



The Scottish Parliament  
Pàrlamaid na h-Alba

## ECONOMY, JOBS AND FAIR WORK COMMITTEE

### AGENDA

25th Meeting, 2017 (Session 5)

Tuesday 3 October 2017

The Committee will meet at 9.30 am in the David Livingstone Room (CR6).

1. **Decision on taking business in private:** The Committee will decide whether to take items 3 and 4 in private.
2. **Economic Data:** The Committee will take evidence from—  
  
Dr Stuart McIntyre, Fraser of Allander Institute;  
  
Professor David Bell, Professor of Economics, University of Stirling;  
  
and then from—  
  
Kenny Richmond, Economics Director, Scottish Enterprise;  
  
Alastair Nicolson, Head of Planning and Partnerships, Highlands and Islands Enterprise;  
  
Gemma Diamond, Senior Manager, Audit Scotland.
3. **Economic Data:** The Committee will consider evidence heard at today's meeting.
4. **Performance of the Scottish Economy:** The Committee will consider its approach to the inquiry.

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The papers for this meeting are as follows—

**Agenda Item 2**

PRIVATE PAPER

EJFW/S5/17/25/1  
(P)

Written submission from Fraser of Allander Institute

EJFW/S5/17/25/2

Written submission from Scottish Enterprise

EJFW/S5/17/25/3

Written submission from Highlands and Islands Enterprise

EJFW/S5/17/25/4

**Agenda Item 4**

PRIVATE PAPER

EJFW/S5/17/25/5  
(P)

## Submission from the FAI to Inquiry into Economic Statistics

September 2017

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### Introduction

We welcome the Scottish Parliament Economy, Jobs and Fair Work Committee's inquiry into economic statistics in Scotland.

Significant progress has been made since devolution to improve the coverage and quality of economic statistics in Scotland. Scotland is much better served than the other devolved nations (and English regions) in terms of economic statistics.

However, there is work still to be done. In particular –

- There are a number of gaps – for example, we lack robust statistics on things like Gross National Income, capital investment, inter-regional trade and prices that independent governments would routinely collect.
- Some of the data that underpin core elements of Scottish economic statistics rely upon apportionment of UK figures rather than bottom-up Scottish-specific data. Whilst this is understandable given resource constraints, more be-spoke estimates would be beneficial.
- Like the UK as a whole, there remain ongoing challenges in sampling and response rates to surveys. Some response rates – e.g. the Labour Force – are falling whilst for others – e.g. the Living Cost and Food Survey – the sample size for Scotland is small.

The Scottish Government should be commended for investing in a distinctly 'Scottish' economic statistics unit in government. Further investment would be welcome however, particularly in the light of the new economic and fiscal powers coming to Holyrood.

New investment on its own will not deliver the step-change that many people would like to see. For this, other reforms – for example around how UK businesses report their activities – would be needed. At the same time, as ONS continue to make better use of administrative data it is important that data sharing and access arrangements are established to enable the Scottish Government to also benefit from these reforms.

## Coverage of economic statistics in Scotland

For the purposes of this submission, we focus upon what we would describe as the core macroeconomic and microeconomic indicators of economic performance.

Between the Office for National Statistics and the Scottish Government data include –

- Gross Domestic Product – including by industry and sector
- National Accounts
- Input-Output tables
- Export statistics
- Labour market statistics – including unemployment, employment and earnings
- Public sector finances (GERS)
- Statistics on the number of businesses in Scotland, key sectors and R&D expenditure
- Statistics on ‘hot topics’ – innovation, access to finance
- Statistics on household incomes

This is a comprehensive set of statistics. It provides a broad coverage of the key issues that businesses and policymakers are most interested in.

It also meets the needs of many key users.

In the FAI, we use all these statistics in our commentary and analysis of the Scottish economy. More generally, the statistics produced are vital for academic research. For example, the Input-Output tables underpin the core macroeconomic and forecasting models in Scotland. Much of our own academic research over the past 20 years has centred upon using the Scottish economy as a case-study of how ‘regional’ economies operate and the risks and opportunities that follow.

The coverage is well-ahead of any other part of the UK. For example, Scotland is the only part of the UK to produce a regular quarterly GDP release. The Scottish Government has invested time and effort in recent years to develop new economic statistical products, via in the main the Scottish National Accounts Project.

The Scottish Government also boosts key datasets by paying for additional samples allowing greater analysis to be conducted. This includes the Annual Population Survey, the Family Resource Survey, the Annual Business Survey, the Business Register and Employment Survey and, more recently the Living Costs and Food Survey.

That being said, there are a number of important gaps.

