



Measuring Northern Ireland's Exports

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1.0 EXECUTIVE SUMMARY

The Northern Ireland Executive's Programme for Government (PfG) 2011-2015 made the economy the top priority and identified growing the private sector (and exports) as one of the primary vehicles for delivering the economic vision outlined. The commitment to a focus on growing the economy was developed further within the Northern Ireland Executive's Economic Strategy subsequently published in March 2012 which additionally focused on export-led growth.

In relation to Northern Ireland exports, there is currently no single published source which attempts to provide a comprehensive overview of exports. The overarching aim of the current project was to attempt to utilise and add value to existing sources of Northern Ireland export data in developing a comprehensive, accessible and robust export report.

Overall, NI is well placed compared to other regions of the UK in respect of the measurement of exports. The current sources of measures of NI exports are: HMRC Regional Trade Statistics (RTS) which relate to the export and import of goods; the Northern Ireland Statistics and Research Agency's (NISRA) Manufacturing Sales and Exports Survey (MSES), Exporting NI Services Survey (ENIS), and estimates of foreign tourism spending; and the Department of Agriculture and Rural Development's estimates of food and drinks processing exports. These sources of export data can be combined to produce two separate potential aggregate measures of NI exports and both measures are underpinned by differing methodologies with particular strengths and weaknesses. These aggregate measures include:

- HMRC-based aggregate export measure: which combines HMRC RTS export estimates with those from the ENIS and foreign tourism spending; and
- MSES-based aggregate export measure: which combines MSES exports with ENIS, Tourism and 25% of DARD food and drinks processing exports.

Aggregate NI economy export measure	2011/12 (£m)
HMRC-based aggregate measure	£6,733
MSES-based aggregate measure	£6,248

The HMRC-based measure is heavily reliant on HMRC RTS export data which are released on a regular and timely basis, include detailed product and country level breakdowns, are easily accessible via the HMRC website, and are the only source of direct like for like UK regional export comparisons available. Potential weaknesses of the HMRC RTS data are that companies are regionally identified according to the location of their headquarters with a subsequent bias towards London and South East England. In addition HMRC RTS also report a large value of exports which are unallocated to any region within the UK. The value of these unallocated exports equate to 12% of the total UK export trade and, in scale, is more

than six times the total value of NI exports reported by HMRC RTS. Given the scale of these unallocated exports, relatively small periodic revisions to the data can have a significant impact on the reported value of NI exports. In addition, the focus of HMRC RTS data is exports (and imports) and no information is generated on other sales such as those within Northern Ireland or external sales to other parts of the UK. Whilst the published information made available by HMRC from the RTS is relatively extensive, no access to the underpinning data or access to micro-data is possible at this time, restricting the level and type of bespoke NI analyses possible.

The MSES-based measure is based on surveys conducted within Northern Ireland and can be tailored to meet NI specific need. The MSES-based measure has an additional advantage of including internal NI sales and external sales to GB thus allowing a more comprehensive measure of the totality of NI sales and exports. The MSES-based measure is amenable to more detailed and ad hoc analysis and has greater potential flexibility and opportunity for development and improvement. However, the timeliness of release of survey-based measures of exports is a potential weakness in that much of the data is published around a year (or more) after the period to which it relates.

Whilst the overall value of the HMRC-based estimate of exports tends to be higher over time, both aggregate measures display similar trends. The level of coherence between the individual MSES and HMRC RTS estimates provides additional comfort that both aggregate measures are broadly and adequately reflecting 'real' underlying trends over time.

There are a number of important new developments of business surveys currently taking place which are likely to have a significant impact on the measurement of NI exports and the development of an aggregate measure of exports. Potentially, the most impactful of these developments is the move to provide a more complete coverage of exports and sales based on extending the coverage of the NI Annual Business Inquiry survey. This development is being led by NISRA and involves extending the sample coverage of the Northern Ireland Annual Business Inquiry (ABI) and has effectively involved the merger of the MSES and ABI business surveys into a single questionnaire along with an associated boost to the underlying sample in order to allow for the provision of more robust estimates. The likely impact of this work will be, in particular, to increase export coverage of the service sector resulting in a higher monetary value of service exports reported compared to those previously published. The first results reflecting these developments are due in early 2014/15.

The improvements to the business survey evidence base currently underway represent positive and welcome developments. However, the new ABI-based measure of exports will not cover the entire economy given that the financial services sector is not included although there are broader developments underway within the Office for National Statistics to address this over the next few years. In subsequently developing any aggregate measure of NI exports based on the new ABI measure of exports, the value of Agriculture-based exports from DARD, in addition to estimates of foreign tourism expenditure will still need to be combined given their omission from the sample.

In considering the two competing approaches to developing an aggregate measure of NI exports, the conclusion reached here is that the survey-based approach to measuring NI exports offers the best way forward. Not only does a survey-based approach allow exports

to be measured along with external sales to GB, but the planned and imminent improvements to coverage via the new ABI-based measure of exports further enhances the strengths of this approach illustrating the benefits of using and relying on sources of data over which there is scope for considerable input to the underpinning methodology, analyses and reporting. A further benefit of the survey-based approach is the potential to provide values for exports and trends in both real and current prices given that HMRC RTS export data is reported on a current price basis only.

In considering the options for developing an aggregate measure of exports for the NI economy, consideration had been given to developments elsewhere, in particular the Scottish Global Connections Survey. Comparisons of the performance of the two major sources of export data for NI with their respective counterparts in Scotland indicate that the coherence and performance of the NI estimates are somewhat better. Comparing the differences in both Scottish and NI export estimates between HMRC RTS and the appropriate regional survey sources show clearly that both the absolute value and proportionate difference in the separate estimates within each region are greater for Scotland compared to NI. In each of the years from 2006/07 to 2011/12 the NI MSES estimate is closer to its HMRC RTS equivalent than the Scottish Global Connection Survey estimate of exports is to Scottish HMRC RTS. Given both the historic better performance of NI export data compared to those for Scotland, and the current developments underway in relation to NI business surveys, it would appear unnecessary for NI to try to replicate the Scottish GCS methodology but rather utilise the existing and developing NI sources to achieve the same ends.

Despite the conclusion that an aggregate measure of NI exports should be based on business survey sources, the HMRC RTS data for NI retains considerable utility and value. There are a number of strengths in relation to HMRC RTS export data, not least of which are its timeliness in providing detailed product and destination details on a quarterly basis, generally no more than two months in arrears and it remains an excellent source for trend analysis and regional comparison.

Finally, whilst this paper is primarily focussed on exports, that is, sales outside NI and Great Britain, it is important not to lose sight of the crucial role of total sales and external sales to the NI economy. For example, manufacturing exports were worth £5,238m in 2011/12 yet this is less than one third of Total Sales (£16,628m) and just over 40% of all sales outside Northern Ireland (sales to GB were £7,641m). A sole focus on exports is inevitably a partial view on sales of businesses outside of NI. It is entirely possible, for example, that a focus on exports, defined as regions outside of the UK, detracts attention from growth or contraction in external sales which, it could be argued, are of a similar order of importance to the Northern Irish economy as a whole. On that basis, and as appropriate, it is recommended that in reporting the value of exports, these should be placed and contextualised within the broader context of the value of NI total sales and external sales.

2.0 INTRODUCTION

2.1 Project Aims and Objectives

Published in 2012, the Northern Ireland Economic Strategy¹ acknowledged some of the limitations associated with data collected on exports from the local economy.

Whilst there is a broad range of export-related data published on a regular basis for the Northern Ireland economy from a range of sources covering manufacturing, services, agriculture and foreign tourism expenditure, that information focuses on separate components of the economy. There is currently no single published source which attempts to provide a comprehensive overview of exports, nor of progress against the range of export-related targets, commitments and aspirations as set out by the Northern Ireland Executive.

Within that broad context, the overarching aim of the current project was to:

Fully utilise and add value to existing sources of Northern Ireland export and export-related data in developing a comprehensive, accessible and robust export report

In taking this project forward, three key stages to this work programme were identified:

- Fully scoping out the existing sources of export data available for NI;
- Bringing these sources of export data together to create as comprehensive and robust an estimate of export activity as possible; and
- Identifying where any gaps exist and suggest how these can be addressed going forward.

2.2 Background

The Northern Ireland Executive's Programme for Government² (PfG) 2011-2015 made the economy its top priority and identified growing the private sector (and exports) as one of the primary vehicles for delivering the vision of '*...a sustainable and growing private sector, with a highly skilled and flexible workforce operating in productive and innovative firms that are competitive in global markets*'.

In support of the PfG, five key strategic priorities were identified the first of which made a clear commitment towards achieving '*...long term economic growth by improving competitiveness and building a larger and more export-driven private sector*'. The PfG set a specific target to increase the value of manufacturing exports by 20% by 2015.

The commitment to a focus on growing the economy was developed further within the Northern Ireland Executive's Economic Strategy subsequently published in March 2012. Consistent with the PfG, the overarching goal of the new Economic Strategy was to '*...improve the economic competitiveness of the Northern Ireland economy . . . through a focus on export led economic growth*'.

¹ www.northernireland.gov.uk/economic-strategy

² www.northernireland.gov.uk/pfg-2011-2015-final-report.pdf

Importantly, the Economic Strategy considered the economy through a longer timeframe to that outlined in the PfG with an economic vision for Northern Ireland by 2030. Reflecting this longer timescales of the economic vision and, in addition to the existing 20% manufacturing exports target within the PfG, the Economic Strategy added new targets, including:

- Increase the value of manufacturing exports to emerging economies by 60% by 2014/15;
- Promote 60 new start ups exporting outside the UK and a further 440 selling to GB by 2014/15;
- Increase exports and external sales as a proportion of NI output by 2030; and
- Develop an agri-food strategy and action plan to drive export led growth in the agri-food sector to 2020.

Within the strategy a range of Key Performance Indicators to be used in monitoring were detailed. The first Annual Monitoring Report³ for the Economic Strategy was published in October 2013 and provided baseline and latest available data set against the specified targets.

In relation to the commitment to develop an agri-food strategy, the Annual Monitoring report referred to the newly published Agri-Food 'Going for Growth' Strategic Action Plan⁴ which contains growth targets to 2020 including specific targets for growth in turnover, employment, external sales and the value-added of the sector as a whole and for individual sectoral component parts.

Within that broad policy context, the measurement of exports for a region within a state represents significant and unique challenges, not least in how to treat components of total sales including, sales, external sales and exports. In terms of exports and, relative to other regions in the UK and to the RoI, existing export data indicates that the value of NI exports is relatively lower. However, it is worth noting that as a small region within the UK, NI has access to a wide range of good quality statistics to measure the economy generally, including exports. Whilst the measurement of exports at a sub-national level is, for a range of reasons, a difficult exercise, and whilst export statistics continue to be measured through a variety of different sources, taken together, NI does appear better placed than most of the 11 other regional areas of the UK to exploit existing export data sources.

In acknowledging that usage to date of the range of available export data may not have represented the most optimal exploitation of the data resources available, the DETI Research Agenda 2012-2015⁵ included a commitment to consider options to develop an estimate of the overall level of exports for the NI economy. That is, the research commitment articulated the desire and need to see a better economy-wide picture of exports and its contribution to economic growth.

³ www.northernireland.gov.uk/ni-economic-strategy-first-annual-monitoring-report-2013.pdf

⁴ www.agrifoodstrategyboard.org.uk/uploads/Going%20for%20Growth%20-%20Web%20Version.PDF

⁵ See: www.deti.gov.uk/deti_research_agenda_2012-15.pdf

2.3 Context

As with other aspects of the local economy, differences in scale and characteristics are often underpinned by broader social, economic and demographic realities. For example, NI's 1.8m people represents a 3% share of the UK-wide population and is 39% the size of the RoI population.

In terms of labour market activity, historically NI was and continues to be characterised, in comparison to the UK as a whole, by:

- Lower levels of economic activity;
- Lower levels of employment;
- A higher concentration of employment in the public sector; and
- A higher concentration of employment of lower skilled lower value added jobs.

In comparison with the UK as a whole, NI has a higher proportion of employment in the skilled trades, but lower proportions employed within both the professional/technical and manager/senior official groups.

Recently published Labour Force Survey data for September to November 2013⁶ show NI to have the lowest employment rate among the twelve UK regions and the highest rate of economic inactivity. In terms of unemployment as reflected by the seasonally adjusted Claimant Count, NI had the highest rate among the twelve UK regions. On the internationally comparable ILO unemployment measure, NI's rate of 7.3% was slightly above that for the UK (7.1%), but below that for the EU as a whole (10.9%) and the RoI (12.6%).

Against that broad context, recently published Economic Commentaries⁷ by the Analytical Services Unit of DETI indicate that:

- Economic risks globally have lessened with the outlook now more stable. Many of our key external markets are now growing: the UK, the Republic of Ireland, the Euro Area and the USA;
- Economic data shows that NI had been more severely impacted by the economic downturn than the rest of the UK. However, recent indicators have shown that the local economy has improved since the turn of 2013; and
- ...forecasts from Oxford Economics cement the recent positive indications that the local economy is improving... the economy to grow at a faster rate this year than they previously anticipated...

In relation to existing measures of exports, annual HMRC export statistics show the UK to have exported £296 billion worth of goods in 2012. Northern Ireland's contribution to this was £5,726 million, or 1.9% somewhat below the per capita share of the UK. As a proportion of UK exports, the value of NI exports are considerably lower than the eleven other UK regions, with the next lowest region (Wales) exporting more than twice as much as NI. The Republic of Ireland, with exports worth EUR92.2 billion in 2012 (approximately £78.4 billion using an exchange rate of EUR1.00 = £0.85) is more than 13 times the value of exports from NI.

