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Report

Irish Exports: The facts, the fiction and the risks

David Purdue and Hansi Huang

NTMA Economics

Irish Exports: The facts, the fiction and the risks

Main Points

- In 2014, exports of goods and services were over 110% of Irish GDP, up from 85% in 2000.
- However, goods exports have stagnated in the last 15 years while services export growth has been outstanding in the last 15 years.
- Contract manufacturing does muddy the water but tells only part of Ireland's export story.
- Ireland's good exports are concentrated in a small number of products in certain sectors. Exports are amongst the most concentrated in Europe with the top 10 goods products (out of 3,900) accounting for 45% of all goods exports. Services exports are also concentrated.
- There are two main risks which arise from this concentration of exports. First, there is the risk that the multinational companies which contribute strongly to our export growth will re-locate their business elsewhere. This risk can be mitigated in part by policy.
- Second, idiosyncratic sector risk is a worry for Ireland. Even if multinational companies choose to remain in Ireland, our dependence on these companies opens Ireland up to sector/company shocks which are hard to mitigate with policy.

Introduction

The importance of exports to Ireland's economy is hard to overstate. As a small open economy, trade allows Ireland access to markets for their produce and access to products not readily available with the ultimate result of an increase in the standard of living as a whole. For instance, the Celtic Tiger years[1] were predicated on export growth while exports provided an avenue for Ireland to return to positive economic growth in 2010/11 following the financial crisis. With such an importance to Ireland there is often misuse and misrepresentation of facts regarding Irish exports data. The note looks to dispel some of the fiction surrounding Irish exports while also highlighting some risks to exports.

The rest of this note is structured as follows: The first section will discuss exports overall, both in terms of growth and composition. The second section looks at goods exports in more detail and discusses the impact of contract manufacturing. After this we discuss services exports in depth. Then we evaluate the concentration of the composition of Irish exports. The last section considers the risk of such concentration and the policy tools which could mitigate some of these risks.

[1] We would denote the Celtic Tiger as the period of 1994-2001 where exports growth was the main driver of the Irish economy prior to the domestic demand led bubble period of 2002-2007.

Exports Overview

In 2014, exports of goods and services were over 110% of Irish GDP, up from 85% in 2000. Both then and now, those figures are nearly three times the European Union average highlighting the dependence of Ireland on trade flows. Since 2000, growth in exports has been driven in the main by services. Exports grew by 96% between 2000 and end-2014 with services accounting for 73pps of that accumulated growth. The accelerated growth from service exports has led to a change in the composition of Irish exports since the turn of the century. In 2000, goods exports accounted for 80% of all Irish exports. By 2014, this share has shrunk to 53%.

Figure 1: Irish Exports as % of GDP

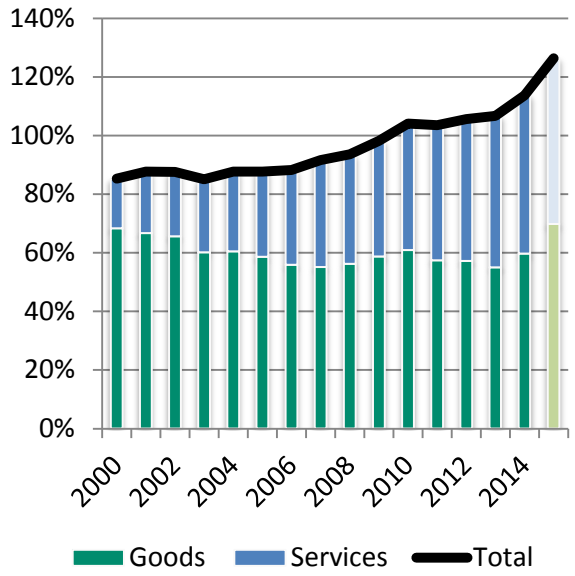


Figure 2: Exports-to-GDP comparisons

	2000	2014
Ireland	85%	113%
EU 28	31%	44%
Belgium	67%	86%
Germany	28%	47%
Spain	25%	32%
Italy	24%	29%