- *Gross National Income (GNI)* – is arguably a preferable measure of economic prosperity than GDP. This has only been produced once – on an experimental basis – for Scotland. GNI is particularly difficult to measure and will require a much better understanding of how income is produced and distributed across the Scottish economy. Data on financial flows in and out of Scotland are largely unknown. We have for example, despite its importance in the policy landscape, very little in the way of robust data on international investment (FDI) to Scotland.
- *Prices* – there are no separate price indices for Scotland. This is a limitation in compiling real-terms series such as trends in earnings, poverty or changes in government budgets.
- *Imports* – there are only limited official estimates of imports to Scotland from overseas or the UK. In the National Accounts, rather than being measured directly they are estimated as a balancing (residual) item.
- *Capital investment* – there is little in the way of data on investment for Scotland either in the aggregate or by sector.
- *Treatment of the North Sea* – the Scottish Government has invested significantly to improve its coverage of the North Sea. This has included more robust estimates of the share of revenues raised from the profits of offshore oil and gas operators, output, investment and exports. However, much less is known about the linkages between the *onshore* and *offshore* Scottish economies.
- *Longitudinal data* – there is very limited data on a longitudinal basis of Scottish households – particularly in terms of issues like income, wealth and spending.

A further challenge is that in certain instances, the underlying samples that are used to compile the statistics for Scotland are relatively small so that, although aggregate data are available, it is not possible to drill down to some of the core policy issues.

For example, whilst the quarterly LFS sample for Scotland contains over 7,000 individual responses once the data are cut by age, sex, region, occupation, reason for inactivity etc. the number of individuals being surveyed for each cell falls dramatically.

Regional data in Scotland are available – for example, the Scottish Government publishes the Annual Business Survey at a local level (supported by a Scottish Government boost).

Robustness is understandably more limited than for Scotland as a whole and much of the data on the labour market that do exist are a mixture of actual and modelled data.

## Areas of focus

Quite often, debates on Scottish economic statistics can often centre on changes in headline figures – e.g. has GDP grown faster or slower than the UK as a whole? – or how the figures can be interpreted as informing – in one way or the other – the constitutional debate.

Whilst this is understandable, from a policy perspective improving the coverage of microeconomic data in Scotland should be a key area of focus. For example, we have little information on what drives businesses to invest, export, etc. A number of organisations in Scotland – for example, Scottish Enterprise, Skills Development Scotland, HMRC etc. – collect information and data that can be useful here. Most of this is not official statistics. But in terms of improving our understanding of the key opportunities and barriers it is useful. Examining how Scotland can make full use not just of official statistics but data held by public bodies and – in the future – administrative data offers an opportunity. As part of this, a commitment to data sharing is a must.

## Accuracy

We have no doubt that the quality and integrity of the economic statistics produced for Scotland – both by the ONS and the Scottish Government – is of a high standard.

The Scottish Government works hard to ensure that its statistical publications meet all the requirements for Official Statistics, with most being classified as National Statistics<sup>1</sup>.

It should be borne in mind however, that all statistical estimates come with a degree of uncertainty and variability. For example, the confidence interval around the headline unemployment rate for Scotland is 0.8 percentage points.

In the main, Scottish economic statistics draw upon a mix of UK data apportioned to Scotland – e.g. by employment share etc, disaggregated company or household data from UK datasets (sometimes boosted by the Scottish Government) or surveys undertaken of Scottish companies.

Where Scottish specific data can be used then this will be preferable. However, the Scottish Government faces three challenges:

1. Be-spoke Scottish survey data are costly – both for government, firms and households

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<sup>1</sup> [www.statisticsauthority.gov.uk/osr/code-of-practice/](http://www.statisticsauthority.gov.uk/osr/code-of-practice/)

2. Unlike the ONS, the Scottish Government is not empowered to insist on a response to requests for data or information<sup>2</sup>;
3. Companies are not required to provide separate reporting units for Scottish activities vis-à-vis the rest of GB.

There is precedent for alternative arrangements in a devolved context. The Northern Ireland Executive has statutory powers – via the Statistics of Trade and Employment (Northern Ireland) Order 1988 – to enforce participation in its Annual Business Inquiry.

Giving the Scottish Government greater authority to access unique data for Scotland on business activity would be a major step forward. To do this, the first hurdle to overcome would be the need to establish separate reporting units for business activities in Scotland and the rest of GB. For most small businesses in Scotland, this would have no impact. But for large companies, this would require a change in how they measure and report their activities. Care would be needed to not overburden businesses. Some form of approximation could be used.

The second hurdle would be actually collecting the data. Running a separate business survey – like in Northern Ireland – would be a major undertaking. As we move toward greater use of administrative data – particularly replacing traditional surveys with real data that companies report for example to HMRC on a regular basis – finding a way for Scottish Government statisticians to access this information through data sharing agreements would be preferable.

