The Domestic Economy

Overview

- *The outlook for real GDP growth has been revised upwards to 5.8 per cent and 4.7 per cent in 2015 and 2016, respectively. A much stronger impetus from domestic demand is now anticipated for 2015 following the expansion in consumption and investment in the first half of the year. Similarly, real GNP growth is expected to be marginally stronger than previously forecast this year and next, at 5.3 and 4.4 per cent.*

- *Growth in domestic demand averaging over 5 per cent this year and next is supported by the substantially greater increase in investment now expected over the forecast horizon of 15.8 and 13.2 per cent respectively. For 2015, much of this expansion is due to growth in the volatile research and development category and reflects the impact of Quarterly National Accounts data reported so far this year. However, building and construction and non-aircraft machinery and equipment investment is anticipated to increase at a slightly slower pace than previously forecast.*

- *Against a background of improvements in consumer sentiment, growth in disposable incomes, reflecting the continued rise in employment, higher rates of pay and a smaller drag of net transfers from government, is expected to contribute to consumption growth of 3 per cent this year. As the rebound from the crisis in terms of latent demand, particularly for big ticket items eases somewhat, the pace of consumption growth is expected to be 2.5 per cent in 2016.*

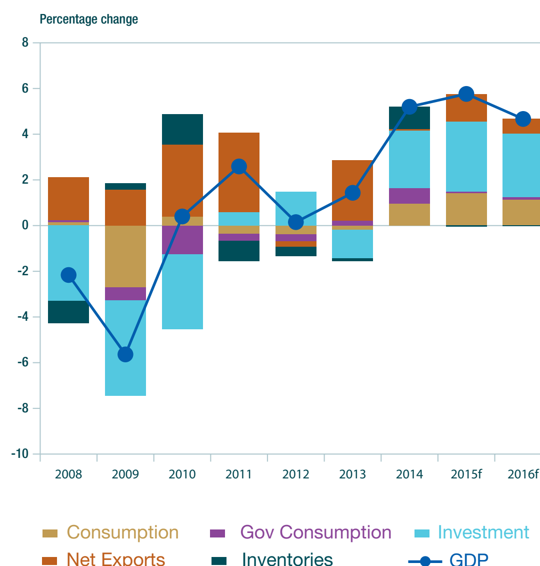
- *Trade and factor income developments remain heavily influenced by issues involving Irish resident multinational firms in high-tech sectors, although indigenous exporting sectors are also growing. Unlike 2014, much of the growth in goods exports so far this year seems to reflect activity within the State, but the pace of growth remains unexpectedly high. This has contributed to large upward revisions to export growth this year (11.1 per cent), with some carry-over to 2016 (6.7 per cent), as growth in the second half of next year is assumed to reflect more fundamental trading partner demand. Imports are also stronger over the forecast horizon due to the stronger outlook for investment, consumption and exports.*

- *The labour market continues to improve and it is expected that employment will increase by on average 2.3 per cent this year and next. This should see the unemployment rate averaging 9.5 per cent in 2015, with a decline to 8.5 per cent expected for 2016, notwithstanding a modest rise in labour force participation. The relative tightening of the labour market, particularly in certain sectors, is expected to support increases in average employee compensation of 2.3-2.4 per cent this year and next.*

- *Inflation is expected to be negligible in 2015, with the HICP averaging 0.3 per cent over the year, as the drag from weak energy prices continues to offset growth in the more domestically driven consumer services prices. The HICP is expected to rise by 1.5 per cent in 2016, somewhat lower than previously forecast, as international oil prices are now assumed to be relatively flat on 2015 and this partially offsets an expected rise in services prices of 3.5 per cent.*

- *Risks to the forecasts are slightly on the upside for 2015 and marginally on the downside for 2016. The outturn for domestic demand, particularly investment, may be stronger than envisaged in this Bulletin for 2015, but most of the growth in these components may be offset by higher imports. For next year, downside risks stem mostly from a drag on external demand from persistent weakness in the emerging market economies and its direct and second-round impacts on Irish exports. While domestic factors point to upside potential, the likelihood of sustained rapid growth in domestic demand next year must be considered in light of the very high pace of growth witnessed in recent years.*

Chart 1: Contributions to GDP



Source: CSO and Central Bank of Ireland.

Table 1: Expenditure on Gross National Product 2014, 2015[f] and 2016[f]

	2014	% change in		2015[f]	% change in		2016[f]
	EUR millions	volume	price	EUR millions	volume	price	EUR millions
Personal Consumption Expenditure	88,959	3.0	1.3	92,819	2.5	1.8	96,852
Public Net Current Expenditure	27,236	0.5	1.6	27,792	0.9	0.8	28,244
Gross Domestic Fixed Capital Formation	36,511	15.8	2.3	43,256	13.2	2.6	50,222
Building and Construction	12,510	8.0	6.1	14,264	12.5	6.3	16,949
Machinery and Equipment	14,215	16.5	0.8	16,666	16.2	1.1	19,543
Intangibles	9,786	25.0	1.0	12,326	10.0	1.4	13,730
Value of Physical Changes in Stocks	1,905			1,905			1,905
TOTAL DOMESTIC DEMAND	154,611	5.6	1.6	165,772	5.0	1.8	177,223
Exports of Goods & Services	214,961	11.1	2.7	245,340	6.7	1.9	266,877
FINAL DEMAND	369,572	8.8	2.3	411,112	6.0	1.9	444,100
Imports of Goods & Services	-180,286	11.9	-1.6	-205,149	7.4	-1.2	-222,901
Statistical Discrepancy	-239			-239			-239
GROSS DOMESTIC PRODUCT	189,047	5.8	2.9	205,724	4.7	2.6	220,959
Net Factor Income from Rest of the World	-26,169	8.4	2.7	-29,139	6.6	1.9	-31,652
GROSS NATIONAL PRODUCT	162,878	5.3	2.9	176,585	4.4	2.7	189,308

Demand

Domestic Demand Overview

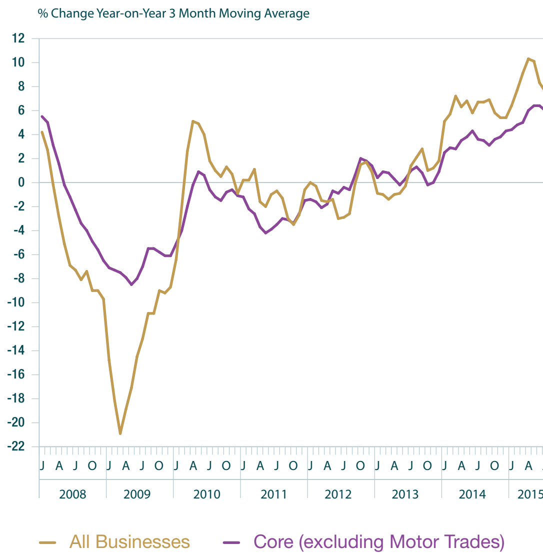
The latest set of *Quarterly National Accounts* figures confirm that the recovery in domestic demand (evident since the second half of 2013) has continued to gather pace. In the first half of the year, domestic demand grew by 8.4 per cent – the fastest rate of growth since 2006. This was driven by continued growth in consumer spending but also by exceptionally strong investment figures, in large part reflecting the volatile research and development (R&D) sub-component (see below). The momentum in domestic demand is expected to persist over the forecast horizon, with growth of 5.6 per cent and 5 per cent forecast for 2015 and 2016, respectively.

Consumption

Personal consumption expenditure is expected to grow by 3 per cent this year and by 2.5 per cent in 2016. The outlook for this year has been revised upwards by 0.7 percentage points since the previous *Bulletin*. This reflects, in part, revisions to the growth outturn in 2014 coupled with robust data for the first half of the year.[1] In seasonally adjusted terms, consumer spending grew by 0.7 and 0.4 per cent on a

1 The CSO revised the growth rate in personal consumption in 2014 upwards from an initial estimate of 1.1 per cent in March to 2 per cent in July.

Chart 2: Index of Volume of Retail Sales



Source: CSO.

quarter-on-quarter basis in the first and second quarters – marking a sixth consecutive quarter of expansion. This upturn has been driven largely by purchases of goods. In the year to July, the volume of retail sales increased by 8.8 per cent helped by robust new car sales.[2] Excluding motor trades, retail sales were up by 5.8 per cent over the same period.

The outlook for the rest of this year and for 2016 is driven by a combination of factors. In particular, the robust recovery in the labour market has become more broadly based and is expected to continue in the short-term. Consumer confidence continues to improve as evidenced by sentiment indicators and car sales statistics.[3] Exchequer taxes have also been consistently strong this year indicative of higher levels of consumer activity, with VAT receipts in particular up 7.9 per cent in the year to end-August.

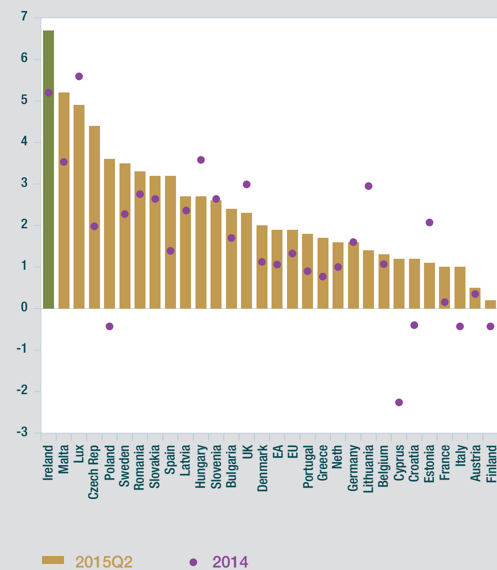
Box A: The Recent Growth Performance of the Irish Economy

By Diarmaid Smyth and Martin O'Brien[4]

The recent growth performance of the Irish economy has been exceptionally robust as well as being quite divergent from developments in the euro area (EA) (Figure 1). An obvious question is how long this pace of growth can be expected to persist? This Box seeks to shed some light on this issue by looking at recent growth in the context of the long-term performance of the Irish economy.

The most recent set of *Quarterly National Accounts* (QNA) confirmed the strong rebound in economic activity – GDP grew by 6.7 per cent in the year to the second quarter (a 6th consecutive quarter of expansion). This rapid growth has resulted in a large gap opening up between the rate of GDP expansion in Ireland and the EA. Differences in the growth of domestic demand have dominated the recent growth in Ireland, as well as the much higher rate of GDP growth than what has been seen in the EA.