⁶ See: http://www.detini.gov.uk/labour_market_press_release_-_january_2014_final_-2.pdf

⁷ See: http://www.detini.gov.uk/economic_commentary_-_october_2013v1.pdf

3.0 MEASURING EXPORTS

3.1 Current and Future Data Developments

NISRA's Economic and Labour Market Statistics Branch conduct the business surveys that measure exports from NI through the Manufacturing, Sales and Exports Survey (MSES) and the Exporting Northern Ireland Services survey (ENIS).

In relation to the potential to combine different sources of export data, and following both internal assessment (NISRA) and external review (independent research commissioned by DETI and InterTradeIreland⁸) of the differences between HMRC Regional Trade Statistics and ELMS business surveys as sources of export measurement, it was concluded that any solution utilising both sources in terms of coverage and coherence differences required micro level access to HMRC Regional Trade Statistics data. Due to issues around confidentiality, and despite repeated attempts with HMRC, it has not been possible to obtain access to micro level data.

In the absence of greater access to HMRC RTS data, the approach taken forward by NISRA was to attempt to improve the exports coverage of NI based business surveys. This was done in 2011 when a new exports section was added to the statutory NI Annual Business Inquiry⁹ (a survey of 9,000 businesses in 2011, extended to 11,000 businesses in 2012, with a response rate of 75% in both years). The ABI also includes a suite of questions on imports which are part of planned developments taking place within the Economic Labour Market and Statistics Branch of NISRA.

The ABI gathers a broad range of financial and employment information covering two thirds of the economy and informs National and Regional Accounts. The ABI includes the Production, Construction, Distribution and Service industries but excludes the Financial Services Sector and public sector activity for the most part.

It is hoped that this new initiative will make it possible to measure exports more coherently and extensively on a more whole economy basis (that is, inclusive of both the manufacturing and service sectors but not including financial services nor tourism and some other sectors as outlined below) and would further allow comparison of NI exports within the context of external sales to GB and NI sales. This development places NI in a unique position with respect to measuring exports and external sales from a region within the UK.

A further development, led by The Office for National Statistics (ONS), relates to conducting a new survey with a specific focus on the Financial Sector and fieldwork is expected to begin in 2015.

In total, there are four main developments taking place which will impact positively on estimates of exports for NI, and these are described below.

⁸ See:

<http://www.intertradeireland.com/media/intertradeirelandcom/researchandstatistics/publications/tradeandbusinessdevelopment/InvestigationintoNorthSouthTradeStatistics.pdf>

⁹ See: www.detini.gov.uk/deti-stats-index/stats-surveys/stats-annual-business-inquiry.htm

3.1.1 Merger of ABI and MSES

From 2011, the ABI and MSES merged into a single survey with one questionnaire issued to over 9,000 businesses, representing a sample enhancement slightly larger than the combined sample of the two separate surveys. In 2012, the sample increased further to 11,000 businesses with the MSES component of the combined survey expected to increase from approximately 3,450 to 3,750 businesses. As well as increasing sample sizes, the merging of the questionnaires is expected to: provide substantially more robust financial estimates; a more comprehensive picture of exports across the economy; and provide a more consistent measure of common variables and hence improve user-confidence in the statistics that are produced.

Data for 2011 and 2012 on a more complete economy basis is due to be published in early 2014/15. This new merged survey adopts the ABI methodology and therefore the resulting trade estimates may differ from those previously published separately for MSES and ENIS. Quantification of the effects of the new methodology will be provided in the first report. The resulting new estimates will be regarded as experimental, as methodological refinements are likely to be required.

In the interim however, it is intended that separate MSES and ENIS survey-based estimates will continue to be published ensuring appropriate comparison and trend analysis with current and previous years and these will be available at least for the short-term.

The industrial sectors (SIC 2007) covered by the ABI include:

- A Agriculture (support activities), Forestry and Fishing;
- B-E Production Industries;
- F Construction;
- G Wholesale and retail trade; repair of motor vehicles and motor cycles (Distribution Industries); and
- H, I, J, L, M, N, P, Q, R and S Service Industries.

It is important to note that not all sectors are covered by the ABI. Financial and Insurance Activities (section K) are no longer included following a decision made by ONS due to ongoing volatility of the associated estimates. The other main areas that are excluded from the ABI are Public Administration and Defence (section O) while Agriculture, Forestry and Fishing (section A) excludes farming. Local authority and central Government bodies in Education (section P) and Human Health and Social Work Activities and Medical and Dental Practice Activities (section Q) are also excluded. A fuller description of the coverage of the ABI is available from http://www.detini.gov.uk/niabi_2012_publication_ru.pdf.

3.1.2 Integrated Business Survey System (IBSS)

In tandem with the merging of the ABI and MSES surveys, a new computerised system has been introduced, referred to as the Integrated Business Survey System (IBSS), to collect and administer ELMS business surveys. The adoption of this system should result in: improved consistency across different surveys; improved survey control procedures; enhanced survey processing; and reduction in administrative errors and reduction in respondent burden, thereby enhancing the overall quality of the data produced.

The development of the IBSS has created the opportunity to combine the ABI and MSES into a single survey and for it to be processed within the new IBSS.

3.1.3 Quarterly Exports Index

An additional development for export measurement is the publication of a new Quarterly Exports Index. This will be sourced from the ELMS Index of Production¹⁰ and will only cover exports from the production sector. The index is planned for publication in mid 2014 and will show quarterly results on a back series of at least three years.

3.1.4 New ONS survey of the Financial Sector

The Office for National Statistics (ONS) is in the early stages of designing a new survey with a focus on the Financial Sector. Fieldwork, which will include NI, is expected to begin in 2015 and will collect information relating to income, expenditure, Assets and Liabilities. However, at present and as currently specified, the NI sample coverage within the ONS survey will not be sufficient to produce separate NI estimates.

3.2 Current Sources for Northern Ireland Exports

The collection of robust, meaningful sub-regional export data represents a specific challenge, not least definitional as to whether, for example, sales of goods or services to other UK regions represent an export or an external sale or simply sales. Additional challenges include the ability to accurately allocate the 'true' source of the value of an export to a specific sub-region in instances when a local business is a subsidiary of a national business whose headquarters may be geographically separate.

Another issue worthy of note in relation to the correct recording of export data is the 'Rotterdam Effect'. Although guidance and instructions advise respondents to both administrative and survey-based instruments on accurate recording of export destinations, errors can occur where the ultimate destination of an export is not accurately recorded particularly in instances where the export travelled via other another country. For example, a NI export to South Africa may exit via the Republic of Ireland but get erroneously recorded as a RoI destination. As yet, there has been no quantification or estimate of this effect (HMRC are aware of it but have not attempted to quantify it). However, as a response error, in theory it is not unreasonable to assume that it can apply to all sources of export data to an unknown extent.

Notwithstanding inevitable caveats, the existing range of export data for NI is relatively extensive albeit that there will inevitably and continuously be opportunities for further

¹⁰ See: <http://www.detini.gov.uk/deti-stats-index/stats-surveys/stats-index-of-production.htm>

development. The range of current sources of export statistics for NI is briefly described below.

3.2.1 HMRC Regional Trade Statistics (RTS)

HMRC has produced regional export data since 1999¹¹ with the aim of supporting decision making in devolved regions and other regional bodies within the UK. The RTS statistics provide a breakdown of the flows of imports and exports between regions of the UK and other countries. Data is taken primarily from Customs systems (for non-EU trade) and the Intrastat survey (for EU trade). HMRC does not receive information in respect of goods that move wholly within the UK (i.e. external sales from NI to GB), nor in intangibles and services such as banking or tourism. On that basis, trade is mainly allocated to a region by the postcode associated with a company's VAT registration. The most recent value of exports attributed to NI for 2011 and 2012 are £6,007 million and £5,726 million respectively. HMRC RTS data is produced on a quarterly basis enabling estimates to be produced for both calendar and financial years.

RTS data is not available for all partner countries. In the current methodology, data is available for a country if the country's total trade (imports and exports combined) exceeded one per cent of the total trade of that country's world region (based on a historical baseline). However, this suppression policy does not apply to EU countries where data for all member states is available.

Inevitably, given difficulties in regionally allocating some exports, not all trade can be assigned to one of the 9 English Regions, Wales, Scotland and NI and this trade is allocated to an 'Unknown region'. This unallocated value of exports accounts for about 12% of total UK trade, substantially greater than the value of exports currently identified as coming from NI. HMRC periodically revise data on the basis of updated information relating to regional exports. In 2012, the value of exports allocated to 'Unknown Region' was the second largest of the 12 known UK regions (behind South East England), almost twice the value of Scottish exports, almost three times the value of exports from Wales and more than six times the value of exports from NI. Given the scale of the unallocated value of exports, relatively small revisions to this in correctly allocating exports to NI may have significant impacts for the total value of NI exports.

The value of exports attributed to the 'Unknown region' includes:

- Trade carried out by persons or entities which cannot be matched to a region;
- Low Value Trade and estimates made for EU trade below the Intrastat threshold;
- Goods within classification codes that have changed since the previous year are not assigned to a region but are included within Unknown region for completeness; and
- Data relating to Natural Gas and Electricity direct from pipeline and grid operators and information on petroleum production from the Department of Energy and Climate Change.

¹¹ See: <https://www.uktradeinfo.com/Statistics/RTS/Pages/default.aspx>

There are a number of notable strengths relating specifically to HMRC Regional Trade Statistics including:

- Based upon a system that has been collecting UK trade data for centuries;
- Comparisons available across 12 UK regions (England (9), Wales, Scotland and NI);
- Easily accessible, quarterly data published within two months from the end of the each quarter; and
- Up to date in-year, annual and financial year data is available for all UK regions, showing detailed destinations and product categories.

3.2.2 Manufacturing Sales and Export Survey (MSES)

The MSES¹² is an annual business survey conducted by the Economic and Labour Market Statistics Branch of the Northern Ireland Statistics and Research Agency (NISRA). The MSES provides information on the value of total sales, external (GB) sales and exports generated by businesses classified within the manufacturing industry in NI (classified as Standard Industrial Classification 2007 (SIC07) divisions 10 to 33). The survey has been carried out since 1991/92. The Northern Ireland Economic Research Centre conducted the survey fieldwork each year prior to 2003 when it was passed to the Economic and Labour Market Statistics Branch of NISRA.

The MSES is a census of all businesses within the manufacturing sector with five or more employees and is a statutory survey achieving response rates in excess of 75% (the 2012/13 MSES achieved an 84% response rate). In terms of data production, a detailed estimation process grosses all sales figures to full population levels with the most recent values for manufacturing exports for NI being £4,811m in 2010/11 and £5,238m in 2011/12.

The MSES is a National Statistics publication and has been subjected to both a Quality Review and Quinquennial Review, both of which reported positively. The MSES is the only manufacturing-based survey which permits exports to be placed into a comparative context with all sales and external sales, it is a well established survey and has many users across government, private sector and media.

The survey provides good trend data from 2001/02 and is available in both current and constant prices (adjusting for the impacts of inflation). However, following implementation of a major revision of UK Standard Industrial Classification codes, users are warned of a discontinuity in the data series with results from 2008/09 based on SIC07 and prior to this, results based on earlier SIC03 classifications.

Information on the destination of exports, including some individual country level breakdowns are published. However, agglomerations of non-EU countries (such as those classed as BRICs or CIVETS¹³) are not published but it should be possible to enumerate these as combined totals. Detailed industrial sector level export data are also produced as well as data on business size (Small: Under 50 employees; Medium: 50-249 employees; Large: 250+ employees). In contrast to the administrative based HMRC Regional Trade Statistics, the

¹² See: <http://www.detini.gov.uk/deti-stats-index/stats-surveys/stats-manufacturing-sales-exports.htm>

¹³ BRICs: Brazil, Russia, India and China. CIVETS: Columbia, Indochina, Vietnam, Egypt, Turkey and South Africa.

MSES is published on an annual financial year basis with the latest available data relating to 2012/13 published in December 2013.

3.2.3 Exporting Northern Ireland Services Survey (ENIS)

ENIS¹⁴ is an annual business survey conducted by the Economic and Labour Market Statistics Branch of the Northern Ireland Statistics and Research Agency. The survey is based on companies with 10 or more employees covering service sector exports in the construction and manufacturing sectors as well as a High Export Potential Group of service industries deemed to have to have a high potential to trade in a service. The survey was first introduced by the Department of Enterprise, Trade and Investment in 2003 to further understand and estimate the value to the NI economy of exporting services.

The survey was introduced following a three-year study undertaken by the Economic Research Institute (ERINI), whereby a number of sectors were identified as being those most likely to be involved in the export of services.

The research project highlighted a number of difficulties associated with the measurement of services export activity, one of them being the size of the services industry and the fact that all companies classified as such, have the potential to trade in a service. The size of the service industry is a significant obstacle in terms of trying to efficiently collect data whilst keeping burden on business to a minimum. To further complicate matters, companies classified outside the services industry may also have the ability to trade in a service, for example, a manufacturing company may offer a design element as a service.