In an ideal world, this could be topped up by powers to successfully carry out focussed surveys on the likes of exports and investment.

## Other issues

There are a number of particular issues that are worth highlighting –

- As emphasised above, we believe that an important area of focus should be on understanding the links between the onshore and offshore Scottish economies. Currently activity between the onshore Scottish economy and the UK continental shelf is classified as an ‘export’ to the rest of the UK. This strikes us as odd. It also means that measuring how shocks to the offshore economy – e.g. the recent collapse in the oil price – feed through to the Scottish economy is extremely difficult.

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<sup>2</sup> At the moment most ONS business surveys – which underpin key macroeconomic and microeconomic data – are conducted under Section 1 of the Statistics of Trade Act 1947. This requires businesses by law to provide the information requested.

- Scottish trade statistics are the subject of much scrutiny – some of it unfair. But there are issues around understanding the flow of goods and services and the operation of the UK supply chain – some of which may be onward exported – which need to be studied in greater detail.
- The Scottish Government not only produces economic statistics, but Scottish Ministers also comment, interpret and make policy based upon them. The statistics are without question prepared and published to the highest standards and are free from political interference. However, it is a requirement for membership of the EU to have a statistical agency separate from the government. As Scotland continues to grow and develop its economic and fiscal institutions, this is something that they may wish to be reflected upon in time.
- Any review of Scottish economic statistics needs to take account of the wider debate about the relevance and timeliness of economic statistics internationally. In recent years, there have been criticisms of whether the methods used to compile statistics are fit for purpose for a modern and dynamic economy in the 21<sup>st</sup> century. A number of issues arise from this, including whether survey-based reporting fully captures all economic activity, especially in a more digital world, and whether better use can be made of administrative and other data. Developments like the new Economic Statistical Centre of Excellence should help.

## Conclusions

We very much support the Scottish Government's efforts to improve the coverage of economic statistics in Scotland. Our understanding of how the Scottish economy operates is greatly improved by their work. Debates over policy are also much better informed than they would otherwise be.

That being said, there are areas for improvement.

Coverage is lacking in a number of important areas, particularly prices and inter-regional trade. Sample sizes can often make analysis underneath the headline figures challenging.

The solution to this is not just more resource. Looking at how economic data are collected and reported in Scotland (and the UK) is arguably more important. The Digital Economy Act is giving ONS much better access to a wide range of data from government and business. Building on this presents an opportunity to transform the quality of economic statistics in Scotland.

## Economic Data Inquiry

### Highlands and Islands Enterprise

#### Highlands and Islands Enterprise (HIE)

HIE is the Scottish Government's economic and community development agency for the north and west of Scotland. Our purpose is to generate sustainable economic growth across the Highlands and Islands, ensuring that it is a highly successful and competitive region in which increasing numbers of people choose to live, work, study and invest.

#### Introduction

Highlands and Islands Enterprise (HIE) welcome the opportunity to contribute to this important inquiry into the accuracy, utility and comprehensibility of Scottish economic statistics.

#### Background

HIE is the Scottish Government's economic and community development agency for the north and west of Scotland, an area which covers half of the Scottish landmass, including over 90 inhabited islands, but home to under 10% of the Scottish population. The region is a diverse area, extending from Shetland to Argyll, and from the Outer Hebrides to Moray. In the UK context, it covers 1/6th of the landmass but is home to less than 0.7% of the population, making it by far the most sparsely populated region in the UK.

The make-up of the Highlands and Islands economy is quite different from the rest of the country, making analysis and interpretation of statistics more challenging. In particular:

- The economy is dominated by SME's, and self-employment rates are higher than elsewhere in the country;
- Average earnings for the self-employed in the region tend to be lower than average earnings for employees, due to the reliance on agriculture and other primary industries, the predominance of tourism to rural areas and the tendency for people to have a number of part-time occupations in areas where economic opportunities are scarce;
- The region has a less high-value added manufacturing sector and a less developed business and financial services sector

In the Highlands and Islands some 81.5% of the workforce is economically active. Unemployment rates (claimant count) in this region have been lower than Scottish figures for the past seven years and the current rate at 1.9% remains well below the Scottish figure of 2.4%. However, these positive factors need to be balanced against the challenge of stemming the out-migration of young people – particularly from the more fragile parts of the region - and providing employment opportunities available in other parts of the country and help raise household incomes up towards the national average.

## Accuracy

### **How reliable is the economic data currently available at the Scottish level?**

There is good coverage of the main economic indicators at the Scottish level with adequate sample sizes for key UK surveys, providing reliable data with which to compare Scotland alongside other national economies.

