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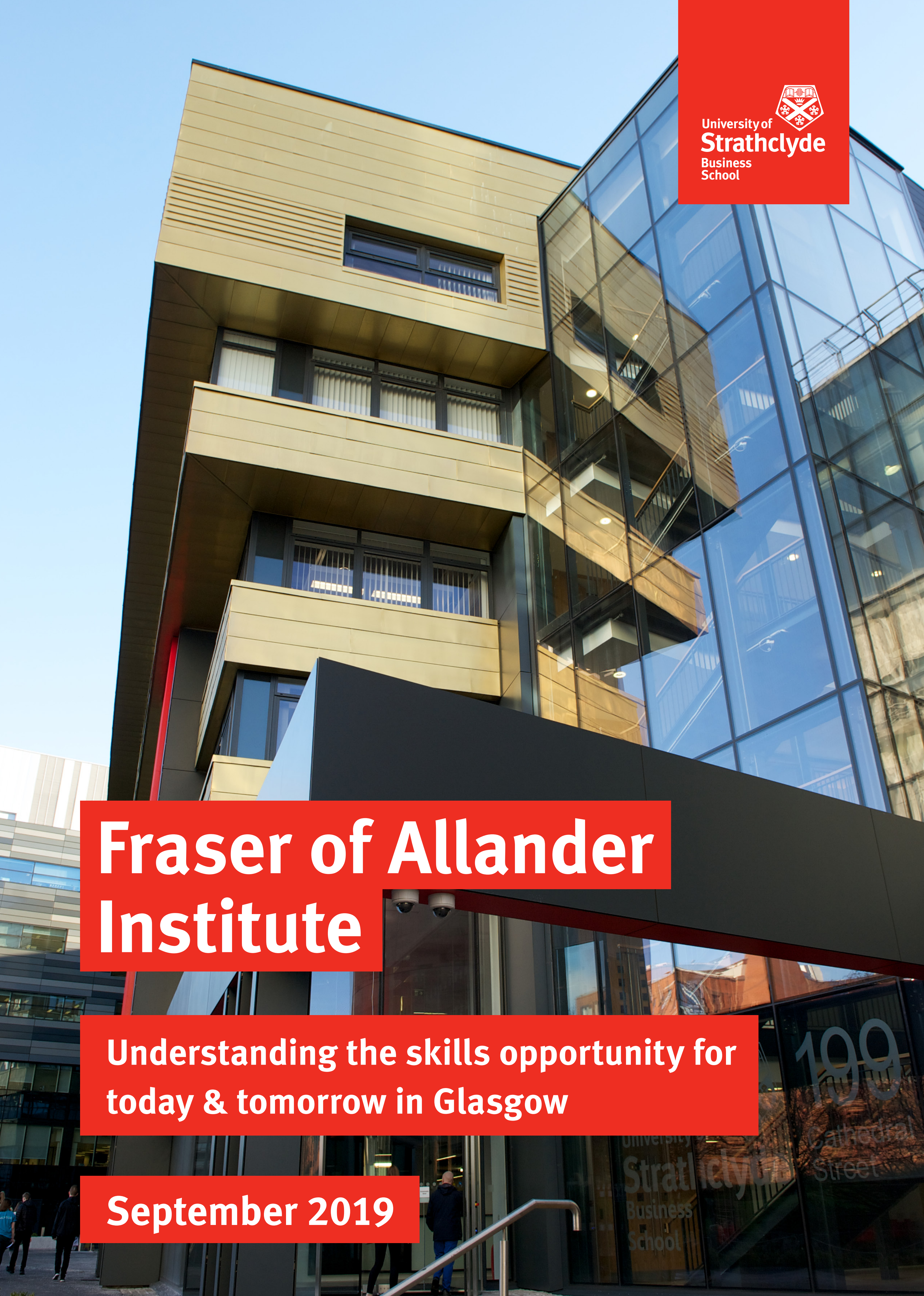

Fraser of Allander Institute

Understanding the skills opportunity for today & tomorrow in Glasgow

September 2019

UNIVERSITY of STRATHCLYDE
FRASER OF ALLANDER INSTITUTE

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The Fraser of Allander Institute

Disclaimer

The Fraser of Allander Institute (FAI) is a leading economic research institute with over 40 years of experience researching, analysing and commentating on the Scottish economy. The FAI undertakes a unique blend of cutting-edge academic research alongside applied commissioned economic consultancy in partnership with business, local and national government and the third sector.

The Scottish Centre for Employment Research (SCER) has an international reputation for high quality research and knowledge exchange on work and employment. SCER works collaboratively with academic, policy and practitioner stakeholders to generate high impact research that delivers shared benefit. The Centre has particular expertise in supporting workplace innovation, job quality and fair work, key priorities for Scotland.

Dashboard

Overview of statistics

Supply	**Modern Apprenticeship Achievements** 2,316 +11% on 17-18	**First Degree Graduates (Scotland)** 38,295 +2% on 16-17	**Further Education** 29,872 +1% on 16-17
Demand	**Youth Employment** 40.2% -4.9 p.p on 2017	**FT Wage Growth** 2.8% +0.7 p.p on 2017	**PT Wage Growth** 3.0% -0.4 p.p on 2017
Match	**Skills Gaps** 18% +5 p.p on 2015	**Youth Unemployment** 14.1% +2.4 p.p on 2017	**Firms with Hard to Fill Vacancies** 18% -12 p.p on 2015

Executive Summary

This report sets out the current skills landscape in Glasgow and the wider city-region. It does this by focusing in on the labour market experience of young workers.

This report aims to feed in to part of a larger conversation on the economic development of the Glasgow city region.

For example the Glasgow Economic Strategy lays out an ambitious plan to grow the Glasgow economy, addressing some identified challenges, but also seizing some emerging opportunities.

The recently launched Glasgow City Innovation District is an important plank of this strategy.

It is clear that there are significant additional demand challenges – and opportunities – in the Glasgow labour market, particularly around health and social care, and digital skills.

Glasgow has seen the strongest growth in tech employment in Scotland since 2009, and this makes investment in digital skills even more pressing (Source: CBRE).

We find:

- Firstly, Glasgow has a highly skilled workforce;
- Secondly, the majority of young people in Glasgow leave school to go into a positive destination;
- Thirdly, Table 12 shows that Glasgow does not seem to have more (or less) of a skill mismatch issue compared to other parts of the country; and
- Fourthly, despite progress being made, challenges around inequality of opportunity for young people across Glasgow remain.

Introduction

Understanding the skills opportunity for today & tomorrow in Glasgow

Developing the Young Workforce (DYW) is a seven-year programme that aims to better prepare young people for the world of work.

To help inform the delivery of this initiative in Glasgow, this report reviews the current skills landscape in the city and the demand from Glasgow's business base both now and in the future.

The report has been prepared by the Fraser of Allander Institute and the Scottish Centre for Employment Research, based at the University of Strathclyde .

For the purposes of this project, we undertook two complimentary strands of work. Firstly, we reviewed the evidence on the Glasgow economy and the provision of skills. However, we are conscious that a purely analytical and statistical exercise can only go so far.

Therefore, alongside this analysis, we embarked upon a series of evidence gathering sessions with employers, skills and employability service providers and young people themselves to learn at first-hand about their experiences of the employment and skills landscape.

This report is the final summary of these activities.

It is structured as follows.

We begin with a discussion of the overarching economic context in which the Glasgow labour market finds itself in, before looking at skills demand in Glasgow and likely future trends.

We then focus upon the supply of skills before concluding with a discussion around how best to match skills demand with supply.

Box 1: Geographical coverage

In this report, we use three definitions for the 'Glasgow economy'.

- The City of Glasgow (i.e. the local authority area);
- The Glasgow City Region City Deal area (GCDR), comprising eight local authorities: E. Dunbartonshire, E. Renfrewshire, Glasgow, Inverclyde, N. Lanarkshire, Renfrewshire, S. Lanarkshire and W. Dunbartonshire[1];
- Glasgow City Region, comprising Glasgow, E. Renfrewshire and E. Dunbartonshire.

[1] One rationale for looking at areas outside Glasgow City is the importance of the city as an economic hub for the wider region.

The economic context

The backdrop

Glasgow is a key growth engine of a rich and prosperous nation.

The city of Glasgow alone contributed £19.3bn to Scotland's economy in 2017 - equivalent to just over 14% of Scotland's entire economic output in that year. The wider Glasgow City Region generates over 30% of Scotland's GVA.

Glasgow's business community can boast of a skilled workforce, a supportive policy environment, a vibrant business support community and key strengths in sectors such as professional services, financial services, tourism and advanced manufacturing.

It has an outstanding Higher and Further Education community from which it can draw a highly skilled workforce. Initiatives such as the establishment of the new National Manufacturing Institute and the country's first innovation district in the city are examples of a positive approach to collaborative working between the public sector, universities and industry.

Glasgow's economy also shows a significant degree of resilience, reflecting, in part, the quality and skills-base of its workforce. For example, whilst Glasgow – like all parts of the UK – was impacted by the 2008-09 financial crisis, it has emerged even stronger economically, with a growth rate that has outperformed the national average.

At the same time, unemployment in Scotland has fallen from 8.8% in 2011 to just 3.4% today.

But the last 10 years have not been without their challenges, and Glasgow has been no different.

Whilst growth has returned, it remains fragile.

> Output per head in Scotland is only around 2% higher than it was just before the financial crisis. To put that in context, that same indicator grew by nearly 10 times that amount in the preceding decade.

Whilst Scotland's labour market has held up remarkably well, underneath these high level trends lie some concerns.

Household budgets have been squeezed and there are signs that some – but not all – of the pick-up in employment since the financial crisis has been in less well-paid and more insecure work.

Perhaps the biggest challenge has been weak productivity growth.

