GREATER MANCHESTER INDEPENDENT PROSPERITY REVIEW

EVIDENCE UPDATE: SKILLS UTILISATION AND EMPLOYER INVESTMENT IN SKILLS

A research report for the
Greater Manchester Prosperity Review: Evidence Update
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Greater Manchester Combined Authority Research Team produces high quality research and intelligence to form the evidence base underpinning policy and strategy for the city region.

The Greater Manchester Independent Prosperity Review was commissioned by a panel of distinguished experts, chaired by Professor Diane Coyle, to provide a detailed and rigorous assessment of the current state, and future potential, of Greater Manchester's economy. Commencing ten years on from the path-breaking Manchester Independent Economic Review, it provides a fresh understanding of what needs to be done to improve productivity and drive prosperity across the city region.

This latest update, the Greater Manchester Independent Prosperity Review: Evidence Update is a key part of the sustained work done by researchers at the Greater Manchester Combined Authority – with input and challenge from experts. The update explores seven inter-connected thematic areas: carbon neutrality, health inequalities, productivity and the business base, the labour market, skills utilisation and employer investment in skills, trade, and transport in light of the significant economic developments experienced since 2019 (Covid-19, UK's exit from the European Union and the energy and inflation shock).

This report, alongside the six other research reports on the thematic areas listed above, forms part of a suite of work from which the summary, the Evidence Update: Reflections Report is drawn. The evidence update will be used to inform the refresh of the Local Industrial Strategy.

Contents

Executive Summary

- ‘Skills supply’ refers to the flow of skills and qualifications, whereas ‘skills demand’ is concerned with what skills are needed and utilised by employers in the economy. This report aims to bring together evidence on different aspects of skills utilisation in Greater Manchester (GM). These include graduate recruitment into high skills work, employer investment in skills, the connection between job quality and skills utilisation, and the scale of ‘over-qualification’ (having qualifications ‘above’ what are necessary to undertake a job). The report expands on themes in the GM Indepdent Prosperity Review (GMCA, 2019b) regarding the need to understand employers’ behaviour on skills more thoroughly as a contributory factor in poor economic performance, as well as to ensure GM is well-placed to offer good employment opportunities to more of its graduates.
- Skills have long been a vital aspect of local economic development. Although improvements across the board have often been called for in GM, when it comes to economic growth, the emphasis has typically been on increasing ‘higher level’ skills (typically understood as level 4+) in order to spur productivity increases. However, the assumption that these skills are relevant and can be well-used in jobs has rarely been tested in any depth. Analysis of ‘highly skilled employment’ in GM (defined through the traditional proxy of combining employment in the top three occupational categories of managers, professionals and associate professionals) suggests that there are more people with ‘high skills’ than there are ‘highly skilled jobs’ available in the city region.
- GM has a below average share of highly skilled employment (47% compared with a national average of 50% in 2020). Although higher than many comparable areas such as Liverpool (46%), it is lower than more prosperous parts of the country, such as London, the south east and the south west (62.2% in London; 58% in Oxfordshire LEP area and 52% in the West of England LEP area respectively). This shortfall implies there are fewer opportunities for highly skilled people than the national norm – and far fewer

than in the capital. A further implication may be that there is intensifying competition for the most desirable of these highly skilled positions as the growth of skills outpaces growth in highly skilled work in the city region.

- Patterns of employment help to contextualise what data exists on the scale of skills under-utilisation. Some 36% of employers in GM reported they had at least one member of staff with skills and qualifications above what was necessary to do their jobs, according to the most recent data from the Employer Skills Survey (ESS, 2019). This was similar to many other comparable city regions, but was higher than the UK national average (34%). These results were largely unchanged from those of 2017. In some districts of GM, according to the ESS, 17% of employers believed *the majority* of their staff were over-qualified. About 30% of employees in the UK report they are over-qualified for their jobs (although we lack any city regional or local breakdowns of this estimate).

- GM is a centre for higher education and the city region aims to encourage more of its graduates to stay in GM. However, some 38% of all graduates in GM work outside traditionally understood graduate or 'highly skilled' employment. The proportion of graduates who undertake non-graduate work has been rising over time. In 2012, 148,000 graduates were in non-graduate work. By 2020 the total was 203,000 (a 37% increase).

- Choices about where graduates wish to work will play a part. Some people may not wish to work in sectors and occupations that are conventionally described as high skill or graduate roles. However, the potential for a mismatch between supply and demand is becoming more apparent as rapid increases in the supply of higher level skills eclipse the pace of employment change.

- The vast majority of recent graduates find work and their salaries are notably higher than average salaries. Those who begin their careers in GM tend to have slightly lower salaries than the national average for graduates (£24,000 vs £25,000) and are more likely to work in lower and medium skilled work than graduates who find work elsewhere.

- Employers are investing less in skills over time, judged in terms of investment in individual trainees and per members of staff. The average number of days training the typical worker in GM received in 2019 was more than a day less than in 2013. The reasons are not fully understood, but key explanations are the changing incentives to invest as the funding burden shifts to individuals and the state, and the 'low skills trajectory' of the economy: not all the jobs require higher skills. This trend may be most apparent in the 'low productivity sectors' – sectors with relatively low productivity that account for a rising share of employment, such as retail, hospitality and care.
- In highlighting demand-side challenges on skills, the report argues that policymakers' attention needs to balance improving skill levels with improving skills utilisation. In other words, there are skills mismatch issues on both demand and supply sides that operate simultaneously. Policies and programmes that seek to develop skill levels in the city region, and to plug skills shortages among employers, need their counterpart initiatives that aim to shape the behaviour of employers on skills. Schemes such as the leadership and management programme and the Good Employment Charter are both important, but poor skills use and low skills demand connects with other long term policy agendas as well (such as around innovation and business development).

1. Introduction

1.1 In economics the idea that supply generates demand is known as Say's law after the French liberal economist Jean-Baptiste Say (1767-1832). Say's law is the argument that by producing more of a particular good the market for that good expands. In general, it remains a contentious view of the way markets operate; nevertheless, something akin to Say's law has evolved to become the overwhelmingly dominant perspective on skills and local economic development. The assumption is that by growing the stock of skills and qualifications in the population, demand for and utilisation of those skills (and thus economic growth) is likely to follow. 'More skills' has become the default answer to a wide variety of socio-economic questions, not least the great challenge of productivity. But has it worked?

1.2 When it comes to productivity there are obviously many other factors involved besides skills: business investment, research and development, innovation, competition, regulation and several more. Yet those who go looking for a close relationship between the growth of skills and that of productivity in the cities and regions of the UK are destined to be disappointed. Consider the example of 'level 4 skills' in Greater Manchester (GM). These are normally seen as advanced, graduate-level skills that render their possessors suitable for professional and managerial work and are often the subject of studies that note a correlation between regions with better skill levels and better productivity (for example, Oguz and Knight, 2011). In 2010, 20% of the GM working age population had a degree. By 2020 the proportion was 33%. This represents an increase of 65%. Such an improvement in the space of a single decade could legitimately be described as a transformation in skill levels at level 4 and above (although gaps remain with skill levels nationally which have also risen at a similar pace). Yet this injection of graduate skills into the GM economy has self-evidently not had the desired effect on productivity. Productivity levels have been about 10% below UK levels in recent years and the gap seems to have widened a little over the last 15 years (Holden et al, 2021).

1.3 To grasp why is a large and complicated question. It could be that the skills developed were not those that employers needed (advocates of technical

education often make this point). Or it could be that the theories that amplified the connection between skills and growth – chiefly, human capital and skills biased technological change - were defective in the first place. The debate goes on. In the meantime, GM policy documents have identified the place to start as being employers and their jobs – the demand side. “Differences in higher-value employment and the utilisation of skills appear to be the most important factors driving differences in local economic performance,” according to the Prosperity Review of 2019 (GMCA, 2019a, p14). In the GM Local Skills Report, a government-mandated document which tries to sum up the state-of-play in the city region on skills, the argument that boosting skills supply will not, on its own, improve economic performance is forcefully expressed: more skills need to go “hand-in-hand with shifts in business processes, employment practices and job quality” (GM ESAP, 2022, p61). The implication of this is that if there is a shortage, it is as much a shortage of good jobs as of skills: inadequacies of supply and demand are operating in parallel.

1.4 Understanding the demand side of skills can mean different things, however. One aspect of skills demand involves talking to employers in detail about their requirements from the skills system in order to influence curricula and qualifications and to help fill gaps in their workforces. Skills intelligence reports on sectors seek to analyse employer ‘needs’ in GM[1]; the ultimate, massive task to be undertaken through this work is to attempt to align skills supply with what employers identify as their requirements, both currently and in the future.