Robust coverage allows for detailed interpretation of economic performance across GDP output, productivity, export activity, innovation and the functioning of the labour market over time.

### **What are the strengths and weaknesses of provision within Scotland and at UK levels?**

Economic data meets all international standards at the UK level and is robust at the Scottish level but reliability and representativeness diminishes at smaller geographies.

Due to the economic make-up of the area, national statistics are unable to accurately reflect the conditions experienced in the region, making analysis and interpretation of statistics a more challenging task. Reliance on returns from large employers, and the lack of regular information on the self-employed introduces a complexity to the interpretation. In addition, some of the national surveys undertaken in the region lack value from a policy making perspective, as the samples are so small and provide only limited coverage of the region (sampling is often undertaken at the UK level).

While (claimant count) unemployment data is very timely and informative, the Economic Output (GVA) data at regional level is two years old before it is published, reducing its value as a tool to inform policy interventions.

### **What could be done by Scottish Government and/or others to improve the quality of data? How would this be funded?**

Data needs to be robust, timely, coherent and accessible in order to inform local evidence-based policy. Continued dialogue between statistical providers and public sector organisations will allow for an improvement in the accuracy and robustness of statistics across all geographies.

The Scottish Economic Statistics Consultancy Group (SESCG) and Scotstat are useful vehicles for discussing the accuracy and comprehensibility of Scottish economic statistics. The creation of a new data Analytical Unit as proposed by the Enterprise and Skills Review could help identify data quality issues at the sub-Scotland level to improve the quality of data produced, considering how best to augment national statistics with information from internal records, big data and minimising methodological differences and anomalies in key datasets.

### **Do you have any views on how data is collected, specifically the role of businesses and households in providing economic data?**

Augmenting national statistics with information gathered for other purposes, particularly utilising HMRC data on pay for the Annual Survey of Hours and Earnings (ASHE) analysis, would be beneficial. The use of 'big' and 'open' data is a useful way to inform our understanding of issues, challenges and progress made in small geographies.

### **Utility**

#### **How are economic statistics used by local, regional and national policy makers to deliver and scrutinise policy?**

As a Scottish Government agency, HIE's role is to lead regional growth and development across the Highlands and Islands, supporting the rural economy and improving competitiveness to help build a fairer, more prosperous and inclusive society.

In the course of its work, HIE utilise a range of national statistics to help understand the workings of the regional economy and constituent sub-economies.

ONS and Scottish Government data underpin the majority of this analysis and is integral to making important decisions on resource allocation and implementing Scotland's Economic Strategy.

HIE utilise economic data for relevant geographies beneath the Scotland geography, at the Highlands and Islands level as a whole; at HIE's eight area office geographies; at settlement and locality level and at individual community level.

Data is used to examine socio-economic trends over time across these geographies, with a focus predominately on demographics, economic activity and unemployment. These data outputs are analysed regularly in economic briefings, area and sectoral profiles and general economic context to inform strategic thinking and decisions on resource allocation.

Given the remote and sparsely populated characteristics of the Highlands and Islands, HIE looks for robustness in data sources to identify, interpret and respond to changes in local labour markets and other socio-economic issues. Small area data analysis helps HIE identify the communities most in need of development support from public sector agencies to tackle their distinct challenges.

#### **Where are the gaps in provision?**

The following points address some of the gaps in provision for the region and identify mitigating actions to help improve the accuracy of statistics for smaller geographies-

- The geographic nature of the Highlands and Islands means that the economy does not operate as a single cohesive unit and therefore data at the NUTS III or even more local level would be extremely useful for monitoring intra-regional differences. The development of other indicators to provide a better picture of local economic conditions is an idea we would be keen to support.