Productivity measures how much (and how well) we can make things for a given amount of effort. The more productive we can become, the better off we will be.

Productivity in Scotland – and within many advanced economies – has barely moved since 2010. The causes of this are still hotly debated.

Ultimately, it is likely to reflect a number of factors, such as low levels of business and public investment and long-term scarring effects from the financial crisis.

Turning this around will not be easy. But we do know that investing in skills, and crucially aligning the skills needs of business with the supply of highly skilled young people, is a crucial determinant of productivity growth over time.

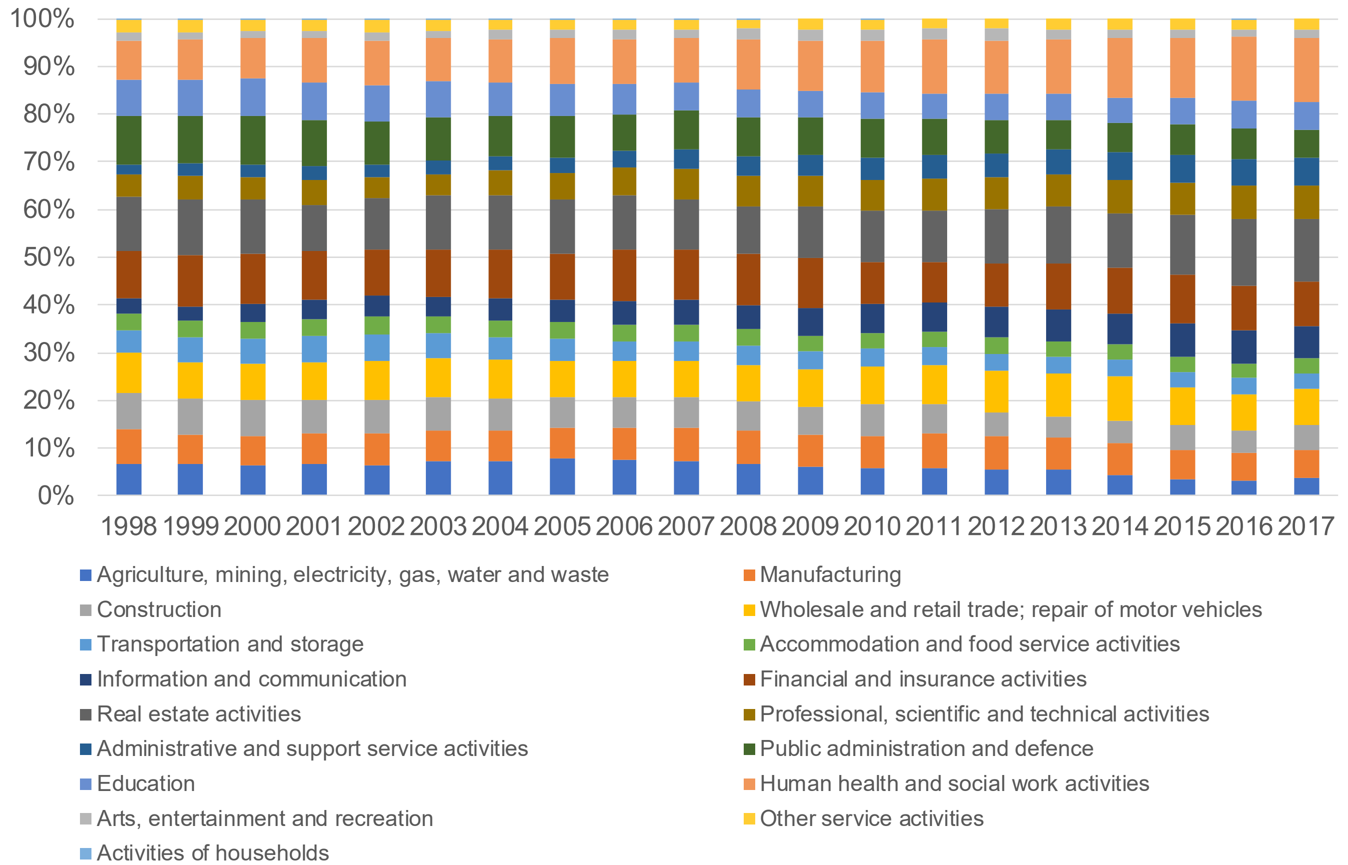
The wider drivers of skills demand in Glasgow

To understand the demand for skills in Glasgow – and its supply – it is important to appreciate the structure of the Glasgow economy.

Not all city economies are alike, and a one-size-fits-all policy is not appropriate. Local insight and autonomy to adjust policy and support interventions as and when required is crucial.

Glasgow remains predominantly a service based economy and this drives the types of skills that are in demand - FIgure 1.

Figure 1: The sectoral composition of the Glasgow City economy



Source: *ONS & FAI analysis*

The largest sectors in Glasgow include public administration, health and education and business services. These sectors have grown in importance over the years.

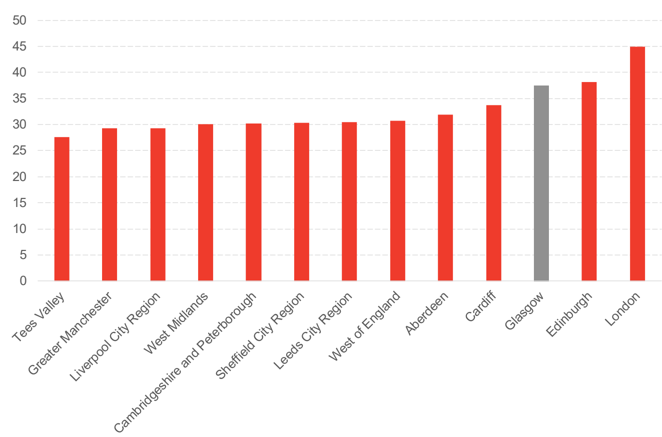
Such sectors clearly require their own suite of specialist skills and training. But they also share common features such as crucial non-cognitive skills. As we highlight below, the demand for such skills is only likely to accelerate in the years ahead, particularly in the light of the growth in health and social care as a key employer in the city.

As highlighted above, boosting the skills base of the Glasgow economy – and crucially linking this into employer needs – will be vital for boosting productivity in the Glasgow economy (and therefore Scotland as a whole).

Contrary to some people's perceptions, Glasgow scores well on measure of productivity relative to other parts of the UK. See Figure 2.

For example, Figure 2 compares labour productivity across UK City-Regions with Glasgow ahead of areas such as Manchester, Liverpool, West Midlands and Sheffield.

Figure 2: UK city deal region labour productivity 2016



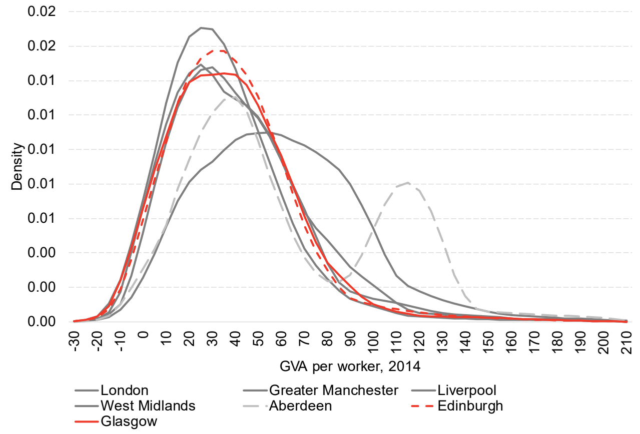
Source: *ONS*

But one clear message that the data tells us is that Glasgow's economy is a story of two very different types of companies.

Figure 3 shows the proportion of Glasgow's firms at different levels of productivity[2].

The long tail relates to a small set of highly productive and externally-focused firms. However there is a much larger group of businesses with much lower levels of productivity and simply "making do".

Figure 3: Labour productivity distributions, city-regions (GVA per worker) 2014



Source: *ONS & FAI analysis*

This has important implications for how we think about designing future skills opportunities.

For Glasgow the challenge is not just about increasing the number of highly productive firms but also shifting the large volume of firms with average levels of productivity up the value chain. Indeed on international comparisons, it is this part of our economy where it would appear that we have a particular weakness.

Therefore, in thinking about the demand for skills and its supply, in the future it will be just as important to focus upon 'core' skills which can be used to help shift-up that 'average' level of productivity across the Glasgow economy.

This is perhaps less about high level, expensive investment and more about things like digital skills, skills that support workplace innovation and process innovation, and better management.

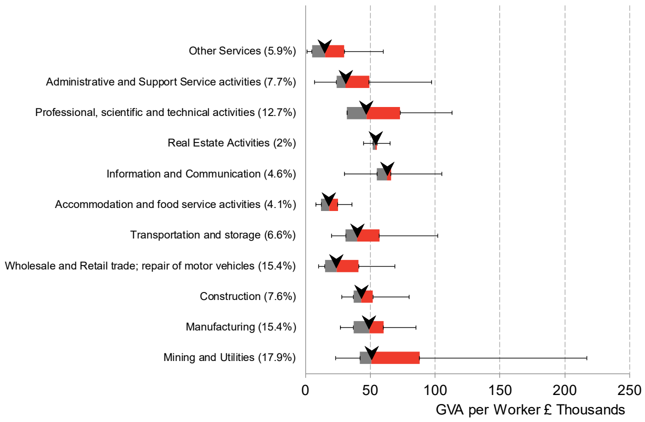
This will be vital to creating the conditions for more Glasgow firms to have the ambition and efficiency to compete both here in the UK and internationally.

To further aid understanding of Glasgow's skills needs both now and in the future, it is possible to combine the information on both the sectoral structure of the Glasgow economy and productivity.

Figure 4 provides a summary of productivity levels across sectors in Glasgow.

We can see that certain sectors have very concentrated productivity distributions (meaning that firms are alike), whilst others are much more diverse[3].

