PMCA ECONOMIC CONSULTING

Economic Commentary

The positive role of exports in job creation in Ireland

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Synopsis

One of the few beacons of hope in the Irish economy is the performance of exports, reflecting the enhanced competitive position of indigenous as well as foreign-owned enterprises. In this first PMCA Economic Commentary, we quantify the employment impact of growth in the value of exports of goods and services from Ireland to the rest of the world. Time series econometric analysis of CSO data reveals that exports growth has a statistically significant and quantitatively large effect on employment: across all occupational groups, a 10% increase in the value of exports is associated with a 4% increase in employment, which translates into potentially 76,000+ new jobs. The relationship is found to be strongest among associate professional and technical workers, where a 10% increase in exports implies a 6.3% increase in employment or potentially 12,000+ new jobs. The econometric results imply that rising exports not only serve to maintain jobs but also have the capacity to create appreciable new employment, a critically important requirement in these extremely tough times. The challenge of Irish economic policy is to convert as much as possible of the employment potential of exports growth highlighted in this study – this can be facilitated by further assisting Irish-based enterprises to expand and diversify into overseas markets, including the newly emerging markets where growth prospects will be greatest in the coming years.

This, the inaugural PMCA Economic Commentary is dedicated to the memory of Professor Brian Hillier, late of the University of Liverpool and an outstanding macroeconomist.

