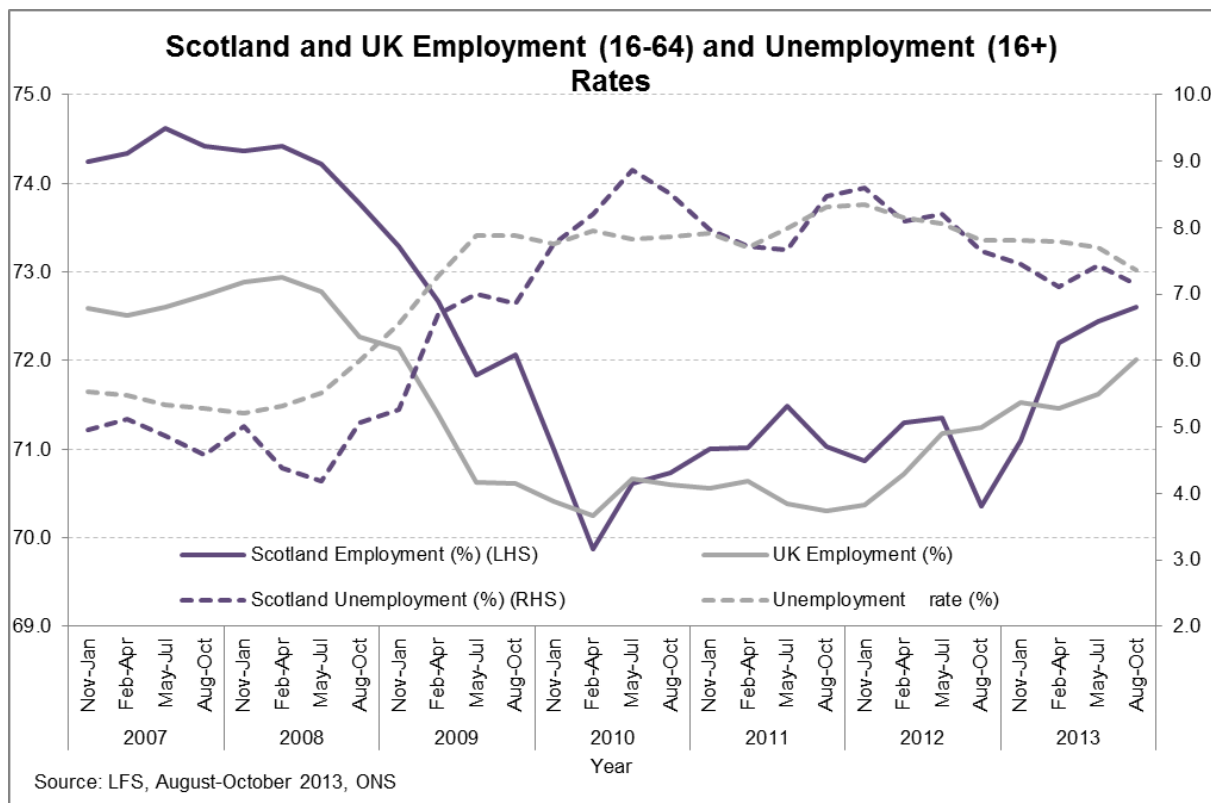
### **Conclusion**

Economic recovery in Scotland has strengthened in 2013 – albeit from a relatively low base – with output growing over the last four quarters, growth accelerating through the year and recent growth broad-based across the main industry sectors.

As elsewhere, household consumption has been the main driver of the recovery over the past year. To sustain the recovery into the medium term there is a need to ensure that such growth is supported by investment and net trade.

The recovery in the Scottish economy over the year has also been reflected in improvements in the labour market, discussed in the next section.

# Labour Market Performance



The recent relative strengthening of the Scottish economy is also evident in the labour market, with employment continuing to rise, driven by a rise in full-time employment, whilst economic inactivity and unemployment have both seen further reductions since the last edition of State of the Economy.

## Recent Labour Market Developments

The latest labour market statistics (August-October 2013) were the 11<sup>th</sup> consecutive monthly release showing an increase in the Scottish employment rate.

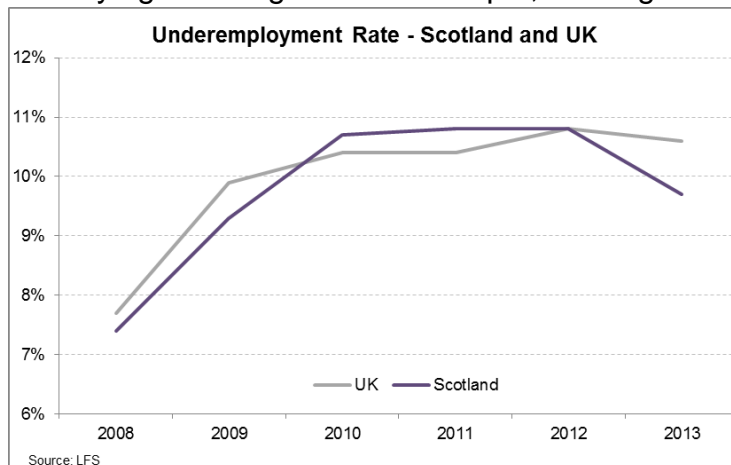
Over the three months (August-October 2013), Scotland's employment rate rose 0.2 percentage points to 72.6% (UK, 0.4 percentage points to 72.0%), and its unemployment rate decreased 0.3 percentage points to 7.1% (UK fell 0.3 percentage points to 7.4%). The inactivity rate saw a slight increase over the quarter of 0.1 percentage points to 21.7% (UK, 22.1%) but remains close, both to its historical low of 21.3% (in June to August 2013) and to rates seen prior to the recession when it fell as low as 21.4% in April-June 2007.