For the reasons outlined, it was recommended that service export activity should be measured comprehensively in those sectors identified by the ERINI research as having the highest potential to trade services internationally (High Export Potential Group). The following Standard Industrial Classifications (SIC) were identified:

- Computer & Related Activities (SIC 72);
- Research & Development (SIC 73);
- Market Research (SIC 74.13);
- Business & Management Consultancy (SIC 74.14);
- Architectural & Engineering (SIC 74.2);
- Technical Testing & Analysis (SIC 74.3);
- Advertising (SIC 74.4); and
- Creative Entertainment (SIC 92.1-92.3).

In administration, ENIS is based on information collected via the International Trade in Services Survey (ITIS) and supplemented with information from the MSES and the NI Annual Business Inquiry (ABI). The ITIS form is supplemented with NI specific questions. ENIS results are based on surveys of businesses with ten or more employees and surveys specifically of the HEPG typically achieve an 80%+ response rate. The International Trade in Services (ITIS) survey is a UK wide survey which collects information on overseas transactions of consultants and companies offering business services. Information collected from the survey is fed into the UK balance of payments and published at the UK level.

¹⁴ See: <http://www.detini.gov.uk/deti-stats-index/stats-surveys/stats-exporting-ni-services.htm>

Survey results are grossed-up to full sample size, both the HEPG and full population (Construction and MSES) incorporating previous years returns and information from other survey sources to impute missing cases and values. Survey results are designated experimental in nature to reflect the fact that survey development is ongoing.

The latest available ENIS data relates to 2011. Consistent with the recent economic cycle, HEPG results are based on responses from 307 companies, the lowest level since the survey began in 2003. Results for the Construction Sector are also based on a reducing sample with 666 companies surveyed in 2011 also the lowest since the survey began. There is no information provided on sample size or response rates for the MSES component of the ENIS. Trend data is available from 2003/04 to 2011 although, as with the MSES, users of ENIS data are cautioned in terms of interpreting trend data given the changes in Standard Industrial Classification from 2009 onwards.

Whilst NISRA indicates that ENIS *'comprehensively measures the level of service export activity'* in the three sectors that it covers they caution that *'it does not provide a complete picture of the total level of service exports in the NI economy'*. Further work is being undertaken by NISRA to improve the coverage of service exports, the outcome of which is due to be published in early 2014/15 (see Section 3.1).

In terms of broader services sales measures, it is possible to put HEPG export sales into context with total HEPG sales, although this is a proxy measure as two different sources are used (HEPG exports are measured by the ITIS, HEPG sales are measured by the ABI). The availability of destination data is somewhat limited (and only produced for HEPG) and do not identify the groupings of countries classed as BRIC and CIVETS.

In terms of publication, only annual data at current prices is available with a considerable time lag between data collection and publication. For example, the latest publication for 2011 data was published in May 2013.

The most recently published report produced results for 2011 and estimated the total value of services exports within scope of the study at £495m.

3.2.4 Agricultural Exports

The Department of Agriculture and Rural Development (DARD) sales and export statistics¹⁵ have recently seen their profile enhanced by the May 2013 publication of the Agri-Food Strategy “Going for Growth, a strategic Action Plan to 2020”¹⁶. The strategy identifies key external sales targets for eight of the ten agri-food subsectors including a 2020 target to grow sales outside of NI by 75% to £4.5bn.

DARD publish external sales and export statistics for ten sub-categories from the Food and Drink Processing sector¹⁷. The results are collated from various surveys, some of which include NISRA business surveys such as the MSES. DARD Subsector Statistics in relation to the food and drink processing sector include estimates of the extent to which they contribute to manufacturing statistics published in the MSES (estimates for 2011 were said to account for 24% of total NI manufacturing export sales)¹⁸.

DARD food and drink processing export statistics include businesses involved in the processing of a raw material destined for human consumption excluding businesses involved in the production of pet foods, animal feeds, rendering, hide and skin processing, and tobacco. Estimates are calculated for businesses with turnovers greater than £250,000. The most recent published export statistics are for 2011 and estimate it to be £1,153 million.

Good trend data exists and it is possible to put export sales into context with NI and GB sales. Destination and Product based data are also produced although on a limited basis. Although there is overlap with other export statistical sources such as the MSES (initial discussions with DARD suggest that a 75% overlap is not unreasonable), DARD statistics include additional sales and exports from their own surveys and sources which are not published elsewhere and add to the overall picture of NI exports. Further research into the overlap of ELMS business survey and DARD sources is required to clarify the exact nature and scale of any overlap. DARD sales and exports statistics are published annually with a considerable time lag, for example, 2011 provisional data was published in July 2013. Destinations at the level of agglomerations of countries such as those designated BRIC or CIVETS are not available and the ten sector classification of product-type does not match the Standard Industrial Classification typically administered in business surveys.

¹⁵ See: <http://www.dardni.gov.uk/index/statistics/statistical-reports/ni-agri-food-sector-key-statistics.htm>

¹⁶ <http://www.dardni.gov.uk/going-for-growth.pdf>

¹⁷ <http://www.dardni.gov.uk/index/statistics/statistical-reports/size-and-performance-of-the-ni-food-and-drinks-processing-sector.htm>

¹⁸ Size and Performance of the NI Food and Drinks Processing Sector, Subsector Statistics 2011

3.2.5 Tourism expenditure

An additional component of the economy which can be treated as a 'de facto' export is foreign tourism expenditure. Targets for tourism set in the Programme for Government, are to increase visitor numbers to 4.2 million and grow tourist revenue to £676 million by December 2014.

Tourism Statistics Branch of NISRA are responsible for producing official tourism statistics on Northern Ireland, including statistics¹⁹ on:

- the performance of hotels, guesthouses, B&Bs and self catering establishments;
- the number of visitors to attractions;
- overseas visitors; and
- domestic tourism.

Estimates of tourism expenditure are based on various surveys from different organisations some of which are based on relatively small sample sizes. Data on overseas visitors leaving through a NI airport or sea terminal is collected by NISRA through the NI Passenger Survey (NIPS) with a sample size of 12,600 in 2012. Information on overseas visitors who stayed overnight in NI but exited via the Republic of Ireland is collected through the Survey of Overseas Travellers, conducted by Failte Ireland, with a sample size of 300 in 2012. Information on ROI visitors to NI is gathered via the Household Travel Survey, a postal survey issued monthly by the Central Statistics Office, ROI with a sample size of 400 in 2012.

While it is not possible to produce confidence intervals individually for each of the surveys, they are produced for the Northern Ireland Passenger Survey and show expenditure estimates at the 95% confidence interval to vary considerably between originating region such as Europe +/- 17%; North America +/- 25% and Other Overseas +/- 34%.

Tourism statistics are designated as 'experimental' and are not a National Statistic. Published tourism expenditure figures for 2011 and 2012 indicated the total value of tourism expenditure to be £640m and £683m respectively. However, these figures include expenditure by persons from NI and GB who stayed overnight in NI (£195m from NI residents and £244m from GB residents in 2012).

In terms of exports, inclusion of tourism expenditure is based on non-UK visitors and this expenditure amounted to £227m in 2011 and £244m in 2012 the only years for which figures are available.

¹⁹ See: <http://www.detini.gov.uk/deti-stats-index/tourism-statistics.htm>

3.3 Approaches Used Elsewhere: Scotland and Republic of Ireland

3.3.1 Scottish Export Statistics

There are two sources of data on Scottish Exports: the Global Connections Survey (GCS)²⁰ and the Index of Manufactured Exports (IME)²¹.

The Global Connections Survey (GCS)

The GCS is a voluntary, annual survey run by the Scottish Government. The survey provides estimates of the cash value of international and Rest of UK exports by destination and industrial sector and is the only export survey covering all sectors of the Scottish economy. The GCS is used to monitor the Scottish Government export target to increase exports by 50% by 2017. There is no equivalent export publication for the UK or its regions and data was first published for 2002. The most recent GCS publication was in January 2013 showing results up to 2011 and is designated a National Statistics publication.

In terms of sample size, 5,000 businesses were invited to participate and responses (including nil) received from around 2,000 representing a response rate of 39%. The Agriculture, Forestry and Fishing sector has the highest response rate (54%) whereas the Financial and Insurance activities sector had the lowest response rate (26%).

In terms of constructing the entire GCS dataset for a year, annual GCS results are supplemented with previous years' survey data and information obtained from other sources such as HMRC, the Department of Energy and Climate Change, Marine Statistics, Further Education Statistics, the Office for National Statistics for survey information from the Inter Department Business Register, the Annual Business Survey, the International Trade in Services survey, the Retail Sales Index and the UK Monthly Production Inquiry.

Statistics are presented across a wide range of SIC07 Division Groups which can be combined into Manufacturing (61% of 2011 exports); Services (including Financial and Insurance activities); representing 32% of 2011 exports; Utilities; Construction; Agriculture, Forestry & Fishing; and Mining, Quarrying & Extraction of Petroleum. In accordance with National Accounting principles, total Scottish exports do not include any exports of oil and gas extracted from the UK Continental Shelf.

The concentration of the annual value of exports amongst Scottish businesses is heavily skewed with 30% of exports attributable to around 20 businesses, 50% to around 50 businesses and 60% to around 100 businesses.

The GCS publication includes some significant cautionary caveats. Users of the data are advised to treat with caution findings in the areas of Destinations and Industrial sectors. These caveats are mainly driven by issues such as: sampling and response rate variations; volatile company characteristics such as moving between industry sectors and markets; and difficulties in accurately identifying destinations, particularly for the service sector and Rest of UK sales.

²⁰ See: <http://www.scotland.gov.uk/Topics/Statistics/Browse/Economy/Exports/GCSIntroduction>

²¹ See: <http://www.scotland.gov.uk/Topics/Statistics/Browse/Economy/Exports/IMEIntroduction>

For example, as companies are not legally required to report their accounts below UK level, their accounting practices do not allow accurate reporting below UK level. A further confounding issue are instances where products are shipped elsewhere within the UK to complete production with value being added at various stages. On that basis therefore, users are advised that estimates of the value relating to rest of UK exports should be interpreted with due care.

Research is being carried out within the Office of the Chief Economic Advisor (OCEA) to develop a new and more robust measure of exports from the financial services sector. It is hoped the 2014 GCS publication will incorporate this new methodology.

Restricting the GCS survey data to the Manufacturing and Production sector provides a basis to compare with the HMRC Regional Trade in Goods Statistics (section 5).

In Scotland, the value of Financial and Insurance exports is estimated at £1,415m in 2011, equivalent to 5.9% of total exports and more than double of that achieved in 2007 (£650m). It is quite apparent that international finance and insurance activities in Scotland make an important contribution to the overall value of Scottish exports, not least of which is likely to be as a result of significant expansion of their banking industry. However, these figures are based on a 26% response rate from the financial and insurance sector to the Scottish Global Connections Survey, the lowest response rate of all sectors to the survey. This current paper does not include any estimation of the value of the Northern Ireland Financial and Insurance sector exports as we are not aware of any available information. Whilst the impression is that the export value of the financial services sector here is relatively small, this current omission would require further work to assess the true scale of the gap and to develop proportionate options to address.

Index of Manufactured Exports (IME)

The IME²² is a measure of quarterly export sales by manufacturing companies located in Scotland. It is based on a sample of around 800 Scottish manufacturing companies per quarter and does not include internal or Rest of UK sales. The most recent publication (October 2013) reports results from Q1 2007 to Q2 2013.

IME data are presented as an index and deflated and seasonally adjusted. The index provides a quarterly time series of the growth (in real terms) of export sales in the manufacturing industry.

The series can show significant levels of statistical variability between quarters and users are advised to exercise caution when comparing across quarters. On that basis and, in line with proper treatment of survey data generally, it is better to compare the general trend exhibited by the IME over a longer period.

²² See: <http://www.scotland.gov.uk/Topics/Statistics/Browse/Economy/Exports/IMEIntroduction>

3.3.2 Republic of Ireland Exports

Export statistics for the Republic of Ireland are published by the Central Statistics Office (CSO)²³ and are comprised of 3 main separate publications.

Goods Exports and Imports

This is a monthly publication providing data on the movement of goods between countries comprising a combination of: data from the Intrastat Survey of Irish traders involved in trade with other EU member states; and Customs based non-EU trade.

The Goods Exports and Imports publication is similar to the HMRC trade statistics which underpin the UK's HMRC Regional Trade Statistics. The most recent Goods Exports and Imports publication was in November 2013 containing data up to and including September 2013.

Trade Statistics

Trade Statistics is a detailed monthly publication, including Exports and Imports classified by 5 digit Standard International Trade Classification by country for current month of publication and year-to-date and is published one month behind the Goods Exports and Imports publication. The data is sourced on the same basis as the Goods Exports and Imports publication.

International Trade in Services 2012

Published annually, the International Trade in Services series goes back to 2003. The latest 2012 publication was published in September 2013.

The data are collected and compiled within the Balance of Payments framework and as such are designed to comply with the stipulated international methodological standards. The results are generally compatible with the information supplied to and published by Eurostat and the European Central Bank (ECB), and those supplied to other international organisations such as the IMF and OECD.

Data within the International Trade in Services report includes type of service exported or imported and country. NI however, is not separately identified from the UK as a whole.

²³See: <http://www.cso.ie/en/releasesandpublications/externaltrade/>

4.0 NORTHERN IRELAND EXPORT STATISTICS

What follows is a brief outline of the main results from the various sources detailed previously that measure exports from NI. In each case, a summary of the most recent year is followed by recent trends. All data are presented as current prices unless otherwise specified.