1.5 Yet the role of employers goes beyond being often dissatisfied consumers of skills developed within ‘the system’. ‘Demand’ means – simply – ‘jobs’. Through employment, employers are active in nurturing, forming, using and extending skills - and in some cases degrading and wasting them as well. Decoding the semaphore of the labour market as it actually is – that is, the arena of largely unintended consequences in which the employment relationship unfolds - offers

[1] Industry skills reports on sectors including the green economy, digital and construction can be read here

powerful intelligence on the demand for skills. It is this aspect of demand that is the focus of the current paper.

1.6 The topic of skills utilisation has suffered somewhat from being frequently name-checked, but rarely developed. The aim of the current paper is not to generate new research findings but to assemble the strands of existing evidence in one place and to reflect on the implications. This evidence is a little fragmented. Several issues form elements of the wider topic of skills utilisation – the scale of low productivity jobs and low pay, graduates working in 'non-graduate jobs', patterns in employer skills investment, and various others – but they are normally treated separately and are seldom stitched together into a more rounded view. While far from offering a comprehensive account of skills utilisation, this paper tries to bring together these strands to review what the evidence tells us about skills utilisation in GM.

1.7 The paper begins by quantifying the scale of under-utilisation both among employers (in GM) and individuals (unfortunately only at national level). From there, it examines one of the idiosyncrasies of the British skills profile: the large and growing pool of graduates in a relatively low skilled nation (OECD, 2017; OECD, 2019); but how many find their way to traditional graduate jobs in the city region of GM? The paper then turns to discuss employer skills investment and training, which appear to be trending downwards over time. The final section considers some of the consequences and accompanying phenomena of skills under-use, such as low pay and poor job quality. A conclusion reflects on underlying themes, causes and implications.

2. Under-utilisation and Over-qualification

2.1 There are two obvious sources on how skills are used at work – workers and employers. Neither of them should be seen as wholly reliable witnesses. Individuals may be prone to gloss their capabilities and think the grass is always greener. Employers are not necessarily in an ideal position to know what skills and qualifications their staff possess. As this report is about employers we will start with them and then move onto surveys of workers.

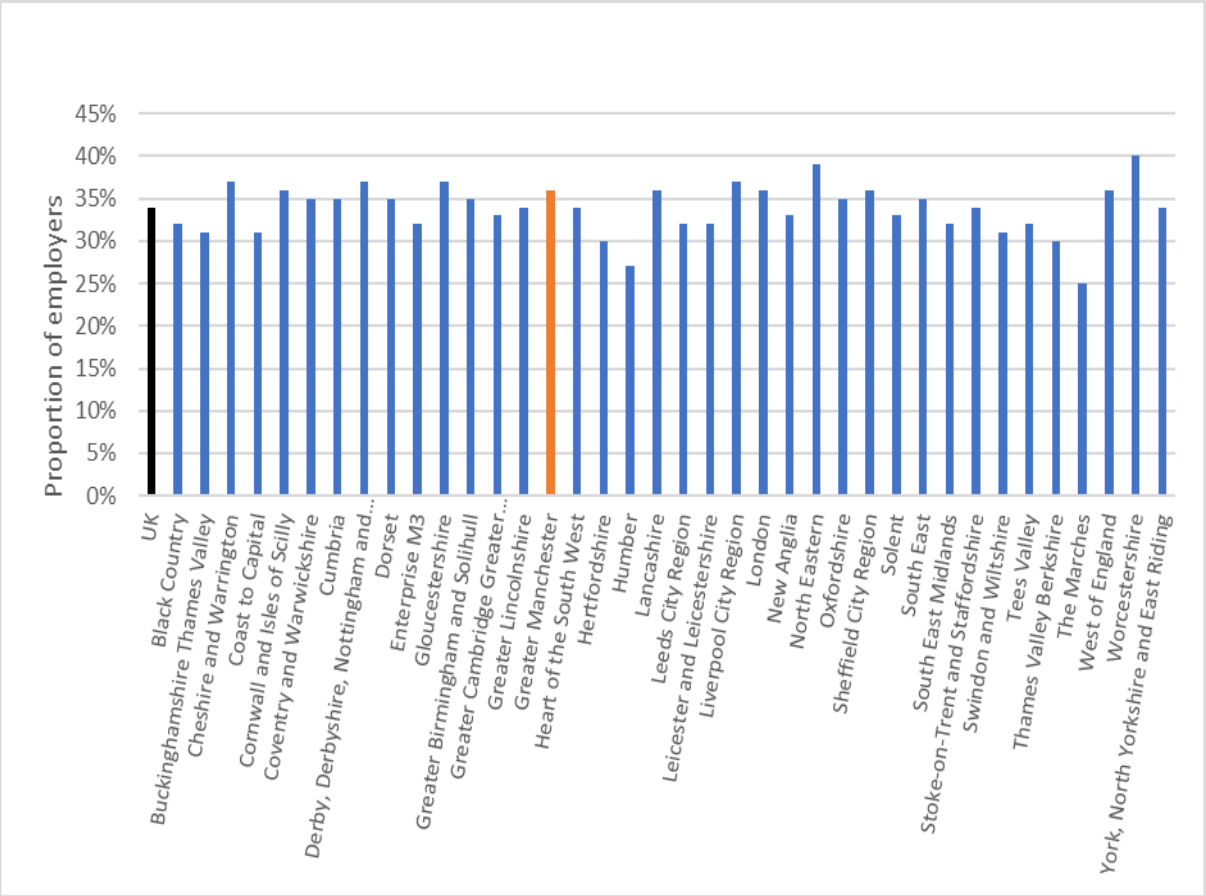
2.2 The Employer Skills Survey (ESS) is regarded the best source of information on employers' use of skills, with data from it released every two years over the last decade. Unfortunately, at the time of writing, the most up to date ESS data refers to 2019: pre-Brexit, pre-Covid, pre-inflationary spiral. This is obviously less than ideal[2]. As this paper is concerned with longer term structural socio-economic issues rather than short-term fluctuations, ESS information remains the best currently available so is reported and discussed here.

2.3 The definition of 'under-utilisation' used in the ESS is that the employer has at least one member of staff with qualifications and skills that are more advanced than the level needed to do their current job. Some 36% of employers in GM had staff who had qualifications and skills above the level necessary for their job in 2019. In comparison with other LEP areas, this was slightly above the national average (34%) but similar to many others. The highest proportion was 40% for Worcestershire in 2019. Within GM, the most acute problems with skills under-utilisation seem to be in Oldham (44% of employers), but others were not far behind (Bolton: 41%). The sectors where it was well above the GM average seem to point to several industries often identified with low pay and low

[2] Fieldwork for the 2022 ESS is taking place between June and December 2022. See Department for Education – Research at DfE – FE News. An *Employer Pulse Survey* (DfE, April 2022) has some limited updates to ESS questions. ESS data can be accessed here.

productivity (hotels and restaurants; arts and other services; transport and storage; health and care).

Figure 1: Proportion of employers with under-utilised staff, LEP areas, 2019



Source: Employer Skills Survey, 2019

2.4 The trends for skills under-utilisation appear little altered since 2017. The proportion whose skills were under-utilised in GM in 2017 was 35% (for the UK it was 34% - unchanged). However, there does seem to have been a worsening since 2015. In the ESS for that year, a quarter of employers in GM said they had staff with under-utilised skills.

2.5 The next version of the ESS may better reflect the post-Covid skills and labour shortages that have filled the headlines for the last year. What is interesting in retrospect about the 2019 data is how much higher the incidence of skills under-utilisation was than the proportion of employers with skills shortage vacancies in their workforce (7% in GM; 6% in England) or skills gaps (staff who were not proficient; 15% in GM; 13% in England). If such figures are taken seriously, they imply that skills under-use was a more endemic problem among employers than

the shortages and gaps that often appear to receive far more attention. Even more striking are the proportions of under-utilised staff (rather than employers who say they had *any* under-utilised staff). When asked to estimate the share of their workforces that had under-utilised skills, one in ten employers reckoned that *the majority* of their staff had under-utilised skills (9% in GM). At the level of local authorities the proportion of employers who believed most staff had under-utilised skills went as high as 17% in Bolton.