The labour market improvements seen over the quarter were also evident over the year. On an annual basis (to August-October 2013) Scotland’s employment rate rose 2.2 percentage points (UK 0.8 percentage points), the unemployment rate fell 0.5 percentage points (UK, 0.5 percentage points) and the economic inactivity rate fell by 2.1 percentage points (UK fell by 0.4 percentage points).

Turning to the youth labour market, although the youth unemployment rate is still elevated compared to before the recession, the current rate of 21.1% (August-October 2013, UK 21.3%) is lower than its recessionary peak. For example, in the equivalent quarter in 2011, the rate was 25.4%.

Business survey data suggests that the growth in employment seen over the year to Q3 2013, has continued into the final quarter of this year. The Bank of Scotland Labour Market Barometer for November 2013 reported the 37th consecutive positive reading for labour market conditions (63.2). The Bank of Scotland PMI survey for November 2013 also indicated a continuation in expansion in private sector employment at a similar pace (53.3) as October (53.4).

Despite the aggregate labour market improvements, there remain a number of underlying challenges. For example, although the increase in employment over the



last year has been driven by a rise in full-time employment, and there has been a decrease in the underemployment rate, the latter remains elevated compared to rates before the recession, implying that there is still a significant number of people in employment who would like to work more hours.

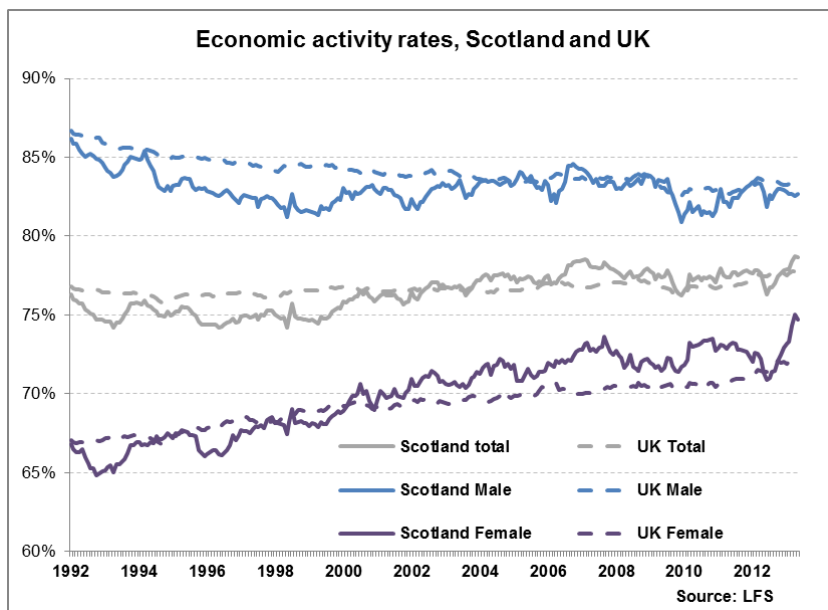
Also, as in the UK, the data indicates that real wage growth remains weak in Scotland. The Annual Survey of Hours and Earnings (ASHE) 2013 indicates that average full-time weekly earnings in Scotland increased 2.1% over the year to April 2013 (UK 2.2%), reaching £508.3. However, as annual CPI inflation rose by 2.4% over the same period, this suggests that real earnings in Scotland and the UK were still falling at the beginning of Q2 2013.

### Trends in Labour Force Participation

As noted, a particularly positive recent labour market development in Scotland, which is also evident elsewhere in the UK, is a trend towards rising labour force participation. The economic activity rate (also known as the labour force participation rate) is the key measure of the supply of labour in an economy.

Economic activity rates measure the share of the population of working age (16-64 years) which is either working or actively looking for work. In contrast, economic inactivity refers to individuals who are neither in work nor looking for work, for example because they are studying, caring for the family or home, are experiencing short or long term sickness, have taken early retirement or are otherwise discouraged from participating in the labour market.

Economic activity rates have been gradually increasing since 1992 when the current Scottish data series began. This has been driven chiefly by increases in the female economic activity rate.



Historically, economic recessions have often been associated with a decline in participation rates. This occurs for several reasons. During a recession, individuals may be discouraged from seeking work due to fewer jobs opportunities being available, making alternatives such as full-time education relatively more attractive at that

time.