Box A Fig 1: Real GDP Growth in the euro area



Source: Eurostat.

4 Irish Economic Analysis Division.

2 According to the CSO, there were 108,522 new private cars licenced in the year to end-August, an increase of 31.9 per cent year-on-year.

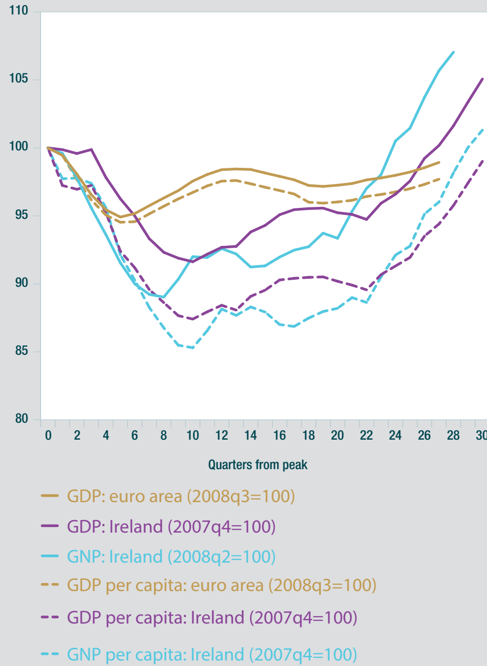
3 The KBC Ireland/ESRI Consumer Sentiment Indicator (3-month moving average) increased to101.2 in August from 100.3 in July.

Box A: The Recent Growth Performance of the Irish Economy

By Diarmaid Smyth and Martin O'Brien

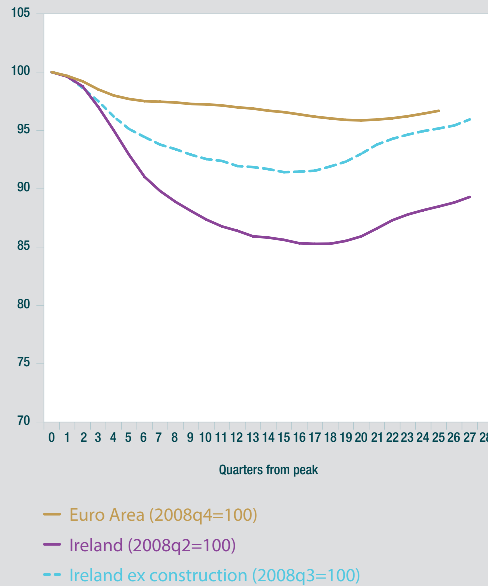
The reasons for the diverging growth performance lie partly in the after effects of the financial crisis and the relative capacity of the Irish economy to respond to such a shock. While the scale of the shock in Ireland has been larger, at the onset and throughout the crisis, the relative flexibility of Ireland's labour market and the less restrictive and business-friendly product market environment has facilitated a more robust recovery from the trough of the recession.[5]

Box A Fig 2A: Annual Real GD(N)P and Real GD(N)P per capita from pre-crisis peak



Source: CSO, Authors' Calculations.

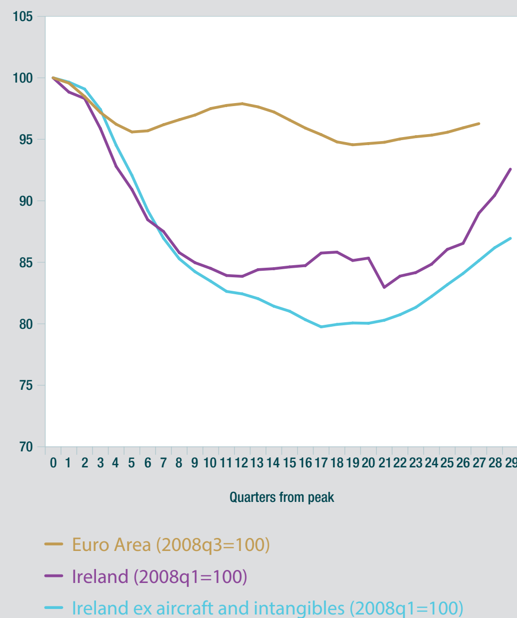
Box A Fig 2B: Annual Average Employment from pre-crisis peak



Source: CSO, Authors' Calculations.

In Ireland the crisis was deeper and more prolonged than in the EA. From peak to trough, real GDP contracted in Ireland by 8.4 per cent between 2007q4 and 2010q2, whereas the peak to trough decline in the EA was 5.1 per cent over the course of 5 quarters from 2008q3 (Figure 2a). Considering GNP, the decline in Ireland was more severe at 11.4 per cent over a two year period. On the labour market side, annual average numbers employed fell by 16.7 per cent in Ireland over the course of the crisis, whereas the equivalent fall in the EA was 4.1 per cent (Figure 2b). In terms of domestic demand, the peak to trough decline in Ireland was even more severe at between 17-20 per cent, depending on the treatment of certain categories of investment, with the EA as a whole seeing a fall of 5.5 per cent (Figure 2c).

Box A Fig 2C: Annual Real Domestic Demand from pre-crisis peak



Source: CSO, Authors' Calculations.

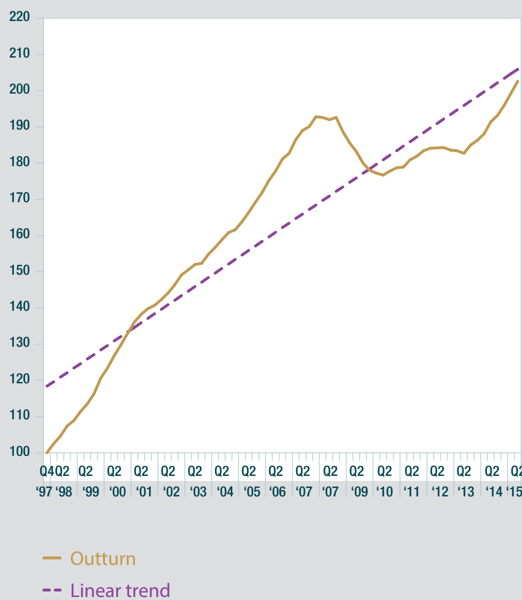
5 OECD indicators on the degree of product market regulation and restrictiveness of employment legislation consistently have Ireland below the euro area average for periods before and during the crisis. A proactive policy stance in conjunction with EU/IMF Financial Assistance Programme was also important in restoring confidence and facilitating growth.

Box A: The Recent Growth Performance of the Irish Economy
By Diarmaid Smyth and Martin O'Brien

While the initial recovery in GDP in Ireland was driven by net exports, the recent rebound in domestic demand is now the dominant source of growth. Much of this reflects "pent up demand" in the economy following a long period of weakness, which has manifested itself most clearly in rising purchases of "big ticket" items – consumer durables, car sales and housing– all of which are up very strongly in recent quarters. However, the recovery has perhaps manifested itself most strongly in the labour market, with an additional 130,000 persons at work since the low point in 2012. In the quarter to end-June, numbers in employment rose by 1 per cent quarter-on-quarter - an 11th consecutive quarterly increase.[6] Figure 2b, shows that employment is now less than 5 per cent below peak levels (excluding construction) and on the basis of the forecasts in this *Bulletin* non-construction related employment will be 1 per cent below peak levels in 2016.

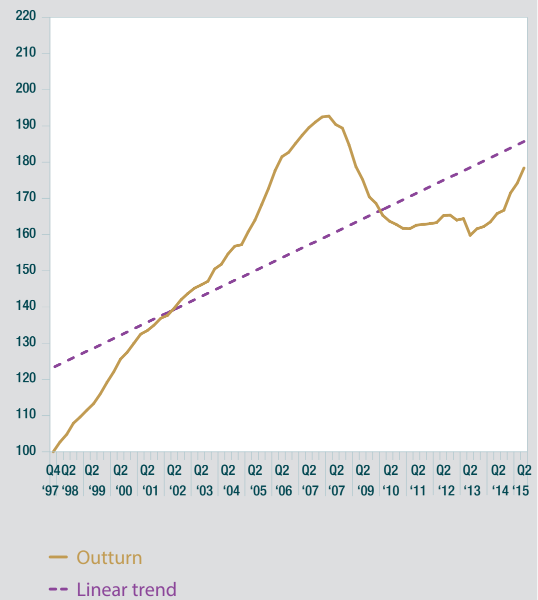
Following the rapid pace of growth over recent quarters, in 2014 the economy surpassed the level it was at pre-crisis in terms of GDP and GNP, while on a per capita basis it will do so in 2015 (Figure 2a). This represents a much lower level of activity than what would have been the case had the trends prevailing at the peak of the boom continued. However the imbalances that had built up in the mid-2000s during the credit-fuelled construction boom were such that both the level and growth rate of economic activity over that period were ultimately unsustainable. It is reasonable to assume that the scale of the Great Recession has been so large, and the positions in the mid-2000s so unsustainable, that the trend rate of growth for the economy is now fundamentally lower than what would have been the case in the early part of this century. A linear trend for GDP estimated over the past 18 years suggests as much from a simple statistical point of view.[7] The rapid rate of growth in recent quarters has moved GDP back towards a level consistent with such a lower trend growth rate (Figure 3a).

Box A Fig 3A: Ireland - Annual Real GDP (1997q4=100)



Source: CSO, Authors' Calculations.

Box A Fig 3B: Ireland - Annual Real Domestic Demand



Source: CSO, Authors' Calculations.

6 The unemployment rate has also fallen sharply from a high of 15.1 per cent in 2012 to 9.5 per cent at present.

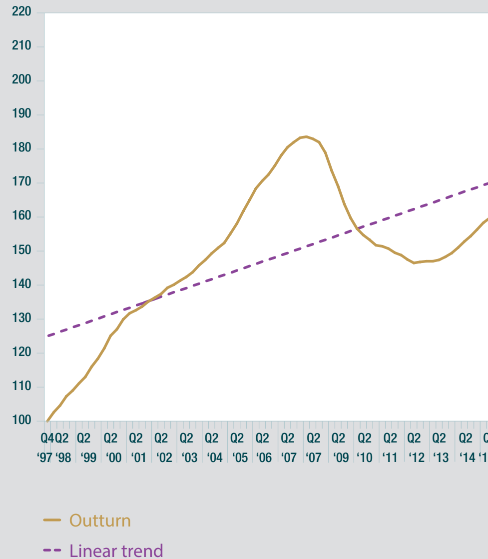
7 Alternative statistical methods for estimating the trend in GDP over this time period, such as the Hodrick Prescott filter or Kalman filter, would typically have slightly lower estimates of trend GDP at present than a simple linear trend. One could also consider counterfactual exercises of where the economy would be without the boom-bust experience of the past decade (P. Honohan, "Where did all the money channelled into property-backed lending go?", *Irish Times*, 31January 2015).