Figure 4: Labour Productivity by Industry in the GCDR



Source: *ONS & FAI analysis*

In our view therefore, rather than just think about how to push skills across the economy as a whole, it will be important to inject a sectoral focus to such policy development by for example –

1. Identifying why some sectors have some firms which much lower levels of productivity than others and whether the supply of skills can be targeted at helping to narrow that gap; and

2. Identifying sectors that have higher productivity levels on average and what can be done to grow their share in Glasgow – e.g. through further international investment – whilst ensuring that the skills system supports such growth.

Glasgow's business base

Following on from this, in looking at the demand and supply of skills – particularly for young people – it is important to understand the underlying nature of the businesses based in the city

[2] The further to the right on the horizontal axis the more productive the firms are.
[3] The share of the economy by sector is in brackets. The arrows show the median firm with the lines showing most and least productive. Accommodation and food services comprise a number of lower productivity firms.

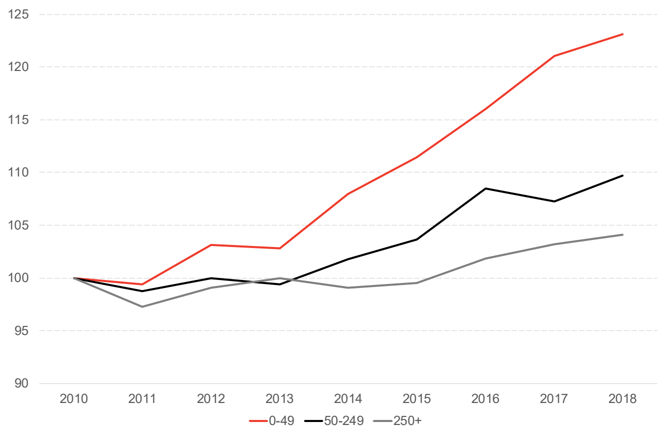
This will shape not only the ability of firms to provide skills based training, but also the shape of skills that different types of firms will demand.

The majority of firms in Glasgow are SMEs, although most people are employed by larger firms. This makes it important to understand the evolving skills needs of both larger and smaller firms (SABS, 2017).

> There are an estimated 17,300 business in Glasgow – around 10% of all businesses in Scotland.

86% of businesses in Glasgow have fewer than 10 employees. There has been a trend to smaller businesses in recent years – see Figure 5.

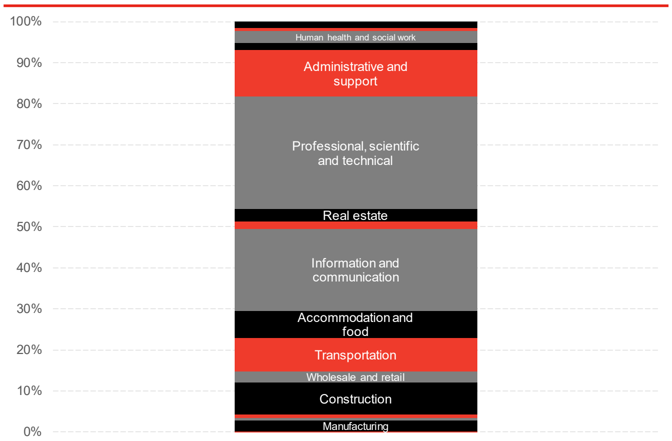
Figure 5: Growth enterprises in Glasgow



Source: *Scottish Government, ONS (IDBR)*

Since 2010, the majority of new small businesses in Glasgow City have been in the 'professional, scientific and technical activities' and 'information and communication' sectors – Figure 6.

Figure 6: Sectoral mix of new small businesses in Glasgow City between 2010 and 2017



Source: *Scottish Government, ONS (IDBR)*

[4] The population of Glasgow City is around 600,000.

> The changing nature of the business base in Glasgow – and the sectoral mix – creates new challenges for the skills system.

Size matters, as larger employers are more likely to have structured training programmes and skills development pathways. They also tend to be more diversified and less impacted by shortages of skills, including being able to draw upon resources from elsewhere to fill gaps.

As a result, they are better placed to cope with new challenges, such as the emergence of automation. This means that the national and regional skills system – and its public bodies – needs to take a pro-active role in supporting the skills needs of small businesses.

This includes supporting small and new firms to ensure that employees are able to learn and develop to ensure that their skills stay relevant. And it also includes a collective effort across the city to ensure that its employees (and future employees) have the capacity to embrace future labour market opportunities.

Glasgow's people

A final crucial element of the context for which Glasgow's future skills demand and supply will be shaped is the changing structure of Glasgow's population.

They are around 1.8 million people living in the Glasgow City Region (as at 2016). This is up around 4% over the decade (Table 1)[4].

Table 1: Population estimates Glasgow City Region

Age	2006	2016	% change 2006-2016
All Ages	1,746,020	1,817,860	4.1%
Aged 16-64	1,153,008	1,198,712	4.0%
Aged 16-29	326,926	345,957	5.8%

Source: *ONS mid-year population estimates*

Around half of people working in Glasgow live in Glasgow city, which also acts as an economic hub for workers living in neighbouring regions.

Data from the 2011 census suggests that those commuting into Glasgow for work tend to be in higher skilled occupations. In looking at the 'skills' question for Glasgow, it cannot be stressed enough that it is also important to consider wider factors. We know for example, that agglomeration and clustering activities are crucial elements in a growth story for a city.

The role of transport infrastructure, digital connectively, housing and so on in determining the growth of the Glasgow business base – and therefore the demand and supply of skills that businesses can draw upon – cannot and should not be viewed separately from skills policies when considering optimal policies for the development of the young workforce.

Glasgow's population is also changing, and changing rapidly.

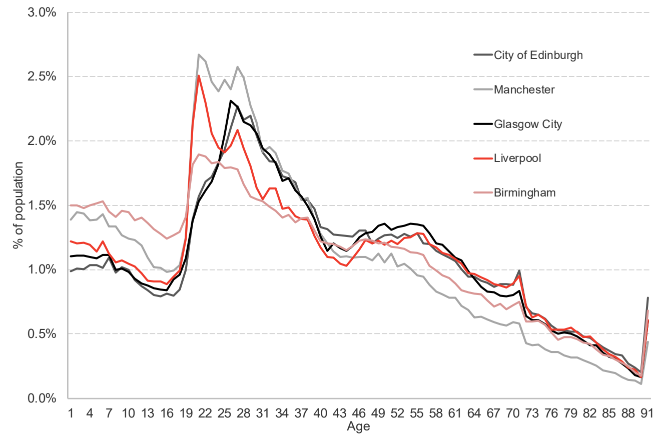
In 2016, Glasgow's working age population (16-64) made up around 66% of the total population – with those aged 16-29 (the 'youth' labour market) 19% of the total.

In comparison to other cities, Glasgow's population is slightly older, with higher proportions of individuals approaching, or already of, retirement age – see Figure 7.

The population projections in Table 2 underline one challenge faced by Glasgow and its surrounding areas: the number of people of working age is projected to fall in the decades to come.

For the skills system this has two main implications. First, it will mean a requirement to focus on providing young people with the skills to meet the inevitable 'replacement' demand that will emerge in the years ahead.

Figure 7: Age distribution of the population



Source: *ONS mid-year population estimates*

Secondly, there will need to be a focus upon how older workers can continue to make a contribution to the economy, including mentoring and providing support for younger workers in the labour force.

Of course, one advantage that Glasgow has over other locations, is to the high number of young people choosing to come to Glasgow to live and study. This can be used as a means of tackling its demographic dynamics.

Net migration plays a key role in driving population change for Glasgow[5]. See Figure 8.

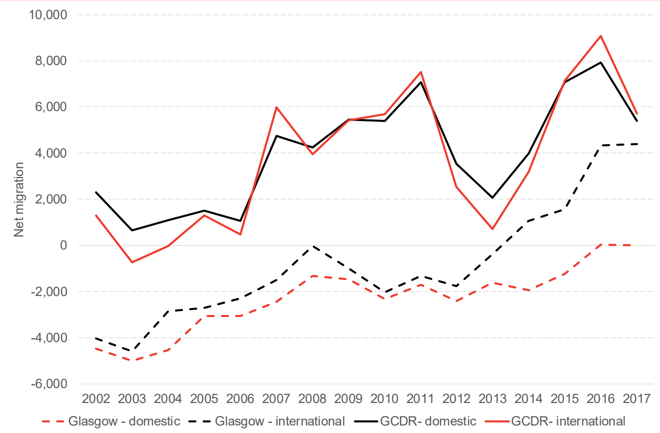
Table 2: Population projections by age band, 2014 – 2039

	0 -15	16-29	30-49	50-64	65-74	75+	Total
Glasgow City	4%	-12%	4%	6%	42%	54%	7%
Glasgow Region	5%	-10%	3%	0%	34%	66%	7%
Scotland	1%	-8%	-2%	-6%	27%	85%	7%

Source: *National Records of Scotland*

[5] Net migration is the difference between the number of people who move into an area and the number of people who move out of that area.

Figure 8: Internal and international net migration



Source: *ONS*

This is partly explained not just by the job opportunities that exist in a city of Glasgow's size, but because of the number of higher and further education institutions that operate in the region.

International net migration has been significantly higher than internal net migration for both Glasgow City and the Glasgow City Region.

Linking up this inflow of migrants – particularly international migrants – with the skills demand from businesses in the city is one way to help tackle the 'replacement demand' challenge that Glasgow will soon face.

Effective linking will require close working between Glasgow's business community and education suppliers.

The economic outlook for the next three years

The immediate economic outlook is highly uncertain.

The ongoing impasse over the UK's withdrawal from the EU has led to a slowdown in growth. While the economy is still projected to expand over the next few years, it is expected to do so at a relatively fragile pace.