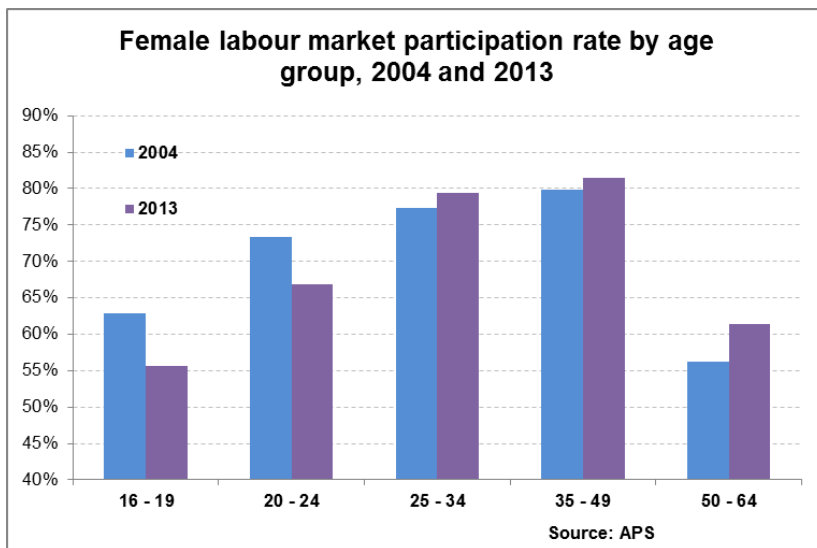
All other things equal, this would be expected to lower activity rates. For example, in the UK in the years following the 1980s and 1990s recessions the economic activity rate saw a notable cyclical decline. However, in both the UK and in Scotland the period following the 2008/09 recession has not lead to a substantial fall in labour force participation. In fact, economic activity rates in Scotland have remained stable over the period since 2008 and have recently increased, with the rate in Scotland reaching a series high of 78.7% in the three-month period June–August 2013 (moderating slightly to 77.9% in August–October 2013). The recent uptick in activity rates, as well as the longer term upwards trend, has been driven in particular by increases in female labour force participation rates. This phenomenon is the result of both shorter term cyclical factors and longer term structural changes.

*Cyclical factors*

Cyclical factors which may have played a role include falling real wages (discussed in the UK section), low interest rates and falling asset prices in the wake of the financial crisis. These have had a negative impact on household income, which may in turn have induced some households to increase their labour supply. Moreover, the combination of the fall in asset prices and low interest rates since 2008 will have affected the value at which individuals’ pensions can be converted into annuity income, which may have caused some individuals who may otherwise have retired early to continue working. Alongside this, changes to taxes and welfare in recent years, such as changes to sickness benefit eligibility, may have affected incentives to participate in the labour market.

*Longer term structural effects*

As outlined above, the increase in labour market participation has been particularly pronounced among females. The chart illustrates the change in female labour market participation



across different age ranges over the past decade. This indicates that the rise in the female economic activity rate has been driven by relatively large increases in participation rates among those aged 50-64. This reflects a prevalence for woman to work longer into old age, perhaps reflecting greater equality

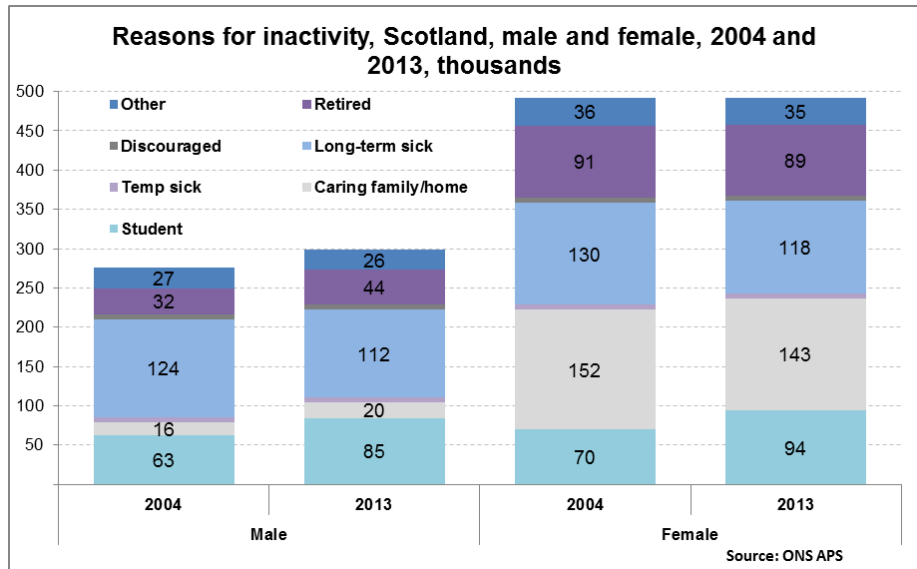
in the labour market.

Interestingly, female participation has fallen among the under 24 age group over the past decade. This is likely to reflect an increase in women in this age group in education, as discussed below.



The chart below shows how the reasons for inactivity given by men and women have changed over time.

Among both men and woman, the number of people who reported being a student as their reason for economic inactivity, has increased since 2004. Whilst greater participation in education will lower



labour market participation during the period of study, over the long run it can be expected to increase these individuals' participation rates and employment as both tend to rise with educational attainment.