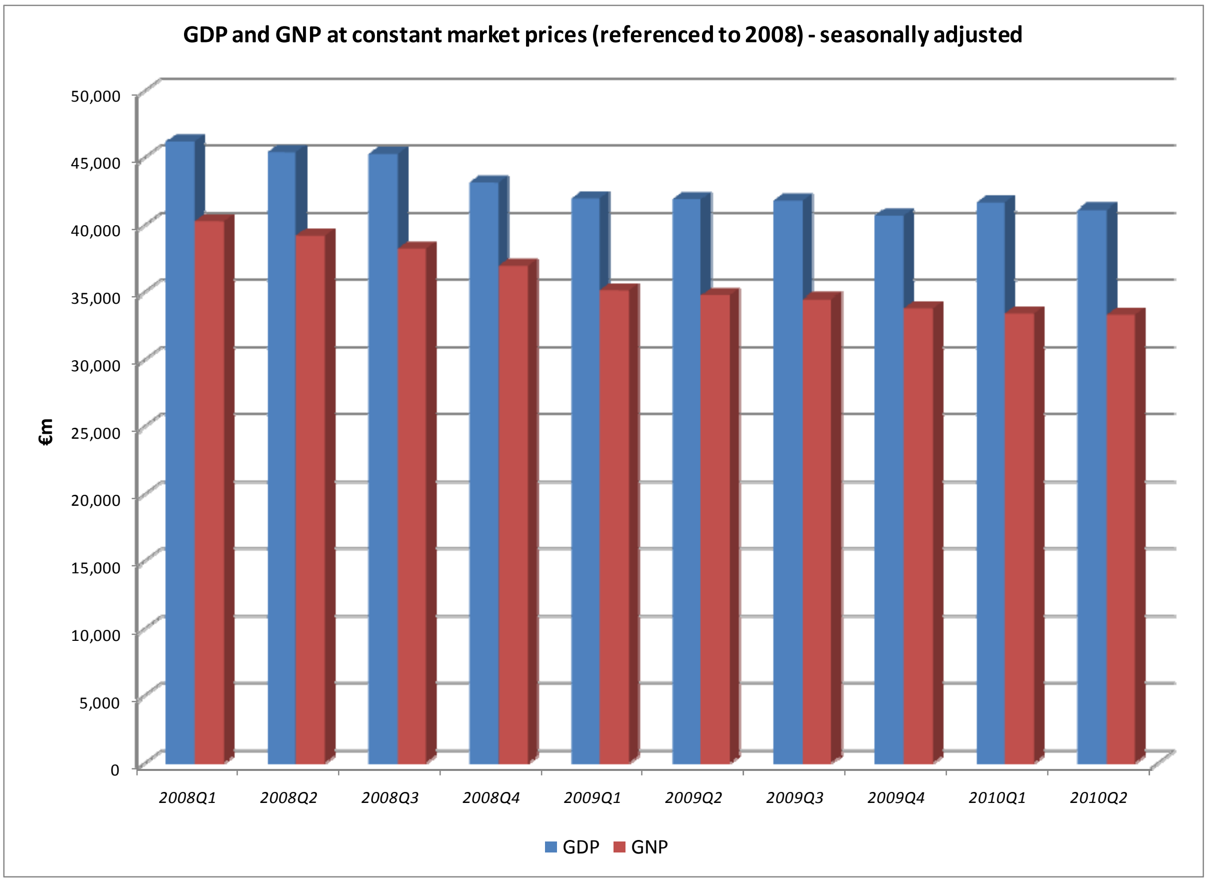
Prolonged recession

The official estimates of Ireland's national income published by the Central Statistics Office (CSO) in September 2010 revealed a contraction in the Irish economy between the first and second quarters of 2010, with gross domestic product (GDP) down by 1.2% and gross national product (GNP) falling by 0.3%. For some commentators, the fall came as a surprise; for others, it confirmed the fragility of the economy, given the precarious positions of the public finances and the banking sector.

As Figure 1 illustrates, the Irish economy has yet to recover from recession. There was an increase in GDP between 2009Q4 and 2010Q1, which prompted some to herald the end of the recession at the beginning of this year, but this view has proved premature. It is evident from the chart that GNP, generally viewed as the more reliable indicator of the size of the Irish economy, has been on a steady downward trajectory and that the country has remained in recession for over two years.

With further, even more severe, austerity measures planned, which people and enterprises are already factoring into their spending and investment decisions, the economy is set to continue shrinking for the rest of the year and probably into 2011. PMCA believes that the most recent OECD forecast for Ireland – namely 1.5% GDP growth in 2011 – is likely to be optimistic.

Figure 1: The trend in Ireland's quarterly GDP and GNP (2008Q1-2010Q2)



Source: CSO, PMCA analysis.

Anatomy of GDP and GNP

Table 1 outlines the components of Ireland's GDP and GNP during the first two quarters of 2010 and compares the situation in 2010Q2 with that a year earlier. While the overall picture is bleak, the analysis nevertheless highlights some potential positives, one of which has received much discussion in recent weeks – Ireland's export performance.

Exports increased by over 7% year-on-year at 2010Q2 and by 1.6% on a quarter-on-quarter basis at this time. Also noteworthy is the growth in imports, which may be interpreted as a positive development because it reflects heightened activity among foreign-owned enterprises in Ireland.

However, the latest fall in national income reflects the contractions in household consumption of goods and services and net spending by central and local government on goods and services. These factors point to the likely adverse economic implications of the further austerity measures planned in the forthcoming budget and indeed in the next series of budgets, until 2014 at least, to which we return at the end of the article.

Table 1: Components of Ireland's GDP and GNP (to 2010Q2)

	Expenditure at constant market prices (ref 2008) and seasonally adjusted				
Components of national income	2009Q2 (€m)	2010Q1 (€m)	2010Q2 (€m)	*% change (yoy)*	*% change (qoq)*
Consumption	22,114	21,818	21,769	*-1.6%*	*-0.2%*
Net government spending	7,011	6,825	6,772	*-3.4%*	*-0.8%*
Investment	7,308	5,200	5,800	*-20.6%*	*11.5%*
Exports	36,205	38,274	38,896	*7.4%*	*1.6%*
Imports	30,457	30,896	32,278	*6.0%*	*4.5%*
Export - imports	5,748	7,378	6,618	*15.1%*	*-10.3%*
GDP	41,888	41,635	41,130	*-1.8%*	*-1.2%*
Net factor income from abroad (outflows)	-7,099	-8,056	-7,722	8.8%	-4.1%
GNP	34,742	33,428	33,335	*-4.0%*	*-0.3%*

Source: CSO, PMCA analysis.