- HIE utilise BRES data to monitor changes in employment across sectors and sub-regional geographies. This is vital to the work that HIE is tasked with, in terms of supporting inclusive growth across many sparsely populated areas and fragile economies. While BRES is currently the best data source available for monitoring employment changes, coverage does need to be rebalanced to accurately reflect the changing nature of employment across the country. It would be beneficial if sample stratification was undertaken at a more granular geographic level to facilitate more detailed analysis at regional and sub-regional level to ensure robust data is available for areas with an economic make-up significantly different from the national picture. The fact that BRES does not cover all sectors of the economy is a fundamental weakness. This probably has a more significant impact on the Highlands and Islands than any other region of the UK, considering the relative importance of small-scale agricultural units to the local economy. Augmenting with data from other sources (i.e. agriculture census) would greatly strengthen data output.
- The SIC coding system does not offer the flexibility to capture data on emerging sectors which may not have a specific code (such as renewable energy) but may have higher growth potential and therefore require specific monitoring and support from regional development agencies.
- HIE utilise BERD statistics to understand R&D spend by Local Authority region. Innovation is an important driver of economic growth and is identified as one of the four priorities in Scotland's Economic Strategy. However, few data sources exist to measure the scale of R&D and innovation activities in the region, so efforts to address this through the BERD Survey are particularly important. Sample sizes in the BERD Survey are low in the more sparsely populated areas of the UK, such as the Highlands and Islands, which means that survey findings are often not published due to the disclosive nature of the data.
- It is not practicable to undertake any time series analysis of the ASHE survey findings at sub-regional level, with annual fluctuations in the data being impossible to explain. Earnings are a proxy for productivity and improved data, and utilising HMRC data on pay would be hugely beneficial in providing a clearer indication of the productivity challenges experienced in different parts of the region. Income data is used to inform policy development to tackle income inequalities and deprivation across the region, and is an important indicator to understand progress against key priorities within Scotland's Economic Strategy.
- Export Statistics Scotland provides detailed activity at the Scottish level but the samples used mean that data for the Highlands and Islands cannot be disclosed for analysis.
- Underemployment is a particular challenge for the region, particularly in more rural areas where pluri-activity is prominent, and people are often self-employed through necessity rather than through choice. Families in many

parts of the region have adopted a multi-occupational way of life, which enables the family unit to remain viable and sustains local services employing part-time, seasonal or casual staff who also have other jobs. It is not a new phenomenon in the Highlands and Islands and has been a feature of the regional economy for many years but little evidence exists to quantify fully the magnitude of underemployment in the region.

The benefits to government and agencies of improved regional statistics in this part of the country would be significant. While we appreciate that the associated cost could be an additional bureaucratic burden on businesses, the potential for utilising information gathered for other purposes to augment national statistics is worthy of detailed investigation. In particular, information from the agricultural sector and the self-employed is already gathered by government in a format that could be adapted to support the other work undertaken by ONS.

### **Can you identify examples of international good practice and case studies?**

OECD and Eurostat provide comprehensive publications utilising national economic datasets which help to compare performance across a range of indicators over time. This serves to provide a robust comparable picture in which to set the performance of the Highlands and Islands economy.

Scottish Government has an open-data platform hosted on [www.statistics.gov.scot](http://www.statistics.gov.scot) which helps to disseminate economic data to a wide audience.

The introduction of the new ONS Business Index will include data from four sources not currently included in the IDBR – the Insolvency register; Corporation Tax register; FCA register and the new self-assessment forms, which all businesses will be required to complete. This will produce data on unregistered enterprises, including small sole traders or partnerships with no employees and an annual turnover of less than the VAT threshold, which will improve the relevance and accuracy of statistics at the regional and sub-regional geographies.

### **Are there barriers preventing the Scottish or UK Governments from improving statistical provision?**

Statistical collection activities tend to focus on gathering and presenting data that meet international comparability standards. While the UK (and Scotland) produces high quality national statistics, focusing more on the needs of policy makers and the way in which evidence can help inform priorities and resource allocation in local areas could change the way in which data is collected and lead to more impactful and informed policy choices. Cross-agency collaboration and creative thinking could overcome many perceived barriers, including the cost of improving statistical provision.

### **Interpretation**

#### **What are the key issues in making sense of the data?**

Providing appropriate context to economic statistics is key to delivering accurate and informed economic intelligence to support strategic policy decisions. Continued

regular liaison, both formal and informal, across statistical departments and wider agencies should be supported and encouraged to ensure key data providers are kept up-to-date with the changing requirements of its customers.

### **What are the barriers to better understanding and how they might be overcome?**

It is imperative that most of the statutory economic datasets produced by ONS, Scottish Government and other data providers continue to be produced frequently and that any proposal to change methodological approaches or timing or publication does not impact on the quality and robustness of data outputs, a particular concern at small-area level.

In addition, any detailed thematic or policy focussed analysis would help in interpreting and understanding the pertinent issues to the national economy and relevance for smaller geographies. Allied to this, a clear overview of the statistical methods employed in producing the data would allow an accurate interpretation of results.

HIE would welcome the opportunity to scrutinise IDBR data from within our region to determine its accuracy and representation of the local business base, ensuring data is plausible given HIE's knowledge of the economic conditions in the area. Data cleansing is much easier to undertake with the benefit of local knowledge.

### **Scrutiny**

#### **What are we measuring and what should we be measuring?**

Reporting at a national level is accurate and detailed but the real challenge is in capturing robust data at smaller geographies to underpin understanding of the key issues and drivers facing the regional economy.