Another trend noticeable in the chart is that the number of women who are inactive due to caring for the family and home has fallen. There are a range of potential explanations for this. For example, the wider availability of flexible working patterns, may allow people to now combine work and caring more than previously.

Finally, among both men and woman, the number of people reporting economic inactivity due to long term sickness has declined. This may reflect factors such as changes in eligibility for long term sickness benefits, as well as a cohort effect, due to retirement of individuals previously classed as long term sick.

### Conclusion

Improvements in the Scottish economy over the year are evident in the labour market, with employment continuing to rise, driven by a rise in full-time employment, whilst unemployment has fallen and labour market participation has risen as economic activity has fallen. As discussed throughout this report, the future path of the labour market in Scotland will depend upon the growth rate in the wider economy and the pattern of productivity improvements in the months ahead.

## Future Prospects



## Future Prospects

Forecasts (Annual GDP)		Scotland		UK	
		2013	2014	2013	2014
Sco	Fraser of Allander Institute (October 2013)	1.3	1.8	-	-
	Scottish ITEM Club ( December 2013)	1.9	1.7	1.4	2.4
UK	OBR (Autumn Statement – December 2013)	-	-	1.4	2.4
	European Commission (November 2013)	-	-	1.3	2.2
	IMF (October 2013)	-	-	1.4	1.9
	OECD (November 2013)	-	-	1.4	2.4
	HM Treasury Average UK Independent Forecast (December 2013)	-	-	1.4	2.5

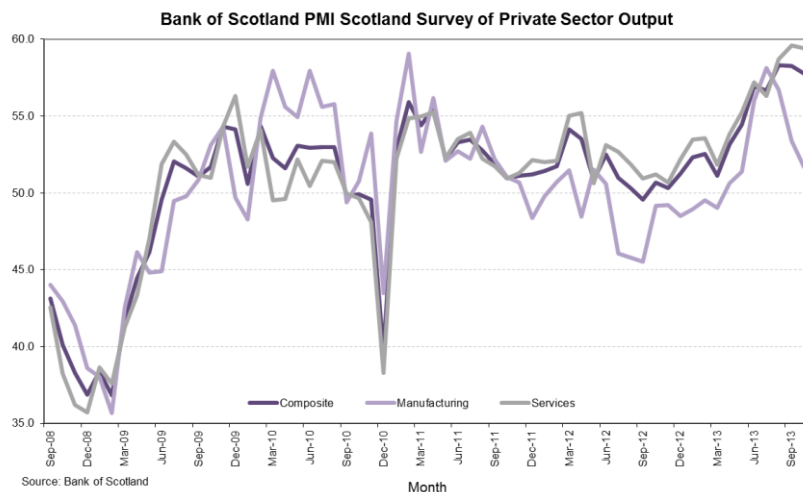
### Future Prospects – Scotland

The macroeconomic indicators for Scotland provide some grounds for optimism, with output growing over the latest four quarters where data are available. The growing recovery in the UK and the US, and more recently the Euro Area, also spell positive news, as they are Scotland's most important trade partners.

The most recent independent forecasts for output growth in 2013 have been revised upwards. The latest Fraser of Allander Economic Commentary revised up 2013 growth forecasts to 1.3% (previously 0.9%). The upward revision reflected continued growth in the Scottish economy over the past year, with indications of strengthening in more recent quarters. More recently, in December 2013, the Ernst and Young ITEM club forecast Scottish GDP to grow 1.9% in 2013, significantly higher than its previous forecast in June 2013 of 0.8%.

Forecasters expect annual growth to pick up into 2014, moving back towards, although still below, long run annual growth rates. The ITEM Club (December 2013) expects growth of 1.7% in 2014, up from its previous estimate of 1.4%, while the FAI revised up its forecast for 2014 from 1.6% to 1.8%.

The last State of the Economy reported that Scottish business surveys over the first half of 2013 supported a cautiously positive outlook for 2013. The picture from the business surveys has remained positive into the second half of the year. The PMI composite index



registered the joint-highest rates of expansion in the survey’s history in both August and September. While October and November PMI figures were lower, they were significantly higher than in the same period last year.

Third quarter reports from the Scottish CBI, the Scottish Chambers of Commerce, Scottish Engineering and Lloyds TSB also indicated improvements in both output and activity among private sector firms. Initial business survey data for the final quarter from the PMI and Scottish Engineering Quarterly Review indicate that some of the momentum may have eased in Q4, especially in the production sector, however both still pointed to continued aggregate expansion. The business surveys for the second half of 2013 also highlighted some areas of fragility, for example in export markets. However, the overall picture is of rising activity and output and confidence gradually returning.

The average independent forecast for Scotland in 2013 is now around 1.6%, rising to 1.8% in 2014.

**Future Prospects – Global Economy**

In October, the IMF revised down global growth for 2013 to 2.9%, highlighting that it believes the recovery is still somewhat fragile. It expects world growth to be driven by developed economies, as growth in emerging economies is forecast to slow. This global view is also shared by the OECD which, in its November Economic Outlook, revised down its global growth forecasts for 2013 and 2014, from 3.1% and 4.0%, to 2.7% and 3.6% respectively. The revisions were due to weaker performances in emerging economies, continuing weakness in the Euro Area, as well as the spill-over effects on international confidence from uncertainty around the Fed’s decision on asset-purchase tapering and the recent US government shutdown.