2.6 Skills under-use carries unequal costs for employers and employees (Keep, 2016, pp16-17). For employers, there are few incentives to avoid taking on over-qualified staff, especially if the cost of skills development has been borne by individuals or the state. It is quite true that there is a theoretical 'opportunity cost' of foregone efficiency and productivity among at least some employers in not making good use of peoples' abilities; there may, therefore, be some merit in thinking - as HR managers tend to - of "untapped resources" (CIPD, 2018). But this is a long-term, speculative and rather abstract view of costs. It seems just as reasonable to argue that employers may even have something of an interest in *maintaining* skills under-utilisation: if employers can attract staff with skill levels above what is strictly necessary to perform the work, then doing so may expand hiring choices, set new reputational and behavioural norms, and help suppress wage growth. For employees, meanwhile, some may choose to work 'beneath' the level they – theoretically at least – could. For many others, though, there are likely to be more acute and immediate costs in terms of squandered productive potential, personal frustration and, by extension, compromised well-being. Furthermore, among those kept out of roles by others who are over-qualified for them, there is a nominal 'loss' of entry points and opportunities. This last point may especially affect the young and those looking to enter the labour market for the first time (such as those moving from inactivity into work).

2.7 The evidence from the employee side on over-qualification tends to be produced only at national level without breakdowns at lower-level geographies due to the difficulty in reaching a sample size with sufficient scale. We therefore lack direct accounts of how widespread the general problem is in GM (although city regional information on graduates is available; see next section). It is therefore difficult to speculate about the scale of spatial variation in under-utilisation, although it

stands to reason that places with certain sectoral clusters and deeper professional and managerial labour markets may be better at using skills than others (eg. London, as discussed in the next section).

2.8 The best domestic source on UK skills under-use among individuals is the Skills and Employment Survey, which has been repeated roughly every six years with the most recent one being published in 2017 (Henseke et al, 2018).

2.9 According to the SES, 30% of employees in the UK said they have skill levels above what is necessary to undertake their work. This is down from 36% in 2012. The survey in 2017 also found that 23% of jobs did not require any qualifications to do them (unchanged from 2012, but down from 28% in 2006) (Henseke et al, 2018, p3). This is a rather higher percentage than the proportion of the workforce without any qualifications (just under 10%). The SES tallies with the ESS in finding that some sectors and occupations have much worse problems with under-utilisation than others, with low paid work having the highest levels of skills under-utilisation.

2.10 There is also some international comparative evidence on skills utilisation that reinforces the estimates of the SES. The OECD's 2019 Adult Skills Survey found that out of 40 countries examined the UK had the fourth highest rate of over-qualification. Just over 30% of respondents were over-qualified in the UK, just below New Zealand, France and Ireland with an OECD average of 22% (OECD, 2019, p118). At the same time, and going some way to explain this result, the UK also had comparatively low demand for workers educated beyond compulsory schooling (OECD, 2017, p20). The UK was second only to Spain in the proportion of job openings that required no more than primary school education in order to do them: 22% of all jobs. The average for G7 countries was less than 10% and for Germany the proportion was 0%. This suggests there are profound differences in how jobs are designed and labour markets are co-ordinated among advanced countries.

2.11 According to the OECD a notable feature of the UK labour market has been its polarising trajectory. It had a comparatively high proportion of jobs that required advanced levels of skill and a high proportion that required only low skills. Yet although low-skilled job openings were roughly in line with the

proportion of workers with low skill levels (21%), high skill jobs were failing to keep pace with the proportion with higher level qualifications. It found: “Demand for higher level qualifications falls short of supply, with only a third of jobs requiring a tertiary education compared while 43% of adults that have this qualification” (OECD, 2017, p18).

3. Graduates and Greater Manchester's High-skilled Labour Market

3.1 Over the last twenty years, the number of students studying in the UK has increased sharply[3]. There were 2.75 million students enrolled in higher education institutions in the 2020/21 academic year, up 41% from the beginning of the century, according to the Higher Education Statistics Agency. More than two million of them were undergraduates, up by 30% since 2000/01. The number of postgraduate students has increased even more substantially, with almost 750,000 postgraduate enrolments in 2020/21 - up 83% from 2000/01.

3.2 GM is an important centre of higher education and is at the forefront of these transformations. Indeed, the higher education sector is a vital part of the city region's brand and its projection of post-industrial renaissance. The Covid pandemic appears to have increased the appetite for university education even more with record enrolment levels in GM's higher education institutions in 2020/21. GM's five universities together produce well over 35,000 qualifiers each year, the vast majority of whom are destined to enter work. There has been a long-standing ambition in the city region to encourage as many as possible to stay in GM following their degrees.

3.3 A strongly utilitarian attitude towards the 'value' of degrees has become fashionable, driven by policy and funding arrangements. Whatever else may motivate individuals to study, the kinds of jobs graduates can access has become more or less the exclusive consideration that matters among policymakers. Some frequently parlayed statistics underscore what are called the 'returns' to higher education. The employment rate for graduates aged between 16 and 64 (86.4%) was significantly higher than for non-graduates in the UK in 2020 (71.3%). Some 66% of graduates were employed in high-skilled occupations compared to 24.5%

[3] This chapter deals with graduates. But other types of level 4+ skills are increasingly prominent in skills debates, such as degree level apprenticeships. An apprenticeship is technically a job. Degree apprenticeships may offer the prospect of better skills utilisation, but research in this field has not been developed so far.

of non-graduates. Graduates also have higher median salaries: £35,000 a year - £9,500 per year greater than for non-graduates. All this suggests there continue to be economic returns to a degree.

3.4 Yet this deployment of averages is unlikely to be the whole story at a time when, as we have seen from the previous section, the labour market has polarising tendencies and inequality is on the rise. How has the labour market responded in the wake of this colossal expansion of the supply of higher-level skills?

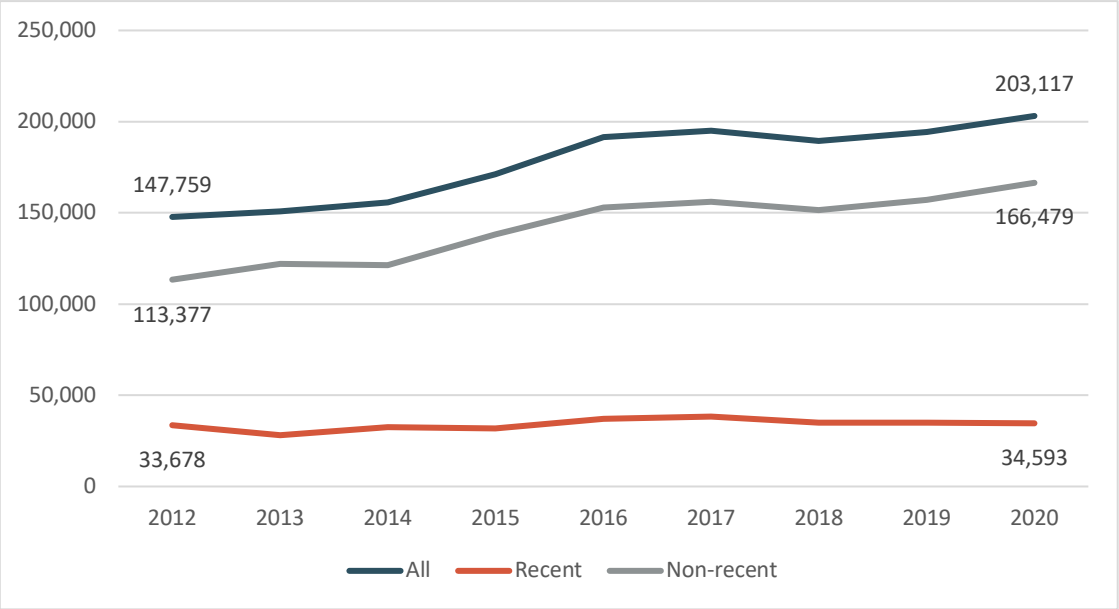
3.5 One of the difficulties with answering that question with much conviction is the lack of a serviceable definition of 'graduate employment' or a 'graduate job'. The term 'graduate' has a very precise meaning on the supply side; the demand side interpretation is much fuzzier. Unlike many countries where specific qualifications are needed to enter and undertake specific occupations, in the UK the labour market is flexible and barriers to entry kept deliberately low to enable more rapid transitions. Occupational identities are more fluid than elsewhere. As a result it is often not easy to say what counts as a graduate job. Jobs, organisations and occupational hierarchies evolve and the meaning and content of roles can vary widely. A case in point here is the term 'manager': upgraded, skill-intensive employment cannot be inferred from the prevalence of 'managers'.

