

Economic Data Inquiry

Skills Development Scotland

1. Background

We welcome the opportunity to provide evidence to the Committee on their inquiry into the accuracy, utility and comprehensibility of Scottish economic statistics.

SDS is Scotland's skills body, focused on contributing to the delivery of the Scottish Government's Economic, Labour and Skills Strategies. Our key aims include the delivery of support to young people and small and medium sized businesses, helping people towards and into employment, and enabling individuals to progress within their jobs. We work with individuals, employers, training providers and partners throughout Scotland to raise aspirations and create a more skilled workforce.

It is important that SDS, and other public bodies, continue to improve on data which can inform decisions about how the public and private sector can invest in Scotland and grow the economy. This submission focuses on the usability of the evidence we draw on to inform our work (data, statistics, intelligence and insight) and where there are gaps which can hinder it.

2. Enterprise & Skills Review - data improvements

This inquiry is timely given the creation of the new analytical unit which will be created to improve the usability and sharing of administrative data across the enterprise and skills system as part of the recommendations of the Enterprise & Skills Review. It will aim to further align enterprise and skills support and ensure robust evaluation of activity and impact. This should in time support the development of economic data in Scotland and improve the consistency and coverage of the evidence base. We are keen to play a key role within the unit and to cement our unique role in harnessing Scotland's labour market intelligence assets.

The improvement plan for data as part of the Review includes improving the range and quality of Scotland's National Accounts statistics (alternative data sources and improved extrapolation methods to allow for the production of quarterly real-term GDP estimates earlier, as well as extending the range of economic data available for Scotland, including producing quarterly Gross National Income figures to complement the GDP nominal estimates) and working closely with Local Authority partners in any future work to improve data quality in, and access to regional or Local Authority management information.

Administrative data is still a largely untapped source of intelligence. Each of the skills agencies, including SDS, collects data as part of operational activities and some of this is published in line with the Code of Practice for Official Statistics, such as our quarterly Modern Apprenticeship statistics. We are keen to build on our current data assets, such as making effective use of administrative data sharing to support service delivery through the 16+ Datahub. The phase 2 Data, Evaluation and Performance Management report of the Enterprise and Skills review suggests that there could be extended opportunities for agencies to work closely with the Scottish

Government to facilitate wider access to key economic data through the development of formal data sharing agreements. SDS believe that this would enable us to access and analyse a more consistent and comprehensive evidence base, leading to greater insight and intelligence on topics such as skills and the labour market.

3. Usability - Data we use

Economic data is essential to our understanding of issues affecting the economy, the skills landscape and determining ways to improve our products, services and performance. We use a range of evidence to inform our work. This evidence is integral to the systematic process that we follow in implementing the Skills Planning Model (SPM), which we drive to improve the response to the needs of industry and ensure people have the chance of succeeding in the world of work.

An outline of the data we use for regional skills planning can be accessed in our Data Matrix User guide.¹ The Data Matrix holds data on 87 indicators, sorted by theme and geography for the Regional Skills Assessments (RSA). The user guide outlines the data sources used in the Data Matrix and indicates how robust the data is in terms of geographic coverage. We use a range of data from the Annual Population Survey, the Scottish Index of Multiple Deprivation to the business Register and Employment Survey. Some data is stronger at spatial level than others.

We analyse this raw data (levels and percentages) thoroughly across demand, supply, provision and skills mismatches, which is then used to produce the RSA outputs for use in Skills Planning (reports by City Deal, ROA region (plus South of Scotland) and the 32 Local Authorities (plus an Islands composite). There are around 50 reports in total.

3. Data we produce for internal and external use

3.1. Forecasting

We produce data on forecasts. This is the one area of data that we produce that is not produced elsewhere.

The preparation of forecasts in relation to:

- Growth - Output;
- Growth - Employment;
- Occupational change;
- Broad industry and Scotland key sectoral change - total jobs requirement– expansion and replacement demand for both sectors and occupations;
- Employment by gender and status; and
- Demand for qualifications;

¹ <https://www.skillsdevelopmentscotland.co.uk/what-we-do/partnerships/regional-skills-assessments/>

The preparation of forecasts for the above in relation to:

- Spatial levels – UK, Scotland, Regional Outcome Agreement Areas (ROAs), City Region Deal areas, South of Scotland and local authorities (including a composite report for Eilean Siar, Orkney and Shetland), where data allows for a reasonable degree of robustness; and
- Scotland's key sectors - priority sectors and high participation sectors.

3.2. National Training Programme Statistics

We have built upon our reporting of performance in Modern Apprenticeships and the Employability Fund by reporting these statistics publicly, on a quarterly basis and to Official Statistics standard. This data has helped to improve transparency and to provide our partners, and the wider public, with significantly more information upon which to base investment.