Table 3 shows the latest forecasts from the Office for Budget Responsibility and the Bank of England for the UK, and from the Scottish Fiscal Commission and Fraser of Allander Institute for Scotland.

Brexit will act as a headwind to business prospects in the short-term. We estimate that over 20,000 jobs in Glasgow (over 40,000 in the wider City Region) are supported by external demand from the EU.

This includes both direct demand (i.e. purchases from the EU), indirect demand (i.e. spill-overs into the wider supply chain) and induced demand (i.e. demand supported by the ongoing spending of wages and salaries by workers in Scotland).

Table 3: Latest Forecasts, Scotland and UK

	2019	2020	2021
OBR (UK)	1.2%	1.4%	1.6%
BoE (UK)	1.3%	1.5%	1.8%
SFC	0.8%	0.9%	1.1%
FAI	1.2%	1.4%	1.5%

Source: *OBR, Bank of England, SFC & FAI*

Longer term risks and opportunities

While this uncertainty is likely to continue for some time yet, our economy is going through some wider structural changes that will shape the future direction of growth and the demand and supply for skills in the decades to come.

The rise of new and emerging markets is fundamentally re-shaping the balance of global economic power and influence.

As highlighted above, our population is also ageing, and this will have an impact on our long-term economic performance.

Climate change and the ever increasing strain being put on the planet's natural resources is already starting to change the way in which we do business.

Whilst this presents numerous challenges, it also will create significant opportunities for an economy such as Glasgow.

That being said, the growth of new markets provides significant opportunities for Glasgow businesses to expand into new markets.

> China has seen real GDP per capita grow by 943% since 1990.

There are significant opportunities for a city such as Glasgow to gain a 'first-mover' advantage in the transition to a more low carbon economy.

We also know that with an ageing population this will increase the demand for employment and investment in sectors tied to health and social care.

Finally, our analysis suggests that 3 in every 10 Scottish jobs are at high risk of automation. This is equivalent to 800,000 jobs[6]. However, it is important to recognise that technological change will also mean that many new jobs will be created.

Which sectors will be impacted? Automation is most likely to affect jobs that involve administrative, clerical and production roles. Whilst generalising to sectors is difficult, this suggests that transport, some aspects of manufacturing and the retail sectors are most likely to be impacted.

PWC estimate that over 40 per cent of wholesale and retail jobs are at high risk of automation. The outlook for retail is important as it is not only a major employer but also has important inclusive growth elements to it (both from a low income and City Region perspective).

Of course, there are simply too many different factors to be able to accurately identify where new opportunities will emerge. This suggests that a focus upon core, transferable and work ready skills, such as digital skills, will be vital.

[6] It should be noted that the estimates are based upon current jobs and do not take into account new jobs that might be created as a result of automation or better productivity.

Demand for skills in Glasgow

The changing nature of skills demand

As highlighted above, Glasgow has experienced significant change in recent years. It is no surprise that the demand for skills in the Glasgow economy has changed markedly.

Table 4 shows the current occupational mix of the Glasgow labour market.

Table 4: % of employees in Glasgow by Standard Occupation Classification (SOC) 2017

	Glasgow City Deal Region	Glasgow City Region	City of Glasgow
Managers, directors & senior officials	8.6%	9.0%	8.5%
Professional occupations	20.8%	24.8%	24.1%
Associate prof & tech	14.4%	16.0%	15.3%
Admin & secretarial	10.7%	9.8%	9.3%
Skilled trades occupations	9.3%	7.3%	7.7%
Caring, leisure & other service	9.3%	8.6%	8.8%
Sales & customer service	8.9%	7.7%	7.4%
Process, plant & machine operatives	7.1%	4.7%	4.9%
Elementary	10.4%	11.5%	13.4%

Source: *APS*

Table 5 shows how these figures have changed over time.

Two conclusions can be reached from the data.

Firstly, the SOCs considered to be at the higher end of the skills level, 'Managers, directors and senior officials', 'Professional occupations' and 'Associate professions and technical occupations' have experienced an increase in the number of individuals in employment across Glasgow.

This undermines any suggestion that job creation in Glasgow since 2010 has only been in 'poor quality' jobs, though elementary occupations have also grown in number.

Table 5: Change in employment by occupation 2010 - 2017

	Glasgow City Deal Region	Glasgow City Region	City of Glasgow
Managers, directors and senior officials	+12.1%	+23.7%	+47.5%
Professional occupations	+29.3%	+32.2%	+46.1%
Associate prof & tech occupations	+16.1%	+30.9%	+37.7%
Administrative and secretarial occupations	-4.8%	-5.9%	-4.7%
Skilled trades occupations	-2.4%	-12.1%	-12.2%
Caring, leisure and other service occupations	-3.9%	+0.31%	+1.2%
Sales and customer service occupations	-4.7%	-17.8%	-29.5%
Process, plant and machine operatives	+14.3%	+5.4%	+2.2%
Elementary occupations	-1.0%	+14.9%	+17.8%

Source: *APS*

Secondly, the 'hollowing-out' of the labour market that has been discussed so extensively in the media is in evidence – with the number of jobs in skilled trades and other associated activities falling.

It is likely that this trend will continue in the years ahead.

Future trends

As highlighted in the previous section, our economy is going through major structural change that will shape the long-term nature of jobs growth (and skills demand) in Glasgow.

Climate change, automation, demographic change and the growth of new markets all create significant risks and opportunities for an economy such as Glasgow.

It is therefore vitally important that we have a skills system that prepares our economy and business base for such changes.

Key to this will be developing core skills of the future – such as digital skills – and in developing the specific skills required for growth sectors of the future – such as in health and social care.

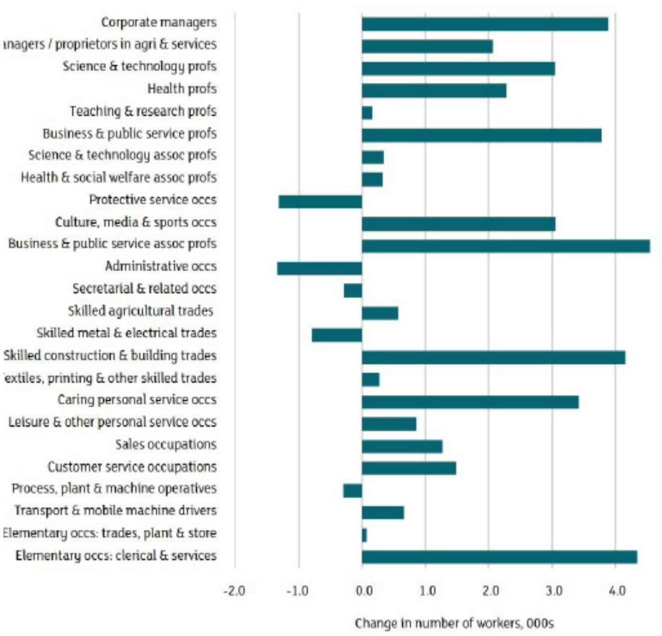
In terms of specific forecasts for the demand for skills, in our view these need to be viewed with a significant degree of caution.

As part of their regional skills assessment, Skills Development Scotland have published forecasts for the composition of the Glasgow economy in 2027 by occupation.

While extreme caution should be placed around specific point estimates, the analysis does provide a useful indication of where key demand for skills may lie.

These forecasts are summarised in Figure 9.

Figure 9: Occupation forecast composition of the Glasgow region in 2027 ('000)



Source: *Skills Development Scotland*

We identify three key trends that will drive the future demand for skills.

Economic expansion

Firstly, assuming that the past is a good guide to the future, jobs are forecast to rise across most occupations as a result of a growing population and increased demand in our economy.

Whilst there are ongoing debates about whether or not our economy has moved to a slower growth path than previously, most economists predict that our economy will converge to a long-term growth rate somewhere between 1.5% and 2.0% over the next few decades.

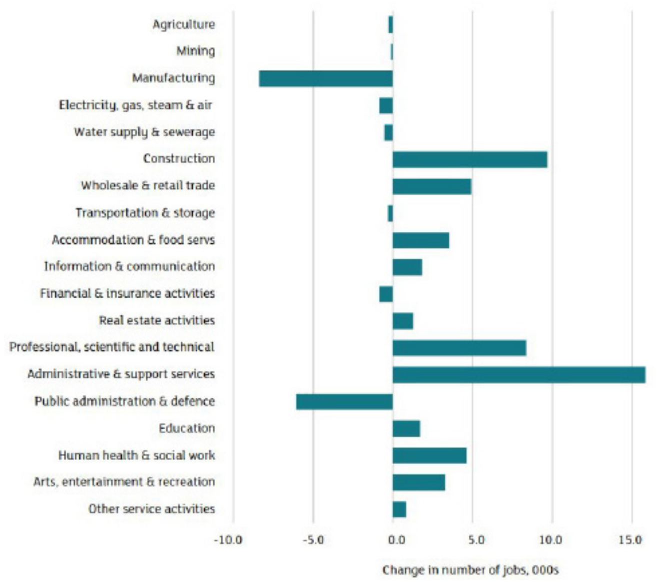
Growth in sectors and occupations

Secondly, the demand for skills are forecast to centre more predominately on the top and bottom end of the occupational scale - see figure 10.

This reflects the rise of automation which is likely to continue to lead to a replacement of skilled trades and routine tasks such as administrative and secretarial tasks.

On a sectoral basis similar forecasts paint an interesting picture of where future skills demand may be concentrated[7].

Figure 10: Industry forecast composition of the Glasgow City Region in 2027, thousands of people



Source: *Skills Development Scotland*

Figure 10 shows that nearly half of the anticipated growth in employment in the Glasgow region by 2027 is concentrated in three service sectors:

- Admin and support services'(23%);
- Accommodation and food (10%); and,
- Human health and social work (12%).