Box A: The Recent Growth Performance of the Irish Economy

By Diarmaid Smyth and Martin O'Brien

Similarly, domestic demand remains well below its pre-crisis peak, but is also approaching a lower post-crisis trend value (Figure 3b). It must be borne in mind that following recent methodological changes in the *National Accounts*, investment in R&D intangibles and all aircraft owned by leasing companies resident in Ireland are now included in domestic demand (see Box B). Conceptually, this investment adds to the productive capacity of the economy, but it is broadly unrelated to developments in the domestic markets for capital, labour, and consumer goods and services. It is therefore also useful to consider domestic demand excluding investment in aircraft and intangibles, the recovery in which has not been as rapid, and the level of which is currently 5 per cent below its value consistent with a lower post-crisis trend growth rate. By the end of the current forecast horizon, this measure of domestic demand is projected to be 2.5 per cent below that trend.

Box A Fig 3C: Ireland - Annual Domestic Demand ex aircraft and intangibles



Source: CSO, Authors' Calculations.

When considering the upside capacity of the economy over the coming years a key issue will be the efficiency of the labour market. In Figure 4a, the economy-wide vacancy rate is plotted from 2008q1 to 2015q2.[8] The number of reported vacancies has been on an upward trajectory in recent quarters. In the first half of 2015, the number of reported vacancies increased sharply, by more than a third to 15,100, with increases recorded in nearly all sectors. An economy wide Beveridge curve is shown in Figure 4b.[9] There appears to have been an upward shift in the curve in recent quarters pointing to tighter labour market conditions, something that is also evident from the latest earnings data - hourly earnings increased for a third successive quarter in 2015q2 - the first time this has occurred since 2009 despite still weak inflationary pressures.

8 The vacancy rate here is defined as the ratio of job vacancies to numbers employed. The data is taken from the CSO's Earnings and Labour Costs survey (EHECS).

9 The negative relationship between vacancies and the unemployment rate over the course of the economic cycle was highlighted in 1944 by William Beveridge.

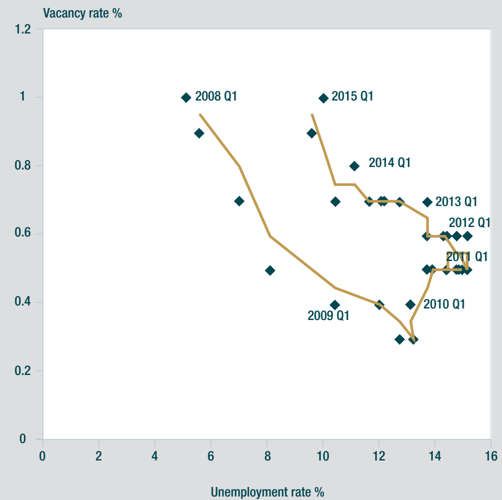
Box A: The Recent Growth Performance of the Irish Economy
By Diarmaid Smyth and Martin O'Brien

Box A Fig 4A: Vacancy Rate

— Vacancy Rate.

Source: CSO.

Box A Fig 4B: Beveridge Curve



Source: CSO, Authors' Calculations.

Taking a cross-check on these developments, given the relative impact of the crisis on Ireland compared to the EA as well as the typically higher responsiveness of the Irish economy to such shocks, it was always likely that growth here would surpass that of the EA in the recovery phase. At this stage, the economy is moving back towards trend levels in terms of GDP and domestic demand, as well as showing the initial indications of a tighter labour market. However the arguably more relevant measure of domestic demand for evaluating contemporaneous developments in capital, labour and goods and services markets, is not expected to reach what could be considered its trend level over the forecast horizon in this *Bulletin*. This suggests that while growth could reasonably be expected to ease somewhat in 2016, there remains capacity for the Irish economy to continue to expand at a faster pace than the EA over the medium term without encountering binding constraints. This capacity is not limitless, however, and inevitably growth will need to slow down to a lower, more sustainable rate. Any stimulus to growth over and above that envisaged in the coming years would have to be supported by increases in the productive capacity of the economy in order to avoid the risk of unsustainable increases in factor prices such as those for labour and capital.

Investment

As noted in previous *Bulletins*, investment forecasts are subject to considerable uncertainty, all the more so with recent statistical changes related to the treatment of aircraft leasing (see Box B). However, after stripping out the volatile components (aircraft and intangibles investment), the latest *Quarterly National Accounts* point to a continued strong rebound in underlying investment, which is up almost 20 per cent year-on-year to the second quarter. On the building and construction side, growth in the first half of 2015 is coming from the residential sector, with the other components (commercial, industrial and infrastructure) registering only modest increases in year-on-year terms (for the first half of 2015) or even a slight decline (for the second quarter). While the headline rate of machinery and equipment investment was flat, the underlying figure, net of the volatile aircraft investment, points to considerable strength in the economy – up almost 40 per cent in the year to the second quarter.

In the residential sector, house completions look set to register an increase of approximately 25 per cent, which coming from a very low base represents 13,700 new housing units. On the basis of current forward looking indicators and a pick-up in development financing, house completions are forecast to increase to about 18,500 new units in 2016. Investment on the non-residential side is forecast to increase by 5 per cent this year and 8 per cent in 2016, a downward adjustment compared with the previous *Bulletin*, in part reflecting base effects from a higher than expected outturn for 2014.

In conjunction with forecasts from other components of domestic demand and export growth, growth in machinery and equipment is expected to remain strong, with an underlying (excluding aircraft investment) increase of 25 and 20 per cent forecast for 2015 and 2016, respectively.

Intangibles investment, which includes spending on patents and intellectual property rights as well as organisational and human capital, increased by almost 70 per cent in the year to the second quarter of 2015. While this was probably related to activity by a limited number of multinationals, it represents a non-negligible proportion of overall investment and is likely to add considerable noise to the overall investment figures.

With this caveat, total investment is forecast to increase by 15.8 per cent and 13.2 per cent in 2015 and 2016, respectively.

Box B: The Impact of Changes in Trade in Aircraft in the National Accounts
By Martin O'Brien[10]

With the release of the *National Income and Expenditure Accounts 2014 (NIE 2014)* the CSO have included the physical trade in all aircraft by Irish resident leasing companies on a change in economic ownership basis.[11] Ireland is central to the world's vast and growing aircraft leasing market, with 14 of the world's top 15 aircraft leasing companies operating here, and approximately half of all leased aircraft globally either owned or managed from Ireland.[12] Given the size of the aircraft leasing sector in Ireland, the inclusion of this trade has led to significant revisions to, *inter alia,* investment, imports and the trade balance, and adds another source of complexity in interpreting Irish macroeconomic data.[13] In this Box the impact of these changes on the headline items of relevance in the National Accounts and Balance of Payments over recent years are considered. The implications of these changes for our forecasting approach to investment and imports is then discussed, as well as their impact on estimates of potential output, based on the measure used for fiscal surveillance by the European Commission.

The differences in the level and growth rates of real imports and investment in NIE 2014 and previous vintages of National Accounts are shown in Figures 1a-1d. These mostly arise due to this change in methodology, with some minor revisions due to a change in how the CSO adjust the level of imports from the survey data they collect in compiling the National Accounts. With the inclusion of the new aircraft, the decline in investment during the 2009/10 recession is now estimated to have been smaller than previous accounts, and had a more pronounced rebound in 2011/12. For 2014, investment is now estimated to have grown by 14.3 per cent as opposed to just 11.3 per cent using the previous methodology. These trends are also broadly reflected in the imports series. Since 2010, the level of investment is now on average 20 per cent higher than under the previous methodology, with imports being 9 per cent higher.

10 Irish Economic Analysis Division.

11 See http://www.cso.ie/en/media/csoie/surveysandmethodologies/surveyforms/documents/balancepayments/pdfdocs/Aircraftleasing2015.pdf for further details.

12 Dept. of Finance (2015) "IFS 2020: A Strategy for Ireland's International Financial Services Sector 2015-2020".

13 For a detailed *ex-ante* discussion of the change, with hypothetical examples of the impact see J. FitzGerald (2015) "Problems Interpreting National Accounts in a Globalised Economy – Ireland", Special Article, ESRI Quarterly Economic Commentary, Summer.

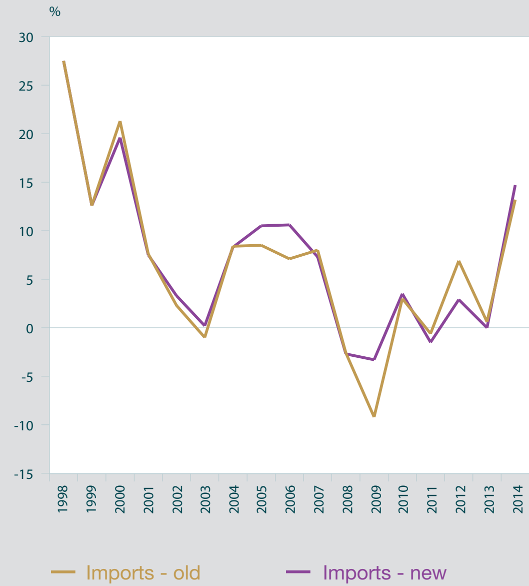
Box B: The Impact of Changes in Trade in Aircraft in the National Accounts

By Martin O'Brien

Box B Fig 1A: Annual real investment growth

Source: CSO, Eurostat.

Box B Fig 1B: Annual real imports growth

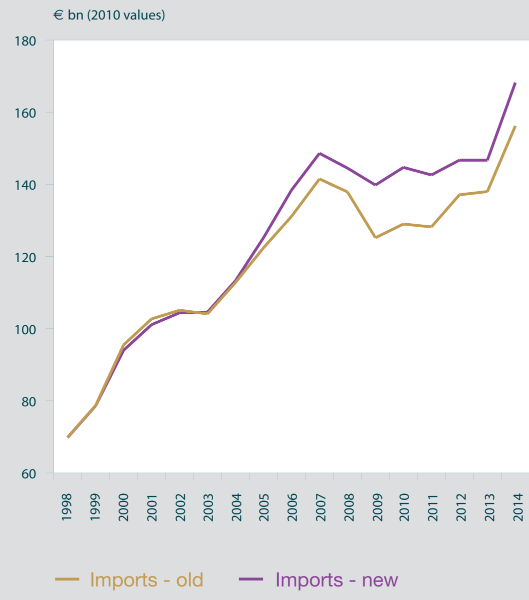


Source: CSO, Eurostat.