#### **Are the current National Performance Framework indicators the best way of measuring innovation, internationalisation, investment and inclusive growth in the Scottish economy?**

The National Performance Framework provides a clear vision for Scotland with broad measures of national wellbeing covering a range of economic, health, social and environmental indicators and targets. Its vision for a successful Scotland is described and measured in five parts which support and reinforce each other.

- **The Scottish Government's Purpose** sets out the direction and ambition for Scotland
- **Purpose Targets** are high level targets that show progress towards the Purpose
- **Strategic Objectives** describe where we will focus our actions
- **National Outcomes** describe what the Scottish Government wants to achieve and the kind of Scotland we want to see
- **National Indicators** enable us to track progress towards the Purpose and National Outcomes

The priorities within the strategy describe the types of intervention or the best approach to be taken to inform interventions taken forward by government and

agencies. However, it is Scotland Performs which conveys the progress being made at a national level towards our shared objectives.

**Conclusion**

Timely, accurate and comprehensive data contribute greatly to our understanding of what is happening in the economy and how resource allocation can best be targeted to increase impact in line with shared strategic objectives. While data quality at the Scottish level is very high, it is less so when broken down to the functional economic areas at which policy development is most impactful. HIE is keen to work with Government and partner agencies to explore ways in which data collection and dissemination methods can be developed and improved in the future

**Highlands and Islands Enterprise**

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# **Economic Data Inquiry**

## **Scottish Enterprise**

### **1. Introduction**

Scottish Enterprise (SE) welcomes the Committee's inquiry into the accuracy, utility and clarity of economic statistics in Scotland.

As Scotland's main economic development agency, good quality economic data are crucial in informing our analysis of the drivers of economic growth and in identifying performance gaps relative to comparator countries. As an evidence and opportunity-led organisation, we work individually and in partnership to extensively use data and analysis to develop strategies and activities.

This inquiry is timely in the context of the announcement, in Phase 2 of the Enterprise and Skills Review, of the creation of a new Data Analytical Unit to support the new Strategic Board. The role of the Unit will include improving the use and sharing of data across the enterprise and skills system which should, over time, support the further improvement of economic data in Scotland. The findings of this inquiry will prove useful to this development.

As an organisation which uses economic data to inform our activities and forward plans, our submission is mainly focused on the areas of accuracy and utility.

### **2. Accuracy**

#### **2.1 How reliable is the economic data currently available at the Scottish level?**

Scottish economic data are reliable as far as we are aware, and, if there are any inaccuracies, for whatever reason, they are likely to be small. More important, however, is the consistency of data over time in order to understand trends and allow comparisons with other parts of the UK and other countries. This ability to make realistic comparisons is more important than total accuracy.

There is good Scottish coverage of the main economic indicators, including GDP level and growth and its components, productivity, exports, R&D expenditure, innovation, the labour market and business demography. These are important in understanding the wider economic environment and the context in which SE operates.

All datasets have official or experimental (where the series is still in the testing phase) statistics status. Some UK surveys include a boosted Scottish sample to improve reliability and allow more in-depth Scotland-level analysis, for example the Small Business Survey and the UK Innovation Survey. Some

limitations may still exist at, say, a sub-Scotland and sectoral level, but these are always likely to exist in any sample survey no matter how much the sample is boosted given the small corporate base of some Scottish regions.

The data are comparable with other economies and provides us with the evidence required to benchmark and measure performance over time. This is important in understanding how the Scottish economy is performing and developing, and how that is happening. This evidence helps SE to prioritise resources to those areas and activities where the potential economic impact can be greatest.

Scottish statisticians do a very good job, both solely and working with their UK counterparts, in seeking to deliver continuous improvement in the range, depth and accuracy of data available.

## **2.2 What are the areas of strength and of weakness of provision within Scotland and at UK level?**

The principal strengths of Scottish provision are the breadth of data and comparability with other economies. Scotland has a wider range of economic data at its disposal than many other parts of the UK. Scottish and UK government statisticians have also been very helpful in supporting SE research projects through providing bespoke data and liaising with the Office for National Statistics (ONS). For example, recent work by them has allowed a relatively accurate assessment of the number of Scottish exporting and importing businesses based on the UK's Annual Business Survey; changes to this number are important in understanding progress towards increasing Scottish international exports.

Weaknesses are, generally, around the availability of Scottish data in some UK datasets, the availability of sub-Scotland data, data reflecting growth sectors and multiple sources of data. Considering these in more detail:

### ***Sub-Scottish Level Data***

There can be differences in the geographies used for some key data. For example, while most economic statistics are published by local authority geography, regional GVA and productivity figures are published at NUTS3 level (NUTS3 is the regional statistics level made up of clusters of Local Authorities).