In general, occupations in which human interaction is a key element of the job are believed to be less likely to be subject to technological change.

[7] Once again, the same caveats hold for such sector forecasts as for occupational forecasts.

Replacement demand

Thirdly, we also know that our labour force is ageing. Therefore the demand for skills will not just be driven by growth overall in the economy, but also by the need to replace workers who will retire.

Table 6 breaks down the likely demand by occupation according to 'expansion demand' – i.e. growth in the overall economy – and 'replacement demand' – i.e. growth required to replace retiring workers.

Table 6: Sources of occupational labour demand 2027, thousands of people, Glasgow City Region

	Expansion	Replace	Total
Managers, directors & senior officials	2.3	12.9	15.2
Professional	4.6	57.4	62.0
Associate professional & technical	3.5	25.5	29.0
Admin & secretarial	0.3	21.5	21.9
Skilled trades	2.4	13.4	15.8
Caring, leisure & other service	3.2	17.2	20.4
Sales & customer service	2.4	25.6	28.0
Process, plant & machine operatives	0.9	7.5	8.3
Elementary	4.1	36.6	40.7
Total	23.7	217.5	241.3

Source: *Skills Development Scotland*

This analysis shows that there are likely to be particularly high demands for 'replacement' skills in professional occupations. Elementary occupations are also likely to see significant demand growth.

Without an internal talent pool, some employers told us that they were pro-actively working on how to address potential "mass retirement".

Focus Group outcomes

Employers highlighted to us that they face particular challenges around replacing experienced workers but that they are being proactive in their attempts to address these challenges.

Succession planning was referenced frequently as a key strategy to address gaps in an organisations' talent pipeline, specifically through the development of young people.

Our focus groups reported that many organisations – larger employers and SMEs – have created training programmes for 'early career' staff to build competencies and better equip them to progress within the organisation. This includes using internal and outsourced training provision, mentoring, and the majority offering apprenticeships.

In addition, many have successfully used youth employability programmes to address shortages in their workforce.

But perhaps most importantly, businesses are aware that knowledge transfer between senior and junior colleagues within their organisations is a real challenge that they have to manage.

> *"While it's important for employers to think ahead of the curve, you have this huge skills gap. We're bringing in apprentices engineers. They're not going to be ready when they complete their apprenticeship. But if we can get them in and have that work-based knowledge transfer happening, then in another 5-8 years they're ready to take on that role. If the average age [of senior staff] was 45-50 we need to work back from that and figure when to bring people in. We can't just bring one person in – they might move on. So, every year, or second, we bring in an engineering apprentice for the talent pipeline." (Quote: food manufacturing firm)*

Table 7 illustrates the qualifications that are needed for the Glasgow labour market of 2027.

Focus Group outcomes

Most of the expansion in demand in the labour market over the period to 2027 is anticipated in these forecasts to be in those jobs 'needing' SCQF 7 – 10 level qualifications. These are from HNC level qualifications up to degree level.

There is some anticipated growth among those with advanced degrees (i.e. postgraduate qualifications), as well as other formal qualifications (although this tends to be primarily for replacement demand).

As we highlighted above, such forecasts need to be viewed with a fair degree of caution. They are largely mechanistic and rely upon projecting past trends in the data to predict future changes.

Major worldwide trends like innovation in the digital economy will revolutionise the nature of work in much the same way that major technological innovations have reshaped the demands of firms for workers in the past. So perhaps more relevant than relying on forecasts, is to ask employers themselves about where skills demands will arise in the future.

Table 7: Qualification breakdown of future labour demand Glasgow City Region, 2027 ('000)

Qualification	Expansion	Replace	Total
SCQF 11 -12	3.5	12.8	16.3
SCQF 7 - 10	13.8	100.1	113.9
SCQF 6	0.7	31.4	32.1
SCQF 5	2.8	46.0	48.8
SCQF 1-4	0.1	10.3	10.4
No Qualifications	2.8	17.0	19.8
Total	**23.7**	**217.5**	**241.3**

Source: *Skills Development Scotland*

The latest (2019) ScotlandIS Scottish Technology Industry Survey highlights the increasing importance of the digital technologies sector in the Scottish labour market. 81% of surveyed businesses are expected to increase employee numbers in 2019.

70% of these firms are expected to hire university graduates, 43% expected to recruit college leavers, and 32% said they were 'definitely or quite likely' to take on Modern Apprentices in 2019 - with 38% looking to take on a Graduate Apprentice.

One challenge appears to be a lack of awareness of Foundation Apprenticeships among those surveyed.

Additionally in the tourism sector, there are policy targets which imply a substantial growth in employment. In Glasgow, for example there is a target to "attract an additional 1 million tourists annually to the City Region by 2023".

Glasgow has around 29,000 jobs in the tourism industry, serving a market of nearly 800,000 visitors. The SDS Skills Investment Plan provides guidance on the qualification level needed for jobs in the Scottish tourism sector. This target suggests a more than doubling in tourism which will necessitate a significant increase in tourism jobs in Glasgow.

Table 8 highlights, in terms of qualifications at least, where we should expect to see rising demand for workers as a result of this policy target.

If growth in employment demand in the tourism sector in Glasgow tracks existing employment patterns this will see around half of the growth in employment demand focussed in among those with SQA Higher and above qualification.

Table 8: SCQF qualification level required for a job in the tourism sector

Qualification	% of roles
SCQF 11 -12	26
SCQF 7 - 10	24
SCQF 6	23
SCQF 5	15
SCQF 1-4	9
No Qualifications	19.8

Source: *SDS*

The views of businesses

Employers we spoke to agreed that technological changes and automation will lead to evolving business models.

Many products and services are already being automated: from customer-facing apps, to learning management systems, to virtual assistants.

However, the employers that we spoke to were not overly concerned with the impact of automation. As one employer put it:

> *"Technology will not displace jobs but create a different future"*
> *(a utilities firm)*

Automation and semi-automation are anticipated to increase efficiency, and in the manufacturing sector new technologies and machinery are being introduced, bringing new skills requirements and potential skills gaps within an organisation.

Some organisations reported that there is already a workforce digital skills gap, with internal processes such as accessing online paperless payslips presenting more of a challenge for the older workforce.

Employers agree that digital skills will be required in the future:

> *"Everybody joining the workforce has to have a basic level of digital skills. It's the adjunct to... Maths and English skills. Everything depends on improvement through digitalisation...It's the capability that's required"*
> *(an engineering firm)*

However, organisations caution against predicting which digital skills will be required to deal with changing services:

> *[We] can't be overly predictive of technical skills as technology changes so fast. It's about how we create the conditions for people to adapt to what may come. Digital skills, literacy, problem solving and decision making...whatever tech comes online we can align our people to that...*
> *(a utilities firm)*

It is clear from our engagement that employers ultimately seek an adaptable and flexible workforce, able to respond well to drivers of change with a "positive growth attitude" (retail firm)

Discussions around digital change highlighted that 'technical' job-related skills – not just digital – were less important to employers than softer skills.

Employers are not as concerned about sector-specific technical skills as there are development opportunities "for the right person", for a person who "fits" the organisation.

When discussing the "right person", there was a consensus across employers that they are happy to train specific technical skills, but most were seeking someone who is adaptable to the needs of the business, able to solve problems, willing to learn, and able to work in a changing industry.

There is also an important challenge about how best to support firms to engage with the skills system. Specifically how employers support skills acquisition and development among their workforce. Employers we spoke to reported some difficulty not necessarily in accessing skills support/advice itself, but in evaluating its quality. This is an area where greater support and guidance would benefit firms.

While employers demonstrate a commitment to developing their workforce, they are also looking for specific personal characteristics:

> *"That desire to learn, you can't teach that. The technical stuff, the team can teach that, the academic stuff they'll get at college, but the attitude you just can't buy"*
> *(a food manufacturing firm)*

Skills specifically in demand across employers included: communication; problem-solving; dealing with conflict; work ethic; enthusiasm; effort; curiosity; emotional intelligence; and inquisitiveness.

The common thread across employer-perceived skills gaps was the need for softer skills, specifically interpersonal skills, as well as work-readiness and experience. Interpersonal skills, specifically how to communicate with different stakeholder groups, was highlighted as a skills gap.

> *... a lot of what young people need to learn is the softer side of business - building relationships, networking to get things done.*
> *(a utilities firm)*

One employer captured the soft skills required to be effective in their organisation as "professional maturity" – which they felt young people, specifically graduates, without experience sometimes lacked:

> *The first thing that popped into my head is "professional maturity" ...[they] can learn maturity by being put in situations that are uncomfortable... but even resilience... things that I'm not sure you can prepare them for, or just once they get into the real world and sit with people. [we have] two graduates at the moment – and the one who is newly finished, I can see a big change in her – how she holds herself, she's not scared. The other sits in a meeting and says nothing as she doesn't know the business yet. It's understanding the business.*

Skills stakeholder also recognised employers' preference for soft skills over technical skills, which, they suggest:

> *... in some ways flies in the face of what we're trying to do in colleges. Turn up on time, smile, speak property, interact with confidence, and they'll [organisations] teach them the skills.*

However, employers were keen to point out that plugging skills gaps was considered to be the responsibility of both universities and employers. One employer highlighted:

> *Writing a piece of critical academic coursework is very different than writing a report on a factory trial or something going in to a monthly management meeting. There's a part for organisation to play in saying this is how we expect this type of communication to be delivered, but universities could do more [by telling them] "we need you to write your academic coursework in this way, but this is how employers are likely to want you to communicate".*
> *(Food manufacturing)*

Skills gaps are expected across digital skills driven by an increase in automation, with employers demanding softer skills and organisational "fit".

Supply of skills in Glasgow

Glasgow's current skills base

Having looked in some detail at the demand for skills we turn next to the supply of skills.

It is clear that Glasgow has a highly skilled workforce.