Box B Fig 1C: Real investment (chain linked annually referenced to 2010)

Source: Eurostat.

Box B Fig 1D: Real imports (chain linked annually referenced to 2010)

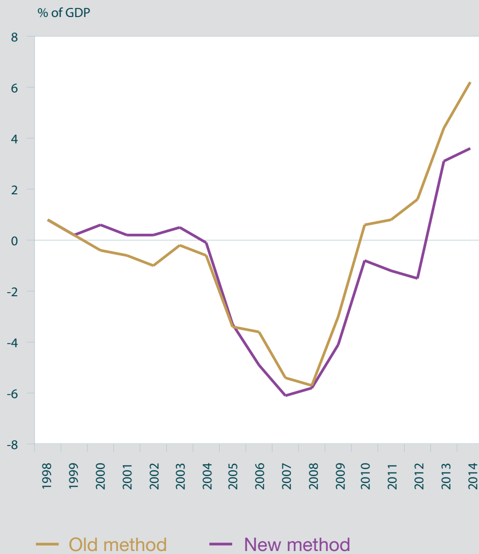


Source: Eurostat.

Box B: The Impact of Changes in Trade in Aircraft in the National Accounts
By Martin O'Brien

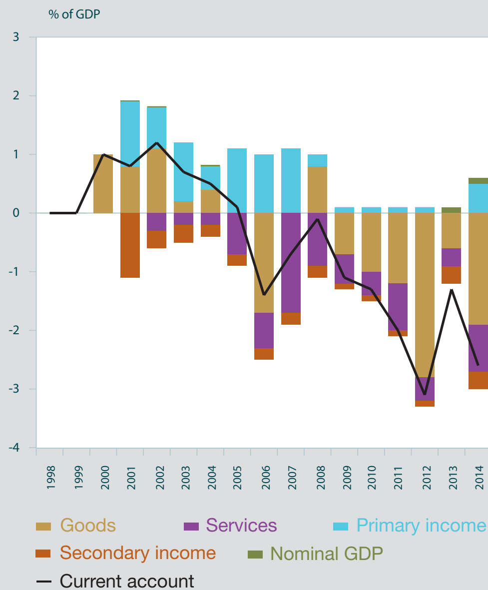
As this additional investment is entirely related to imported goods, the impact on the level and growth rates of GDP and GNP arising from the change in methodology has been negligible. However the composition of GDP is significantly affected, with the investment share now averaging 22.3 per cent since 2000, as opposed to 20.2 per cent under the old methodology.

Box B Fig 2a: Current account balance



Source: CSO.

Box B Fig 2B: Difference in Current Account Components



Source: CSO.

The additional (net) imports of aircraft now included in the data have reduced the goods trade balance in the current account of the balance of payments. As there has been no change arising from the new methodology in other items within the current account and the level of nominal GDP is slightly higher due to unrelated revisions, the current account surplus of recent years is now lower than what had previously been reported (Figure 2a). While other items regarding the services trade and primary income balances have been revised in line with existing CSO practices, these are small when compared to the impact of the trade in aircraft on the goods trade balance (Figure 2b).

Box B: The Impact of Changes in Trade in Aircraft in the National Accounts
By Martin O'Brien

A high degree of uncertainty has always been attached to headline investment forecasts given the timing and volume of aircraft purchases by Irish headquartered airlines. This uncertainty is now magnified given the scale of the trade in aircraft now included, and the number of firms involved. While further analysis will have to be done as more data become available, growth in the global airline industry tends to be correlated with global GDP growth, and this may be a useful preliminary benchmark for aircraft investment forecasts.[14]

As noted above, this additional investment in aircraft now included in the *National Accounts* is all imported. In practice, forecasts for imports are estimated with reference to the marginal propensity to import for a given level of consumption, investment and exports and the forecast path for these expenditure components. The marginal import propensities can be derived from the *Supply and Use Tables* published the CSO. The latest vintage of the *Tables* refer to 2011 and implies that approximately 50 per cent of investment expenditure in that year was on imports. Now that investment expenditure has been increased by the change in methodology, and all of that increase refers to imported goods, the marginal propensity to import for a given level of investment will typically be higher than 50 per cent in the years that aircraft are purchased. Initial estimates by the Bank suggest that the marginal propensity to import for investment is now closer to 55 per cent, which has the impact of systematically increasing the level of imports in our forecasts.

Arising from their new treatment, all aircraft owned by Irish resident leasing companies are now considered part of the Irish capital stock, despite the fact that the vast majority of them will never actually be based out of Ireland. There will also be an impact on the economy-wide consumption of fixed capital, or depreciation rate, depending on how statisticians evaluate how aircraft depreciate in comparison with other elements of the capital stock. With this rise in the capital stock, standard estimates of the productive capacity, or potential output, of the Irish economy will also change. It is well known that estimates of potential output in the Irish case are fraught with difficulty due to, amongst other things, the high degree of flexibility in both labour and capital markets.[15]

The European Commission (EC) applies a standard methodology across EU Member States in estimating potential output and the related output gap (the difference between potential output and actual GDP). This is used in fiscal surveillance and benchmarking progress in meeting conditions under the Stability and Growth Pact (SGP).[16] Following the EC methodology implies

14 See IATA (2015) "Economic Performance of the Airline Industry - June", available at http://www.iata.org/whatwedo/Documents/economics/IATA-Economic-Performance-of-the-Industry-mid-year-2015-report.pdf.

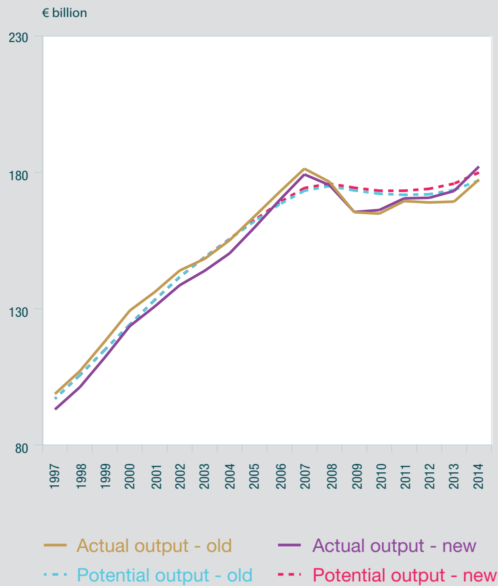
15 For a more detailed discussion see Bergin and FitzGerald (2014) "The Structural Balance for Ireland", Special Article, ESRI Quarterly Economic Commentary, Spring.

16 It has been noted that this approach is problematic when applied to Ireland. See "Box B: Towards More Relevant Measures of Potential Output" in the Irish Fiscal Advisory Council's Fiscal Assessment Report, June 2015.

Box B: The Impact of Changes in Trade in Aircraft in the National Accounts
By Martin O'Brien

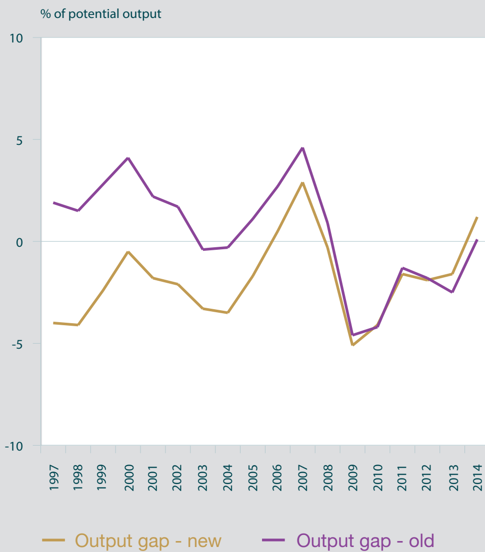
a specific means of deriving the production function for the economy that is common across Member States with very few exceptions to capture country specific idiosyncrasies. On the assumption that this method is applied as it has been to date, the additional capital stock under the new treatment of aircraft investment leads to estimated potential output using the EC methodology being approximately 1.5 per cent higher in 2014 compared to the previous EC estimates, and on average about 1 per cent higher since 2008 (Figure 3a, 3c).[17] The output gap, which is expressed as a per cent of potential output, would now be estimated to have been 1.2 per cent in 2014, significantly more positive than the previous estimate which in essence had an output gap of zero last year (Figure 3b).

Box B Fig 3A: Potential output estimate using EC methodology (real 2010 values)



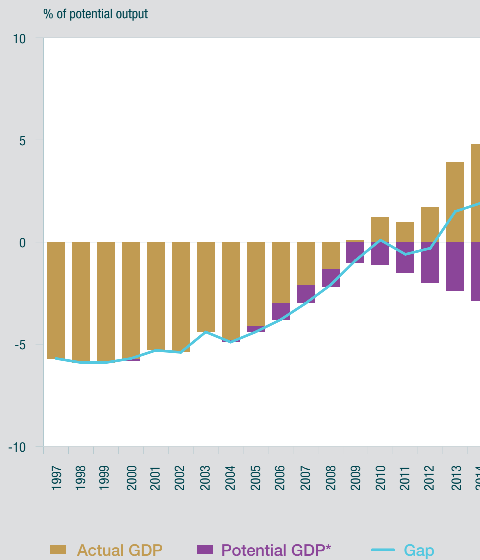
Source: CSO, Authors' Calculations.

Box B Figure 3B: Output gap estimate using the EC methodology



Source: CSO, Authors' Calculations.

Box B Figure 3C: Differences arising from new estimates



Source: CSO, Authors' Calculations.

17 DG ECFIN provides computer code to replicate their approach to estimating potential output at https://circabc.europa.eu. We update the underlying data used in the estimates from DG ECFIN in their Spring 2015 forecast to reflect the new investment series and GDP estimates. We assume no difference in the aggregate depreciation rate, nor do we adjust the standard EC methodology of a common fixed coefficient on the capital input to the production function. A higher depreciation rate, which may ultimately be the case following the revision to the investment series, would tend to reduce potential output estimates. Further details of the EC methodology can be found in K. Havik et al (2014) "The Production Function Methodology for Calculating Potential Growth Rates and Output Gaps", DG ECFIN European Economy Economic Papers, No. 535.