4.1 HMRC Regional Trade Statistics

4.1.1 Most Recent year

Table 1 HMRC RTS NI	2012	%
Destination of Exports	(£m)	
European Community	£3,231	56%
Republic of Ireland	£2,075	36%
Rest of EC	£1,156	20%
Rest of World	£2,495	44%
BRIC countries	£200	3.5%
CIVETS countries	£123	2.1%
Total Exports	£5,726	100%

In 2012 the value of RTS exports from NI was provisionally reported as £5,726m.

Of the £5,726m worth of goods NI exported in 2012, more than a third (36%) went to the Republic of Ireland and a fifth went to other EU countries.

Countries designated as BRICs and CIVETS represented 5.6% of exports with exports to BRIC countries contributing the larger share.

Table 2 HMRC RTS NI	2012	%
Exports by product sector	(£m)	
Food & live animals	£967	17%
Beverages & tobacco	£265	5%
Crude materials	£239	4%
Chemicals	£633	11%
Manufactured goods	£483	8%
Machinery & transport	£2,378	42%
Miscellaneous manufactured	£644	11%
Other	£115	2%
Total Exports	£5,726	100%

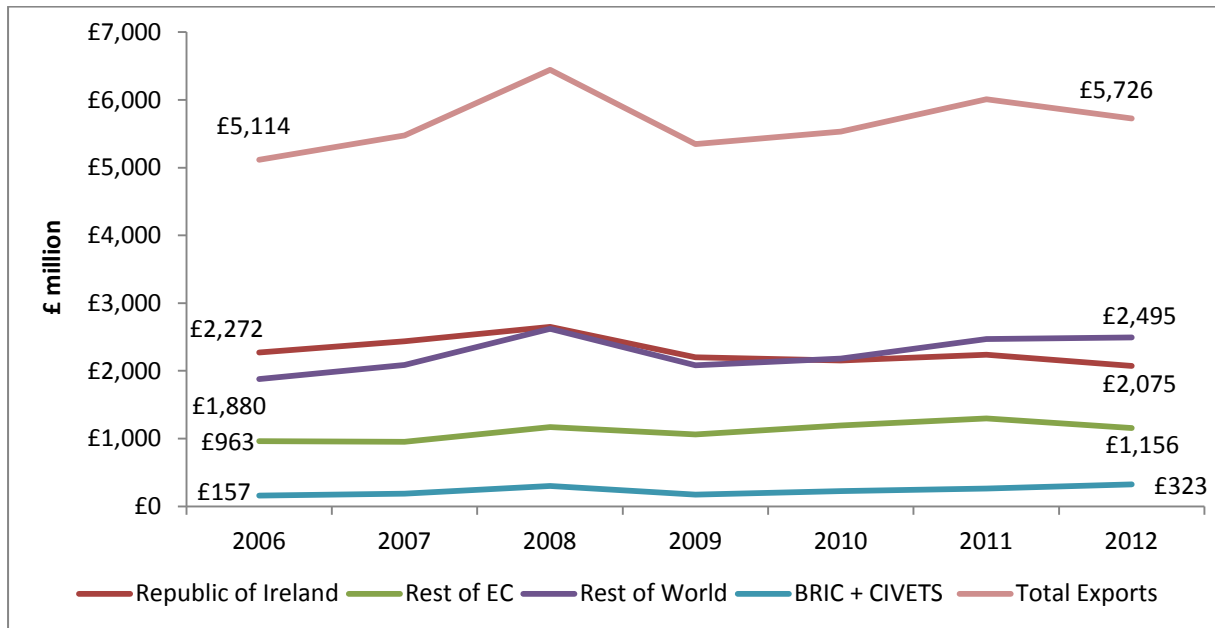
Three product sectors dominated NI exports with Machinery and Transport being particularly dominant (42% of exports).

Together, Machinery & Transport, Food & Live Animals, and Chemicals made up 70% of NI exports in 2012.

4.1.2 Trends (2006 to 2012 calendar years)

Over the seven years 2006 to 2012, the overall trend relating to total NI RTS exports was marginally positive with total exports of £5,114m in 2006 rising to a high of £6,443m in 2008. Following 2008, the value of total exports has struggled to regain persistent positive growth with the total value of exports in 2012 at £5,726m.

Figure 1: Destination of NI RTS Exports 2006 - 2012



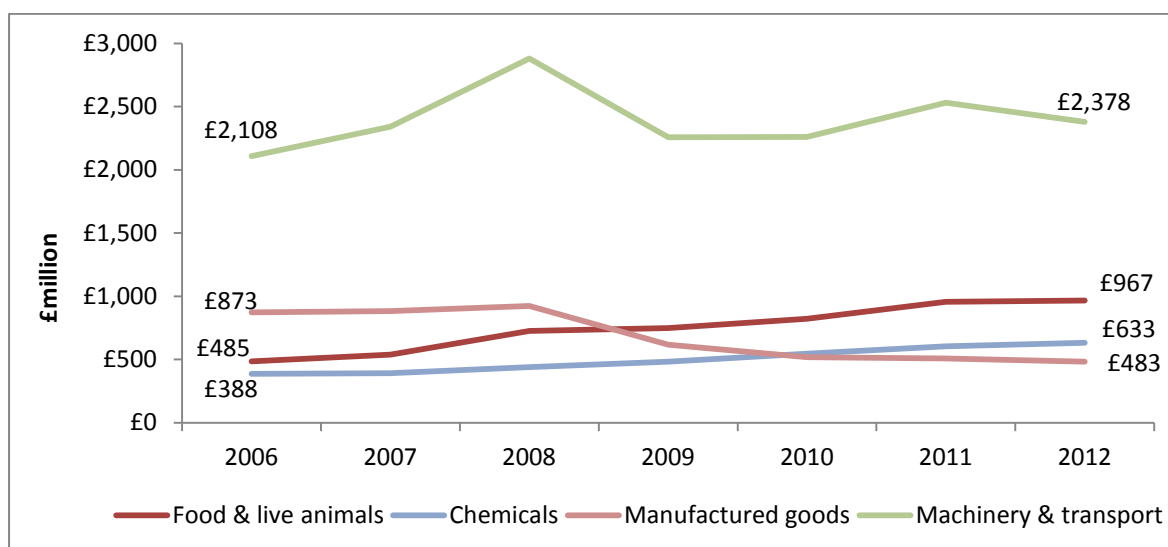
Throughout the period 2006 to 2012, RoI and Rest of World (all markets outside the EC) have been particularly important export markets. Interestingly, while RTS exports to RoI have experienced a general downward trend post 2008, exports to Rest of World regained most of the lost ground post 2008 and now surpass those of the RoI. Aside from a brief period of stability between 2010 and 2011, exports to RoI have fallen each year from the 2008 peak and are currently at their lowest level for the entire period shown.

Although relatively small in size, exports to BRIC and CIVETS countries have increased annually since 2009, with the value of exports in 2012 standing at £323m.

Commodity Breakdowns

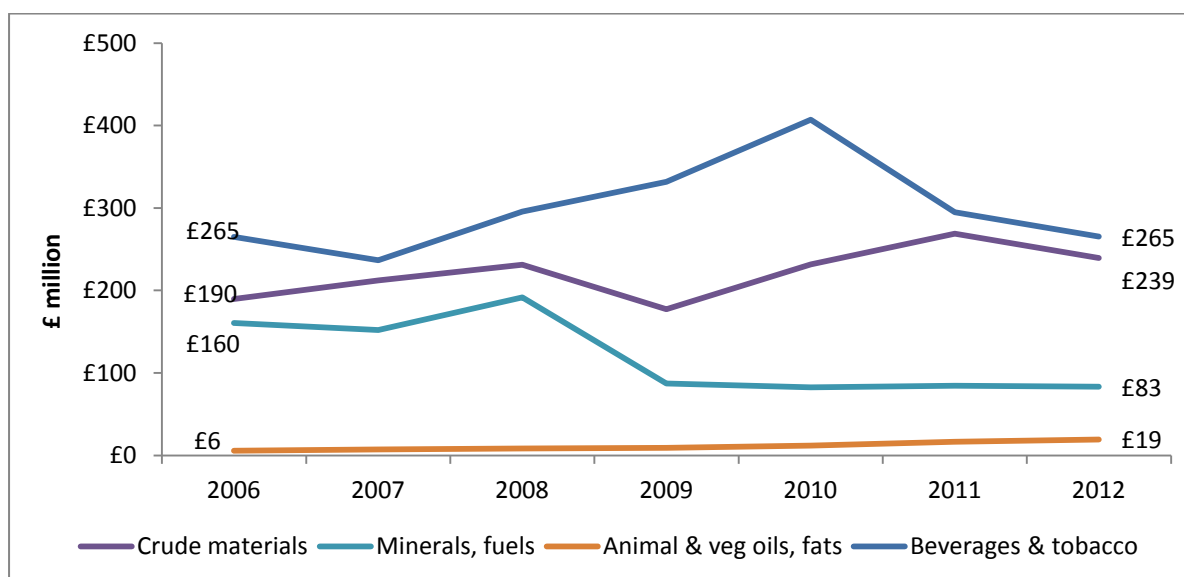
The eight commodity categories reported by RTS (excluding Miscellaneous and Unclassified categories) were examined from 2006 to 2012 by separating the top four and bottom four categories in terms of export value.

Figure 2: Commodity Breakdown of NI RTS Exports 2006 – 2012 (top four by value)



In terms of the categories of goods exported, Machinery and transport represent the single largest value of exporting commodity through the period 2006 to 2012 although the overall trend over the period is relatively flat. In contrast, the export values of both the Chemicals and Food and live animals commodities have increased steadily over the period. The value of exports of Manufactured goods has decreased over the period.

Figure 3: Commodity Breakdown of NI RTS Exports 2006 – 2012 (bottom four by value)



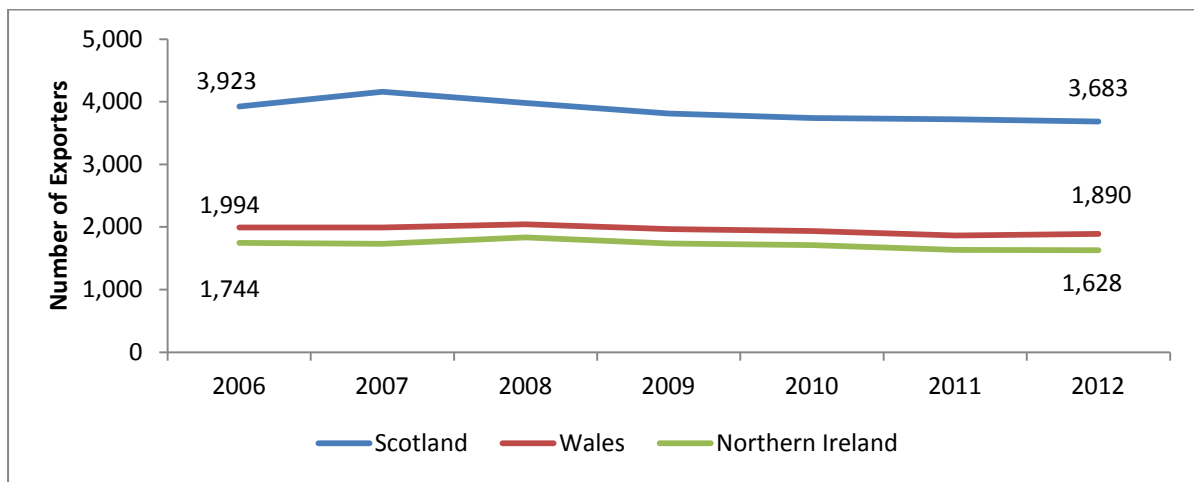
Of the four commodity export categories with the lowest value from NI, exports of Beverages and Tobacco grew until 2010 but have since fallen back to 2006 levels. The overall trend in the value of exports of Crude materials has been marginally positive but over the period, the export value of Minerals, Fuels has halved. The value of Animal & vegetable oils, fats exports have trebled over the period but remain a small fraction of total RTS exports.

Number of Exporters

RTS also provide information on the number of exporting businesses in Scotland, Wales and NI and the destination of their exports in relation to separate groupings of EU and Non-EU countries.

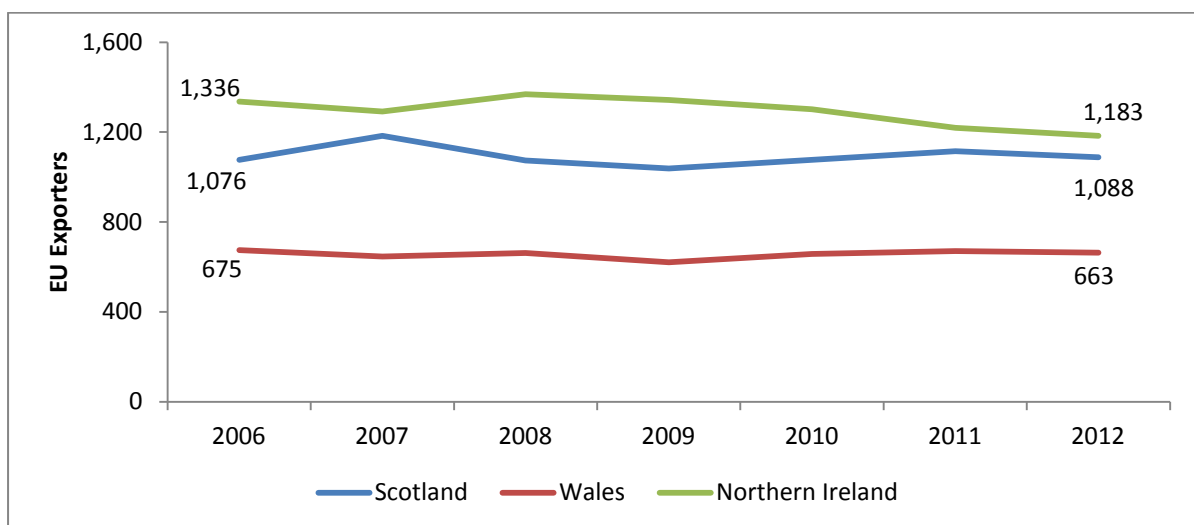
In terms of total numbers of exporters in 2012, the number in NI (1,628) is below that for Scotland (3,683) and a little below that for Wales (1,890). Over the period, the number of RTS exporters in NI has declined from 1,744 in 2006 to 1,628 in 2012 although the marginal decline over the period has been apparent for all three regions.