The Scottish Credit and Qualifications Framework (SCQF) allows us to compare qualifications at all levels from school, further and higher education and qualifications obtained within the workplace.

Each qualification is categorised into a level, ranging from level 1 (equivalent to National 1 award at SQA level) to the maximum SCQF, level 12 (equivalent to a Professional Development Award, Doctoral Degree, Professional Apprenticeship).

Figure 11 shows the spread of skills qualification by level for Glasgow City Region and Scotland as a whole.

Figure 11: Qualifications of 16-24 year old workers

Source: *ONS*

Very few (less than 10%) of 16 - 24 year olds have no qualifications – albeit this is higher than the Scottish average.

Over 50% of 16 - 24 year olds have qualifications of SCQF 6 (e.g. ranging from Scottish Highers and above).

While Glasgow City Deal region is slightly behind the Scottish average in the skills qualifications framework SCQF 5 and 6 level, it has a higher proportion of individuals with SCQF levels 7-12 than the Scotland average.

The flow from education

Alongside the stock of skills, it is also interesting to examine the flow of workers from education.

The vast majority of young people in Glasgow leave school to go into a positive destination. Less than 1 in ten enter unemployment:

- Over 40% go into higher education;
- 20% into further education; and,
- 25% into employment.

But there are variations across the city region.

Fewer than 1 in 3 school leavers in Glasgow City go on to higher education, compared to over 60% in East Renfrewshire.

In contrast, more school leavers in Glasgow City go on to further education or straight into employment. This raises some interesting issues about skill development of the young workforce.

Since 2009-10 all areas have seen the proportion of their school leavers becoming unemployed drop.

Table 9: Destination of school leavers

	GCR	East Dunbartonshire	East Renfrewshire	Glasgow City
Higher education (%)				
2015/16	42%	57%	61%	31%
Change from 2009/10	4%	6%	3%	4%
Further education (%)				
2015/16	20%	14%	13%	24%
Change from 2009/10	-2%	-3%	-2%	-1%
Employment (%)				
2015/16	25%	23%	19%	27%
Change from 2009/10	4%	2%	1%	6%
Unemployment (%)				
2015/16	9%	4%	5%	11%
Change from 2009/10	-6%	-4%	-2%	-7%

Source: *Scottish Government*

Apprenticeships

One route that school leavers can take to kick start their careers is to undertake an apprenticeship. These are offered as an alternative route to develop workers' skills while working with an employer on the job.

Focus Group outcomes

The statistics on apprenticeships and feedback from employers shows that firms are willing and able to engage with opportunities to invest in young workers.

The 'apprenticeship family' has three main pathways; foundation apprenticeships (FA), modern apprenticeships (MA) and graduate apprenticeships (GA). GA's are a new addition to the apprenticeship landscape and as such little data is currently available.

FA's were introduced in 2014 as a way to provide a blend of academic and workplace learning for young people. FA's are delivered as a partnership between schools, colleges and firms with young people learning skills and knowledge in a formal educational setting and putting this into practice with firms.

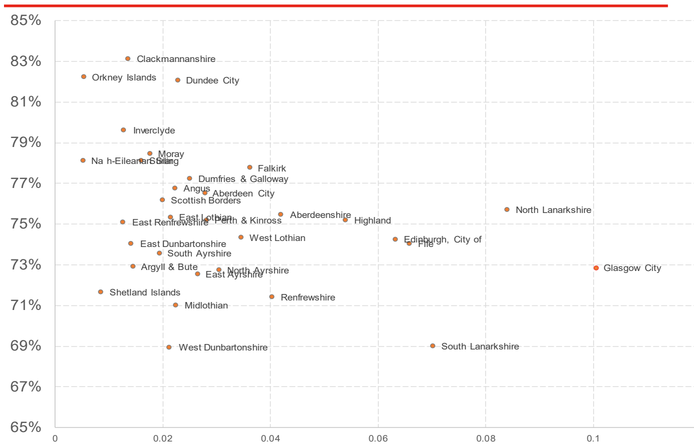
The first cohort of FA's were enrolled 2016—2018. Glasgow had 30 FA starts in Cohort 1 (representing 8.7% of Cohort 1). Cohort 2 was a larger cohort (enrolled 2017-2019), and Glasgow's FA starts more than trebled to 99 (8% of the starts in Cohort 2).

While the number of young people starting FA's increased rapidly from Cohort 1, little is yet known about the outcomes of the FA's in supporting stronger education to career transitions given that this programme remains relatively new.

Nevertheless, as outlined later, in speaking to young people it is important that the training and work based learning that is provided is assessed and monitored to ensure that it is of the right quality, focus and frequency to support the development of the apprentices.

Glasgow City hosts the highest share of modern apprentice starts in Scotland – Figure 12 – with over 1 in 10 modern apprenticeships in Scotland in Glasgow City.

Figure 12: Modern Apprenticeships in Scotland



Source: *Skills Development Scotland*

The rate of 'achievements' – while still in excess of 75% - is lower than the national average. This is likely to be driven, in part, by the socio-economic disadvantage and inequality faced by many of the people who take up modern apprenticeship opportunities in Glasgow relative to other parts of the country.

That being said, this rather blunt measurement of 'success' masks huge differences in experience of apprenticeships.

While the employers we spoke to did not report that they were underutilising the skills of their young workers, young people did.

A YouGov poll of 1,500 young people carried out for the TUC found that only three in 10 felt their current job made the most of their experience and qualifications. The same figure was demonstrated within the focus group with young people.

Apprentices, specifically, had concerns over their employer's ability to provide them with the appropriate experience:

> *"They [the employer] don't know what to do with you... [you] spend your time filing. After time you slot into more of a relevant role but it's slow... they think "where do we put them so they don't bother folk?"*

Many young people highlighted limited opportunities to gain useful experience or learn relevant skills:

> *"I can't stress how much they didn't know what to do with me.*
>
> *You carry out admin work, but it's not the experience you want for engineering.*
>
> *A lot of it I don't use in my job – which is annoying."*

When employers are not using their skills, young people become disillusioned and disengage:

> *Just try to keep a happy face, but it's hard though. [you think] What's the point?*

In addition, young people were keen to point out that not all of them should be tarred with the same brush:

> *"When you're sweeping floors for 10 hours a day it becomes disheartening... you'd get people who would just stand about on their phones. It's all individual. [the stereotype] annoys me.*
>
> *Some young people don't have initiative! One guy sat on his phone for a week on work experience. I understand where employers are coming from. Make yourself look good and worthwhile."*

The under-utilisation of employees' skills represents a potential missed opportunity for businesses. It would appear that greater structure and planning around apprenticeships is needed to get the most out of these opportunities.

Table 10: Further education starts by subject at Glasgow Colleges

	FT students in 2010	2016 change relative to 2010	% of 2010 total	% of 2016 total
Business/Management Studies	1669	64	17%	15%
Info Tech and Info	1152	-173	12%	9%
Engineering	711	279	7%	9%
Aut/Phot/Pub/Media	840	113	8%	9%
Catering/Food/Leisure/Tourism	516	139	5%	6%
Arts and Crafts	652	593	7%	11%
Sport, Game & Recreation	709	-51	7%	6%
Health Care/Med/H&S	563	360	6%	8%
Performing Arts	725	-281	7%	4%
Construction/Property/BuiltEnv	499	22	5%	5%
Other ‹5%	1945	135	19%	19%

Source: *Scottish Funding Council*

Post-school education

Turning to more formal education, the data show that the total number of people entering further education in Glasgow, typically by entering college, has increased over the past decade.

The greatest number of full-time students in Glasgow study business & management studies or IT.

Table 10 shows how the number of those studying different subjects has changed in recent years.

We can see that the largest growth has been among those studying 'Arts and crafts'. This subject area now comprises 11% of all FE starts.

In contrast, the number of FE students studying for information technology in Glasgow has fallen. There has been a notable increase in the number of FE starts in Glasgow which are in engineering, up 279 since 2010.

Whilst data is not available at a Glasgow City Region or Glasgow City, the Scotland wide data shows that having undertaken training at an FE college, the majority of leavers do not progress directly to employment, instead two thirds typically undertake further training.

Focus Group outcomes

We explored this in more depth with young people. For those who considered themselves "not great at school" leaving without Highers further training helped them to identify areas of occupational interest. Attending college and trying (and leaving) different courses helped them to figure out their skills and interests and subsequently find a relevant apprenticeship.

Table 11: Destination of leavers from further education aged 16-24 (Scotland)

	2013-14	2014-15	2015-16
Number of FE leavers:	34,862	30,505	32,689
% going on to:			
Further study	76.2%	79.0%	76.4%
Work	19.5%	16.9%	19.3%
Other destinations	0.7%	0.6%	0.9%
Negative destinations	3.6%	3.3%	3.4%

Source: *Scottish Funding Council*

Glasgow has exceptionally strong Universities.

There are six higher education institutions within the Glasgow City Region.

With the exception of Luxembourg, Scotland has more leading universities per head of the population than the rest of the world (Audit Scotland, 2016).

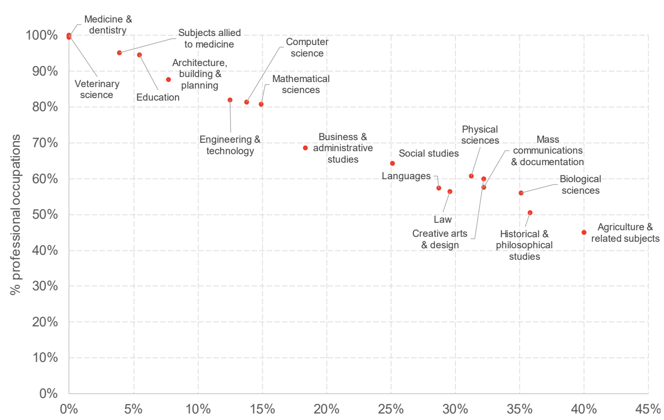
Having completed their University degree, there is an obvious interest in understanding the extent to which young people find that their studies enable them to access a good job.