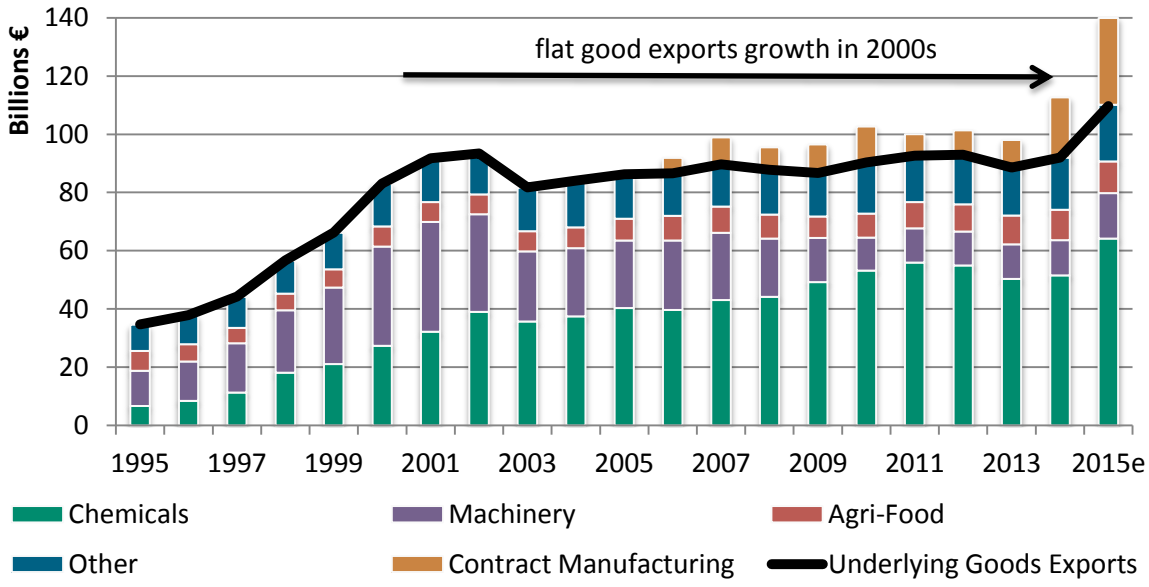
Source: CSO, authors' calculations; Eurostat; 2015 forecast based on Q1-Q3 2015 growth

In 2014 and 2015, growth in exports has been particularly strong. Partly this is to do with contract manufacturing (discussed in the next section) but in the main exports growth has been broad-based and driven by economic factors. Both service and goods exports have grown strongly since end-2013 (by over 20% and 40% respectively). Several factors explain this; Irish competitiveness improved in recent years following a necessary "internal devaluation". At the same time Ireland's main trading partners have seen modest growth (in particular the US and the UK) fuelling demand for our exports. The weakening of the euro in 2014 and 2015 has added to this, in particular the euro's weakness against the dollar. Indeed, looking at data from the think tank Bruegel, Ireland has benefited the most in the euro area from the recent depreciation even when sectoral shifts within economies are taken into account.

Goods Exports in Detail

Once the driver of export growth in Ireland, goods exports have stagnated overall since the turn of the century. Goods exports were 84 times their 1973 level in 2002 showcasing the "opening up" of the Irish economy in the latter decades of the 20th century.[2] However since 2002 export growth has been flat until 2015 (see figure 3). There are considerable compositional changes underneath that overall stagnation. Chemical exports have continued to grow in the 2000s albeit at a slower pace that the rapid increase seen in the 1970-1990s. At the same time, machinery exports have fallen dramatically from their height in 2001 of over €37bn to just €12bn in 2014. Agri-food exports have grown by 55% since 2002, despite the financial crisis providing a strong headwind in 2008 to 2010.

Figure 3: Ireland's Goods Export Growth



Source: CSO International Trade statistics, authors' calculations, 2015 forecast based on Q1-Q3 2015 growth