Box B: The Impact of Changes in Trade in Aircraft in the National Accounts
By Martin O'Brien

One implication of the revised estimates is the impact that the practice of chain linking volume measures has on historic levels of real GDP. The EC use chain linked volume measures with a reference year of 2010 in their procedures for calculating the output gap. The chain linked deflator with reference year 2010 now incorporates alternative developments in investment and import prices which were not present in previous estimates. The effect of this is to reduce the size of the economy in real 2010 terms in years prior to 2008 (Figure 3a, 3c). This is the dominant feature in explaining the new output gap measure using the EC methodology in those years. Consequently, the economy was estimated to have a negative output gap using this measure through the late 1990's and early 2000's, as opposed to a positive one. During the height of the construction boom in 2006/7, the economy is assessed to have had a much smaller positive output gap under the new method than previously estimated.

The systematically higher level of potential output under the EC methodology following the additional investment in aircraft will provide the framework within which fiscal policy will be evaluated under the preventive arm of the SGP from 2016.

Government Consumption

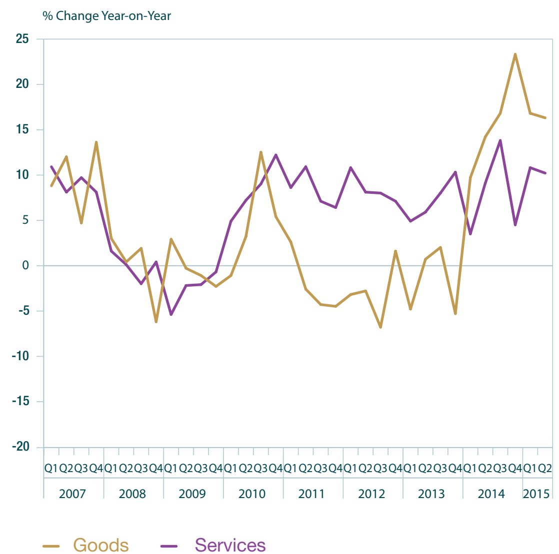
The volume of government consumption increased by 3.5 per cent in the first half of the year, following growth of 4.6 per cent in 2014. For the year as a whole, real government consumption is assumed to increase by 0.5 per cent, with 0.9 per cent growth assumed in 2016.

External Demand and the Balance of Payments

Exports and Imports

According to the latest *Quarterly National Accounts* export growth continued to be robust in the first half of 2015, rising by 13.8 per cent compared with the first half of 2014. While import growth has also strengthened so far in 2015, particularly for services, net exports have made a stronger contribution to GDP growth in the first six months of the year than in 2014. However revised estimates in the latest set of *National Accounts* indicate that net exports made a much smaller contribution to GDP growth in 2014 than had previously been thought. Looking ahead, the projections in this *Bulletin* for 2015 and 2016 imply a stronger contribution from net exports to GDP growth over the forecast horizon (Chart 1).

Chart 3: Volume of Exports



Source: CSO Quarterly National Accounts.

Growth in goods exports continues to dominate overall developments in Irish exports, with volume growth of over 16 per cent on an annual basis in the first half of 2015. The impact of Ireland being a net contract manufacturing user garnered a lot of attention in explaining the growth in goods exports in 2014. This issue is, however, a symptom of

Table 2: Goods and Services Trade 2014, 2015f, 2016f

	2014	% change in		2015f	% change in		2016f
	EUR millions	volume	price	EUR millions	volume	price	EUR millions
Exports	214,961	11.1	2.7	245,340	6.7	1.9	266,877
Goods	113,211	13.8	3.6	133,472	7.7	1.5	145,906
Services	101,750	8.0	1.8	111,868	5.5	2.5	120,971
Imports	180,286	11.9	1.6	205,149	7.4	1.2	222,901
Goods	70,910	10.9	1.4	79,745	7.0	1.5	86,646
Services	109,376	12.6	1.8	125,404	7.6	1.0	136,256

the underlying driver of Irish export growth in recent years, namely the role of Irish firms in the international fragmentation of production and changes in corporate structure resulting in shifts in Ireland's position in global value chains.[18] Data so far for 2015 does not point toward changes in contract manufacturing as being the main factor in goods export growth.[19] Consequently, growth in the value of exported goods actually processed in Ireland is the main source of export growth so far in 2015, particularly exports of pharmaceuticals and of professional, scientific and controlling instruments such as medical apparatus.

That being said, developments in Irish goods imports so far in 2015 appear to be driven by activity outside the State of Irish owned firms, or firms operating on contract processing Irish owned materials for Irish resident entities. The most recent growth in goods imports on a *National Accounts* basis is not reflected to the same extent in customs data. Combined with the developments in goods exports, the rise in the goods trade surplus to date in 2015 has for the most part reflected activity within the State.

Services trade is also affected by the involvement of Irish resident multi-national firms in the wider restructuring of production and intra-firm transactions evident in recent years. Services imports continue to grow strongly at just over 20 per cent on an annual basis in the first half of 2015, reflecting both the import of royalties and licences arising from using intellectual property (IP) from outside Ireland, as well as the outright purchase of such IP assets which gets reflected in intangibles investment. This IP underpins the production of hi-tech goods and services for export here. Regarding services exports, growth is being recorded across all categories, with the strongest contributors continuing to be computer services, insurance and financial services and business services (including leasing and administrative support services). Growth in the value of tourism services exports is also accelerating in 2015.

Sentiment indicators for both manufacturing and services industries continue to be positive regarding the prospects for exports. The outlook for demand in our major trading partners based on the most recent external demand assumptions is marginally stronger than in the previous *Bulletin* for 2015 and somewhat weaker for 2016. This is due to a slightly less optimistic outlook for the world economy in 2016 arising from the slowdown in China (see Box C). The dominant factor in determining our near term projections on exports, however, is the higher than expected growth reported so far this year.

With these factors in mind, the latest projection is for overall export growth of 11.1 per cent

18 See S. Byrne and M. O'Brien (2015) "The Changing Nature of Irish Exports: Context, Causes and Consequences", Special Article in Central Bank of Ireland Quarterly Bulletin No.2.

19 The value of goods exports on the basis of customs data in the first half of 2015 increased by €8.6 billion on an annual basis, whereas the adjustment made to these data to match the value of goods exports on a *National Accounts* basis, which includes the contract manufacturing adjustment, rose by €6.3 billion over the same period.

Table 3: Balance of Payments 2014, 2015f, 2016f

€ million	2014	2015f	2016f
Trade Balance	34,674	40,191	43,976
Goods	42,297	53,727	59,260
Services	-7,623	-13,536	-15,284
Net Factor Income from the Rest of the World	-25,105	-29,139	-31,652
Current International Transfers	-2,736	-2,736	-2,736
Balance on Current Account	6,833	8,316	9,588
(% of GDP)	3.6	4.0	4.3

for 2015 in volume terms, and 6.7 per cent in 2016, significantly stronger than in our previous *Bulletin*. Goods exports are expected to grow at a faster pace than services over the forecast horizon.

The outlook for domestic demand and export growth, as well as the higher than expected outturn for the first half of 2015 due to imported IP assets, justify a strengthening of imports over the forecast horizon. Consequently, an 11.9 per cent increase in the volume of imports is expected in 2015 followed by 7.4 per cent in 2016.

Combined with the export outlook this implies a higher net export contribution to overall GDP growth this year and next compared with 2014. A reasonable degree of uncertainty surrounds the net export projections at present as a result of the sector specific issues noted above and the timing of any further big-ticket investment items such as aircraft or IP assets over the forecast horizon.

Net Trade, Factor Incomes and International Transfers

The trade surplus for 2014, revised to reflect the inclusion of the physical trade in aircraft owned by Irish resident leasing companies, was broadly flat compared with 2013 as an increase in net goods exports was offset by deterioration in the services deficit. The overall trade balance for 2014 was €34.7 billion, and is forecast to rise to €40.2 billion in 2015.

Net factor income flows have been marginally less negative in recent years. This mostly reflects lower profit repatriation by multinationals due to a higher tendency for these companies to import intellectual property rights or retain earnings domestically, developments in the IFSC, and an increase in investment income inflows to Ireland. The latter follows from the significant M&A activity and re-domiciling of multi-national enterprises in recent years. There was further evidence of this in the first quarter of 2015, with a large increase in both foreign assets and foreign liabilities for non-IFSC companies. It is likely that the issues underlying factor income flows evident in recent years will prevail over the forecast horizon.

Given the scale of factor income flows and the uncertainty of their timing, small changes in outflows or inflows could have a significant impact on balance of payments projections in this *Bulletin*. Taking this into account, along with the trade developments noted above, the projections imply that the current account will record surpluses above 4 per cent of GDP in both 2015 and 2016.

Box C: Irish Trade with China

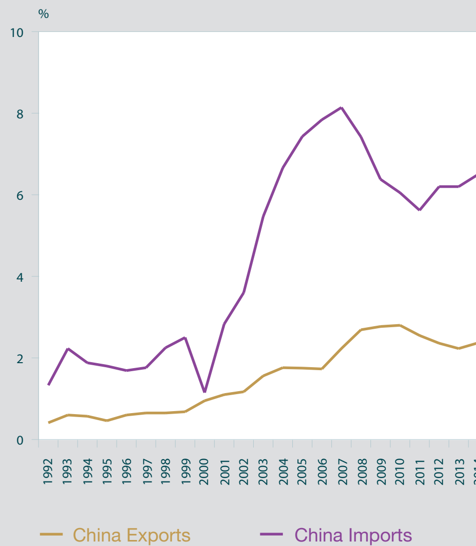
By Stephen Byrne[20]

Over the past three decades, China's participation in international trade has expanded at a robust pace.[21] In 2014 China overtook the US as the country with the largest share of trade in goods exports. In recent years, Irish trade bodies have identified China as a key market with which to develop trade links.[22] In the context of a possible slowing of the pace of economic activity in China, it is pertinent to examine the nature of Irish trade with China and the potential direct effects of this on Irish foreign demand.[23]

Goods Exports[24]

Ireland has an overall goods trade deficit with China, but the gap between exports and imports has narrowed over the past number of years. Figure 1 shows that Irish trade with China has grown at a significant pace. Trade with the Chinese market accounted for 2.3 per cent of total Irish exports in 2014, having risen from just under 1 per cent in 2000. By contrast, exports to Brazil, Russia and India have remained broadly static as a percentage of total exports over the same period.