Figure 4: Total Number of Exporters by Region 2006 - 2012



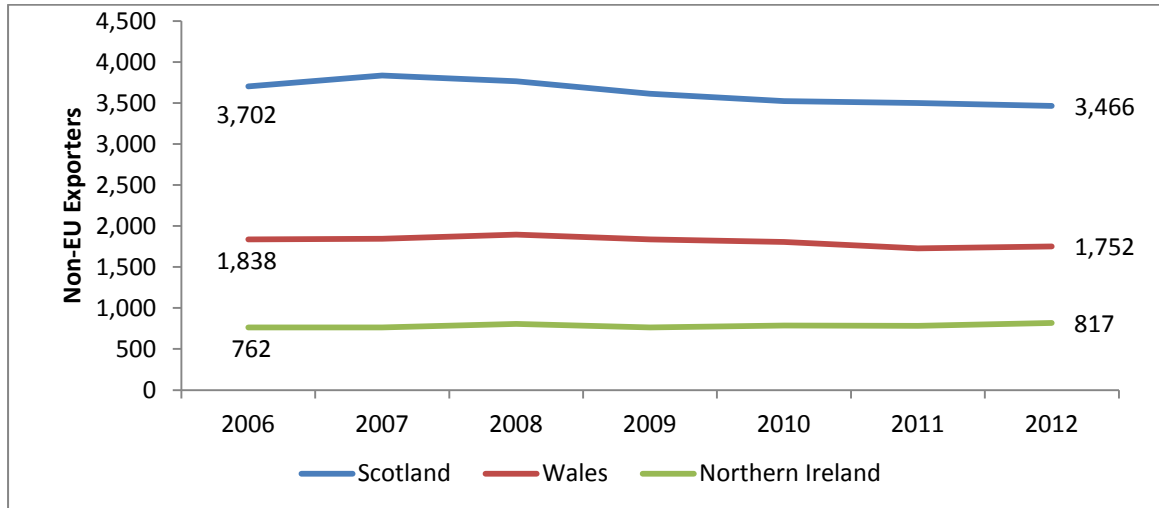
A more subtle picture emerges when the numbers of exporters to EU and non-EU countries are examined separately. Unsurprisingly, given the geographic proximity and broader social and economic relationship of NI to the RoI, NI (1,183) has more businesses exporting to the EU as a group of countries compared to Wales (663) or Scotland (1,088).

Figure 5: Total Number of EU Exporters by Region 2006 - 2012



By contrast the RTS indicates that NI has the lowest number of businesses exporting to non-EU countries compared to Scotland or Wales. However, NI was the only region to have more non-EU exporting businesses in 2012 compared to 2008.

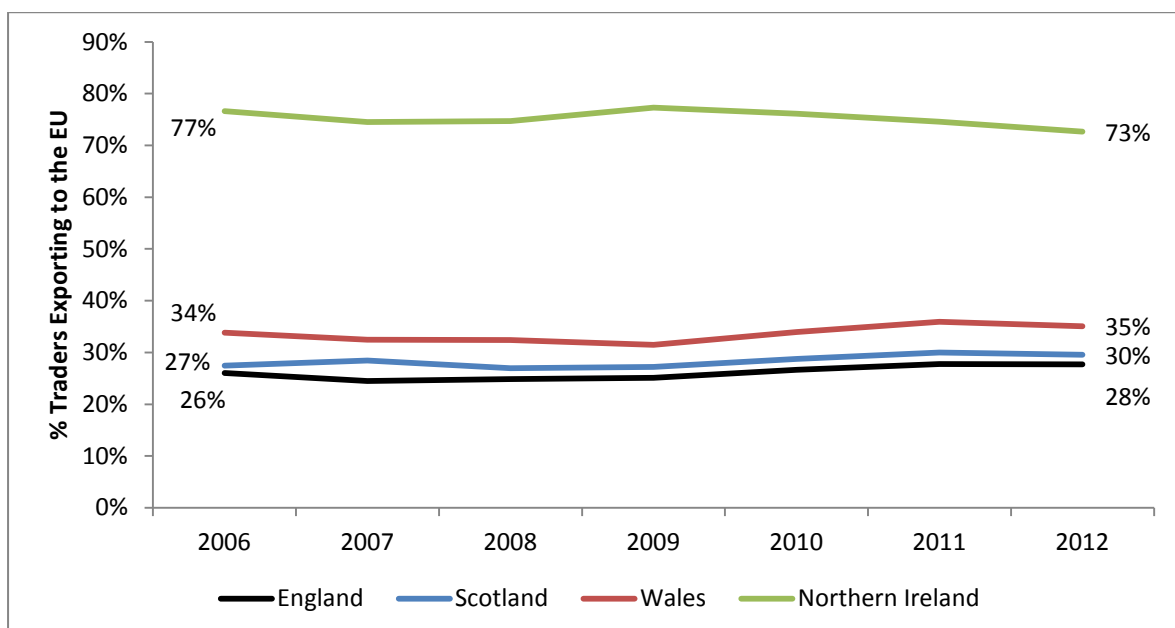
Figure 6: Total Number of Non-EU Exporters by Region 2006 - 2012



The difference in regional EU and Non EU exporting profiles is more pronounced when proportions are considered. Figure 7 shows the proportion of all exporting traders that are trading to the EU. Quite clearly, NI has a significantly different profile than the other countries. In 2012 for example, almost three quarters (73%) of NI traders traded with the EU whereas the equivalent figure for the other regions was England 28%, Scotland 30% and Wales 35%. The importance of the Republic of Ireland to NI export trade is likely to be the major influence in the EU trader counts.

However, NI is the only region to have a lower proportion of EU traders in 2012 (73%) than 2006 (77%).

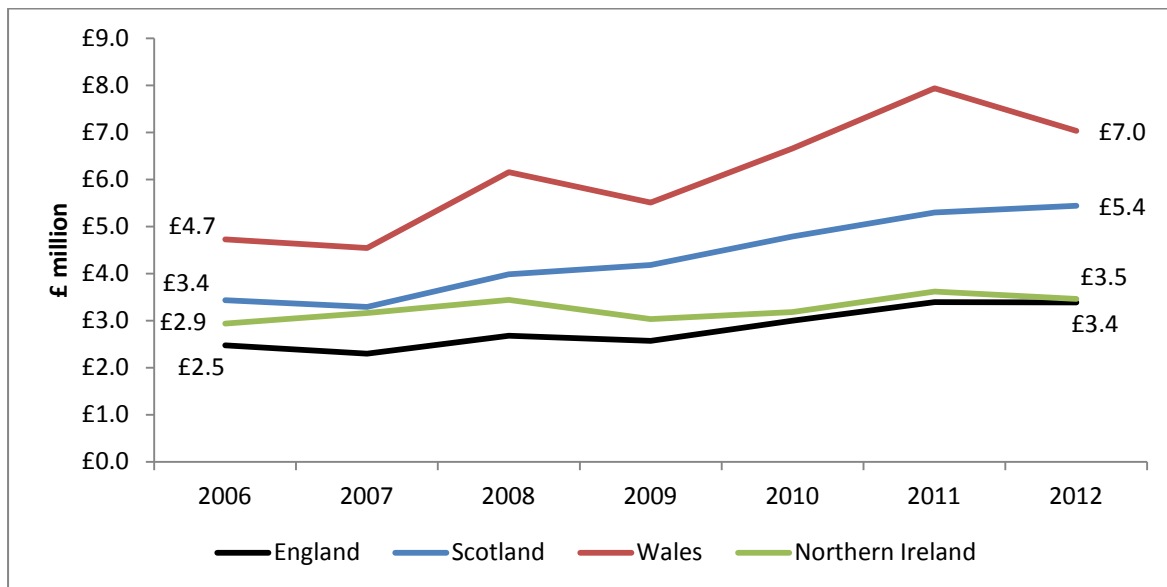
Figure 7: Proportion of Traders that trade with the EU by Region 2006 – 2012



In 2012 the average NI business exported £3.5m worth of goods, similar to England (£3.4m) but considerably lower than Scotland (£5.4m) and Wales (£7.0m). While average values have increased for all regions since 2006, NI average values have increased the least, both in actual value (+£0.6m per exporter) and proportion (+21%).

On a cautionary note however, average values per exporter are a somewhat crude measure as they will be affected by a small number of very large exporting businesses.

Figure 8: Average £m value per Exporter 2006-2012



4.2. Manufacturing Sales and Exports Survey (MSES)

4.2.1 Most Recent Year

The MSES provides estimates for sales, external sales and exports within the context of total NI sales. Provisional figures for 2011/12 indicate that exports accounted for almost a third (32%) of total sales.

Table 3 MSES Destination of Sales	(2011/12) £m	%
Total Sales	£16,628	
External Sales	£12,879	77%
Great Britain	£7,641	46%
Exports	£5,238	32%
Northern Ireland	£3,749	23%
Exports	£5,238	
Republic of Ireland	£1,269	24%
Rest of EU	£1,388	26%
Rest of World	£2,581	49%

Sales within Northern Ireland accounted for 23% of total sales while external sales to Great Britain (46%) accounted for almost half of all sales.

Exports from the MSES were estimated at £5,238m. Of these, around one quarter (24%) went to the Republic of Ireland while around another quarter (26%) went to the Rest of EU and almost half (49%) of NI exports went to the Rest of the World.

Table 4 MSES Exports by Industrial Sector	2011/12 £m	%
Food, Beverages, Tobacco	£1,047	20%
Other Transport Equipment	£715	14%
Machinery & Equipment n.e.c.	£681	13%
Computer, Electronic, Optical	£508	10%
Rubber and Plastics	£406	8%
Chemicals	£239	5%
Other	£1,642	31%
Total	£5,238	100%

The coverage of MSES industrial sector breakdowns includes those in SIC 10 to 33 derived from the SIC07 classification.

Results for 2011/12 show the Food, Beverages, Tobacco sector to be the main exporting sector accounting for one fifth (20%) of exports. Half of exports come from the next five industrial sectors combined including: Other Transport Equipment (14%); Machinery & Equipment n.e.c. (13%); Computer, Electronic, Optical (10%); Rubber and Plastics (8%) and Chemicals (5%).

The remaining 31% of MSES exports are spread across 17 different SIC07 Divisions, ranging in value from £165m (Pharmaceuticals) to relatively very small values.

Table 5 MSES Exports by Size of Business	2011/12 £m	%
Small (under 50 employees)	£765	15%
Medium (50-249 employees)	£1,046	20%
Large (250+ employees)	£3,426	65%
Total	£5,238	100%

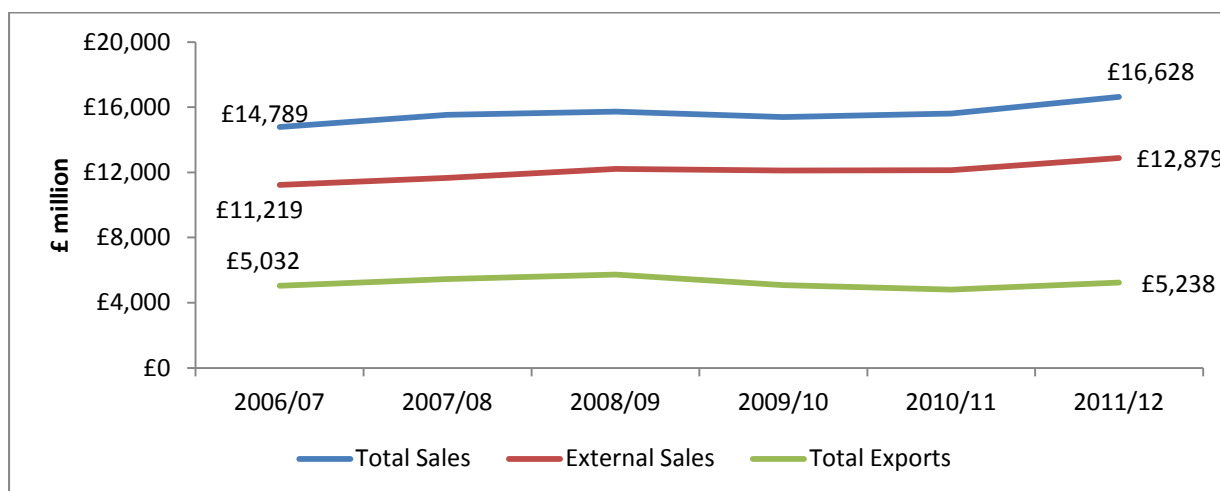
The MSES also publishes the value of exports by a three-way Size of Business classification including: Small (<50 employees); Medium (50-249 employees); and Large (250+ employees).