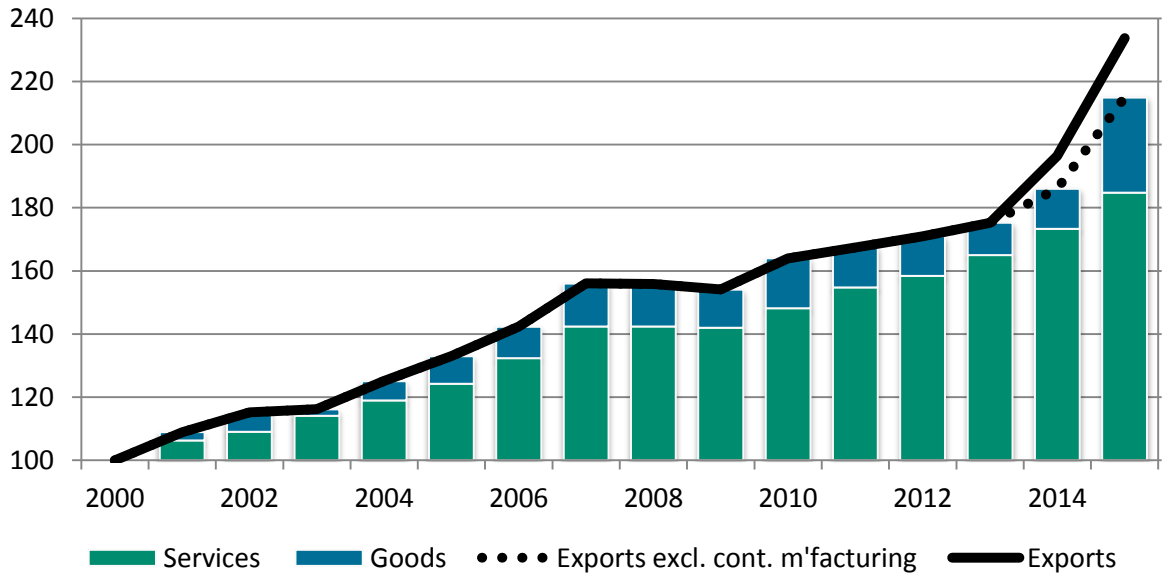
One issue which overstates the extent of goods export growth in the last two years is contract manufacturing. Contract manufacturing occurs where a company in Ireland engages a company abroad to manufacture products on its behalf. Crucially, the inputs used in this production process remain in the ownership of the Irish entity and a change of economic ownership is not deemed to occur during this subcontracting process. Instead the foreign contract manufacturer supplies a manufacturing service to the Irish entity and never takes ownership of the product being produced. When the product is sold to a customer abroad, a change of economic ownership takes place between Ireland and the country of the buyer. The export of this good is then recorded in the Irish Balance of Payments even though it was never produced in Ireland.

[2] This comparison is in nominal terms. Applying a deflator suggests the real increase is closer to 18 times.

Overall, GDP is not materially distorted by contract manufacturing. Contract manufacturing does increase Irish exports. However, at the same time it increases Irish imports, thereby offsetting the distortion.[3] As a result overall economic activity is unaffected even if the underlying components of GDP (exports and imports) are inflated by the practice.

It is prudent then to adjust the export figures for the impact of contract manufacturing. First, note that this impact occurs only on the goods exports side of the ledger; services exports are unaffected. Second, we can create a proxy for contract manufacturing by taking the difference between the monthly International trade exports statistics released by the CSO and the Balance of Payments measure for goods exports. The monthly data is based on the actual volume of goods flowing through Ireland's various ports whereas the Balance of Payments makes adjustments for, among other items, contract manufacturing. The difference is a good proxy for contract manufacturing given it is the main adjustment made. There was a small difference in 2006-2013 between the two measures of goods exports which then ballooned in 2014 and 2015 as contract manufacturing became a more prominent issue. The difference in 2014 amounted to €20 billion whereas in 2015 the difference is likely to be closer to €30 billion.[4]

Figure 4: Exports growth breakdown (2000 = 100)



Source: CSO, authors' calculations; 2015 forecast based on Q1-Q3 2015 growth

[3] Imports associated with contract manufacturing would be imports of manufacturing services, supply of material inputs used in production, import of royalties for use of the patents and imports of other services incl. transport.

[4] The difference was close to €8 billion per annum in 2006-2013.