Note: GDP and GNP, and each of their components, are seasonally adjusted individually and referenced to year 2008.

Exports – a potentially important positive for Ireland

This first PMCA commentary takes a closer look at the relationship between exports and employment in Ireland by estimating the 'elasticity' of employment with respect to exports, which basically quantifies how employment responds to a given percentage change in the value of exports of goods and services.[1]

[1] On 27 October 2010, the Irish Exporters' Association published figures showing that the value of goods and services exported in the third quarter of this year was €40.4 billion, up almost 10% on the same time last year.

Economists generally tend to be of the view that an increase in exports will be absorbed by firms using existing employees rather than hiring new workers, suggesting that exports have a limited impact on employment. However, relatively little empirical research on the relationship between exports and employment has been carried out in Ireland.

New evidence from econometric analysis

Econometric analysis can be applied to publicly available time series data on exports and employment – the longest such data span the period 1997Q4-2010Q2, giving 51 quarterly observations, in which the employment data pertain to broad occupational groups.

Econometrics can provide new insights regarding whether there is a statistically stable, long run and therefore *meaningful relationship* between exports and employment in Ireland; in other words, one that is not due merely to spurious correlation. Econometric analysis can also shed light on the *quantitative relationship* as well as the *statistical significance* of the relationship between exports and employment.

The new econometric estimates presented in Table 2 show the quantitative impacts of exports on employment in all and in specific occupational groups in Ireland where both a meaningful and a statistically significant relationship between exports and employment is evident.

Among all occupational groups, the econometric analysis reveals that a 10% increase in exports is associated with a 4.1% increase in employment. Within all occupational groups, the quantitative impact is highest among associate professional and technical workers, where a 10% increase in exports is associated with a 6.3% increase in employment. While a statistically significant relationship is also found among managers and administrators, craft and related personnel and other broad occupational groups, the quantitative impact of exports on employment is smaller compared with that among associated professional and technical workers.

Table 2: Results of econometric analysis of the relationship between Irish employment and exports (1997Q4-2010Q2)

Occupational group	A 10% increase in the value of exports leads to a percentage change in employment of:
All broad occupational groups	4.1%
Associate professional and technical	6.3%
Other broad occupational groups	3.7%
Craft and related	3.2%
Manager & administrator	1.5%

Source: CSO, PMCA analysis.

Note: employment and exports seasonally adjusted individually and referenced to year 2008. In the occupational groups shown, the econometric analysis reveals a co-integrating or long-run, stable relationship between exports and employment. In the other five occupational groups for which the CSO provides time series data during 1997Q4-2010Q2, there is no such co-integrating relationship.

Put in other terms, a 10% increase in the value of exports of goods and services would translate into potentially 76,223 new jobs among all broad occupational groups; in the occupational group where the econometric relationship between exports and employment is found to be strongest, namely associate professional and technical workers, a 10% increase in exports could possibly lead to the creation of 12,222 additional jobs in Ireland.

In particular, given the 1,859,100 people in employment in Ireland at the second quarter of 2010, the estimated 4.1% increase in employment resulting from a 10% increase in exports would suggest potential additional employment of 76,223 across all occupational groups; and with 194,000 people employed in the associate professional and technical category at this time, the estimated 6.3% increase in employment from a 10% increase in exports would imply potential additional employment of 12,222 additional jobs within that particular occupational category.

The likelihood of these significant levels of new jobs eventuating would in turn depend on the chances of a 10% increase in exports over a given period of time. The latest available CSO data referred to earlier show that between the first and second quarters of 2010, exports of goods and services from Ireland grew by 1.6%. This rate of increase in exports would imply, on the basis of the estimates presented here, potentially in the region of 12,200 additional jobs across all occupational categories in Ireland – still a very significant figure for the Irish economy at this extremely challenging time in the country's history.

Exports noteworthy in the current environment and good news

The new econometric evidence suggests that growth in exports not only serves to maintain jobs but also has the potential to create significant new employment. The employment 'prize' to be gained by boosting exports growth is strong, according to the analysis presented in this article.