	Previous IMF Forecasts (%) (July 2013)		Latest IMF Forecasts (%) (October 2013)	
	2013	2014	2013	2014
World Output	3.1	3.8	2.9	3.6
Advanced Economies	1.2	2.1	1.2	2.0
Euro Area	-0.6	0.9	-0.4	1.0
US	1.7	2.7	1.6	2.6
UK	0.9	1.5	1.4	1.9
China	7.8	7.7	7.6	7.3
Brazil	2.5	3.2	2.5	2.5
India	5.6	6.3	3.8	5.1
Russia	2.5	3.3	1.5	3.0

Although the IMF's latest forecast for the Euro Area for 2013 was revised upwards (by 0.2 percentage points to -0.4%), growth is still expected to be negative overall this year. Despite the growth in the most recent two quarters and policy action appearing to have prevented the worst effects of the Euro crisis emerging, there is still some way to go before economic confidence and private sector activity are revived to a degree sufficient to feed through to substantial growth in output and job creation. Euro Area growth is forecast to move into positive territory in 2014 (with growth of 1.0% forecast) but the outlook for the region remains challenging.

Both the IMF and OECD are now taking a more pessimistic view than previously of the near-medium-term growth prospects for emerging economies. Although the IMF projects their growth rates to remain well above those of advanced economies, they are expected to be below rates seen in recent years.

In contrast, the US is forecast by the IMF to grow by 1.6% in 2013 and to continue to lead the recovery into 2014, with growth of 2.6% forecast. With growth throughout 2013 and output exceeding its pre-recession peak by 5.3% (at Q3 2013), the outlook for the US economy is optimistic. This represents a positive opportunity for Scottish exporters to build on, as the US is Scotland's most important international export partner.

Overall, despite the caution expressed by international commentators, at the end of the 2013 global economic conditions have significantly improved and the outlook is much more optimistic than at the end of the previous year. Global growth is forecast to pick up further to 3.6% in the forthcoming year, which should strengthen confidence and feed through to sustained improvements in other economic indicators.

# Estimates of Gross National Income

On 15 November 2013, the Scottish Government, for the first time, published an estimate of Gross National Income (GNI) for Scotland in 2010.<sup>20</sup> This is an experimental statistic, which means that it is in an official process of development, and may be revised as methodologies and data sources are improved. Nevertheless, it offers the first estimate of the aggregate income of Scottish residents<sup>21</sup>.

Users are actively encouraged to provide feedback on the methodologies applied and presentation of the data. Such feedback will be reflected in any future publications. The aim of disseminating this research is to encourage its use and to gauge interest in incorporating GNI into the suite of economic statistics for Scotland produced by Scottish Government statisticians. The methodologies deployed follow those of the UK.

## What is Gross National Income?

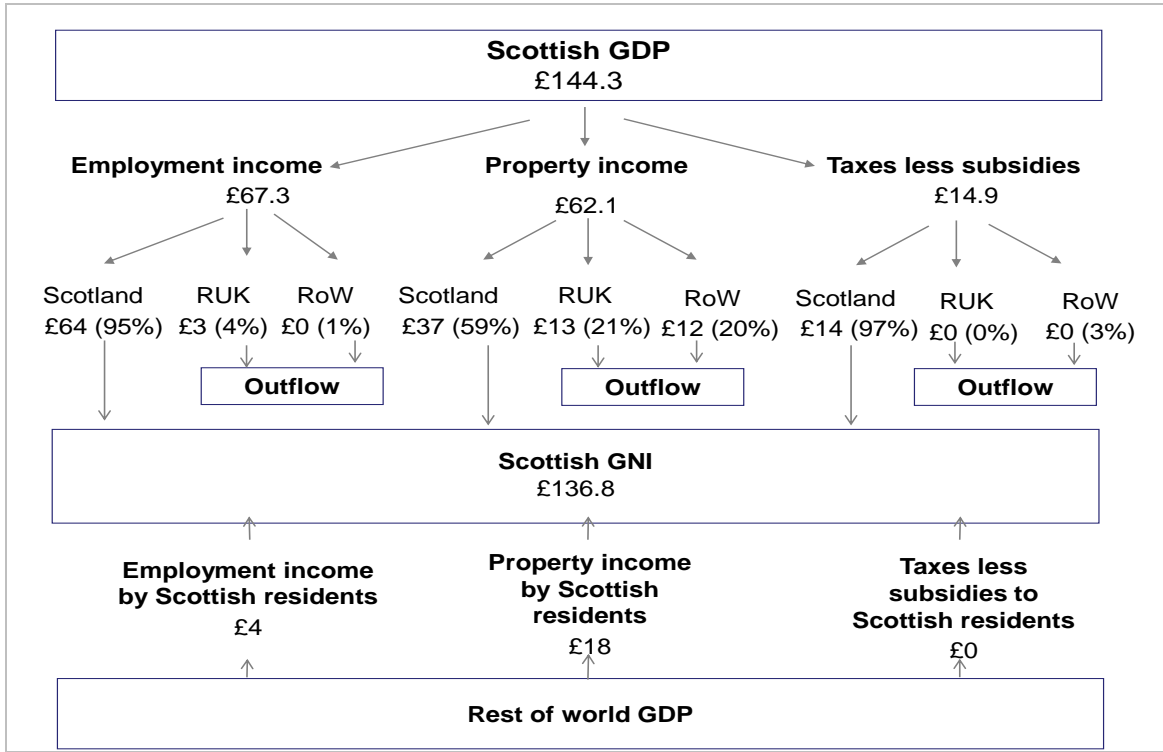
Gross National Income is a measure of the total income of Scottish residents. This is distinct from Gross Domestic Product (GDP), which measures the total income generated by all persons and businesses in Scotland, whether or not they are resident here. To move from an estimate of Gross Domestic Product to one of Gross National Income, any estimated income earned by non-Scottish residents is removed from GDP estimates, and income earned by Scottish residents in other countries and territories is added in. This is illustrated in the figure overleaf