3.6 For research purposes, bespoke definitions of graduate employment have been generated by assigning official occupational titles known as SOC codes (standard occupational classification) to the categories of 'graduate' and 'non-graduate' on the basis of researcher judgements about what is normal for a sector. The definition used by the Office for National Statistics (ONS) operates in this manner[4]. Examples of non-graduate jobs include receptionists, sales assistants, many types of factory workers, care workers and home carers. These classifications are indicative of what may be expected from roles. Holding a graduate qualification does not guarantee a person's ability or interest in gaining an occupation defined as a graduate role. Similarly, lots of people without graduate qualifications can successfully undertake graduate level work.

[4] An example of this approach from the ONS can be found here. The data used in this paper draws on this release

3.7 Having noted these crucial caveats, the ONS estimates there were approximately 203,000 graduates in non-graduate roles in the GM city region in 2020 (the most recent data). This constitutes an increase since 2012 when there were 148,000 (a 37% increase). Of all employed graduates, the proportion working in non-graduate roles has remained steady at around 38%. In 2020, GM had a slightly higher proportion of graduates employed in non-graduate roles than the UK (37.8% compared to 36% in the UK). The GM position is comparable, if slightly lower, to other similar city regions (West Midlands: 39.4%; Liverpool City Region (38.9), as well as Scotland, Northern Ireland and Wales). London had among the lowest proportions of employed graduates working in non-graduate roles (30.7%).

Figure 2: Number of graduates working in non-graduate roles in GM, 2012-2020



Source: ONS

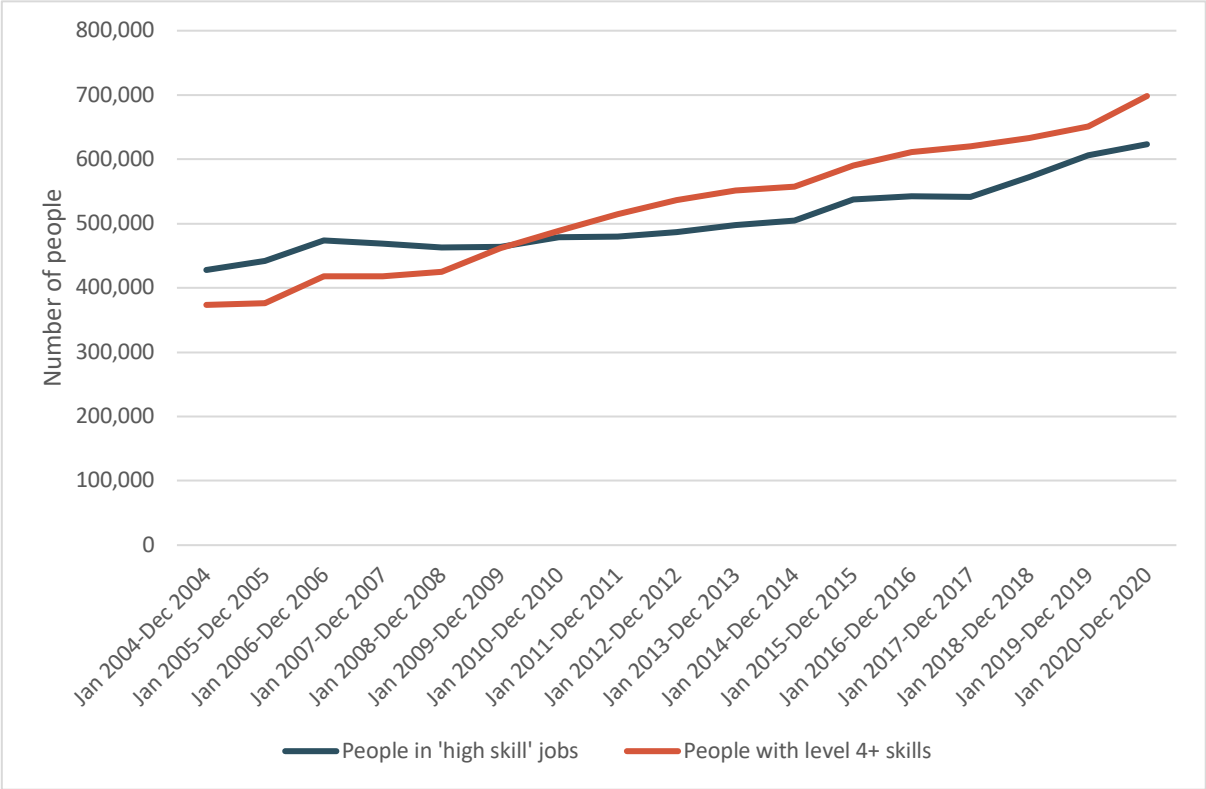
3.8 Intriguingly, the ONS reports that 'recent' graduates – those who graduated in the last five years - seem to have become better at navigating their way to graduate work over time. In 2012, 57% of recent graduates were in non-graduate work. By 2020, this was down to 43%. It is not clear why this might be. One possible explanation may be that graduates are seeking to 'professionalise' more quickly – to find their feet in better paying careers earlier than before due to financial pressures; alternatively, employers may be promoting young people faster.

3.9 Variation in the proportion of graduates employed in non-graduate roles is likely to be determined by a large number of factors, most obviously the proportion of graduates in the working population, and the proportion of all roles which are considered to be 'graduate roles'. Other factors include the extent to which higher education pathways align with a progression into specific roles, the availability of alternative pathways into 'graduate' occupations, and the individual characteristics and preferences of students. The data suggests that London remains better than other places at 'using' its graduates in roles that theoretically match their skills. In many other places the 'graduate labour market' will be too shallow to easily absorb the larger graduate pool.

3.10 A comparison that might provide useful context is between the growth of 'graduate roles' in the economy and the growth of graduates. Given the lack of formal definition of graduate roles just outlined this needs to be treated cautiously. The chart below plots the growth of level 4 skills in the population compared with 'high skill occupations' using the Annual Population Survey. A degree is not exactly the same as 'level 4+' and the proxy of the top three occupational groups (managers, professionals and associate professions) are not necessarily reducible to 'high skill' or 'graduate roles'. Nevertheless, as a broad-brush exercise in comparing the growth of skills and the growth of occupations that use those skills, the proxies are traditional.

3.11 As the chart shows, although both high skills and high skilled jobs have been growing in GM, growth in skills has outpaced growth in high skill jobs. Level 4+ skills in the GM population have grown by 87% between 2004 and 2020. The number of people employed in the top three occupational groups has grown by 46%. The chart implies there was a nominal gap of approximately 75,000 jobs between the number of highly skilled people and 'high skill jobs'. The point at which the two lines crossed – that is, when the skills exceeded the jobs – roughly coincided with the financial crisis and recession.

Figure 3: Graduate skills versus 'high skill' jobs in Greater Manchester



Source: Annual Population Survey
Notes: 'high skill job' proxied by people employed in one of the top three occupational groups of managers, directors and senior officials; professional occupations; and associate professional and technical occupations. The comparison is inexact: people with high skills can choose to work elsewhere in the labour market; similarly, people without level 4+ qualifications may undertake work at high skill levels.

3.12 Several possible implications emerge from this exercise. There is a strongly expanding pool of graduates seeking work in a less-strongly-expanding set of graduate-type jobs. This suggests positional competition for the best roles is likely to become more intense (Brown et al, 2020). Secondly, there would appear to be a growing risk of a deficit as higher-level skills grow beyond the capacity of the economy to easily absorb them. Third, more graduates may experience the skills-to-work transition as something of a broken promise. The expectations attached to higher level study do not connect with the nature of real-world opportunities as more than 30% are destined for jobs outside the graduate labour market (assuming that is the kind of job they wanted to start with). And fourth, there may be a rise in 'credentialism' — the process by which jobs come to require qualifications when previously they did not. Employers can request that candidates possess a degree as a way of filtering large numbers of applicants for

vacancies so that new occupational norms are created quite independently of the skills involved in doing the actual work. This creates increasingly competitive labour market conditions not just for graduates but perhaps especially for non-graduates who have to compete for a decreasing number of good jobs in a qualifications-saturated labour market.

3.13 As one paper puts it: "Many employers, faced with a more qualified pool of applicants, select workers with better qualifications, seeing the possession of qualifications as a signal of capability. However the effect is that the qualification levels to obtain jobs spiral: jobs that were non-graduate yesterday are graduate jobs today and will likely become post-graduate jobs tomorrow" (Findlay and Warhurst, 2012, p4).

3.14 This highlights a fundamental distinction that runs through all skills debates, but is highly relevant to the current one: the difference between skills and qualifications. A qualification may be understood to signal a skill, but is often a poor proxy for it. It is easy to count qualifications, but we should always remain aware that when we do so we are not necessarily measuring skills; the amassing of qualifications may or may not amount to the formation and refinement of skill. To this can be added a familiar complaint from advocates of technical education (and many employers and policymakers): that what is needed is not more graduates, but more technical skills (DfE, 2019[5]). In other words, many of the skills that have been developed so quickly in recent times are, in effect, the wrong skills.