Another key gap is a lack of sub-Scotland and sectoral data in some key data sets, for example Annual Business Survey data on exporters by sector and at sub-Scotland level, and components of business investment.

In addition to these explicit data gaps there is an issue with small sample sizes for some survey data sets, impacting on our ability to analyse some sectors and geographies. There is also a time lag in some indicators e.g. the Scottish GDP figures are reported one quarter behind the UK.

Taken together, these data limitations can inhibit SE's ability to develop policy to maximise its contribution to growing the economy and inhibit SE's ability to develop a full range of support for smaller regions.

### ***Standard Industrial Classifications and Growth Sectors***

Another area of potential comparative difficulty is the use of Standard Industrial Classifications (SICs) to measure the performance of Growth Sectors<sup>1</sup>. Although SICs allow sectoral comparability between Scotland and other economies, some Growth Sectors cannot be fully defined by SICs (e.g. Energy is wider than companies categorised under SICs as oil and gas). This can limit understanding of the performance of some growth sectors.

### ***Business Activity Data***

There is no single dataset capturing all business activity. As a result SE has to use a range of sources to assess the performance of Scottish businesses. The main sources of business data are: SABS (Scottish Annual Business Statistics) that has business financial information; the ONS BRES (Business Register & Employment Survey) that has employment data, but is a completely separate survey to SABS; and Businesses in Scotland that has information on the number of businesses and employment, but taken from a different source with different timescales to the other two main sources of data. These differences require analytical capability to understand and interpret the data and to ensure that figures are not being misunderstood and used inappropriately.

### ***Exports Statistics***

There are a number of sources of exports data. Scottish National Accounts has recently been revised to include the Index of Manufactured Exports (IME). Annual Business Survey data measures the number of exporters, and ESS (Export Statistics Scotland) and IME provide estimates of export values. Meanwhile, the ONS is developing service sector exports statistics. Although ESS provides data on exports from Scotland to the rest of the UK, there is currently no data available on trade between UK regions. Also, there is no export data available at a sub-Scotland level

It is not known whether all these sources will align in a way to allow, as accurately as possible, an assessment of sales outside Scotland (to the rest of UK as well as overseas), and how they will match with business data to allow, for example, an assessment of percentage of turnover accounted for by exports.

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<sup>1</sup> [Scotland's Economic Strategy](#) identifies those sectors where Scotland has a distinct comparative advantage: Food & Drink (including agriculture & fisheries), Creative Industries (including digital), Sustainable Tourism, Energy (including renewables), Financial & Business Services, Life Sciences.

### ***Inclusive Growth Data***

A range of data is available for many measures of inclusive growth. However, there is currently a lack of Scottish data for some key measures related to 'fair work', such as employee engagement, job security and job satisfaction. Activity by the Fair Work Convention may address this gap in the future.

### ***Data Set Methodological Differences***

Beyond issues related to sample sizes and gaps, there are methodological differences between some UK and Scottish data sets which can create confusion for users.

For example, Businesses in Scotland methodology includes all enterprises that operate in Scotland regardless of where the enterprise is based (or HQed). The justification for this is that it provides a more comprehensive understanding of the Scottish business environment than is possible using other business population estimates which only include enterprises which have their UK base (or HQ) in Scotland. UK Business Activity Size Location statistics, by contrast, is produced from an extract taken from the Inter-Departmental Business Register (IDBR) recording the location of units. The consequence of this is that Businesses in Scotland statistics cannot be directly compared with other UK regions. This makes it difficult to compare the performance of Scottish businesses with those in other UK regions.

Another example of methodological difference is varying reporting periods for productivity (GVA per hour) levels and indices, which result in differences between ONS and Scottish Government figures. The latest ONS UK sub-regional productivity figures were released in January 2017 with data to 2015; the latest Scottish productivity figures were released in May 2017 with data to 2016. This resulted in the Scottish figure for 2015 being different across the two publications, which can cause confusion. This difference also creates inconsistencies when comparing Scottish figures with regions elsewhere in the UK.

### **2.3 What could be done by Scottish Government and/or others to improve the quality of data? How would this be funded?**

The importance of improving the data which informs economic policy decisions in Scotland was recognised in the Enterprise and Skills Review Phase 2 Report. While acknowledging the high quality of data currently published, it recognised that more could be done to improve this.

The focus of this activity will be the establishment of a new analytical unit to enhance coordination and collaboration of the four enterprise and skills agencies and government.

The report also mentions specific areas for a Scottish Government improvement plan, which will improve the quality of data available to the analytical unit and beyond. These include improvements to trade data and improving national accounts, both in terms of providing GDP estimates earlier and in extending the range of economic data available for Scotland. We will assist in addressing these through our participation in the analytical unit.