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<sup>20</sup> See <http://www.scotland.gov.uk/Topics/Statistics/Browse/Economy/SNAP/expstats/aggregates>

<sup>21</sup> The estimates respond to widespread demand for an estimate of Scottish GNI (for example, the Council of Economic Advisors identified the lack of a Scottish estimate of in 2008). The methodology has been subject to consultation with potential users and has been peer-reviewed by Martin Kellaway, a former head of the UK National Accounts and adviser to Eurostat on National Accounts in Europe. More information about the methodology used is provided on the Scottish Government.

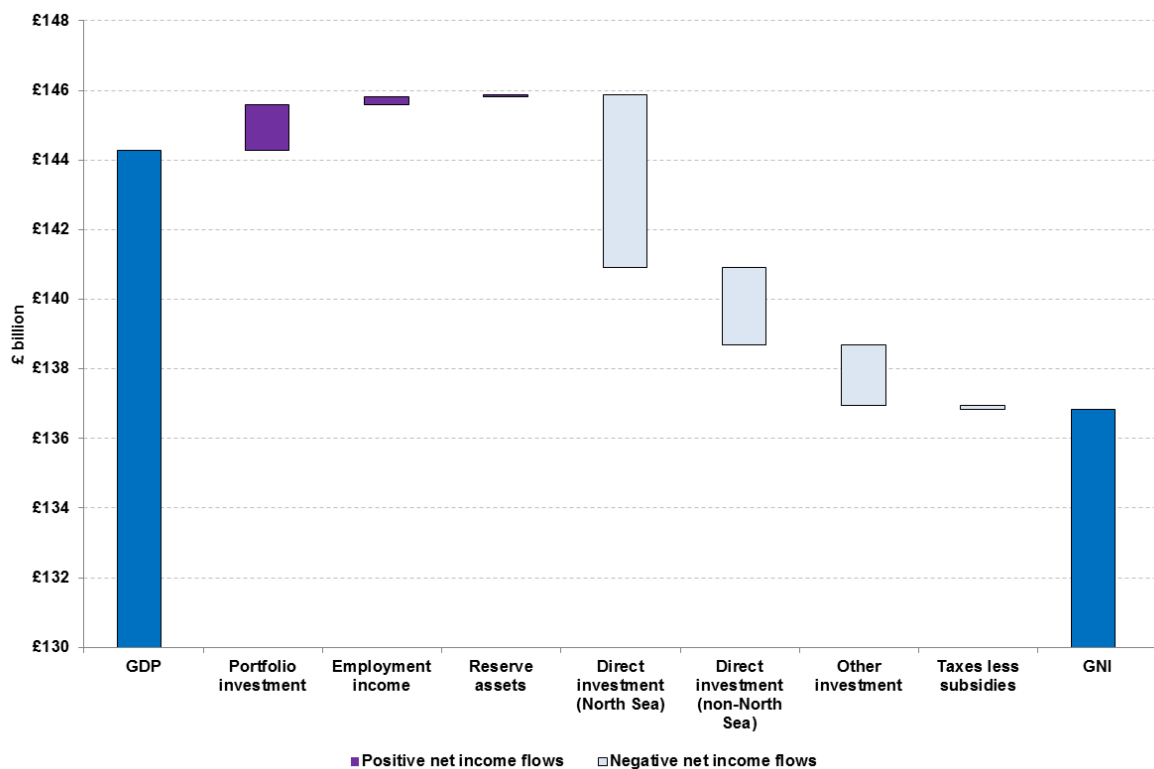
**GDP and GNI, illustrative geographic share of the North Sea (2010, £bn)**



Source: Scottish National Accounts Project

In practice, the difference between GNI and GDP reflects the structure and ownership within an economy and is primarily explained by flows of profit. For example, profits from a foreign-owned Scottish subsidiary of an overseas parent company would not be included in GNI, nor would profits from a Scottish firm paid to any overseas shareholders. However, overseas profits generated by Scottish firms would be included in GNI. This is demonstrated in the chart below which shows the key net inflows and outflows which account for the difference between Scottish GDP and GNI. Net inflows and outflows or profits are primarily captured by the portfolio investment and direct investment flows,