3.15 These distinctions are extremely important, but they also invoke seemingly monumental claims that invite many questions about 'need' and what is 'ideal' – and indeed about what the whole purpose of learning and skill formation should be – and, as such, are beyond the scope of this paper.

High skill employment: how does GM compare?

3.16 To gain a clearer picture of how GM is positioned in comparison with other areas in the scale of its high skill labour market – and thus how compelling its

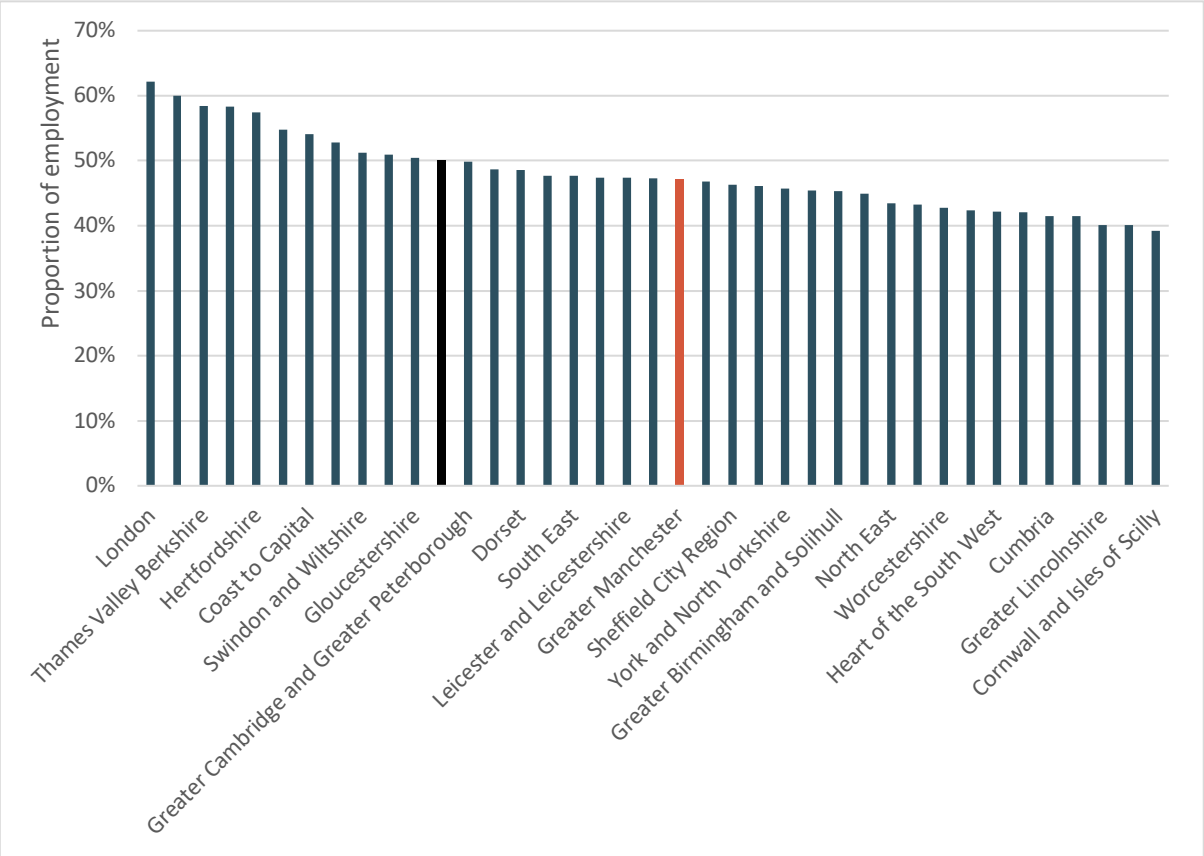
[5] The Augar report (DfE, 2019) explored this topic and the balance of skills that the UK needs in depth

labour market might be to graduates - the following chart compares LEP areas on the share of employment in the top three occupational categories in 2020[6]. GM is 'mid-table'. It is below the national average, with plenty of other areas with a greater preponderance of high skilled work (including, most clearly, London, but also other areas in the south east and south west). On the other hand, it has slightly more high skilled employment than areas such as Liverpool and Sheffield (but less than the Leeds city region).

3.17 Yet GM is an average of diverse local authorities. The second chart below shows variation in highly skilled employment by district for the residents of GM. Within GM, Trafford is the most 'skilled' in terms of high skill occupations among residents and Oldham and Wigan the least. Perhaps most unexpected, though, is the positioning of the district containing the city centre and the city region's largest universities: Manchester. Despite its advantages for economic dynamism, Manchester's residents undertake a very wide variety of jobs and the proportion of those in high skilled work is actually only very close to the national average.

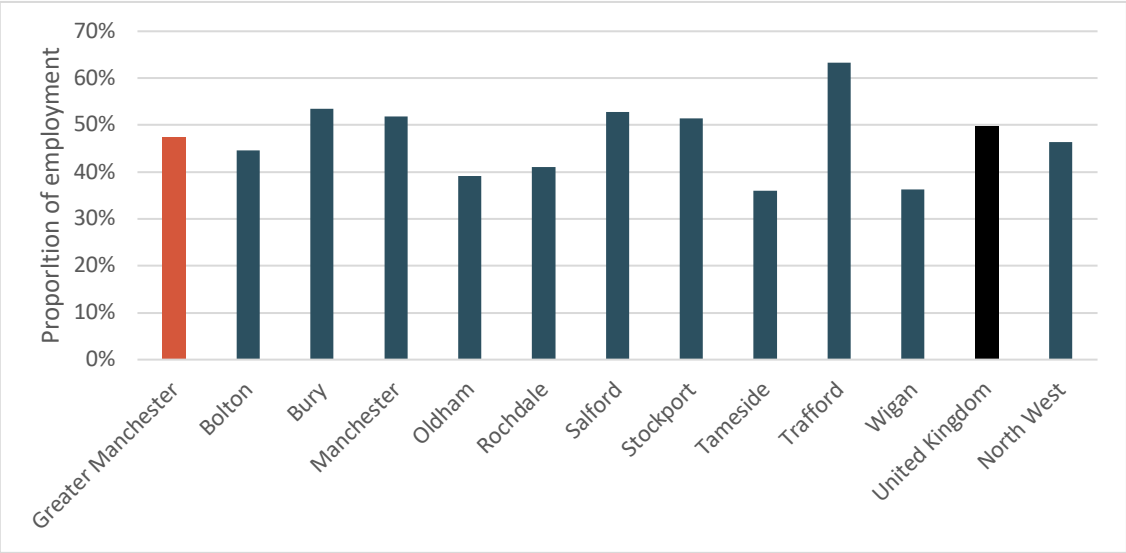
[6] Data for 2021 is also available on the APS, but 2020 was chosen to be more comparable with other data in this section and the previous one.

Figure 4: Proportion in 'highly skilled' employment, English LEP areas, 2020



Source: Annual Population Survey
Notes: See notes for figure 3.

