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\(^1\). 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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\(^1\) *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:

<table>
<thead>
<tr>
<th>Economic indicator</th>
<th>Scottish, UK, international data sources</th>
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</thead>
<tbody>
<tr>
<td>Productivity</td>
<td>Scottish Government (SG) labour productivity statistics; ONS, OECD</td>
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<tr>
<td>Business Investment</td>
<td>SG Quarterly national Accounts; OECD</td>
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<tr>
<td>Business R&amp;D Spending</td>
<td>SG R&amp;D statistics; OECD</td>
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<td>Innovative Businesses</td>
<td>UK Government’s Innovation Survey; Eurostat</td>
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<tr>
<td>Export Levels</td>
<td>SG Export Statistics Scotland &amp; Index of Manufactured Exports; HMRC; OECD</td>
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<tr>
<td>Number of Exporters</td>
<td>ONS</td>
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<tr>
<td>Inward Investment</td>
<td>ONS; Ernst &amp; Young (non-official)</td>
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<tr>
<td>Size/Structure of the Business Base</td>
<td>SG Businesses in Scotland; Scottish Annual Business Statistics</td>
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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.