### Scottish GNI and GDP Including an Illustrative Geographical Share of North Sea Output 2010 - £ Billions



Source: Scottish National Accounts Project

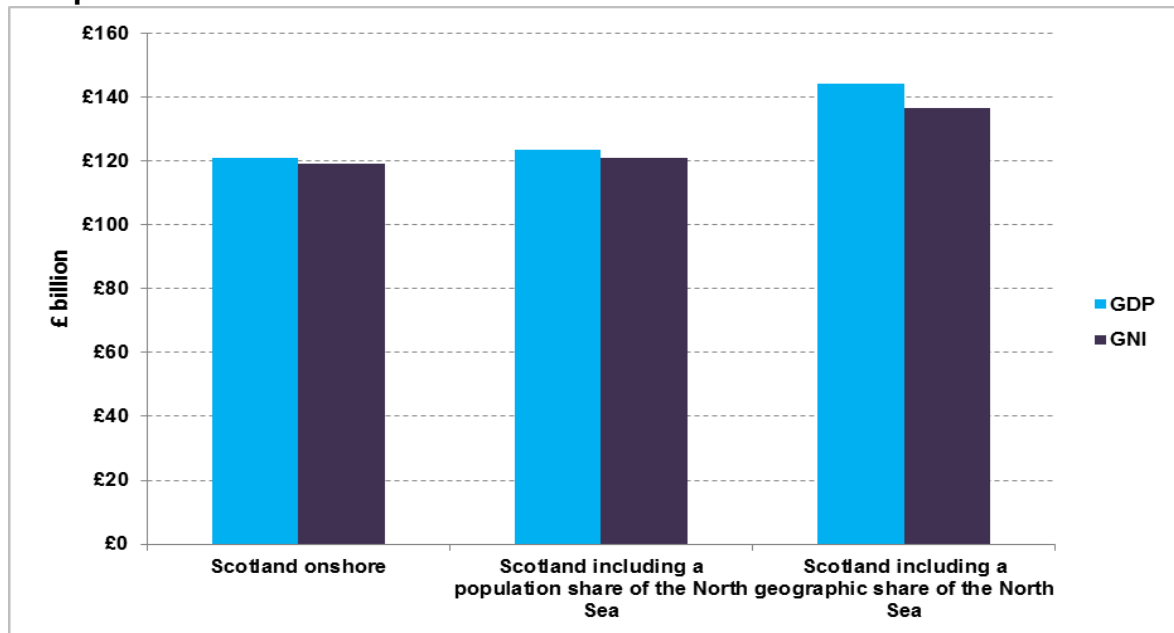
GNI forms an important part of a country’s framework of National Accounts. As outlined above, it provides a measure of the income earned by a country’s residents, and so considers how much income remains in Scotland. GNI is also used within the European Union to determine a county’s contribution to certain budgets, and is used to measure a country’s contribution to international development against UN targets.

### Estimates of Gross National Income for Scotland

As with estimates of Scotland’s GDP, three separate measures of Scotland’s GNI have been produced for 2010:

- for onshore Scotland;
- for Scotland including a population share of North Sea production; and
- for Scotland including an illustrative geographic share of North Sea production.

### Comparisons of Scottish GDP and GNI



Source: Scottish National Accounts Project

### Future Developments

As mentioned above, estimates of GNI remain in development, and further work is planned to refine these estimates and produce figures for other years. Planned development includes: improving the estimates associated with the financial services industries and portfolio investment associated with the North Sea. The estimates are published on the Scottish Government website at:

<http://www.scotland.gov.uk/Topics/Statistics/Browse/Economy/SNAP/expstats/aggregates>

Users' views on the current methodology and areas for improvement are welcome, and can be sent to [economic.statistics@scotland.gsi.gov.uk](mailto:economic.statistics@scotland.gsi.gov.uk).

## International Trade Estimates

On 15 November 2013 the Scottish Government for the first time published estimates of the value and volume of exports of North Sea oil and gas commodities from Scottish waters.<sup>22</sup> These are experimental statistics, which means that they are still in development, and may be revised as methodologies and data sources are improved. Combining these estimates with existing estimates of exports from onshore Scotland allows, for the first time, a measure of Scottish exports to be calculated which captures the contribution of oil and gas production in the Scottish portion of the North Sea.

This analysis uses the median line principle to determine the production occurring in Scottish waters, as employed in 1999 to determine the boundary between Scotland and the rest of the UK for fishery demarcation purposes. This is consistent with the approach taken when incorporating oil and gas activity into other economic statistics for Scotland. However, other alternative methods of apportionment are possible.

### Why estimate North Sea exports?

The annual Global Connections Survey provides estimates of the value of Scotland's exports to the rest of the UK and the rest of the world. These form the basis of estimates of exports in Scotland's Input-Output tables and Quarterly National Accounts. However, the estimate of Scottish exports only covers the onshore economy, and therefore excludes exports associated with the North Sea<sup>23</sup>.