Further consideration should also be given to how statistical data can be better combined with evidence held by SE and others (e.g. evaluation evidence) in order to present a deeper or more rounded picture of some of the more complex issues for Scottish economic development – for example, Inclusive Growth.

For a body like SE that works primarily at the company level, the macro level data available are generally adequate for what we need, subject to the caveats mentioned above. We would welcome ongoing dialogue with statisticians as to how any potential gap between ‘macro’ and company-level data can be eliminated.

### 3. Utility

#### 3.1 How are economic statistics used by local, regional and national policy-makers to deliver and scrutinise policy?

Scottish Enterprise uses economic data to understand the drivers of economic growth and highlight where the biggest performance gaps are within Scotland, and relative to comparator countries. Our evidence-based approach allows us to develop appropriate policy responses, allocate resources where the maximum impact can be achieved and to monitor progress. However, as noted above if there are data gaps or data are limited, this can inhibit our ability to develop targeted policy.

One important area for analysis in SE has been the drivers of productivity. We assess Scotland’s productivity performance over time and compare this to other economies.

Examples of data on productivity and its drivers, and the sources SE extensively uses, include:

<b>Economic indicator</b>	<b>Scottish, UK, international data sources</b>
Productivity	Scottish Government (SG) labour productivity statistics; ONS, OECD
Business Investment	SG Quarterly national Accounts; OECD
Business R&D Spending	SG R&D statistics; OECD
Innovative Businesses	UK Government’s Innovation Survey; Eurostat
Export Levels	SG Export Statistics Scotland & Index of Manufactured Exports; HMRC; OECD
Number of Exporters	ONS
Inward Investment	ONS; Ernst & Young (non-official)

Size/Structure of the Business Base	SG Businesses in Scotland; Scottish Annual Business Statistics
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The statistics, once analysed, are then used to help shape SE policy and to ensure that staff are informed of progress in the economy. This information often forms a critical element of strategic discussions and features strongly in the identification of new areas of work or in specific responses to an economic 'shock'. This can also be vital in partnership work, for example SE carried out the economic appraisal that underpins the Tay Cities Regional Economic Strategy.

A good example of how analysis shapes SE activity is in the area of export and innovation policy. Our analysis of data on the numbers of exporters and innovation active businesses showed that, compared to other UK regions and OECD countries, there was a significant 'performance gap'. SE has developed policy responses to help more companies sell overseas and to increase their innovation activity. The data allows progress in closing the performance gaps to be monitored.

### **3.2 Where are the gaps in provision?**

Lack of data for some economic indicators mean there is a gap in our evidence base which can impede development of appropriate policy responses. The main examples of data gaps are information on capital investment (by sector and type of investment), number of exporters and innovating businesses at a sub-Scotland level, and intra-UK trading. However, work is underway on these to assess future data availability.

### **3.3 Can you identify examples of international good practice and case studies?**

The production of internationally comparable statistics requires uniform statistical definitions and harmonisation of the classifications used. UK data feed into datasets published by the OECD and Eurostat for all the main economic and business indicators.

The OECD and Eurostat publish a wide range of data that is comparable across countries with definitions clearly set out. This allows Scottish data to be compared with other countries. OECD and Eurostat also publish reports that draws on a range of indicators to provide in-depth analysis of economic growth drivers, for example reports on productivity performance.

## **4. Interpretation**

### **4.1 What are the key issues in making sense of the data?**

The key issues are, as highlighted in 2.2 above, concerned with the number of different data sources that have to be accessed for related measures and the use of different methodologies for these data sets..

Both of these areas add an extra step, and often a layer of complexity, to the analysis of data and can increase the possibility that data will be misinterpreted, leading to erroneous conclusions and poorly developed policy responses.

#### **4.2 What are the barriers to better understanding and how might they be overcome?**

Where possible, reducing the number of methodologies and data sources for related data, through having combined surveys or publications, would enable better understanding. Similarly, an approach to sample sizes that provided robust data at a sub-Scotland level would provide a richer, more granular assessment and understanding, enabling better targeted policy responses. Finally, having a mechanism to combine data and evidence in a way that allows more robust debate on the state of the Scottish economy will be beneficial as well as a way of combining effectively the SIC and wider sector definitional data to assess the strength or otherwise of Scottish sectors comparatively.

### **5. Conclusion**

As recognised in the Enterprise and Skills Review, good quality data collection, analysis and utilisation is critical for sustainable and inclusive economic growth. This inquiry is therefore both timely and important.

While it is clear that the data available in Scotland is of high quality there are always continuous improvements to be made. We trust that the information we have presented above is of interest to the Committee in its deliberations and we look forward to following the progress of this inquiry with interest.

**Scottish Enterprise**