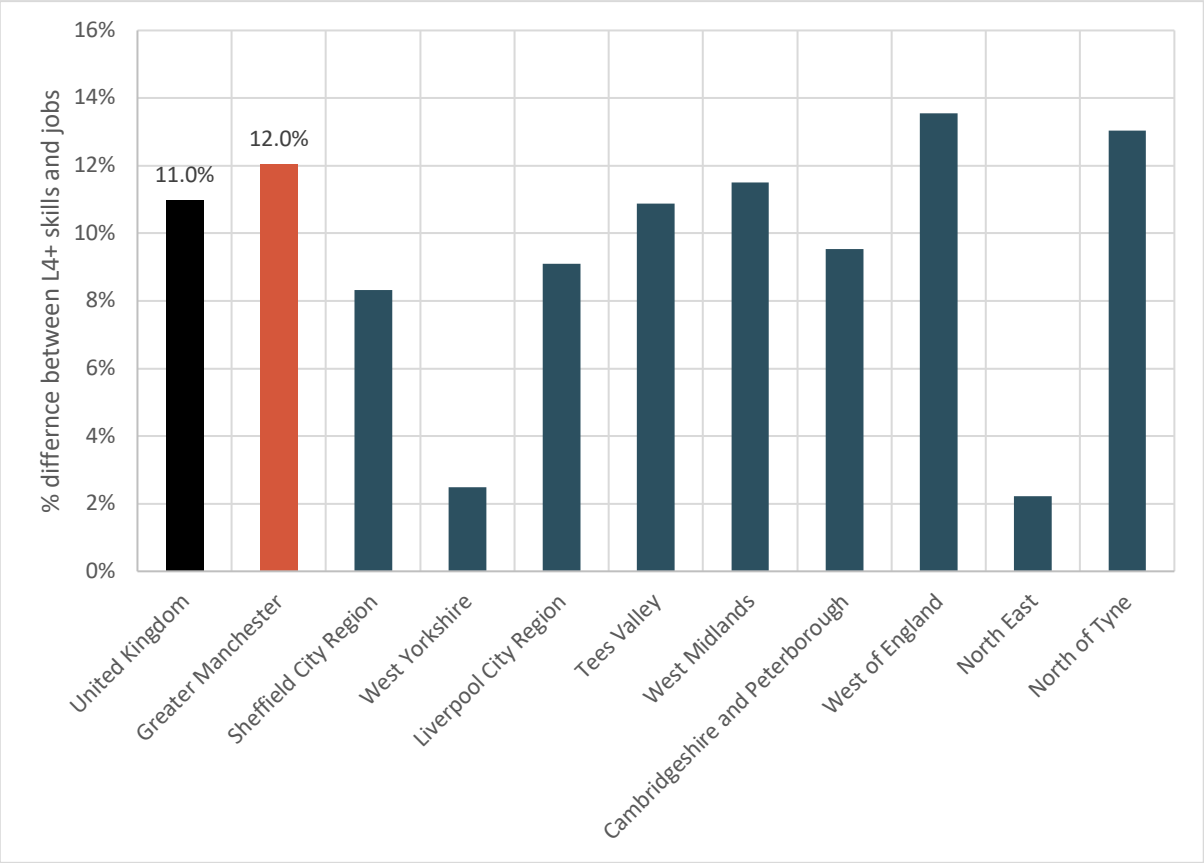
Figure 5: Proportion of high skilled employment, Greater Manchester, 2020



Source: Annual Population Survey
Notes: See notes for figure 3. Chart refers to GM residents.

3.18 It is also possible to compare areas on the scale of their nominal gaps between the number of people with skills at or above level 4 and the number of highly skilled jobs available within a particular area. All the caveats that applied to the skills and jobs comparison in figure 3 above also apply here. Still, leaving those to one side, it appears that GM's gap is relatively large in comparison with other Combined Authority areas. It is just above the UK level, but below some areas such as the West of England.

Figure 6: Difference between number of people with skills at level 4+ and 'high skill' jobs, 2020



Source: Annual Population Survey
Notes: See notes for figure 3.

Graduate retention

3.19 So what is the experience of new graduates from GM universities who enter the labour market for the first time? Recent analysis of data from the Higher Education Statistics Agency offers some insight into this question through a new

survey – the Graduate Outcomes Survey – that asks participants about what they were doing 15 months after leaving university. GMCA has commissioned a subset of this data for GM and the results yield useful findings for understanding skills utilisation (see GMCA, 2022a).

3.20 GM's five HE institutions are very different kinds of places. The University of Manchester has a substantial population of international students and is geared to research, while the Universities of Bolton and Salford are institutions catering to more local learners and are more work-oriented institutions in the sense that lower proportions of undergraduates will seek to pursue further study. Only about 14% of the intake of learners at the University of Manchester come from the city region, while at Bolton and Salford, about half of the students went to school in the city region to start with. These factors are powerful influences which shape whether students stay in GM to work after university (GMCA, 2022a).

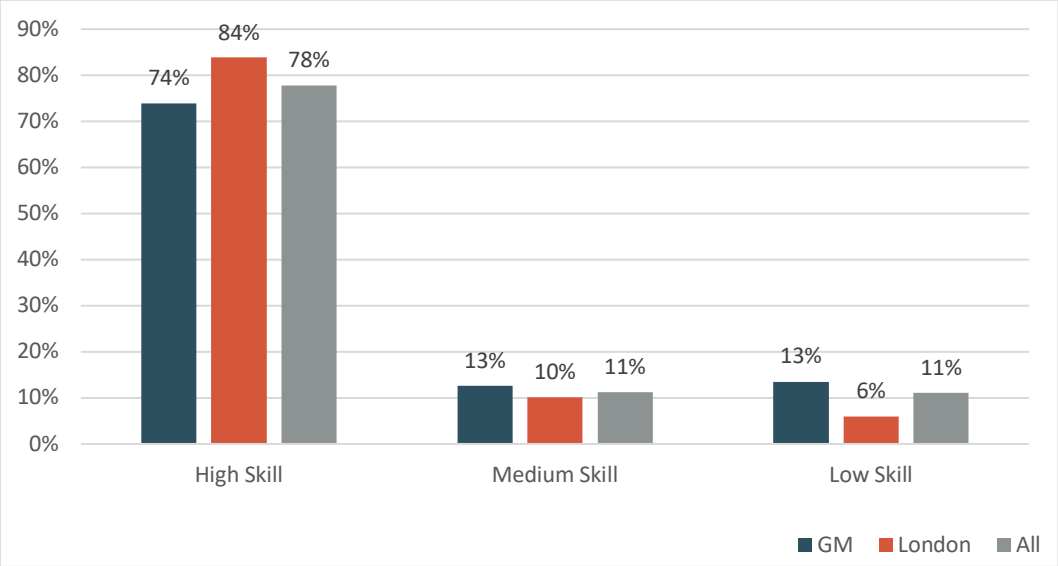
3.21 The vast majority of students (70%) enter the labour market immediately after their degree. Some 44% opt to begin their working lives in GM, with the remainder leaving the city region to begin their careers. About 12% of GM graduates gravitate to London within five years of graduating.

3.22 GM's labour market has certain differences both from national averages and from other major cities, most notably the capital. These differences appear to have some influence over the opportunities and constraints that graduates confront. In total, 74% of the graduates of GM universities entered 'high skilled work' if they stayed in GM (defined, once again, as occupations that are classified as professional, managerial or associate professional). Yet this proportion is a little lower than graduates who opt to go elsewhere to begin their careers. The 'all areas' proportion of graduates who entered high skilled work was 78%. And this rises to 84% for the graduates who moved to London for work.

3.23 Meanwhile, at the other end of the skills spectrum, 13% of the graduates who stayed in GM undertake work that is 'low skilled' (meaning occupations that fall into the three lowest skilled job categories of the occupational hierarchy - customer service roles, process and machine operatives, and elementary trades). The chart below shows the occupational levels of the graduates from GM universities in 2018/19 15 months after leaving university. A further 13%

graduates enter work that is technically classified as 'medium skilled' in GM – technical roles, jobs in administration, sales positions and so on. The rates of entering these medium skilled roles are very similar for graduates who work in GM and those who work elsewhere.

Figure 7: Occupation skill level by location of work among 2018/19 graduates from GM higher education institutions



Source: HESA, 2022

3.24 Unsurprisingly, given these results, there appears to be also something of a GM pay penalty that affects graduates who begin their careers in GM. Salaries for graduates who choose to stay in GM are generally a little below the national average – as with GM salaries in general. The average salary for graduates from GM HEIs who stayed in GM to begin their careers is £24,000 (GMCA, 2022a). For those who began their careers outside GM the average was approximately £25,000 and for those in London £27,000. These figures vary somewhat by institution with graduates from the University of Manchester tending to earn more than others – and indeed more than the national average – and graduates from other institutions to earn slightly less. On the other hand, the cost of living is also likely to be somewhat lower in GM compared with London and the south east as well, so the pay penalty may be irrelevant or unnoticed.

3.25 What the available graduate data on skills utilisation shows is that degrees continue to have labour market currency. A sizeable majority of graduates will enter high skill professions at salaries that are well above the levels earned by

non-graduates. But there is a non-trivial minority for whom this is not the case. They pursue careers that are not conventionally seen as graduate level. The role of choice versus constraint in this opportunity bargain is something it would be useful to know more about. And it is important to stress, also, that there are many good reasons to pursue learning that have nothing to do with the labour market. So far, though, it appears as if the constraint element cannot simply be ignored: the economic structures that pertain in GM certainly seem to have at least some influence over graduate outcomes.

4. Employer Skills Investment

4.1 There are three ‘partners’ in the skills system with needs to be met and interests to be served – individuals, employers and the state. The previous section examined the growth of the graduate labour force that has been funded by the state and – increasingly – by student debt, and whether graduates were finding their way to work that was commensurate with their skills. In this section attention turns to employers as investors in skills.