Estimating exports from the North Sea is part of an ongoing programme of work to better understand and capture the linkages between onshore Scotland and the North Sea<sup>24</sup>. North Sea oil and gas extraction is the largest single industry in Scotland<sup>25</sup>, and understanding how goods and services flow between offshore Scotland, onshore Scotland, the rest of the UK, and the rest of the world, is important in understanding the different ways in which the North Sea contributes to the Scottish (and UK) economy.

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<sup>22</sup> See <http://www.scotland.gov.uk/Topics/Statistics/Browse/Business/Energy/OilGas2>

<sup>23</sup> Whilst the Global Connections Survey does not include direct exports from the North Sea, it does cover oil which is produced in the North Sea which is landed in Scotland and subsequently exported as refined petroleum.

<sup>24</sup> As part of this work programme the Scottish Government has also recently published historic quarterly estimates of oil and gas production and associated variables for the Scottish portion of the North Sea. Further information is available from <http://www.scotland.gov.uk/Topics/Statistics/Browse/Economy/SNAP/expstats/oilandgas/methodology>

<sup>25</sup> On the basis of industrial divisions, as set out in the latest UK Standard Industrial Classification (SIC 07). The North Sea industry is taken as division 06: extraction of crude petroleum and natural gas.



## Estimating total Scottish exports including the North Sea

The table below shows how the newly published estimates of North Sea oil and gas exports can be combined with existing export figures from the Quarterly National Accounts to estimate the total value of Scotland's exports for 2012.

Scotland's exports including the North Sea (2012, £ billion)	Rest of UK exports	International exports	Total exports
Onshore Scotland	£47.7	£20.9	£68.7
<b>Less</b>			
<i>exports of mining support to North Sea</i>	£5.7	-	£5.7
<b>Plus</b>			
<i>exports of oil and gas</i>	£10.7	£13.8	£24.4
Scotland including the North Sea	£52.7	£34.7	£87.4

Source: Scottish National Accounts Project

Of Scotland's current onshore exports to the rest of the UK (£47.7 billion), £5.7 billion, approximately 8%, are accounted for by onshore Scotland servicing the North Sea. These are excluded when estimating Scotland's total exports including those from the North Sea as, in this context, sales to the North Sea represent the movement of goods and services within Scotland.

Exports of North Sea oil and gas to the rest of the UK and the rest of the world are added to the remaining onshore exports to give an estimate of total exports<sup>26</sup>. In 2012, North Sea exports are estimated to have been £24.4 billion, which gives an estimate of total exports of £87.4 billion in 2012. Overall, Scotland's exports increase by £18.8 billion or almost 30% when including the North Sea.

It is worth noting that as well as being an exporter of physical oil and gas goods, captured by these new estimates, Scotland is also a significant exporter of oil and gas services. These service exports have been growing, reflecting Aberdeen's position as a global centre of excellence for the energy industry. Research<sup>27</sup> by Scottish Enterprise, Scottish Development International, and the Scottish Council for Development and Industry shows that international sales by the Scottish oil and gas supply chain and its overseas subsidiaries were worth £8.2 billion in 2011. These sales continue to perform strongly, growing by 10% in 2011, and up from less than £4 billion in 2003.

<sup>26</sup> Of the estimate of total oil and gas exports published by the Scottish Government only exports of crude oil and natural gas are added to onshore exports. This is because, as outlined above exports of refined petroleum products from Scottish refineries are already captured within existing exports from onshore Scotland.

<sup>27</sup> Survey of International Activity in the Oil and Gas Sector 2011/12, Scottish Enterprise International Activity Survey, available [here](#).

## Summary

### **Recent Scottish Economic Developments**

- Economic recovery in Scotland has continued through 2013, bringing with it a boost to household and business confidence.
- The strengthening of the Scottish economy has been reflected in the labour market, with employment continuing to rise, driven by a rise in full-time employment, whilst unemployment and, in particular, economic inactivity have fallen.
- As elsewhere, household consumption has been the main determinant of the Scottish recovery over the past year, and for a sustained recovery there is a need to ensure that continued growth is supported by investment and net trade.

### **Future Prospects - Global Economy**

- Expectations for global growth in 2013 have recently been revised down slightly, reflecting a slowing in growth in emerging economies and remaining weaknesses in the Euro Area.
- Nevertheless, at the end of the 2013, global economic conditions have significantly improved and the outlook is much more optimistic than at the end of 2012. Global growth is forecast to pick up further in 2014, which should strengthen confidence and feed through to sustained improvements in other economic indicators.

### **Future Prospects – Scottish Economy**

- The macroeconomic indicators for Scotland provide some grounds for optimism, with the economy moving closer to pre-recession levels.
- Growing recovery in the UK, US, and more recently in the Euro Area also spell positive news, as they are Scotland's most important trade partners.
- Looking ahead, as in the rest of the UK, sustaining the recovery in Scotland into the medium term will require an improvement in underlying competitiveness, linked to a sustained pick up in productivity and real wages, the underlying drivers of household income and consumption.
- Nevertheless, with the strengthening in output and the labour market over the year, and the return of confidence across sectors, recent Scottish output forecasts have been significantly revised upwards.
- Overall, there is a more positive outlook for 2014 and, with a supporting external environment, indications are that Scotland's recovery will continue to gain momentum in the forthcoming year.