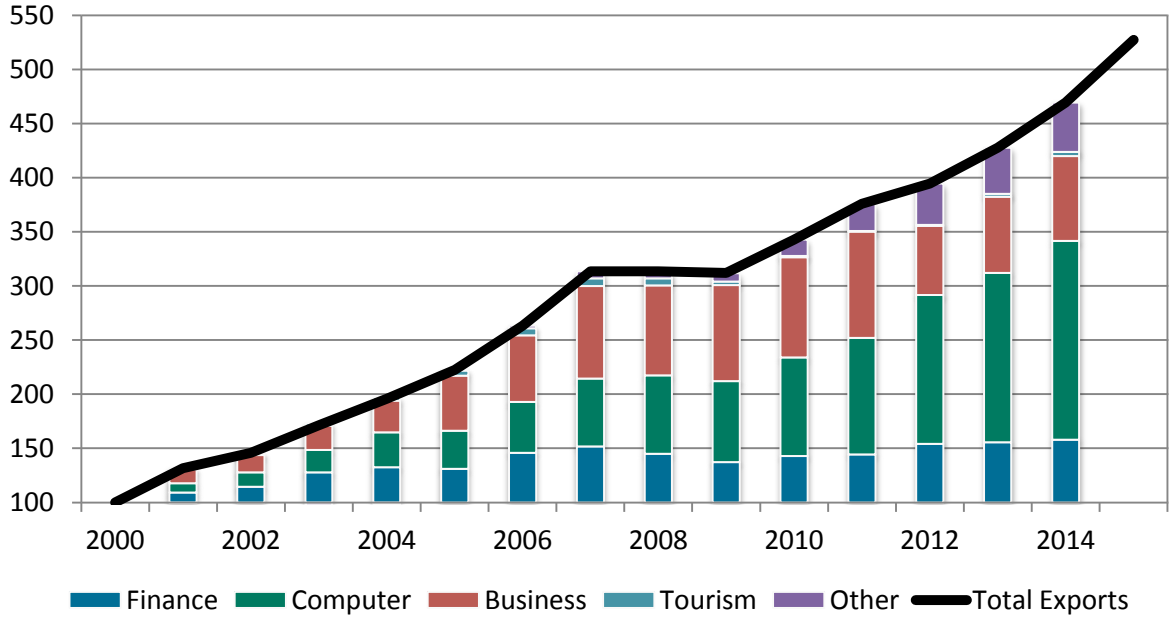
Figure 4 shows the growth of goods and services exports when we exclude the step change in contract manufacturing from the 2014/15 data.[5] In 2014, exports grew by 6.1% excluding contract manufacturing, down from 12.1%. In 2015, based on Q1-Q3 data, it is likely exports grew by close to 15% excluding contract manufacturing – a very strong figure even if down from the headline 19% growth.

In terms of GDP, exports when contract manufacturing is excluded are likely to be close to 116% of GDP for 2015, a jump of 8pps on the relevant 2014 figure. This simple analysis show that contract does muddy the water when it comes to Irish exports. However it is clear that contract manufacturing tells only part of the export growth story. There is real export growth in Ireland - particularly on the services side.

Services Exports in detail

Services Exports have become critical to Ireland in the last 15 years. In 2014, services exports were close to five times their 2000 levels (€101.8bn versus €21.7bn). For the period 2000-2004, Financial Services exports were the main driver of growth as the IFSC expanded in Dublin. Since then, Computer Services have been the dominant sector with exports tripling from €15.7bn in 2005 to €47.9bn in 2015. Business Services grew strongly before the financial crisis but have slowed in recent years.

Figure 5: Services Export growth breakdown (2000 = 100)

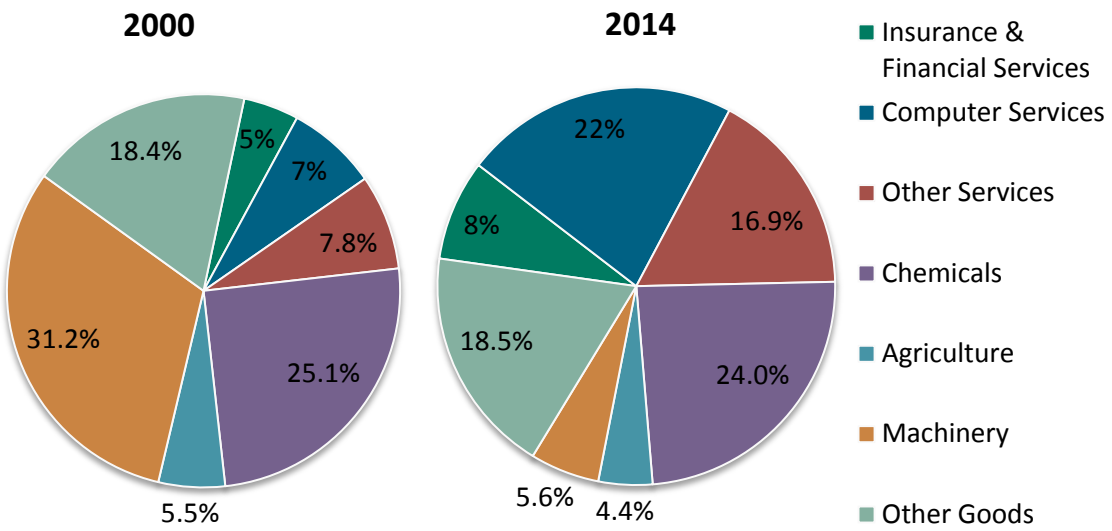


Source: CSO, authors' calculations, 2015 forecast based on Q1-Q3 2015 growth

[5] To calculate, we assumed the 2006-2013 level of disparity between the two export measures remained throughout 2014/15 and any increase above the 2006-2013 level is deducted from exports.