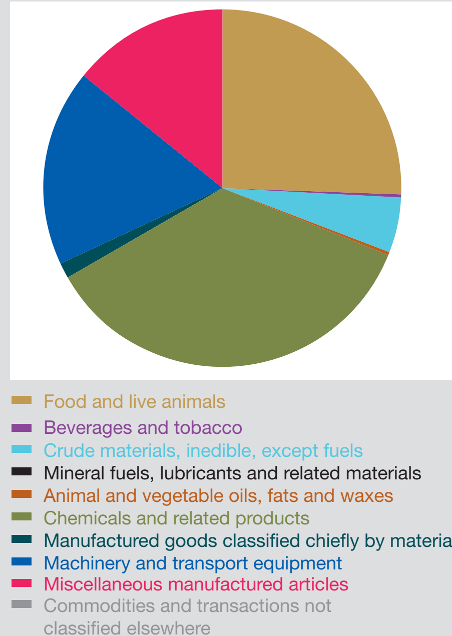
Box C Figure 1: China Exports & Imports



Source: Comtrade Database.

Figure 2 illustrates the composition of Irish goods exports to China, broken down by commodity group. From the chart it is clear that there are three areas in particular which dominate. Chemicals and Related Products make up the largest share at 35 per cent of total exports to China followed by Agri-Food (25.7 per cent) and Machinery & Transport Equipment (17.6 per cent). Interestingly, the share of machinery and transport equipment exports has fallen steadily over the past number of years, from 44 per cent and 45 per cent in 2011 and 2012 respectively. Examining the broader product basis data from the UN Comtrade database, the strength of Chemicals exports is driven by organic chemicals and basic ingredients used in the preparation of pharmaceutical products.

Box C Figure 2: Exports to China in 2014



Source: CSO.

China accounts for 7.4 per cent of Ireland's total machinery and transport exports; it also accounts for 5.2 per cent of Ireland's exports of raw material type items such as rubber, cork, wood and metals.

20 Irish Economic Analysis Division

21 For the purposes of this analysis, data for China, Hong Kong and Macao are aggregated.

22 A Strategy for Growth: Medium Term Economic Strategy (2014). Department of Finance.

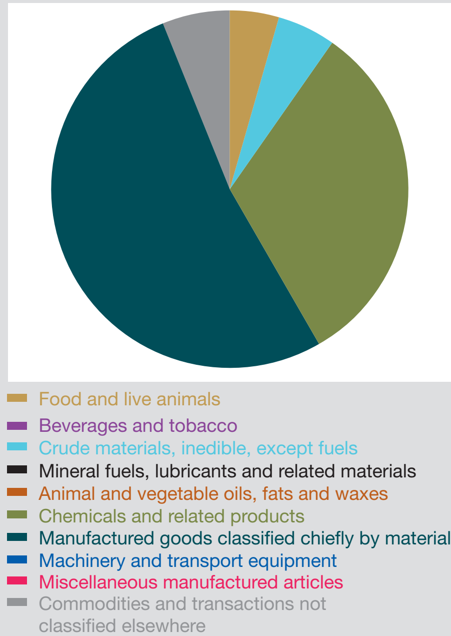
23 There would also be indirect impacts through a reduction in activity in third countries arising from such a slowdown in Chinese trade.

24 Trade in aircraft owned by Irish resident leasing companies, which are included in the CSO Goods Exports and Imports release, are not included in the Comtrade database as yet and as such are not reflected in the parts of this Box which refers to Comtrade.

Box C: Irish Trade with China

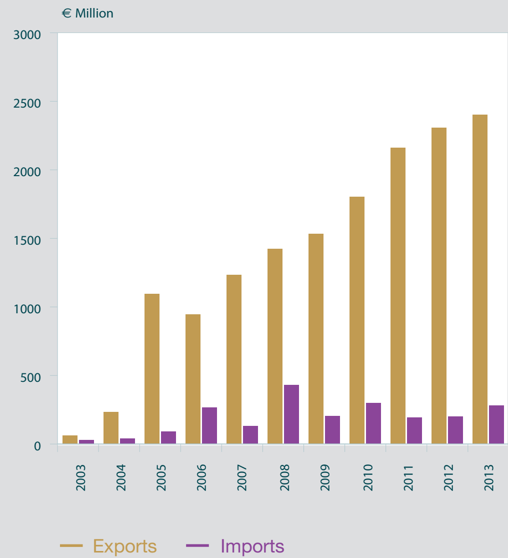
By Stephen Byrne

Box C Figure 3: Imports from China in 2014



Source: CSO.

Box C Figure 4: Irish Services Trade with China



Source: CSO.

Goods Imports

In terms of imports from China, Machinery & Transport Equipment is the most important component, accounting for 48 per cent of total imports. This category predominantly comprises IT equipment, telecommunications and electrical machinery. The miscellaneous manufactures category which accounts for 32 per cent of imports primarily reflects clothing and footwear as well as articles such as plastic toys, games, musical instruments and sporting goods. Finally, manufacturing goods classified chiefly material accounts for 10 per cent of imports driven mainly by intermediate type goods such as rubber, cork, wood and metals.

Services

China has become more important to Irish services exporters in recent times. In 2013, China accounted for 2.6 per cent of total services exports, compared with 0.5 per cent in 2004. Of this, operational leasing accounted for 39 per cent; primarily reflecting activity by Irish resident aircraft leasing companies.[25] Business services, financial services and computer services account for the bulk of the remaining share, but given that a more detailed breakdown is not available, data for the magnitude of these sectors' trade are unavailable. Ireland has an overall surplus in services trade with China (see Figure 4).

25 According to the Industrial Development Authority (IDA), three Chinese aircraft leasing companies have established headquarters in Ireland since late 2013.

Box C: Irish Trade with China
By Stephen Byrne

Box C, Table 1: Services Exports to China, by Component

Service	2013 € billion
Tourism and travel	40
Insurance	13
Royalties/licences	1
All business services	1003
Of which: Operational leasing	*940*
Of which: Other	*6*
Other services not elsewhere stated	159
Services Exports to China/ Total Services Exports	**2.6%**

Source: CSO. Owing to data availability issues, the figures here do not sum to the total services exports value. Data are not published by the CSO relating to Financial Services, Computer Services, Merchanting, Trade and Related Services, Advertising and Market Research, Research and Development, Architectural Engineering and other Technical Services and Management Services between Affiliates.[26]

Using the approach of Byrne and O'Brien (2015)[27] which focuses on value added, it is possible to confirm that a somewhat greater proportion of Ireland's exports to China come from the foreign dominated sectors (see table 2). Of total exports to China, it is estimated that 58.4 per cent come from the foreign dominated sectors while 41.6 per cent come from the domestic dominated sectors. The domestic dominated sectors are more reliant on the Chinese market however, with the Chinese exports of the domestic dominated sectors making up 3.2 per cent of their world exports while the comparable figure for the foreign dominated sectors is 2 per cent.

Box C, Table 2: Chinese Trade by Foreign/Domestic Dominated Sectors

<table>
<tr><th></th><th></th><th>Goods</th><th>Services</th><th>Total</th><th>Share of China in Total Exports</th></tr>
<tr><td rowspan="3">Services Exports to China/ Total Services Exports</td><td>Foreign Dominated</td><td>60.1</td><td>57.2</td><td>58.4</td><td>2.0</td></tr>
<tr><td>Domestic Dominated</td><td>39.9</td><td>42.8</td><td>41.6</td><td>3.2</td></tr>
<tr><td>Total</td><td>100.0</td><td>100.0</td><td>100.0</td><td>2.4</td></tr>
</table>

Note: The foreign sectors match as closely as possible to those identified in Table 3 of the CSO release on Gross Value Added For Foreign Owned Multinational Enterprises And Other Sectors Annual Results 2013. Sectors included as foreign dominated in this table are: Printing and reproduction of recorded media, Chemicals and Chemical Products, Basic Pharmaceutical products and pharmaceutical preparations; Computer, electronic and optical products; Electrical Equipment; Telecommunications, computer and information services; Audio visual and related services.

26 See CSO Balance of Payments - Background Notes, for further details.

27 Byrne, S., & O'Brien, M. (2015). The Changing Nature of Irish Exports: Context, Causes and Consequences. *Quarterly Bulletin 02/April* 15, 58.

Supply

According to the latest *Quarterly National Accounts* the volume of output increased in most sectors of the economy in the first half of 2015 on an annual basis, the exception being public administration and defence which contracted by 4.7 per cent. Growth was particularly strong in the market services sectors (distribution, transport, software and communications) at 10.5 per cent, and industry excluding building and construction at 7.6 per cent.

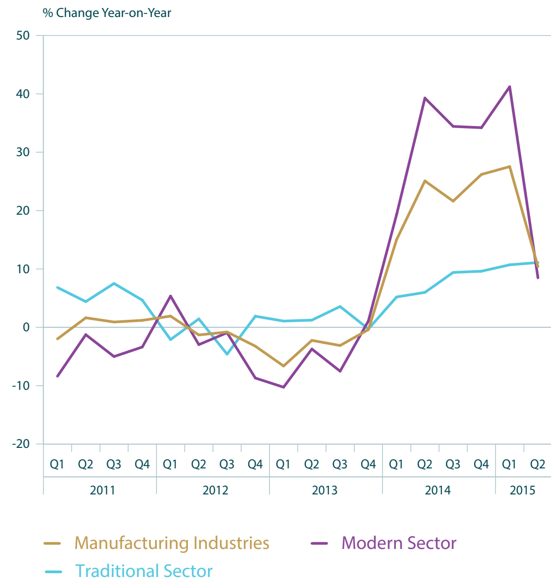
High frequency indicators from the monthly *Industrial Production* series point to a continued expansion in output from manufacturing industries in the first seven months of the year. The volume of industrial production in the second quarter of 2015 was 10.3 per cent higher than in the same period in 2014. However, the volume of output fell by 4.2 per cent in the second quarter of 2015 when compared with the first quarter.

The output of the modern sector, primarily driven by pharmaceuticals and chemicals, was up 8.5 per cent year-on-year in Q2. The output of the traditional sectors continues to expand robustly, increasing in July by 16.7 per cent when compared with July 2014 (see chart 4).