3.3. 16+ Data Hub Data Sharing

The Hub reflects the requirement for data sharing in the Post-16 Education (Scotland) Act 2013. It takes raw data produced by SDS and matches it with other public sector data. It includes data from all 14 regional colleges, all 32 Local Authorities (361 schools), Scottish Funding Council, the Student Awards Agency Scotland & Department for Work and Pensions imported through a secure gateway and held in a shared data set so reports based on combined intelligence can be compiled. This combined data set allows tracking of school leaver destinations through a process combining regular data input from partners, with direct input by our staff following contact with young people. Previously known as the School Leaver Destination Return or SLDR, this follow-up process is now undertaken regularly throughout the year, ensuring up to date intelligence on the destinations of our school leavers. This shared data set also used to produce the annual Participation Measure, introduced by SDS in 2015, to report on the learning, training or work status of all 16-19 year olds in Scotland - provides a wider picture of young peoples' activity than the traditional school-leaver destinations. The second Participation Measure (August 2016) saw the introduction of a new methodology which takes account of all statuses for individuals over the whole 2015-16 year (1st April – 31st March) in contrast to the School Leaver Destination Report which reported on an individuals' status on a single day. In August 2017 the Participation Measure became a key policy outcome measure in Scotland Performs.

3.4. Labour Market Focus and Research Online

We also produce monthly stakeholder briefings - Labour Market Focus - which summarise the Scottish labour market compared to the UK in an accessible and visual way. The briefing also highlights reports added to Research Online, Scotland's labour market intelligence hub, which is managed by SDS. The site provides access to the most recent and relevant labour market research and analysis, sourced from around the world.

4. How we use data

We utilise a breadth of evidence to inform decision making on our investment and services:

- In the development of our strategic and operational plans;
- In the development of our CMS/CIAG offer – we have developed a tool to equip our staff with knowledge and expertise on the labour market;
- In our Apprenticeship investment – we produce a demand statement to inform our Modern Apprenticeship, Foundation Apprenticeship and Graduate Level Apprenticeship offer; and
- In our leadership of skills investment planning (a) sectorally and (b) regionally.

We use our forecast data alongside other data (published datasets) to inform Skills Assessments that we produce:

- National – Jobs and Skills in Scotland – due for publication in September 2017;
- Regional – Regional Skills Assessments – also due in September 2017; and
- Sectoral – Sectoral Skills Assessments – due in January 2018.

4.1. National

Our Jobs and Skills report is due for publication in September this year. This report provides external insight and comment on the key drivers for skills (political, economic, social, technological) alongside insight on work based learning. The report will include commentary from a range of experts and we are working with the Fraser of Allander Institute to quality check the analysis and conclusions..

4.2. Regional

Published in November 2014, Regional Skills Assessments (RSAs) were developed in conjunction with partners to provide a single, comprehensive skills evidence base at the regional level. 11 RSAs were developed, covering the 26 local authority areas in lowland Scotland (the area covered by Scottish Enterprise).

4.3 Sectoral

The Sectoral Skills Assessment is due to be published in early 2018. This report will provide quantitative and qualitative analysis of each of the key sectors in order to give a comprehensive and cohesive annual overview in a way not done previously.

4.4. Sectoral and Regional Skills Investment Plans

We have also produced Skills Investment Plans for key sectors, and Regional Skills Investment Plans. Through Skills Investment Planning, we aim to bring skills demand and supply closer together. We support individuals to develop the skills that industry needs, and support sectors and regions to make best use of the people, skills and resources available.

Skills Investment Plans (SIPs) describe the skills challenges and opportunities across Scotland's key sectors. They provide a picture of the economic and labour market situation, trends in skills and qualification supply and employers' perspectives on the big skills issues affecting sector growth. They were created with key industry players, including Industry Leadership Groups, through a process of labour market and skills supply research and analysis, industry consultation and action planning

across Scotland's education and skills system. Each SIP is tailored to the needs of the sector. As outlined above, we ensure that SDS services for individuals and employers line up with the SIP recommendations. We work with industry and partners to carry out the actions and monitor progress.

We have extended our skills planning approach to include Regional Skills Investment Plans (RSIPs), which recognise the diverse needs of regions across Scotland. This work builds on Regional Skills Assessment data to take account of the particular challenges, opportunities and drivers at regional level and present a partnership response to these. The RSIP for the Highlands and Islands enterprise area is the first of these regional plans. Work has already begun to extend this to other regions in the coming year. Local Skills Investment Plans are also underway (e.g. for Moray, Shetland and West Lothian).

5. Comprehensibility – where there are gaps

5.1 Gaps in SDS data

In terms of filling gaps in our own work, where we identify gaps in evidence we look to work with partners on commissioning specific work to fill these. Based on our current work programme examples include:

- National – implications of decision making on Brexit;
- Regional – Developing a bespoke evidence base for the Loch Lomond and Trossachs National Park area;
- Sectoral – Developing a STEM evidence base.