This growth has meant the composition of exports has changed dramatically. Chemical and machinery good exports dominated the export picture in 2000 representing 25.1% and 31.2% of all exports respectively. By 2014, Chemical exports had remained steady at 24% of total exports while machinery exports fell to only 5.6%. In contrast, computer services have grown to 22% of all exports – three times their contribution in 2000. Other Services which includes business services and tourism has also grown strongly in the last 15 years (16.9% of exports versus 7.8% in 2000). The latest quarterly BOP data suggests the pattern of robust services growth will continue in 2015. Based on data from the first three quarters of 2015, growth of close to 10-12% in services exports was likely for full year 2015.

Figure 6: Sectoral Breakdown of Irish Exports



Source: CSO, authors' calculations

The data shows that in the last twenty years Ireland has in its choice of sector concentration "backed winners". Highly-skilled but footloose sectors have been attracted to Ireland by its pro-business environment and high number of third-level graduates. World services exports have tripled since 2000. At the same time, Ireland's share of global services exports has increased from less than 0.5% in the 1990s to over 2.5% in recent years. A particular highlight is Ireland's Information and Communications Technology services exports which are the largest in the world – accounting for 13% of world ICT services exports.

Ireland's export composition: Too much concentration?

A word of caution is necessary however. Ireland's exports are concentrated in a small number of products in certain sectors. The UN comtrade database gives detailed breakdown of the types of good products which countries export. Ireland is one of the most concentrated EU countries with the top 10 goods export products accounting for 45% of all goods exports. The top 10 in Ireland is unsurprisingly dominated by the chemical and pharmaceutical industries. Compared with other countries, Ireland is more concentrated that the core of Europe but less concentrated than Norway – a country heavily focused around the energy sector.

Figure 7: Top Good Export Products as % of Good Exports

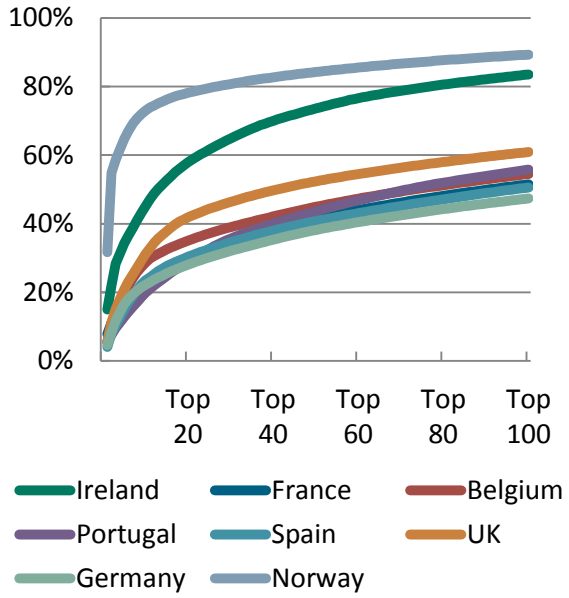
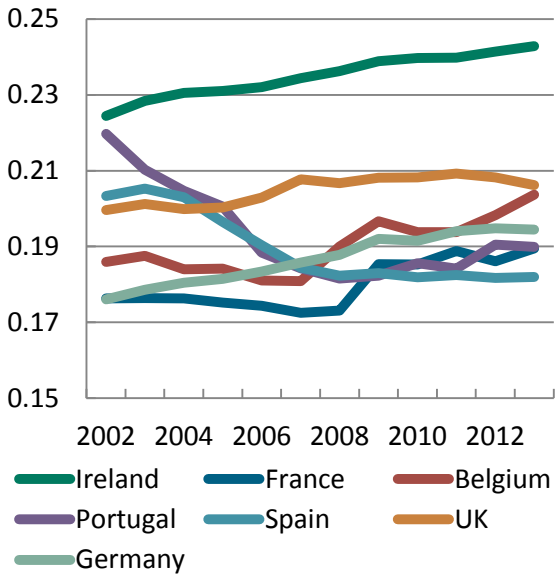


Figure 8: Services Exports Herfindahl Index



Source: UN Comtrade

Unfortunately the same granular level of data is not available for services exports. To compare the concentration of Ireland's services exports versus that of other economies we use a Herfindahl index – a standard measure of concentration. Taking higher level data from the UN's comtrade database Figure 8 shows the level of concentration in Irish services exports is above that of other EU countries.