This in turn highlights the importance of continuing the focus on competitiveness, including sustained and further efforts to assist Irish-based enterprises to expand and diversify into overseas markets, including the rapidly growing emerging markets of China and India, where new opportunities for exporting are likely to be strongest in the coming years.

Encouraging news is that trade in goods between Europe and Asia is strong and Ireland is doing well in the bargain. Between the first half of 2009 and the same period in 2010, exports from the EU27 to countries taking part in the Asia-Europe Meeting (ASEM) grew strongly by 20% and, along with Austria, Ireland was the only EU Member State to record a trade surplus with the ASEM partners. The latest figures show that Ireland exports goods to the value of €3.3 billion to the ASEM partners, representing annual growth of 3% on the same period in 2009.[2] Food and drink from Ireland is especially noteworthy – this is an economic sector where Irish-owned firms have an international comparative advantage and gives hope for the future.

More good news comes from another Eurostat new release (18 Nov 2010), showing that the largest trade surpluses between the EU and the US were in Germany, Ireland, Italy and the UK (Ireland ran the second biggest trade surplus with the US, €5.2 billion, during the first half of 2010).

2 Eurostat news release on the 8th ASEM Summit, 143/2010 – 1 October 2010.

Forthcoming 'fiscal consolidation' – *further austerity* by another name

To return to where we started, while exports may be doing a lot of the 'heavy-lifting' in terms of keeping the Irish economy afloat, the prognosis overall *over the short-term* is extremely challenging. The likelihood is that real GDP growth will be in the region of -0.3% for 2010 (GNP is likely to fall by more) and the best we can hope for is very weak growth in 2011 – it may be well into the New Year before we start to see any economic growth, if at all. The Department of Finance's pre-budget growth forecasts are likely to be very optimistic and the more recent and more modest OECD forecasts – namely 1.5% GDP growth in 2011 and 2.5% growth in 2012 – are also likely to be optimistic.

According to a recently published International Monetary Fund (IMF) study of the effects of 'fiscal consolidation' – in other words, tax hikes and government spending cuts – in advanced countries, including Ireland, fiscal consolidation typically reduces output and raises unemployment *in the short term*.[3] Consolidation is more painful when it relies primarily on tax hikes, according to the IMF. The IMF study also finds that budget deficit cuts are likely to be more painful if they occur simultaneously across many countries, and if monetary policy is not in a position to offset them. This is precisely the international environment in which Ireland currently finds itself due to the fiscal consolidation being planned or already underway in other advanced economies, including the UK, and because there is very little scope for interest rates in the eurozone to go any lower.

According to the IMF's calculations, a fiscal consolidation equal to 1% of GDP typically reduces GDP by about 0.5% within two years and raises the unemployment rate by about 0.3 percentage points. Domestic demand – consumption and investment – falls by about 1%.

In its planned budget, the government had been planning for a fiscal consolidation package of €6 billion or about 3.5% of GDP (the €6 billion figure represents a doubling of the original estimate, illustrating the uncertainty surrounding the Irish economy). Applying the IMF's estimates, this is likely to result in a further contraction in the Irish economy of 1.75% over the next couple of years, with possibly worse to come in the next four years if the plans to make savings of €15 billion (possibly more) in attempting to reduce the exchequer deficit as a proportion of GDP to 3% by 2014 are implemented – this is now in the hands of the IMF, the European Commission and the European Central Bank (ECB), who together have taken control of the Irish economy from a beleaguered government.

To conclude, it will take a significant rate of exports growth and enhanced confidence in the Irish economy to counterbalance the severe economic austerity that is coming our way. Nevertheless, exports growth (through the activities of both indigenous and foreign-owned enterprises in Ireland) represents the country's best hope in paving the way for recovery – which will eventually come.

[3] 'Will it Hurt? Macroeconomic Effects of Fiscal Consolidation', Chapter 3 of the IMF's October 2010 *World Economic Outlook*.

About the series

PMCA Economic Commentaries aim to provide independent economic analysis and insightful views on a wide range of developments in economics nationally and internationally, in a jargon-free manner. Articles are available at no cost.

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