There has been continued growth in the services sector, with the monthly services index expanding by 10.3 per cent year on year in July. This figure is driven by increases in accommodation and food services activities, which rose by 17.2 per cent year on year, and wholesale and retail trade, which increased by 13.4 per cent. These indicators suggest that the continued growth in domestic demand and exports projected in this *Bulletin* will support further growth in the services sector over the forecast horizon.

Further support for this view comes from sentiment indicators for the manufacturing and services sectors which point towards continued expansion in output. The most recent services PMI for August showed that purchasing managers' expectations are for further expansion over the coming twelve months. The manufacturing PMI however, while still expanding, reduced to 53.7, the lowest rate of expansion for 18 months.

Chart 4: Volume of Industrial Production



Source: CSO.

The Labour Market

Employment is expected to increase by 2.4 per cent in 2015 – the strongest rate of growth since 2007. With the labour force forecast to grow by a more modest 0.5 per cent, the average annual rate of unemployment is projected to decline to 9.5 per cent this year. In 2016, the momentum in the labour market and the economy in general should see further gains in employment with growth of 2.2 per cent leading to an average unemployment rate of 8.5 per cent. Emloyment is expected to be above 2 million in 2016. The rebalancing in growth towards more domestically driven sources should lend support to more labour intensive sectors, principally construction and services.

The labour market has strengthened significantly throughout the course of this year helped by a broad based recovery in

Table 4: Employment, Labour Force and Unemployment 2013, 2014, 2015f and 2016f

	2013	2014	2015f	2016f
Agriculture	107	109	111	113
Industry (including construction)	343	348	375	393
Services	1,430	1,458	1,475	1,498
Total Employment	**1,880**	**1,916**	**1,962**	**2,004**
Unemployment	284	241	206	186
Labour Force	2,163	2,157	2,168	2,191
Unemployment Rate (%)	13.1	11.2	9.5	8.5

Note: Figures may not sum due to rounding.

nearly all areas of employment. Numbers in employment increased by 2.6 per cent in the second quarter of the year based on the most recent CSO data from the *Quarterly National Household Survey.* Most of these jobs were created in full-time areas with particularly strong gains recorded in construction, manufacturing and financial, insurance and real estate related activities.

Labour force growth has been much more modest reflecting still outward (albeit declining) migration and a static participation rate. The combination of strong employment growth and weak labour force dynamics has resulted in a very sharp decline in the unemployment rate – to 9.5 per cent in August (from 11.1 per cent in August 2014). The latest data from the Live Register lend support to the labour market outlook presented here. Numbers on the Register declined for a 37th consecutive month in July to 343,100 persons (down 10.3 per cent year-on-year). This brought the average monthly fall in the Register this year to approximately 3,000 persons.

Pay

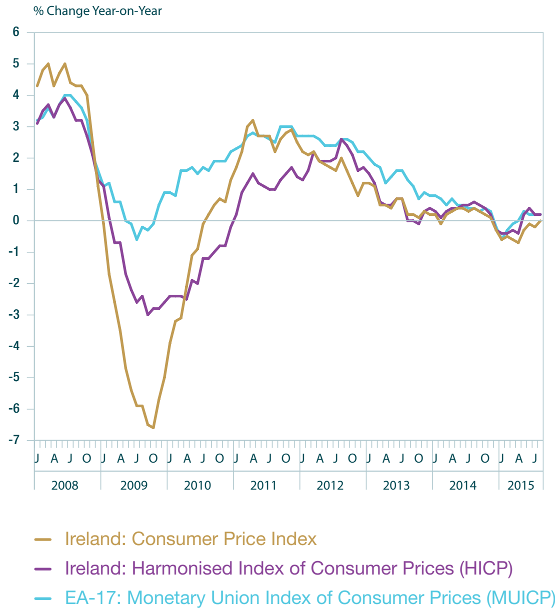
Compensation per employee is forecast to increase by 2.3 per cent and 2.4 per cent in 2015 and 2016 respectively. This follows an estimated increase of 1.7 per cent last year based on the *National Income and Expenditure Accounts* 2014. As the labour market improves further, and potential labour supply constraints in some sectors become more evident, there are upside risks to the outlook for wages. Total economy-wide compensation is forecast to increase by 4.8 per cent this year and by 4.6 per cent in 2016 based on the outlook for wages and the employment forecasts detailed above.

Hourly earnings increased by 1.5 per cent in the second quarter of 2015, following an increase of 0.5 per cent in the first quarter, based on the latest *Earnings and Labour Cost Survey*. In total, 8 of the 13 main sectors recorded increases in hourly earnings, with the largest gains recorded in the administration and support activities sector. The latest Exchequer tax data to end-August also point to stronger earnings growth in 2015 with income taxes and social security contributions up 6 and 8.8 per cent respectively in the year.

Inflation

Despite the broad based pick-up in economic activity, the latest available inflation data indicate that consumer price movements remain relatively subdued. The HICP posted a year-on-year increase of 0.2 per cent in August. The negative HICP year-on-year outturn for the first four months of the year turned marginally positive as the year progressed, so that, on average, for the year to August, the HICP was flat. The pressures coming from buoyant domestic economic activity are being offset by external factors, mainly lower commodity and, in particular, lower oil prices; at the time of writing, the price

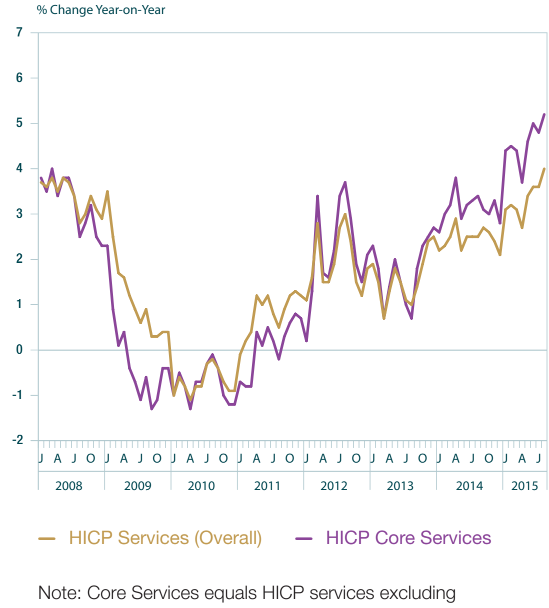
Chart 5: Consumer Prices



— Ireland: Consumer Price Index
— Ireland: Harmonised Index of Consumer Prices (HICP)
— EA-17: Monetary Union Index of Consumer Prices (MUICP)

Source: CSO.

Chart 6: Services Sector Inflation



— HICP Services (Overall) — HICP Core Services

Note: Core Services equals HICP services excluding telecommunications, alcohol and administered services.
Source: CSO.

of Brent crude oil had fallen to $44 a barrel – a decline of 55 per cent compared with a year previous.

On the basis of currently available information and prevailing oil futures prices, HICP inflation is expected to remain at 0.3 per cent for the year as a whole, a figure unchanged from 2014. The CPI, which includes a mortgage interest component, is also expected to increase by 0.3 per cent in 2015. Reflecting strength in domestic demand, services inflation (which includes rent prices and water charges) is projected to increase by 3.8 per cent in 2015. Goods price inflation, on the other hand is expected to decline by 3.3 per cent in 2015, driven in the main by lower global food and energy prices.

The downward pressure coming from lower global commodity prices is being partially offset by depreciation in the euro relative to our main trading partners – the US and the UK. *Ceteris paribus*, a decline in the value of the euro serves to increase the euro price that foreign producers selling in Ireland need to charge to maintain profits in their own currency. The euro has declined by approximately 15 and 9 per cent against the dollar and sterling respectively.

Looking ahead to 2016, a pick-up in headline HICP inflation is envisaged, driven mainly by a smaller reduction in goods prices, as the drag from external factors is expected to wane. The most prominent driver of the projected easing of the pace of decline in goods prices is expected to be the energy component as international commodity prices recover. Services inflation in 2016 is expected to remain elevated on foot of continued growth in domestic demand. There may be some downward impact due to base effects as the impact of the introduction of water and sewerage charges into the HICP basket of goods and services drops out of annual comparisons. Core services inflation, however, is expected to increase by close to 5 per cent in 2016. Reflecting such a combination of developments, both HICP and CPI inflation is projected to rise to 1.5 per cent in 2016.

Table 5: Inflation Measures - Annual Averages, Per Cent

Measure	HICP	HICP excluding Energy	Services[a]	Goods[a]	CPI
2011	1.2	0.0	0.8	1.5	2.6
2012	1.9	0.9	1.9	1.9	1.7
2013	0.5	0.6	1.6	-0.4	0.5
2014	0.3	0.5	2.4	-1.7	0.2
2015[f]	0.3	1.3	3.8	-3.3	0.3
2016[f]	1.5	1.6	3.5	-0.6	1.5

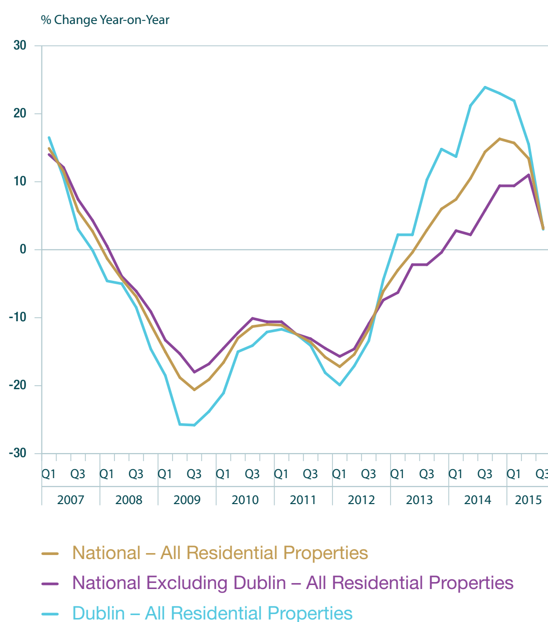
a Goods and services inflation refers to the HICP goods and services components.

The projected profile for headline HICP and CPI inflation is slightly lower compared with the previous *Bulletin*, due for the most part to more benign assumptions regarding oil price developments in 2016.