In 2011/12, large companies dominated the NI export market, accounting for almost two-thirds (65%) of total exports.

4.2.2 Trends (2006/07 to 2011/12)

Whilst there was a revision in 2008/09 to UK SIC codes resulting in a discontinuity in the data series, for the purposes of the current paper, trend results are shown including both 2006/07 and 2007/08.

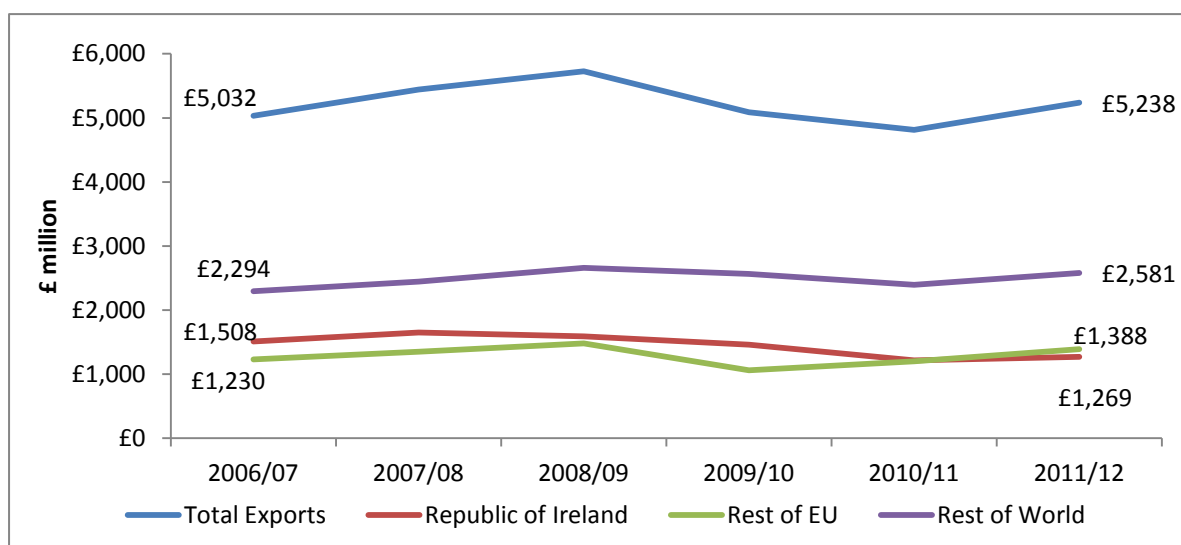
Figure 9: Total NI Sales, External Sales and Exports 2006/07 – 2011/12



In 2011/12, the MSES recorded total sales of £16,628m. The positive trend over the period in the value of total sales, has been driven largely by the growth in external sales (to GB) which have increased from £11,219m in 2006/07 to £12,879 in 2011/12. The value of export sales over the period has, by contrast, remained relatively flat.

In terms of destination for manufacturing exports, the Rest of the World markets typically make up around half the total export sales value while those to RoI fell from 30% of total exports in 2006/07 to 24% in the most recent year. Exports to the Rest of Europe (£1,388m) surpassed those to RoI (£1,269m) for the first time in 2011/12.

Figure 10: Destination of NI Exports 2006/07 – 2011/12



4.3 Exporting Northern Ireland Services Survey (ENIS)

4.3.1 Most Recent Year

In 2011 the provisional value of NI services exports was £495m.

Table 6 ENIS Exports 2011	£m	%
Higher Export Potential Group (HEPG)	£247	50%
Construction Service Companies	£184	37%
Manufacturing Service Companies	£65	13%
Total	£495	100%
Destination (HEPG only)		
Republic of Ireland	£76	31%
Rest of EU	£20	8%
Rest of World	£151	61%
Industrial Sector (SIC07)		
HEPG Companies	£247	50%
Computer & Related	£173	35%
Research & Development	£27	5%
Agriculture, Engineering, Technical Testing	£23	5%
Other⁽¹⁾	£24	5%
Manufacturing Services	£65	13%
Transport Equipment	£19	4%
Fabricated metal	£9	2%
Food, Beverages, Tobacco	£6	1%
Other⁽²⁾	£31	6%
Construction Services	£184	37%
Total	£495	100%

Half of services exports came from the Higher Export Potential Group (HEPG), more than a third (37%) from Construction and 13% from Manufacturing.

Destination is published for the HEPG category only and is limited to three areas. The Rest of World group dominates accounting for 61% of HEPG exports although at 31%, Republic of Ireland is again a major destination. The Rest of EU accounted for 8% of HEPG exports.

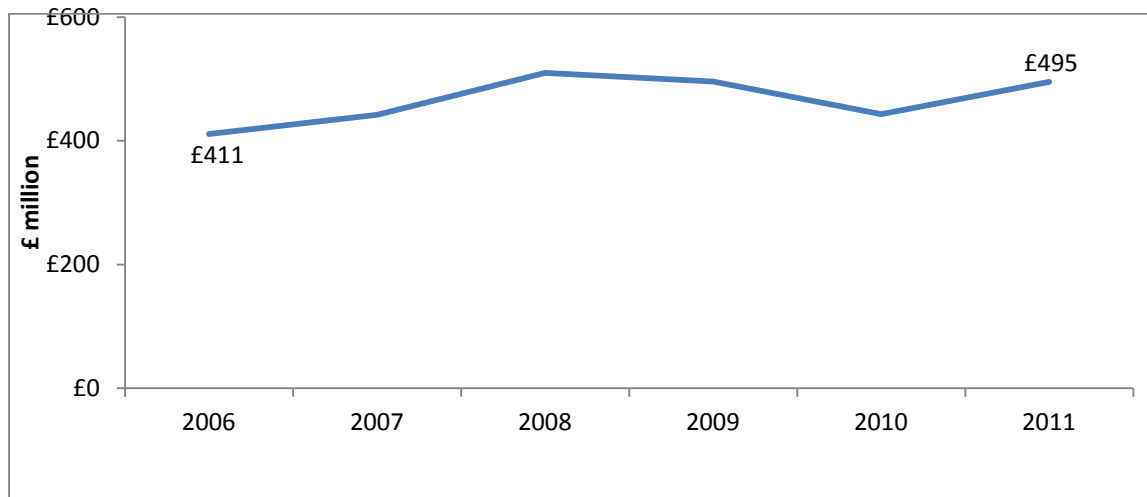
Other⁽¹⁾ includes Business & Management Consultancy (£12m); Advertising (£7m); Market Research (£1m) and Creative Entertainment (£4m). Other⁽²⁾ includes ten other SIC07 Industrial Sectors with results suppressed to avoid disclosure. Figures may not add due to rounding.

Industrial Sector level detail is provided on a SIC07 basis. The top two individual sectors in terms of value of services exports are Construction (37%) and the Computer & Related sector within HEPG (35%).

4.3.2 Trends (2004 to 2011)

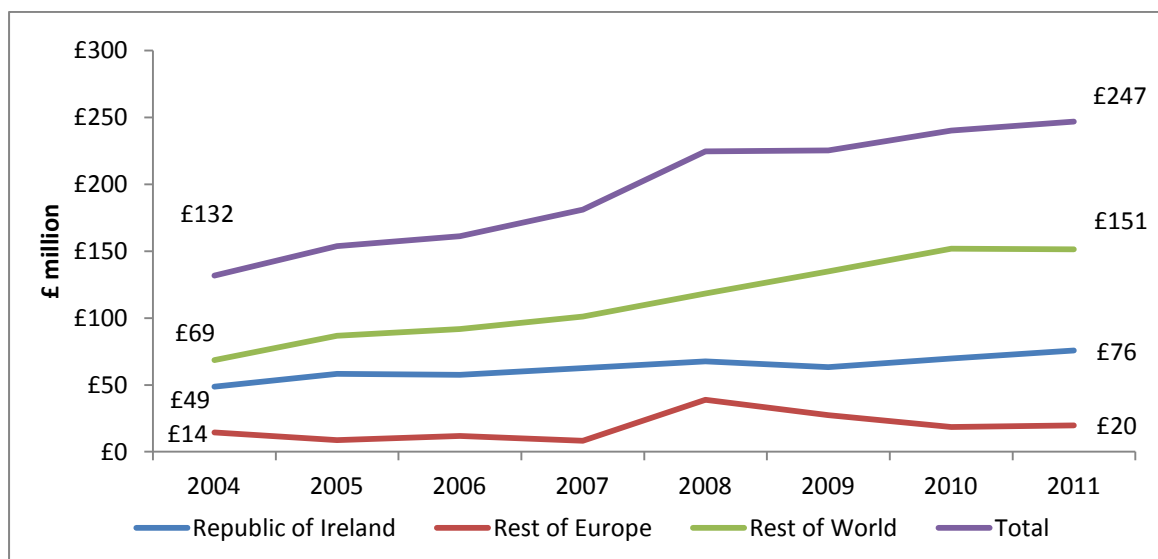
Combined service sector exports for the HEPG, Manufacturing, and Construction sectors are available from 2006 to 2011 with an overall positive trend over the period.

Figure 11: ENIS Exports 2006 - 2011



The level of detail available on the destination of service sector exports is limited and is only available for HEPG companies (about half of total service sector exports). Three regional groupings of service sector export destinations are available, the Republic of Ireland, the Rest of European Union and the Rest of the World.

Figure 12: Destination of ENIS HEPG Services Exports 2004 - 2011



Service sector exports by the HEPG group rose continuously over the period, driven largely by the increase in exports to Rest of the World. Exports to RoI have risen positively over time, while the trend in value of exports to Rest of European Union over time is broadly flat.

4.4 DARD Food and Drinks Processing Exports

4.4.1 Most Recent Year

In 2011 sales to Great Britain (40%) and NI (31%) accounted for the majority of total sales in the Food and Drinks Processing sector, with exports (29%) accounted for the remainder. The total value of exports in 2011 was £1,153m.

Table 7	(2011)	%
Destinations of Sales	£m	
Total Sales	£3,985	
External Sales	£2,750	69%
Great Britain	£1,596	40%
Exports	£1,153	29%
Northern Ireland	£1,236	31%
Exports	£1,153	
Republic of Ireland	£651	56%
Rest of EU	£404	35%
Rest of World	£98	8%

The RoI is the main export market for Food and Drinks , accounting for over half of the total.

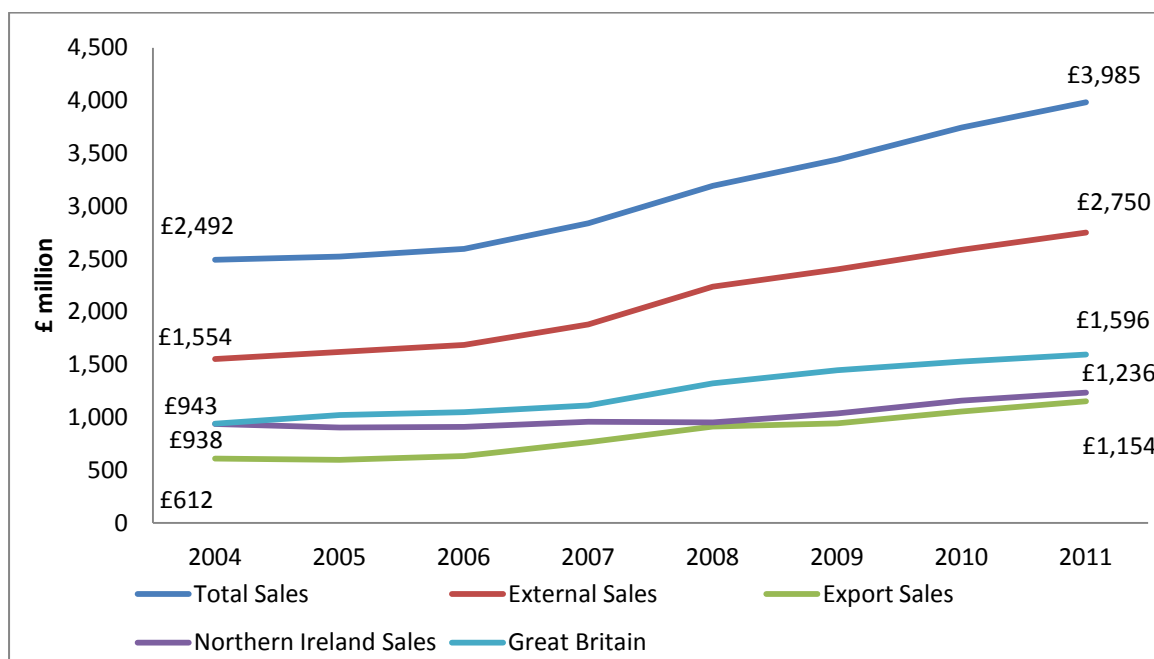
The Rest of EU makes up the next largest group and less than 10% of agricultural exports goes to the Rest of the World.

Of the individual subsectors within Food and Drinks Processing, three subsectors make up over 70% of exports: Milk & Milk Products (36%); Beef & Sheepmeat (20%); and Drinks (15%).