As the Committee will be aware, as part of the Enterprise and Skills Review, we are working with Scottish Government and the Scottish Funding Council to map the learner journey. Information on provision is essential to inform this exercise. Currently we have different datasets. Our work on this workstream aims to ensure consistency between the datasets to allow us to measure outputs and outcomes and build an aligned framework for the learner journey. As part of this we have undertaken work to identify gaps in the data. This is timely given the focus of this inquiry; we have highlighted the gaps which may be of interest to the Committee below in sections 5.2 and 5.3.

The recent Centre for Work-Based Learning (CWBL) Impact Round Table highlighted the importance of linking datasets to track long-term outcomes of apprenticeships in Scotland. This is entirely consistent with the recent OECD report into tracking long-term outcomes². We are working closely with the Scottish Government and other partners to effect the construction of such linked data for Scotland.

In line with a recommendation from TERU, we are also looking to move towards a web-based tool to make data on provision, demand and supply easily accessible and interrogatable. Partners will be able to pool information and compare data.

² <http://www.oecd-ilibrary.org/docserver/download/59084781-en.pdf>

5.2 Better use of available data

It is important to note that the issue is not always that data does not exist but that it is not accessible. There are a number of examples of robust datasets that currently exist which could be better utilised through stronger data sharing. We would welcome greater access to the following data sources:

- HMRC: At present there is a legalised gateway for anonymised data sharing between SDS and HMRC. The key benefit of SDS having access to data on individual identifiable data on those in employment would reduce the number of “unknowns” in our database and allow us to target resource at those who need it most. Access to this data would facilitate richer analysis in terms of outcomes and enable us to further progress with the examination of the long term outcomes of Modern Apprenticeships as part of the Scottish Government led Longitudinal Educational Outcome (LEO) project. Scottish Government are actively pursuing access as part of the Digital Economy Act 2017
- DWP: The current data sharing agreement between SDS and DWP does not cover access to Universal Credit (UC) claimants. Again the key benefits of this data is a reduction in the number of ‘unknowns’ in our database and allow us to target resource at those who need it most.
- SQA data: although this does not relate to economic data, we could use this to analyse the skills landscape in terms of long term outcomes such as the economic impact of studying certain subjects and following different pathways to employment
- ONS data: greater access to detailed data for Scotland on ONS sources including Labour Force Survey (LFS), Annual Survey of Hours and Earnings (ASHE), Annual Population Survey (APS), Public Sector Employment (PSE) Survey and Inter Departmental Business Register (IDBR) would support a more comprehensive set of data for real time analysis of sector, regional economic growth patterns and economic intelligence.
- Business Register and Employment (BRES) survey
- Access to IDBR data

5.3 Data Gaps

There are specific sets of data where we would welcome improvements:

- Good quality Scottish migration data
- Good quality export data
- In work poverty

We would also welcome more data on the links between skills and productivity and productivity by sector, occupation, age and qualification. We currently have access to data on productivity per job from Oxford Economics but this is not broken down by age or sector. We also access ONS data but not all is available at Local Authority level. This additional data would be helpful for our skills planning work.

There is a gap in underemployment data. Information on underemployment would be helpful for us in determining how young people are affected by it in the long and short term, and the specific effects of underemployment depending on the sector, age and gender. Scottish Government previously produced more aggregate

underemployment statistics as a supplement to monthly and quarterly employment statistics.

Finally, having good data and evidence is necessary but not sufficient to effect change. As outlined above, SDS is working with the Scottish Government and others to track long-term outcomes of apprenticeships in Scotland. Tracking long term outcomes across different forms of provision in order to understand return on investment of public spend would enable us to better understand what works best for whom and shape strategies accordingly.

6. Scotland's capacity to interpret the data

As Scotland's national skills agency we are also concerned with the capacity of the skills system to understand economic data and utilise it to inform economic policy decisions in Scotland. Scotland's education and skills system is unique, with its own distinctive landscape. Academic research into the system therefore needs to recognise these unique characteristics. With this in mind, our [Collaborative PhD Programme](#) aims to develop a cadre of high-quality academic researchers with a deep knowledge of the Scottish skills landscape and system. The programme is delivered in partnership with the Scottish Graduate School for Social Science ([SGSSS](#)) and is co-funded by SDS and the Economic and Social Research Council.

7. Best practise examples

In 2015 we undertook a review of Regional Skills Assessments and as part of this a desk-based review of good practice from across the UK and EU in the provision of labour market intelligence to support skills planning was carried out. Appendix A outlines these examples.

The SDS sponsored PhD programme is now well-established and is highly regarded by the academic community within and outwith Scotland. The programme was identified in the Bartholomew Report³ as a case study of collaborative good practice.

The Apprenticeship Long Term Outcome Framework, developed by the OECD, provides an approach to articulating return on investment of public spend. There is potential to extend this model across broader skills provision to better understand outcomes and shape policies and strategies accordingly.

8. Conclusion

We hope that the Committee will find this information useful and look forward to following the progress of this inquiry.

Skills Development Scotland

³ <http://www.esrc.ac.uk/files/skills-and-careers/studentships/full-report-review-of-the-esrc-doctoral-training-centres-network/>