4.2 Once more, there is an unfortunate data-lag in the best source: the ESS, with the data referring to 2019. In 2019, employers in the UK spent £42 billion on skills, a figure that includes the wage costs of those undergoing training. If wage costs are removed then employer investment would be roughly on a par with total state spending on skills of approximately £23 billion (New Economy, 2017).

4.3 Employer investment in 2019 was about the same as in 2017 - and indeed about the same as in 2005 (it fell in the intervening years and then recovered). However, this spending was across a period when the workforce was expanding. This means that the flat investment total actually represents a reduction in investment in spending on individual workers. Training investment per employee fell 28%, from £2,139 to £1,530 per worker, according to the Learning and Work Institute, putting British investment in skills at about half the level of the EU average (LWI, 2022).

4.4 In 2019, some 61% of employers provided training in the UK, a higher proportion than in many European countries, but a lower rate than in 2011. GM appears to hold up quite well against national norms: some 64% of employers trained their staff in GM in 2019. Rather worryingly, however, a more up-to-date survey repeated some of the ESS questions to try to grasp the effect of the Covid pandemic on training (Employer Pulse Survey, DfE, 2022). It found that employers that provided training in the previous 12 months had fallen to 48% (no GM data was made available).

4.5 Rather than participation in *any* training, arguably a more valuable metric is *how much* training workers receive. This data offers a broadly consistent view that the workforce appears to be receiving less training over time, but there are some

nuances in respect of geographical variations. According to the ESS, in 2019 employees in GM received more than a day's less training a year on average than they did in 2013 (although they received more than is typical nationally).

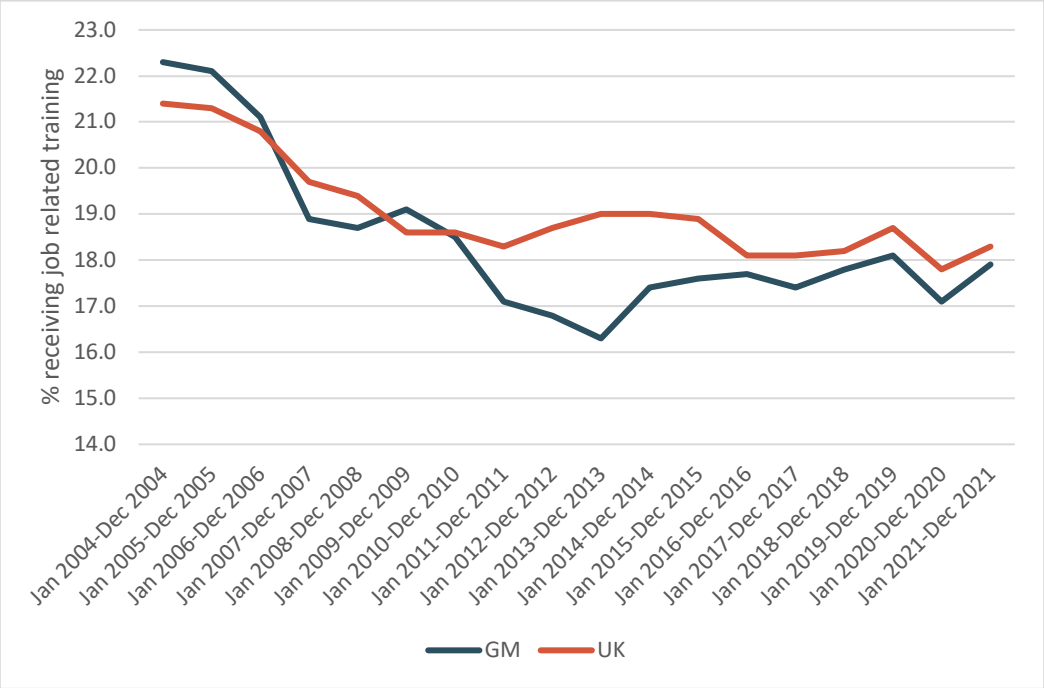
Figure 8: Employer investment in training – training per employee

Source: ESS, 2013, 2015, 2017, 2019

4.6 Training data can be disaggregated per person trained and per member of staff. The average member of staff in GM received 3.8 days training a year – a figure that again is slightly above national norms. According to the 2019 ESS, the lowest investment in training was in Oldham (3.6 days per trainee; 1.7 days per staff member). But neighbouring Rochdale was among the districts with relatively high investment (7.5 days per trainee; 4.2 days per staff member).

4.7 The data in the ESS which shows GM in a comparatively favourable light on employer investment in training needs to be balanced with other sources (such as the Annual Population Survey). The APS also concurs that there is less training per person over time, but suggests GM based employees typically receive less than average. The APS asks participants how many working-age people received training over the last 13 week period. In 2004, 22.3% of respondents received training in this time slot. By 2021 the proportion was about 18% and had been flat for a number of years. There was a particular period of investment decline in GM in the years following the financial crisis.

Figure 9: Proportion of employees who received job related training in last 13 weeks



Source: Annual Population Survey, 2021

4.8 Merely quantifying training in this manner does not address its 'quality', however. The 'quality of training' can be difficult to gain consensus about – especially when a portion of training may be to do with compliance or organisational box-ticking. For 12% of employers in the UK, training was limited to basic induction or health and safety while fewer than 20% of all employers provided management training, according to the ESS. This does not necessarily mean training is low quality, but it suggests the value and impact of training is likely to be nugatory.

4.9 Access to training is also highly unequal with low paid, low qualified workers less likely to have opportunities to develop their skills (LWI, 2022). Some 72% of people in high skill occupations (the top three broad occupational groups referred to previously) receive training, according to the ESS. This compares with 25% for people in low skill occupations. Smaller businesses and employers in lower wage, lower productivity sectors (including retail and hospitality) were less likely to provide training. These patterns reinforce disadvantage in the labour market and limit the opportunities to progress.

4.10 Plenty of other reports have also noted the decline in training over time, so the finding is well evidenced (Green and Henseke, 2019; Chartered Institute of Personnel and Development, 2019; Dromey and McNeil, 2017; DfE, 2017; Green et al, 2013). What are the explanations for it? There are several theories, but the main ones that link to the themes of this paper can be boiled down to two.

4.11 First, there is the question of the changing dynamics of investment in skills. Because of the rise of individual investment, most notably student debt, the incentive to invest among employers may have been weakened. As a result, the need to capitalise may have diminished too, feeding the sense that skills under-utilisation is a cost-effective strategy for employers. As the skills academic Ewart Keep puts it: “When much of the skills supply has been provided more or less free of (direct) charge to employers via publicly funded programmes, student loan financed provision, or high levels of subsidy for some forms of employer-provided training, poor skills utilisation carried a limited cost” (Keep, 2016, p45).

4.12 The Chartered Institute of Personnel and Development, the HR managers’ organisation, also argues this may be the case. However, the CIPD adds there could be another, second factor at play: “Just as likely a contributing factor is the shift towards business models and competitive strategies requiring lower levels of skills.” (CIPD, 2019 p2). This is another powerful theme in the explanations for decreasing investment. According to one report: “A falling demand for skill formation is inherent in a ‘low-skills’ trajectory for large swathes of the British economy, representing a trend away from the knowledge-economy” (Green et al, 2013, p28). Put simply, this is the thesis that employers are training less in aggregate because many don’t see a need for skills.

5. Job Quality and Skills Utilisation: Different Labels for the Same Thing?

5.1 Referring to GM's pre-Covid labour market, the Prosperity Review One Year On report noted: "While jobs were relatively plentiful, there were problems with job quality" (GMIPR, 2020 p18). In this section, the evidence behind this assertion will be examined before moving on to consider the relationship between job quality and skills utilisation.

5.2 The term 'job quality' has gradually become more familiar, but it remains troubled. There is at-best modest consensus about what it means, it is very difficult to measure (though not impossible), and it is even harder to identify the range of policies that might help improve it. There is some agreement that job quality is a multi-dimensional concept comprising such areas as pay, job security, autonomy and so on, but very little on how many dimensions there should be within the concept, which indicators are best to measure the dimensions, or how to weight them in coming up with an overall assessment. As most jobs are likely to have good and bad elements, the multi-dimensional character of job quality means dimensions may cancel each other out to some degree (an interesting job with terrible pay, for instance, or a dull job with mercifully short hours).

5.3 In theory the list of dimensions could be extremely long and detailed and therefore advance a more thorough account of what it means to enjoy good work. But a long list is unworkable in practice. A short list, on the other hand, will have greater focus but could be seen as arbitrary and incomplete. Given these and many other questions, there is always a temptation to abandon the idea of job quality altogether for being just too complicated and to measure something different instead – job satisfaction, for example, or a solitary dimension of job quality such a pay. Both these options have been pursued in GM at different times alongside an on-going emphasis on job quality.