Table 8	(2011)	%
Export Sales by Subsector	£m	
Animal By-Products	£6	<1%
Bakeries	£63	5%
Beef & Sheepmeat	£236	20%
Drinks	£177	15%
Eggs	£6	<1%
Fish	£37	3%
Fruit & Vegetables	£54	5%
Milk & Milk Products	£415	36%
Pigmeat	£51	4%
Poultrymeat	£110	10%
Total	£1,153	100%

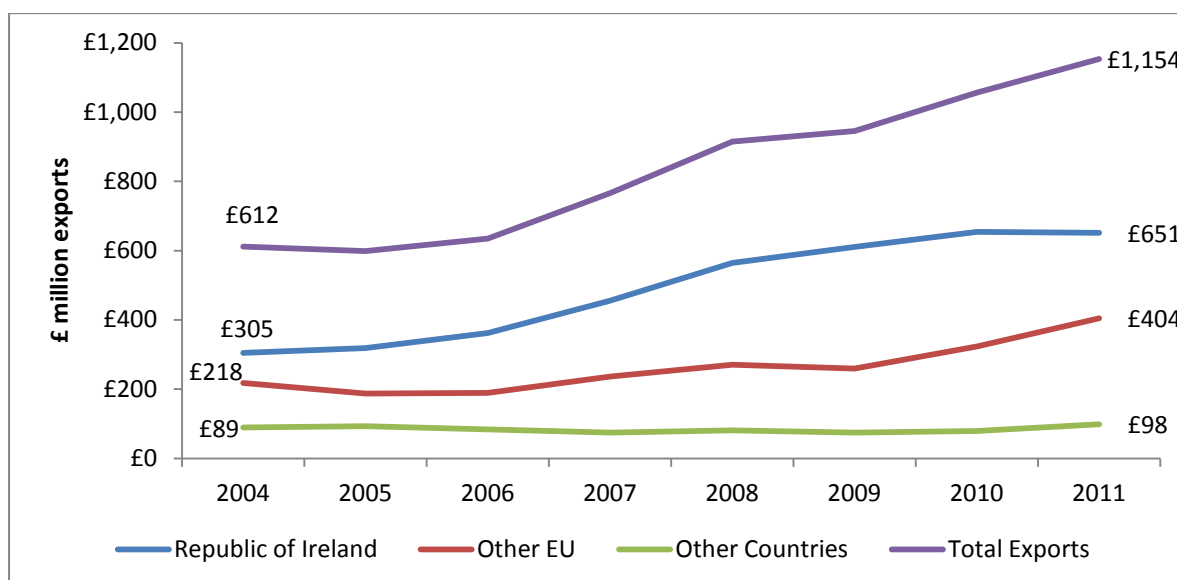
4.4.2 Trends (2004 to 2011)

Figure 13: Agriculture Total Sales, External Sales and Exports 2004 - 2011



Aside from NI Sales which were relatively flat to 2008, other trends show increasing sales over time. However, the gap between exports and sales within NI has narrowed while it has increased when compared to the stronger growth in external sales.

Figure 14: Destination of Agricultural Exports 2004 - 2011



In relation to exports, the RoI is the dominant market where sales have increased year on year from 2004 to 2010. Sales to other EU countries have shown steady increases from 2006 to 2011. In contrast, agricultural exports beyond the EU are relatively small and have remained stable throughout the period.

4.5 Foreign Tourism Expenditure

Estimates of tourism expenditure in NI are only available for 2011 and 2012.

Total spend by all tourists (including NI and GB residents) staying at least one overnight in NI was £640m in 2011 and £683m in 2012.

Table 9 Foreign Tourism Expenditure	2011	2012
	£m	£m
NI visitors	£177	£195
GB visitors	£235	£244
Rol visitors	£59	£70
Overseas visitors	£168	£174
Total external expenditure	£463	£488
Total foreign tourism expenditure	£227	£244
Total tourism expenditure	£640	£683

In terms of exports, foreign tourism (overseas visitors and visitors from the Rol) contributed £244m to the NI economy in 2012. In terms of tourism-based exports, overseas visitors expenditure accounted for the vast majority (71%) although spend by Rol tourists make a significant contribution (29%) to the total.

5.0 CREATING AN AGGREGATE EXPORTS MEASURE

NI, in common with most regions within the UK, does not have a whole economy measure of exports similar to the Global Connections Study in Scotland. The developments being taken forward by the ELMS branch of NISRA in combining surveys and enhancing sample size and coverage, due for initial publication in Spring 2014, will go some way to addressing this (Section 3.1).

However, unlike most other regions within the UK, NI does have several existing sources of good quality information relating to exports with trend data available for a number of years and which are generally accepted as being robust and fit for purpose.

5.1 Aggregating exports

The core thrust of the current paper was to consider if and how, these disparate sources of export data could be combined and what options were available for going forward.

The total values for exports from the various available sources within NI and from HMRC Regional Trade Statistics are summarised below. Export data for ENIS, foreign tourism expenditure and DARD relate to calendar year. Data for MSES refers to financial year. On that basis, and to maintain consistency with the MSES, HMRC RTS data has been included on a financial year basis.

Table 10	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12
Sources of NI Exports	(£m)	(£m)	(£m)	(£m)	(£m)	(£m)
MSES	£5,032	£5,444	£5,727	£5,087	£4,811	£5,238
ENIS	£411	£442	£510	£496	£443	£495
Tourism	-	-	-	-	-	£227
DARD (Agriculture)	£635	£766	£915	£945	£1,057	£1,153
HMRC RTS	£5,217	£5,588	£6,054	£5,103	£5,737	£6,011

Note: Tourism foreign expenditure is only available from 2011/12

In principle, it should be entirely possible to combine different sources of export data which are collected on a non-overlapping sectoral basis, with each measure individually weighted to population totals. There are potentially a number of ways in which this data can be brought together to provide a broader estimate of NI exports and, inevitably, each particular perspective will have strengths and weaknesses.

One core principle in considering aggregating the export data however is no combination of HMRC RTS and MSES data is possible. Given that the overlap in coverage between these two sources is considerable and, in the absence of access to HMRC RTS micro data to investigate further, combining both sources in a meaningful way will not be possible.

Given that MSES and HMRC RTS data cannot be combined, two alternative approaches, one MSES-based and one HMRC-based seemed appropriate. Table 11 below indicates the

outturn of combining HMRC RTS data with ENIS and Tourism export data compared against the combination of MSES data with ENIS, Tourism, and DARD export data.

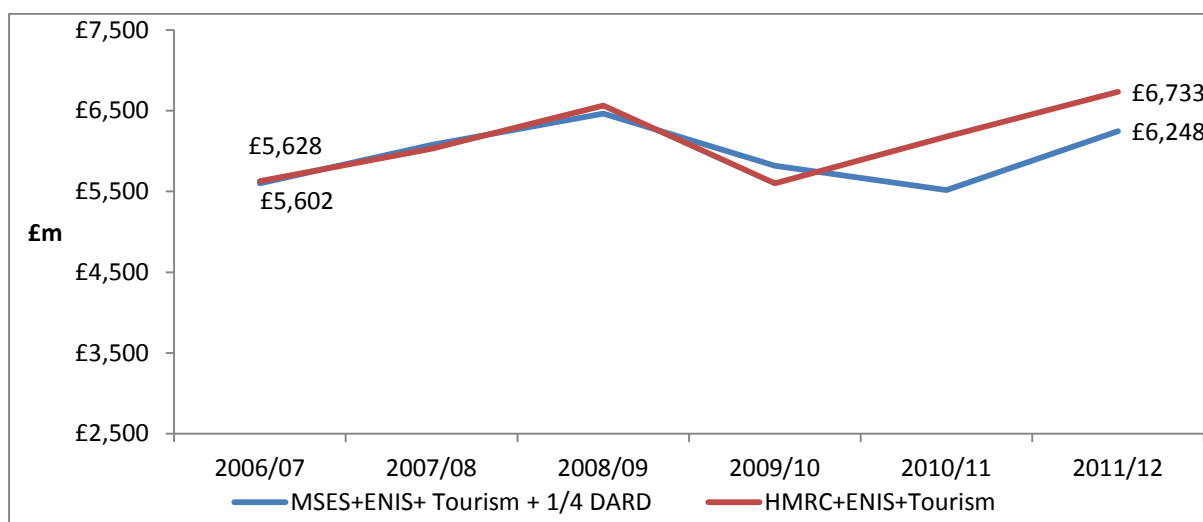
A number of adjustments had to be made in combining data sources. In calculating the HMRC-based measure, the assumption has been made that coverage of DARD export data from the Food and Drinks Processing sector by HMRC RTS is more or less complete and that inclusion of DARD data would be entirely duplicative. In calculating the MSES-based measure, the known overlap in coverage between both the MSES and DARD Food and Drinks Processing sector exports was explored. Inevitably the degree of overlap between the MSES and DARD export data will vary in scale over time. Whilst work remains to be done to firm up the estimation of overlap, initial investigation suggests that an estimate of a 75% overlap between the two sources appears plausible. In other words, around ¾ of the DARD Food and Drinks Processing sector exports are likely to be included in MSES export figures.

Table 11 Aggregate export measure	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12
	(£m)	(£m)	(£m)	(£m)	(£m)	(£m)
HMRC based aggregate measure (HMRC RTS plus ENIS plus Tourism)	£5,628	£6,030	£6,564	£5,599	£6,180	£6,733
MSES based aggregate measure (MSES plus ENIS plus Tourism plus ¼ DARD)	£5,602	£6,078	£6,466	£5,819	£5,518	£6,248

For simplicity, from herein, the two aggregate export measures are described as ‘HMRC-based’ and ‘MSES-based’ aggregate export measures.

Encouragingly (aside from 2010/11) the two separate aggregate export measures result in trends over time that are broadly similar although the HMRC-based measure produces higher estimates of total exports in four of the six periods.

Figure 15: HMRC-based compared to MSES-based aggregate measure 2006/07 – 2011/12

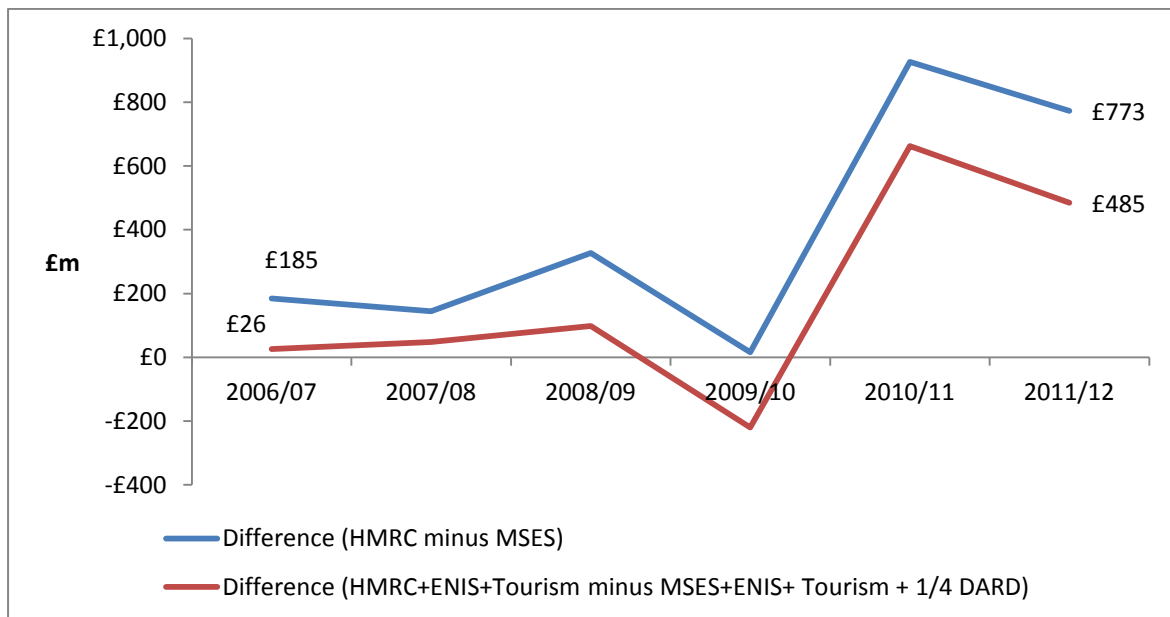


As noted previously, the introduction of a new Standard Industrial Classification system in 2008/09 (SIC07) effectively introduced a discontinuity in the business survey exports data (MSES and ENIS) with previous years based on the SIC03 classification.

It is worth noting however, that the differences between the values for total exports derived from these aggregate measures are lower in five of the six periods than the difference seen between the individual HMRC RTS and MSES export estimates. That is, the two aggregate measures of total exports results in differences which are generally less than those seen between the two individual measures of exports (HMRC RTS and MSES) which are the two most directly comparable.