It is worth discussing the data involved here. The goods exports data can be broken down into some 3,900 products giving a better picture of the concentration surrounding exports. The granular data allows us to examine the concentration both "across" and "within" sectors. An example of "across-sector" concentration would be exposure to one particular sector such as pharmaceuticals. "Within-sector" concentration is concentration around one particular drug rather than around a group of drug products. The services data is only broken down into 11 sectors and therefore does not capture

the concentration of exports around certain products within a sector. This data likely "covers up" some of the concentration within sectors and as such the Herfindahl index likely understates Ireland's services export concentration.

The risks from concentration

Multinational Companies leaving

There are two risks to Irish growth prospects which arise from the concentration of exports. First, there is the risk that the multinational companies who drive our export growth (and therefore a large part of Ireland's economy) will re-locate their business elsewhere. Reasons for re-location could include a lack of price competitiveness driving firms to lower cost jurisdictions, changes to the tax environment, a decrease in the ease of business, or a lack of/loss of human capital.

This risk can be mitigated in part by policy. The reasons for which multinational companies located in Ireland are similar to those that keep them here. Much research has been carried out into determinants of locational choice. Basile et al. (2008) use data on foreign subsidiaries across 50 European regions over the period 1991-1999 to test the determinants of multinational location choice. Their main research aim was to test the effect of EU structural funds on FDI location decisions but in doing so found that market size/potential, tax policy, FDI presence and R&D intensity were all significant positive determinants of locational choice.

Other research such as Siedschlag et al. (2013a) found that the probability of location choice of a foreign R&D affiliate is positively affected by increased FDI presence, human capital levels and research capacity and quality. In Siedschlag et al. (2013b) they concentrate on the ICT sector over the period 1998-2008 and find that location probability increases with market size/potential, human capital, income tax and the presence of other foreign-owned firms. Davies and Killeen (2015) find similar results when reviewing the location decisions of Non-Bank Financial FDI.

Lawless et al. (2014) look at the implication for locational choice resulting from corporate tax policy. They find a strong negative, but non-linear, effect of taxation on the likelihood of a destination being chosen. The result holds using a range of tax measures and the inclusion of a range of additional control variables and sub-sample splits.

The literature suggests that firms will continue to choose Ireland as their FDI destination if policy with regards to taxation, education, infrastructure and R&D remains competitive vis-à-vis other countries.

Idiosyncratic sector risk

A second risk is that of idiosyncratic sector risk. Even if multinational companies choose to remain in Ireland, our dependence on these companies opens Ireland up to idiosyncratic company/sector shocks which are hard to mitigate. A downturn in the ICT sector for example could see lower exports, investment curtailed, FDI inflows decreased, a fall in employment and a lower tax take for the state. This type of shock is not something Ireland can easily mitigate in truth. The sectors Ireland is heavily invested in (ICT sector, pharma, and aircraft leasing) are very much globally-focussed and as such Irish domestic policy will have little effect.

With that being said, it is still important to understand the cyclical nature of these industries and to be prepared for possible negative shocks. Expansionary periods need to be viewed as temporary and not something to be relied upon. Corporate tax take is probably the most pertinent and timely issue here. Much has been discussed about whether the surge in corporate tax receipts in 2015 is a one-off or can be relied upon in the coming years. While we believe the increase in receipts can for the most part be considered "bankable" in 2016 there is a risk in a recessionary period from the increasing concentration of corporate tax receipts. For 2008-2012 the top ten CT-paying companies accounted for 24% of all CT receipts. For the first ten months of 2015 that percentage is 50%. While November CT receipts may have reduced this share as smaller companies filed returns, it is clear that a high concentration leaves Ireland open to idiosyncratic company/sector risk. Prudence in the face of such concentration would be wise.

Conclusion

Exports play a huge role in the Irish economy. In the last 15 years, exports have been driven by services as goods exports have stagnated. Our analysis shows contract manufacturing does muddy the water in terms of goods exports but does not account for all recent export growth. Turning to risks, Ireland's exports are concentrated in a small number of products in certain sectors. There are two risks which arise from this concentration. There is the risk that the multinational companies who drive our export growth will re-locate their business elsewhere. Alternatively, idiosyncratic sector risk is also a worry for Ireland. Even if multinational companies choose to remain in Ireland, our dependence on these companies opens Ireland up to sector shocks. The first risk can be mitigated in part by policy however the second risk may be impossible to guard against.

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