Residential Property

The pace of growth in residential property prices, though still robust, has slowed in the first half of 2015. Nationally, prices increased by 9.4 per cent in year-on-year terms in July. However in July the rate of growth in Dublin (9.2 per cent) fell below the growth rate in national prices. This is in contrast to developments over recent quarters, where prices increases in the Dublin region exceeded the national average.

Chart 7: Residential Property Price Indices



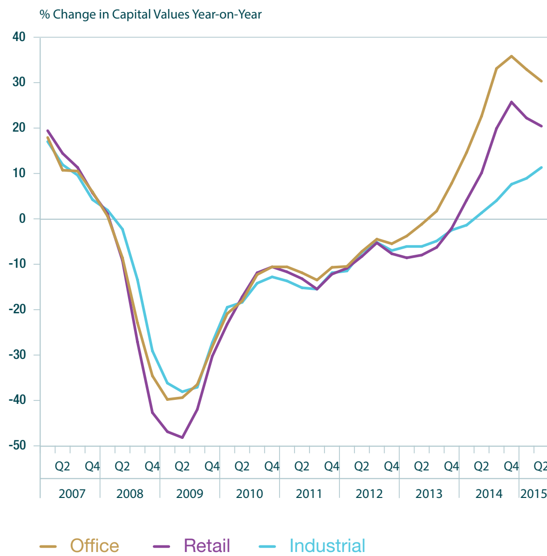
Source: CSO.

On the supply side, there were 2,996 house completions in the second quarter of 2015, reflecting a 9.3 per cent increase over the same period last year. Meanwhile, planning permission was granted for 1,058 new houses and apartments in the first quarter of this year. A further increase in house building is anticipated over the forecast horizon.

Commercial Property

The latest data from the Society of Chartered Surveyors/ Investment property databank show that commercial property prices have continued to grow strongly in the second quarter of 2015. The year on year rate of growth is fastest in the retail and office sectors at 20.5 per cent and 30.4 per cent respectively. Meanwhile growth remains robust in the industrial sector at 1.4 per cent. Combined, commercial property prices grew by 26 per cent in Q2 2015 compared with the same period last year. The Bank's *Macro Financial Review* (July 2015) contains a comprehensive analysis of recent developments in commercial property prices.

Chart 8: SCS/IPD Irish Commercial Property Index



Source: SCS/IPD.

Competitiveness

Over the past three quarters the euro has become substantially weaker against both the dollar and the pound sterling. Recent trends suggest that the euro has stabilized at around $1.10 in Q3 2015, which represents a decrease of about $0.15 when compared with the closing rate of 2014. In year-on-year terms, the euro has declined against the dollar by over 14 per cent. The situation is similar for the euro against the pound, as the rate has settled at £0.71 in the current quarter – down over 9 per cent on a year-on-year basis. Evidence suggests that market participants' expectations about interest rate differentials and political events in the euro area have been two factors behind recent movements.

The latest Harmonised Competitiveness Index (HCI) data for July 2015 show that the nominal HCI depreciated by 8 per cent on a year-on-year basis. When deflated by consumer prices and producer prices, the real HCI decreased by 8.4 per cent and 9.7 per cent, respectively, over the same period. These HCI developments are complementary to the latest exchange rate movements in suggesting that the Irish economy has made gains in terms of its competitive stance against its trading partners.

On the basis of the conventional GDP per worker measure, productivity increased by 3.2 per cent in 2014. Employment growth slowed in 2014, while the drag on GDP growth of sector specific issues in pharmaceutical and ICT enterprises was reversed significantly. Looking ahead, average annual productivity growth of 2.9 per cent (on a GDP per worker basis) is forecast for both 2015 and 2016.

Factoring in the projected increases in compensation of employees over the forecast horizon, unit labour costs are expected to remain relatively unchanged over 2015 and 2016.

The Public Finances

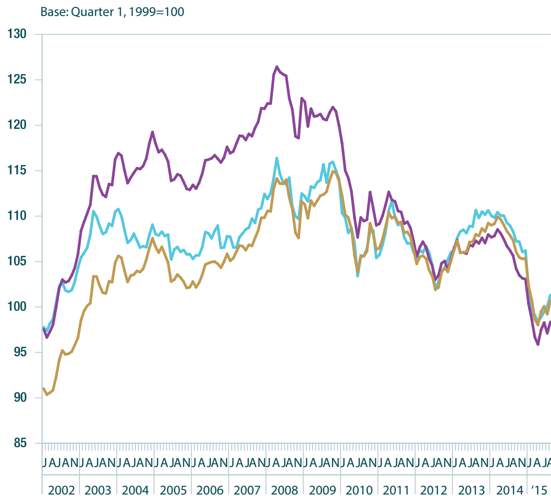
Overview

The latest fiscal developments have continued to be broadly positive. Government Finance Statistics reveal that the general government deficit declined once again in the first quarter of the year, while Exchequer returns point to robust tax growth and restrained spending more recently. Tax revenue surpassed Budget day expectations by €500 million in the month of August alone, and was €1.4 billion above profile in the year to August. Reflecting these developments it is very likely that the 2015 EDP budget target – a general government deficit below 3 per cent of GDP – will be met with a margin and Ireland will exit the corrective arm of the Stability and Growth Pact. Public debt also declined in the first quarter of the year, but remains at an elevated level.

Government Finance Statistics

First quarter Government Finance Statistics show a decline in both the general government deficit and debt ratios at the start of the year. The deficit ratio declined to 5.4 per cent

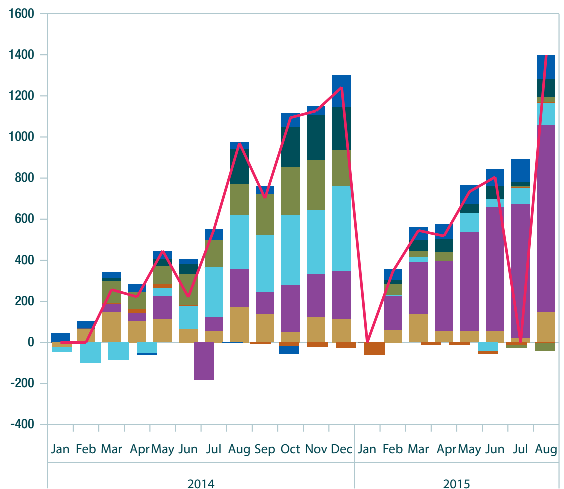
Chart 9: Harmonised Competitiveness Indicators



— Nominal HCI — Consumer Price Deflated HCI
— Producer Price Deflated HCI

Source: Central Bank of Ireland and ECB.

Chart 10: Divergence of Tax Heads from Profile



Income Tax, Corporation Tax, VAT, Local Property Tax, Excise Duties, Stamps, Other, Total

Source: Department of Finance.

of GDP from 5.8 per cent one year earlier, supported by strong growth in taxes and social contributions and a decline in the interest bill and social benefits. The gross debt ratio recorded a bigger adjustment than implied by the deficit figures - falling from 118.8 at the start of 2014 to 104.7 – as the process of winding up Irish Bank Resolution Corporation (IBRC) continued. This also resulted in a decline in the assets held by government and, as a result, there was a much smaller improvement in net debt, which fell from 89.1 to 86.3 per cent of GDP.

Exchequer Returns[28]

The latest data reveal that the Exchequer ran a deficit of €3.7 billion in the first eight months of the year, a decrease of €2.7 billion from the corresponding period of 2014 (see Table 6). This outturn was substantially better than expected at the time of the last Budget. While an improvement over the period was anticipated, the Exchequer balance was €2.2 billion ahead of profile reflecting stronger than expected revenue and weaker expenditure developments.

The performance of tax revenue has been particularly impressive in the year to date. Taxes are up 10 per cent year-on-year and are €1.4 billion (5.4 per cent) ahead of expectations, against the backdrop of very strong corporation tax inflows (€912 million above profile). The other three of the 'big four' tax heads – income tax, VAT and excise duties are also growing robustly, with the former 6 per cent higher in annual terms as the labour market continues to recover. As Chart 10 shows, the tax over-performance has strengthened over the course of the year, increasing from €545 million at the end of Q1 and €806 million at the end of Q2. This is following a similar trend seen in 2014. Non-tax revenues were also stronger than expected in the first eight months of the year, led by developments in PRSI, again highlighting the labour market recovery (8.8 per cent growth, €224 million ahead of profile). Central Bank surplus income increased by €500 million this year, although around half of this does not impact the general government balance.

Spending developments have also been favourable, although not to the same extent as those on the revenue side. Total expenditure

28 The figures in this section exclude transactions with no general government impact, giving a closer approximation to the general government balance. These figures are provided by the Department of Finance in its Analytical Exchequer Statement.

Table 6: Analytical Exchequer Statement for June 2015 (€ millions)

	Jan-Aug 2014 €m	Jan-Aug 2015 €m	Annual Change	Outturn vs Profile
Revenue	**34,644**	**36,698**	**5.9%**	**4.6%**
– Tax revenue	24,914	27,344	9.8%	5.4%
– Appropriations-in-aid	7,269	7,066	-2.8%	2.8%
– Other Revenue	2,461	2,288	-7.0%	1.6%
Expenditure	**41,113**	**40,431**	**-1.7%**	**-1.3%**
– Current Primary Expenditure	34,816	34,287	-1.5%	-0.2%
– Capital Expenditure	1,468	1,621	+10.4%	-4.6%
– Interest on National Debt	4,829	4,524	-6.3%	-8.1%
Exchequer Balance	**-6,469**	**-3,733**	**-42.3%**	**-36.8%**

Source: Department of Finance

was down 1.7 per cent on an annual basis in the year to August, and was €549 million below profile. The latter has been primarily driven by much lower interest payments than were expected at the time of the Budget, reflecting the earlier repayment of IMF Programme loans and more favourable market conditions. With regard to non-interest related expenditure, gross voted spending was broadly on target – as small overspends in Health and Social Protection were offset elsewhere.

Funding and Other Developments

Following a very busy and successful first half of the year, there were less new issuances by the National Treasury Management Agency (NTMA) during the third quarter. In August it cancelled €500 million of the 2038 floating bond which was issued in connection with the liquidation of IBRC. The bonds were purchased from the Central Bank of Ireland. In September, meanwhile, the Agency raised €1 billion through the auction of a 15-year Treasury bond. As a result it raised €12 billion in the first nine months, already achieving the lower bound of the €12 to €15 billion target set for the year as a whole. Ireland's sovereign credit rating was revised upwards by Fitch and Moody's in August and September respectively, from stable to positive.