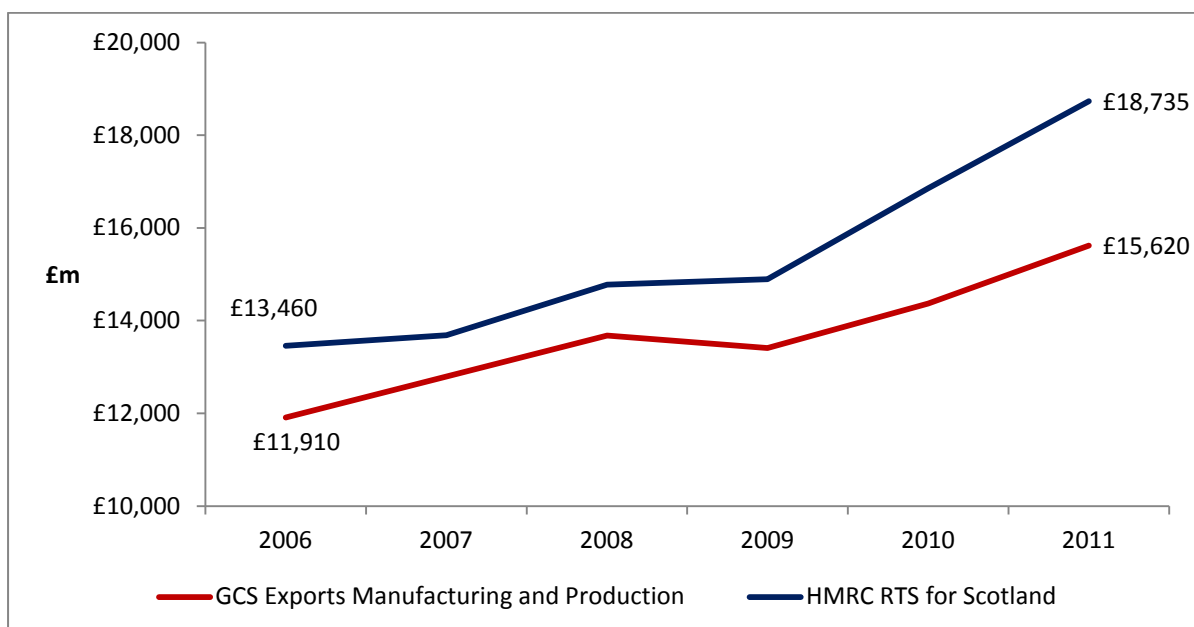
Table 12 Difference estimation	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12
	(£m)	(£m)	(£m)	(£m)	(£m)	(£m)
HMRC based minus MSES based aggregate export measures	£26	£48	£98	-£220	£662	£485
HMRC - MSES	£185	£144	£327	£16	£926	£773

Figure 16: Differences between NI HMRC-based and MSES-based aggregate export measures; Differences between NI HMRC RTS and MSES 2006/07 – 2011/12



In assessing the scale of the difference between the two NI aggregate export measures, a useful comparison can be made with analyses reported within the Scottish Government Statistical Bulletin on Scotland’s Global Connections Survey²⁴ (Figures 17–19). That bulletin compared the findings from the Manufacturing and Production element of the GCS to HMRC RTS export estimates for Scotland (in 2011, Manufacturing and Production accounted for almost two-thirds (65%) of all GCS exports).

Figure 17: Scottish GCS Manufacturing & Production Exports and HMRC RTS Exports 2006-2011



²⁴ Note: HMRC figures used here are revised figures and are different to those produced in the 2013 GCS publication.

Comparing the differences in both Scottish and NI export estimates between HMRC RTS and regional survey sources show clearly that both the absolute value and the proportionate difference in the separate estimates within each region are greater for Scotland.

Figure 18: Scottish GCS (SIC 10-33), Northern Ireland MSES (SIC 10-33) and HMRC RTS Exports

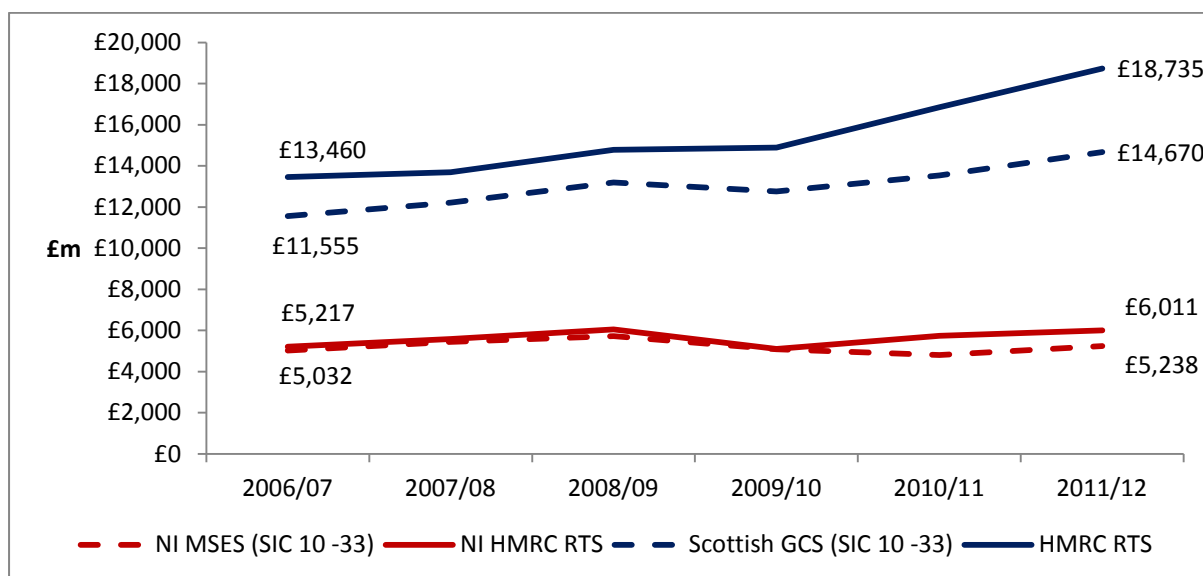
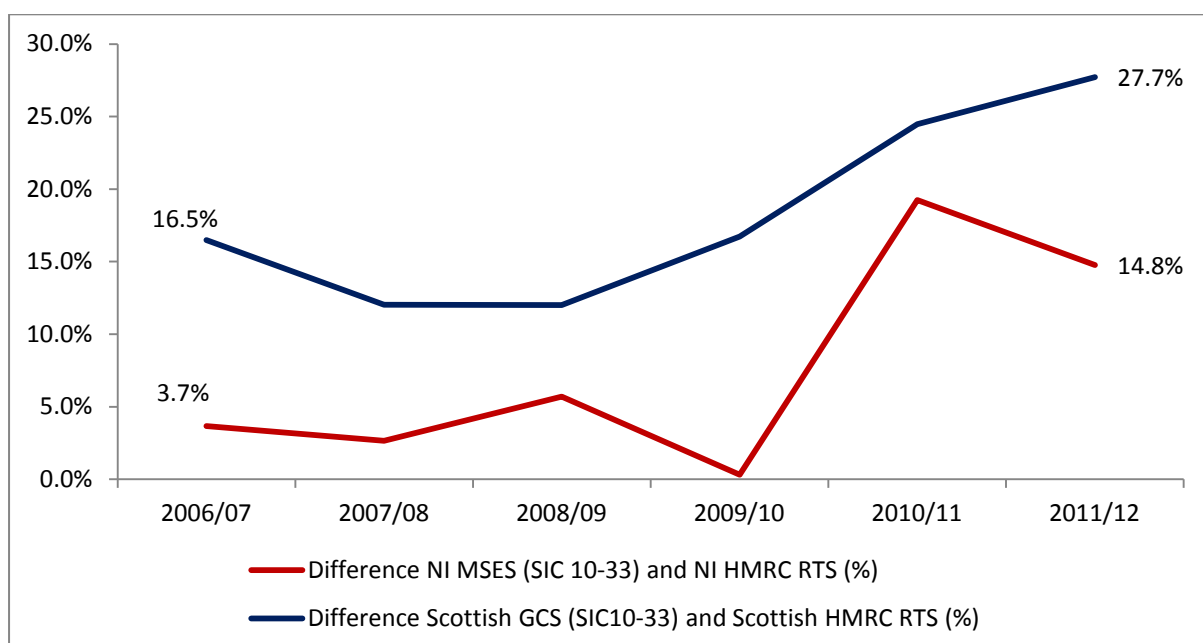


Figure 19: Proportionate differences between Scottish GCS (SIC 10-33), Northern Ireland MSES (SIC 10-33) and HMRC RTS Exports



So, for example, in 2011/12 Scottish estimates of exports from the HMRC RTS were 27.7% higher than those from the Manufacturing and Production SIC 10-33 element of the Global

Connections Survey compared to NI HMRC RTS exports estimates being 14.8% higher than the MSES. There is some comfort for NI in terms of the comparability of both the administrative HMRC RTS export estimates and those derived from the MSES given the relatively larger differences in exports estimates generated in Scotland between HMRC RTS and the Manufacturing and Production element of their GCS estimates. As can be seen from all the years in the period shown, the NI MSES estimate is closer to its HMRC RTS equivalent than the Scottish GCS estimate (SIC 10-33) is to Scottish HMRC RTS.

5.2 Strengths and Weaknesses

Two potential aggregated measures for NI exports have been identified. The HMRC-based measure combines HMRC data which reports on exports of goods together with services exports derived from ENIS and estimates of foreign tourism expenditure. The MSES-based aggregate measure of exports is largely survey-based including the MSES, ENIS, foreign tourism expenditure and DARD estimates of exports in the Food and Drinks Processing sector.

In the previous two years (2010/11 and 2011/12), the HMRC-based measure has generated the higher value of annual exports with a difference of around £662m and £485m respectively. The difference between the two aggregated measures is driven largely by the difference in exports estimates generated by the MSES and HMRC RTS. Nevertheless, comparisons of similar Scottish measures indicate that the export estimates from NI MSES and HMRC RTS are more similar indicating a better degree of coherence.

An unknown issue remains the enhancements to the ABI in combining the ABI with the MSES and enlargement of the survey sample. In theory, these changes should enable a more complete estimate to be made of the value of manufacturing and services exports and it is likely that, due to the more complete coverage of the economy, a higher value of exports from NI will be reported.

In assessing in the round, Table 13 below details potential strengths and weaknesses of each aggregate measure.

Table 13: Summary of strengths and weaknesses of each aggregate export measure

Aggregate export measure	Strengths	Weaknesses
MSES-based (MSES plus ENIS plus Tourism plus ¼ DARD)	Largely survey-based and may be possible to estimate confidence intervals around overall estimate	Individual components have associated confidence intervals
	Estimation should be possible for export destination in terms of: Rest of World, Rest of EU and RoI	Coverage of component parts is currently a mixture of calendar and financial years
	Potential improvement to the coverage of goods and services exports will be achieved through the changes to the ABI/MSES	MSES coverage enables a more subtle analysis of destination including BRICs and CIVETs but this cannot be done for the other sources of export data
	With the potential exception of DARD data, survey based sources use similar classifications and approaches	Delays in publishing annual data
	Access to all underpinning data (with the exception of some DARD estimation for small exporters) is available	Interpreting changes over time is likely to be more challenging given that the aggregate measure is broadly survey-based and as a result, a better measure of general trends than year-on-year change
	Survey data offers potentially greater flexibility and opportunities for broader ad hoc analysis and potential to adapt to future circumstances	
	Local sources all amenable to input in terms of availability and methodology	
	Possible to place exports within the context of sales and external sales	
HMRC RTS-based (HMRC RTS plus ENIS plus Tourism)	Largely based on administrative sources and less sensitive to issues of sampling error	Aggregate measure uses a combination of administrative and survey-based estimates reflecting different methodologies
	This measure should benefit from developments taking place to improve estimation of services exports	No access to HMRC RTS micro data limiting the investigation of any emergent issues
	Fewer separate sources comprise the overall measure	A significant amount of UK regional exports (approximately 12%) are unallocated to a region
	HMRC RTS provides a consistent basis for comparison with the UK as a whole and for regions within the UK	No control over the availability and methodology of HMRC RTS
	Detailed destination level available for the HMRC element of this aggregate measure	Not possible to put manufacturing exports into the context of sales and external sales without reference to MSES which would introduce a fourth source
	HMRC quarterly data is much more timely than the survey sources and is easy to access via the HMRC website	HMRC RTS data is subject to regular revision which can impact on previous historic estimates. These revisions have the potential to considerably change NI estimates with the potential to confuse stakeholders

In considering the two approaches to produce an aggregate measure of NI exports in the round, the conclusion reached here is that the survey-based aggregate approach to measuring NI exports offers the best way forward. Not only does a survey-based approach allow exports to be measured along with external sales to GB, but the planned and imminent improvements to coverage via the new ABI-based measure of exports further enhances the strengths of this approach illustrating the benefits of using and relying on sources of data over which there is scope for considerable input to the underpinning methodology, analyses and reporting.

5.3 Further issues

This paper has considered the possibility of developing an aggregate measure of NI exports from existing sources and on that basis, two potential measures have been identified and a preferred measure identified. However in considering further, a number of issues remain outstanding:

- Further work is needed to investigate the extent of overlap in export estimates between the MSES and the DARD estimates of the Food and Drinks processing sector exports and how this varies over time, in addition to investigating other sources of DARD exports which are not covered by either the MSES or Food and Drinks processing (e.g. live animals).
- Whilst likely to be relatively small in value in the context of the totality of NI exports, the issue of Financial Services exports requires some consideration and to what extent this will be addressed by developments taking place within the Office for National Statistics regarding a new survey of the Financial Sector.
- Developing a methodology to calculate and apply confidence intervals to overall aggregate export estimates generated from survey sources should be explored. NISRA Tourism estimates for expenditure are based on an aggregation of data from different surveys and recent developments there may help form the basis for taking forward this work
- The impact of combining the ABI together with the MSES needs fully considered in due course when the first estimates are published in Spring 2014 in the context of aggregate measures of NI exports
- The timeliness of the new ABI-based measure is an important issue for the future. At the moment, 2011 and 2012 data is likely to be published in early 2014/15. It is important to pursue avenues to achieve an earlier release of information such as a First Release or Headline Findings in advance of more complete reporting. Given the stage of development underway however, it is unlikely significant developments in relation to timeliness of reporting will be possible in the short-term as the new methodologies settle and are reviewed.

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