In Figure 13, we look at the share of graduates by degree subject area who enter professional occupations versus entering customer services, caring and elementary occupations.

Unfortunately these data are only available for Scotland (although there is no reason to believe that Glasgow will be that different).

We can clearly see that graduates from some degree subjects are much more likely to enter professional occupations (medicine, dentistry, veterinary science and education are of course no surprise in this regard) than others (for example those undertaking agricultural studies, mass communication and documentation, or historical and philosophical sciences).

Figure 13: 1st degree leavers by subject area 2011/12 to 2015/16, Scotland



Source: *HESA*

Skills leakage?

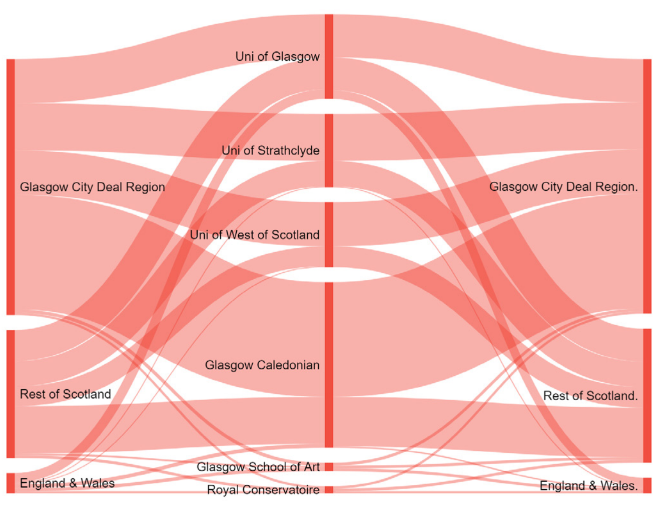
Another of the questions which often arises is about the number of graduates being produced by universities in Glasgow but who ultimately do not stay in the local economy.

To answer this, we can examine the flow of students entering higher education institutions in Glasgow by domicile location and also look at the destination of graduates.

Doing so, it is evident the largest proportion of individuals studying at higher education institutions in Glasgow are domiciled within the Glasgow City Region, with 63% of those studying at a Glasgow higher education institution coming from the Glasgow City Region.

Figure 14 highlights that the majority of graduates from Glasgow's Universities are coming from the GCR, and the vast majority stay in GCR after they graduate.

Figure 14: Higher education entrants by location of domicile, higher education institution and location of domicile after completing higher education



Source: *HESA, 2017*

Focus Group outcomes

There is a difference in employer perceptions of whether Glasgow graduates and highly skilled employees of working age are emigrating and the reality.

In our engagement with businesses we did find a number of areas of concern.

Remuneration and progression opportunities were frequency cited as the main reason for Scottish talent emigrating. The difference was perceived to a greater or lesser extent based on sector.

Stakeholders within the finance sector suggest finance hubs in London and Europe attract graduates from Glasgow with competitive entry level salaries, however, they suggest graduates end up "coming home".

Specific roles in hospitality and events were also highlighted as difficult to retain. Technical engineers opt to tour with bands and productions rather than remain within Glasgow where career paths and remuneration packages are less attractive.

Digital firms believe they are losing talent to countries that can provide careers with "larger salaries and exciting opportunities".

Job-ready[8]?

Qualifications are only one element of the preparedness of young people to meet the needs of employers. Aside from qualifications, employers need their staff to have certain skills to engage with the work they are being asked to do.

When asking employers and skills stakeholders about the relative skills of young people – across apprenticeships and graduates – distinctions were made between the two.

Employers had different expectations of graduates and apprentices, and were able to identify observable distinctions:

> *Graduates were reported to have "better skills" than apprentices, in particular critical thinking. MAs are "too raw, with no life experience". (automotive firm)*
>
> *Conversely, other employers suggested "I could handpick a graduate from a pool. But they don't have the life skills". (Hospitality/events)*
>
> *"Graduates are not always up to date with systems knowledge. University does not always teach students the required context, skills and systems." (Hospitality/events)*
>
> *"Degrees are worthwhile but experience is huge. When we interview people...– a lot of graduates feel like they don't need to do anything else because they have a degree. I don't see voluntary experience on degrees." (Hospitality/events– young person)*

[8] www.cipd.co.uk/knowledge/work/youth/unemployment-report

For school leavers entering apprenticeships, employers considered the biggest challenge to be their ability to prioritise projects and work independently:

> *"They've come from an environment where it's very regimented, told what to do, more or less structured. Whereas here's an environment where we say here is a bunch of stuff we need you to do, it's up to you how you do it.*
>
> *They're not as used to juggling projects, and prioritising projects, and managing their time as graduates completing multiple classes and half a dozen pieces of coursework due at the same time" (a food manufacturing firm)*

In addition, there are fewer expectations for apprentices to hit the ground running.

> *"Employers will expect graduates to say how you'll contribute to the bottom line, not an apprentice. They look at graduates as a return on investment.... apprentices don't cost as much" (an engineering firm)*

With an important caveat from one employer:

> *We see a distinction to some extent, but the graduate comes in at a different point in time. And different life-stage, [and] with a qualification. (a utilities firm)*

Much of the rhetoric around employer demands suggests that employers expect young people to be "oven ready". However, one employer suggests more is expected from young people today than a generation ago:

> *Are we being unrealistic in our expectations? Graduates aren't significantly less work-ready than 10-20 years ago. (a food manufacturing firm)*

Focus Group outcomes

Our engagement with young workers emphasised that each young person had been offered training by their employer. There were some challenges however,with being able to access the training and engage in development opportunities.

Skills demand vs supply in Glasgow

Evidence from skills surveys

Until this point we have focussed our attention on skills demand or skills supply. Of course, what really matters is the match between the two.

In order to look at this issue in more detail, in this section we explore data collected as part of the Employer Skills Survey (ESS). It gives a good snapshot of the extent to which employers are facing a skills mismatch, either among their existing employees (so a skill gap) or among potential employees (a skill shortage vacancy)[9].

The Skill-shortage vacancies (SSV) information show the vacancies which are difficult to fill because the establishment is unable to find applicants with suitable skills, qualifications or experience.

Table 12: Skill gaps and skill shortage vacancies

	Edinburgh Fife and the Lothian		Glasgow and Clyde Valley		Greater Manchester		Greater Birmingham and Solihull	
	2015 % of establish-ments	Change relative to 2013	2015 % of establish-ments	Change relative to 2013	2015 % of establish-ments	Change relative to 2013	2015 % of establish-ments	Change relative to 2013
SSVs only	5%	3%	4%	2%	3%	0%	4%	2%
Skills gaps only	13%	-4%	11%	-6%	13%	-2%	14%	1%
SSVs AND Skills gaps	2%	-1%	2%	1%	1%	0%	2%	1%
SSVs OR Skills gaps	19%	-4%	17%	-3%	17%	-2%	21%	5%
Neither SSVs nor Skills gaps	81%	4%	83%	3%	83%	2%	79%	-5%

Source: *Employer Skills Survey (ESS)*

Table 13: Hard to fill vacancies

	Glasgow and Clyde Valley		Edinburgh, Fife and the Lothian		Greater Manchester		Greater Birmingham and Solihull	
	2013	2015	2013	2015	2013	2015	2013	2015
Managers	12%	1%	19%	3%	3%	6%	4%	2%
Professionals	11%	14%	17%	28%	25%	16%	15%	20%
Associate professionals	10%	14%	15%	14%	26%	11%	20%	16%
Administrative/clerical staff	7%	7%	11%	2%	8%	7%	14%	3%
Skilled trades occupations	25%	22%	20%	15%	17%	28%	16%	25%
Caring, leisure and other services staff	10%	18%	10%	10%	16%	22%	19%	10%
Sales and customer services staff	12%	11%	8%	11%	10%	7%	8%	11%
Machine operatives	7%	10%	5%	10%	4%	6%	5%	8%
Elementary staff	10%	11%	8%	18%	5%	10%	12%	13%
Unclassified staff	3%	1%	1%	*%	1%	0%	2%	2%

Source: *ESS*

[9] The Employer Skills Survey is run in alternate years with the Employer Perspectives Survey. It was last run in 2017 but the results are not yet available.

The results for Glasgow and Clyde Valley highlight approximately 4% of establishments were faced with this problem in 2015, a slight increase since 2013[10].

In 2015, the skills gap for Glasgow and Clyde Valley was 11%, a decrease of 6% since 2013 and lower than many other parts of the UK.

The table below shows the occupations that experienced a decrease in the skill shortage vacancies between 2013 and 2015 included Managers, Skilled trades occupations and sales and customer services staff.

These numbers do not suggest that there is an overwhelming mismatch between the skills of the Glasgow workforce and the needs of employers.

Of course, skill gap vacancies still exist, but these are not of a level in GCR which is dissimilar to the other major city region areas in the UK.

Despite these figures, employer and skills stakeholders told us that they are concerned about skills gaps and skills shortages.

Two explanations for this are possible. Firstly, that the perception of skills gaps might not match reality. Secondly, that conditions have deteriorated in recent times.

Evidence from stakeholders

Two main themes emerged from our discussions with skills stakeholders:

1. some sectors struggle to attract skilled workers because of the reputation of their sector for the types and conditions of work offered; and

2. there is sometimes a mismatch between the expectations of employers and employees.

Firms in the manufacturing, hospitality and tourism organisations explicitly told us that they need public relations and promotion support in order to inform young people of the realistic expectations and benefits of working in a sector which has a legacy of poor working conditions.

A manufacturing employer told us of their need to fill food technician roles, but that the sector's reputation for being poorly paid and unskilled was a key barrier:

> *"The manufacturing sector, food, in particular, doesn't enjoy a reputation as a great place to work. And that's unfair as there are fantastic careers available in the food industry... and earn good salaries in a lot of areas. But schools and parents don't advocate it as a career choice to students.*
>
> *And you can almost see parents shepherding their kids away from factory, manufacturing... [imagining them] on a production line for 50 years on minimum wage" (a food manufacturing firm)*

Hospitality is another sector where reputational challenges and perceptions are a problem in recruitment.

Stakeholders told us that a key challenge in recruiting for these sectors is that a reputation for the use of zero-hour contracts and unsociable hours are taken by workers to be a signal of poor job quality.

Employers in the hospitality sector, while aware of the reputation zero-hour contracts attract, did not view casual work as something negative. Employers believe that employees value "choice" of working hours and pattern.

One hospitality and events organisation we spoke to paid all casual staff on zero-hours contracts (approx. 5% of their workforce) the Glasgow living wage – irrespective of age. Their view was that zero-hour contracts are the employee's choice, as they seek flexibility and hours to suit their university courses, as well as the option of refusing shifts.

Other hospitality organisations use zero-hours contracts, but in the "right way". They take an evidence-based approach (forecasting busy periods) to predict the likelihood of required hours thus setting expectations for staff.

They ensure that staff are aware they are accruing hours and are eligible for holidays – often encouraging them to take them. The organisation finds that even when they advertise full-time vacancies, casual staff opt out of applying – thus supporting their view that staff prefer the flexibility of zero-hour contracts.

[10] Due to the way in which this survey is calculated, it is based upon a slightly different geographical area – Glasgow and Clyde Valley.

But it is not just about a sector's reputation for low pay and routine jobs that is a challenge for them in recruitment. There is a wider challenge about perceptions of the jobs available in some sectors.

Application rates have dropped for hospitality courses in Glasgow. This has been attributed to a shift in interest from jobs relating to cooking and bar work, to events. But also, a concern that schools do not convey to students a clear enough understanding of hospitality as a career path:

> *"Young people think hospitality is about cooking. We need them to understand it's about front desk and back office, IT, social media, HR" (College)*

Focus Group outcomes

More needs to be done to make clear the diversity and quality of roles available in sectors which are struggling to recruit workers. This needs to be a collective effort of businesses skills providers and government. At the same time it is key that firms ensure that progression and development opportunities are clear to potential recruits.

A second main challenge is aligning expectations between employers and workers. Firms that we spoke to cited challenges in recruiting workers who had realistic expectations about the work on offer and the route to progression within the sector.

> *"...it is knowing you can't just walk out of university and walk into assistant manager [role]. Its on-the-job development – learning how to manage people... it's [the] difference between leadership and management. It's understanding that. Which graduates won't get the opportunity until they're in the workplace" (a hospitality/ tourism company)*

Some employers are concerned that graduates, specifically, expect a lot from employers, when 'it's their first step on the career ladder and the reality can be different'.

Many firms engage with industry careers events for those leaving the skills system, but uptake of these opportunities by students is often poor, with students failing to take advantage of the opportunity that exists to learn more about the work on offer.

Those students who do take up these opportunities often impress employers by demonstrating a proactive approach to their career, which can be interpreted as a trait that will transfer into the workplace:

> *"The ones who are turning up for employers are making the most informed choices. They are doing their homework, meeting people from industry. This generation do so much online ... but then coming to meet those people and seeing if they're a fit, that'll tell you. LinkedIn pages won't tell that"*

Another employer told us:

> *"It's the proactive ones that come and talk to the employer... Within an hour of speaking, I had [their] CV and a blurb on why we should hire [them]. ... that's amazing" (a hospitality/events firm)*

Relatedly, some attributed concerts around 'brain drain' in engineering to companies outside Scotland organising their graduate recruitment more efficiently and earlier in the final year than local organisations. One stakeholder highlighted that final year students *"don't want to go into final exams fearing you are nowhere on the route to employment"*, and as such, companies in Glasgow would benefit from seeking talent earlier in the student's final year.

The greatest concern for engineering is "leakage" from science, technology, engineering and mathematics (STEM) subjects, with under half of the male graduates, and approximately three-quarters of female graduates, not entering a STEM career post-education. Instead, they reportedly go into finance and management consultancy firms, tempted away by larger salaries and earlier engagement from employers.

Similarly, there was a view from many stakeholders:

> *Young people have choices now. They can go and do what they want.*
>
> *Young people can be picky and choosy.*

Some local organisations reportedly wait for the "right fit" – the right combination of soft skills and personal attributes - and are missing opportunities to recruit talented young people they can develop.

In addition, some employers we spoke to highlight the tension that generational differences can create. For example one skills stakeholder highlighted resilience as a key skill lacking in a number of young people.

> *"This generation is not used to failure. And the job market is volatile, and they will get rejected from graduate jobs. And some jobs aren't going to work out for them and they'll have to move on to something else".*

Skills stakeholders also suggested a "changing approach to technology and time" can be perceived as an issue of work ethic for some employers: young people prefer to be flexible in regard to where and when they work, whereas:

> *"Most industries expect that you're able to deliver work at a time and place, and work to the client. Deadlines, 9-5 framework".*

Some employer stakeholders challenge the generational stereotypes young people currently face in regard to assumptions of millennials poor 'work ethic':

> *"I don't know if that's fair...I don't see it. I see a generation that is more sensible than mine was... more diligent with their studies...We grew up at a time when we were asked to work overtime, we said yes, we worked weekends. Now, they realise there's a balance to be had, and no thanks, that's my family time. While that provides operational difficulties you can't knock it" (an engineering firm)*

It is clear that many young people are seen by employers as highly motivated and enthusiastic. Some employers seem to understand that workers may have different priorities, and value greater flexibility in the workplace. Greater appreciation and accommodation of more flexible work patterns would seem to be a step towards better aligning expectations of workers.

That being said, there is clearly a challenge in improving engagement between those leaving the skills system and potential employers. This would help bridge the gap between the expectations of workers and employers.

The evidence we received was that the current format of industry engagement events does not seem to be attracting the breadth of student engagement that employers would want. Thought should be given to how to improve students' engagement with employers, and to supporting employers to engage more and earlier with those in the skills system.

Recommendations

In this section we present a short set of recommendations which build on the evidence base described in the report so far.

- There is clearly a role for strengthening education to work transitions. Investment is needed in closer working between employers and skills providers. Greater collaboration between the education system and employers would support employability and provide young people with realistic expectations of the world of work. For instance, employers tell us they would welcome the opportunity to provide time for a young person seeking to understand an industry to shadow their workforce. These opportunities should be routinely embedded within the curriculum,
- Employers need greater support in engaging with those in the skills system as well as those leaving the skills system in a more effective way. Employers do not seem to be able to access the breadth of talent in our educational establishments.
- Firms in some sectors need support to develop a narrative about the diversity of roles and opportunities in their sector, and the quality of work available, to overcome stereotypes that young people may have about some sectors.
- The continued development of the apprenticeship family is to be welcomed. But it is key that the support and training provided to those young people on apprenticeships is of the appropriate quality.
- Employers view the training provider market as something of a 'cluttered landscape' where it can be difficult to identify appropriate training providers and to assess the quality of the training provided. Consideration should be given to options to improve the information available to employers about training providers.
- Support is needed to develop more extensive mentoring support for young people to enter and progress within the labour market; once employed, they can 'payback' by going in to support other young people.
- Young people also identified that the scheduling of many traditional education offerings didn't presently meet their needs. One challenge was that the University academic calendar, some felt, provided a protracted gap over the summer in the training provided. This was perceived as being inefficient. In addition, the traditional format of teaching was felt in some cases to be less flexible than training provided through online platforms, or on a more 'on demand' basis.

Conclusions

The Glasgow City Region makes a crucial contribution to the Scottish (and UK) economy.

However, the nature of the Glasgow economy has been changing in recent years with a continued move toward a more service based economy.

If Glasgow is to become more prosperous it needs to become more productive. This is not just about boosting productivity amongst the high end firms but also across the wider business base. Developing the right skills will therefore be crucial across the economy.

Glasgow's population is also changing as the city's working age population ages.

Glasgow will therefore need to develop a skills system that meets these challenges.

This study has attempted to add some clarity to the issue of skills in the Glasgow economy by reviewing the evidence and engaging directly with business, skills providers and young people.

A number of interesting trends have emerged.

Firstly, Glasgow has a highly skilled workforce.

Second, the majority of young people in Glasgow leave school to go into a positive destination.

Third, Glasgow does not seem to have more (or less) of a skill mismatch issue compared to other parts of the country.

Of course, there is only so much that such official statistics can tell us.

Our engagement with employers, young people and skills stakeholders helped us identify their key perceptions of skills in Glasgow, future trends and strengths and weaknesses in the current system.

Skills challenges for employers and skills stakeholders are generally aligned. All stakeholders acknowledge that automation and an ageing workforce will bring changes to the labour market and skills systems.

Yet stakeholders were also confident with their ability to adapt to change, with many organisations taking a proactive approach to mediating any negative impact.

While the data shows few overarching skills shortages and sufficient quality jobs in Glasgow, the theme that emerged from engagement with stakeholders is that employers are experiencing shortages and gaps, and young people are feeling underutilised.

There are good practice examples from organisations – large and small – in regard to developing their young workforce. Work-based learning is considered a "virtuous cycle" – with employers positive about the impact apprenticeships can have on the young workforce.

Challenges can occur for employers engaging with the skills system. With a "cluttered landscape" of training providers, the potential to be "bamboozled" is significant, especially for when seeking quality provision.

However, employers have the potential to influence the skills system, and a reciprocal relationship has benefits which can support the development of Glasgow's young workforce.

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