5.4 The difficulties of job quality are especially pronounced when it comes to skills. Going back to some classic studies of the post war years, skill has long been a central ingredient in identifying good and bad jobs, although it often tends to be elided with other ideas, such as autonomy, status, craft and identity (for example, Blauner, 1964). As was highlighted in the introduction, it has become fairly common to identify poor job quality as a principal culprit to explain why skills improvements have not translated into productivity. But precisely what element of skills matters most for job quality? It is arguable that individuals with higher skill levels will tend to have higher job quality and individuals with lower skills are likely to have lower job quality. Yet the attributes of individuals tell us little about the quality of a job. Job quality is widely, if not universally, seen as being about the job rather than the person who does the job (Felstead et al, 2019[7]). So there is a reasonable logic in looking to the demand side for the skill component of job quality. Several of the topics covered in this report might make plausible candidates for being considered relevant to job quality – employer investment in skills is one, skills under-utilisation is another. Others not covered so much might also be germane, such as internal promotion prospects, recruitment skills and management practices and processes. In some ways the entire set of issues attached to skills demand could be seen as the same as those involved in job quality – a mutually reinforcing syndrome of problems affecting people at work and regional economic development. But if approached in this way, with skills utilisation positioned as an element in a wider concept of job quality, then the discussion risks becoming circular and tautologous: statements along the lines of "poor job quality causes skills to be under-used" is the same as "poor job quality causes poor job quality".

5.5 There is no easy solution. As always, though, conceptual problems should not hold up attempts to understand or intervene. And in recent years GM has attempted both to measure job quality and introduce policies to address it.

5.6 Beginning in the summer of 2022 the GM residents survey has begun to ask a range of questions about 'good work', including whether people felt their skills

[7] It might be said, though, that jobs need people to 'activate' them. Whether jobs can be conceptually separated from people is debatable.

were ‘recognised’. Asked to rate their supervisor or manager, 68% of residents said they were either ‘good’ or ‘very good’ at recognising their skills and abilities. Some 66% also agreed they “helped [them] to learn how to do their job better” (GMCA, 2022b)[8]. About three quarters also felt positively about their autonomy at work. In the context of the other data discussed in this paper, such results seem to amount to a broadly consistent picture that there is a sizeable minority of slightly under a third of working people whose skills are probably not utilised well in their job. Meanwhile, the survey also appears to suggest high job satisfaction rates: some 69% of GM residents said they were satisfied with their job. This result appears to be somewhat above others’ findings and is in any case a different concept from job quality (for example, the Resolution Foundation found just over half were satisfied overall with their job, a proportion that has declined (Resolution Foundation, 2021).

5.7 In terms of policy responses, the main intervention so far has been the GM Good Employment Charter that was introduced in January 2020. The charter is a voluntary membership scheme for employers that aims to generate a movement around good employment with three ‘tiers’ of belonging. In keeping with much of the job quality literature, the charter envisages job quality as being multi-dimensional - that is, as a package made up of different elements (the charter calls them ‘characteristics’). The number and nature of the characteristics was decided on following two rounds of stakeholder consultation. The charter has seven dimensions: secure work, flexible work, pay, engagement and voice, recruitment and career progression, people management, health and well-being. Some of these elements might appear to be more important to individuals (for example, pay and security), while others are perhaps more valuable to employers (engagement). The charter explicitly aims to help both individuals and employers. Although the term ‘good skills utilisation’ does not explicitly feature, it appears to relate to more than one characteristic, especially career progression and people management. One of the recommendations flowing from the Prosperity Review

[8] Although recognising skills and helping people learn new ones is not quite the same as using existing skills well. In other words, the survey question does not align precisely with utilisation.

was to use the charter to encourage 'foundational economy' firms to use skills better (GMCA, 2019).

Evidence: the scale of poor job quality (aka, the scale of low pay)

5.8 The main evidence that tends to be cited to back up the claim of low job quality in the GM city region is in respect of the single dimension of pay, doubtless because it is the easiest to quantify. So the rest of this section focuses exclusively on low pay as a measure of job quality, and what that implies for skills utilisation, rather than the complex measurement controversies of other job quality dimensions, such as insecurity or engagement.

5.9 In GM different interpretations of 'low pay' have been used. In work for the Prosperity Review of 2019, the benchmark chosen was the low pay threshold, an internationally used benchmark of two thirds of the median for all workers (full and part timers)[9]. The Prosperity Review used data referring to 2017 and found that 19% of jobs in Greater Manchester were paid less than two thirds of the national median wage in 2017. This was a higher proportion than in better performing UK urban areas (London, 10%, and Bristol city region, 16%), but lower than many other city regions (20-24%). The proportion of local jobs that were low paid in 2017 was highest in Rochdale (26% in 2017) and lowest in Manchester and Salford (14%). The majority of low paid workers in GM were women and such work was heavily concentrated in a handful of sectors: retail and wholesale accounted for 27% of all low paying jobs, hospitality, tourism and sport for 21%, and health and social care for 15% (GMCA, 2019a, p43).

5.10 The pronounced concentration of low pay in certain sectors links to another important finding in the Prosperity Review with a bearing on skills utilisation: the growth of employment in sectors with low productivity. Some 42% of employment

[9] Because it is a relative measure that uses the mid-point of the salary distribution (the median) it is worth bearing in mind some of the implications of choosing this yardstick. In eras when the median is flat or falling the low pay threshold may become a comparatively less demanding threshold to attain, which can reinforce an impression of the incidence of low pay 'falling'. Second, the median, because it is an average of different types of worker, will be affected by the scale of part-time working. And third, at times when social inequality is rising the role of the median in identifying a central tendency in society is arguably diminished: it is the mid-point of a distribution with increasing variance.

in GM was in sectors with relatively low productivity (defined by identifying sectors where Gross Value Added (GVA) per worker was £30,000 or below, the largest ones being care, retail and hospitality). Employment share accounted for by these sectors had crept up over recent decades (GMCA, 2019b).

5.11 The Greater Manchester Strategy (GMCA, 2021), however, uses a different measure of low pay. To mesh with policy supporting a living wage in the city region, the low pay statistic that is typically cited is the proportion of workers earning below a living wage[10]. Using the living wage returns a slightly different estimate of the scale of low pay than the low pay threshold in some years, but the general picture is similar. In 2021 just under a fifth of workers in GM earned below the level of the living wage at the time (19.1%). In some districts the proportion falling short of a living wage was not far off 30% (eg. Tameside). However, the data also suggests the scale of low pay in general has been falling over the last few years. In the table below, proportions earning below the level of the living wage are shown for the years between 2013 and 2021, with low pay 'peaking' in scale in 2016. Among the likely explanations for the fall are above inflation rises in the statutory pay floor. These are likely to have also impacted rates above the minimum as well, as employers adjust differentials in order to keep their staff.

[10] The living wage also has some quirks that are worth noting. The level of the living wage is set by the Living Wage Foundation with advice from experts in November each year. The changes in the level each year tend to vary; some years the up-rating is easier for employers to meet than for others, which can affect the proportions falling above and below the level.

Table 1: Proportions earning below the living wage, 2013-2021

	2013	2014	2015	2016	2017	2018	2019	2020	2021
Bolton	27.4	28	25.8	23.4	24.8	27.7	24.4	24.8	22.4
Bury	21.7	26.4	27.6	29.3	27.1	27.7	25.8	22.6	22.9
Manchester	16.4	17.2	15.8	18	15.3	17.6	13.0	14.8	14.6
Oldham	32.3	33.7	32.9	32.1	30.2	27.6	25.1	22.9	23.1
Rochdale	26.7	32.6	29.6	32	29	29.9	23.0	25.8	19.4
Salford	16	17.4	19.9	21.3	16.5	18.5	16.9	14.3	16.3
Stockport	20.4	23.2	23.9	25.5	25.6	26.3	20.8	20.1	17.8
Tameside	25.6	24.7	25.8	28.9	25.7	25.4	25.3	32.1	28.5
Trafford	24.7	24.7	26.2	27.3	25.3	23.7	22.6	22.9	19.3
Wigan	26.4	30.2	28.4	31.9	29.3	31.5	27.6	24.6	23.5
GM	**21.7**	**23.3**	**23**	**24.4**	**22.0**	**23.8**	**19.7**	**20.0**	**19.1**
UK	**20.8**	**22.6**	**22.8**	**22**	**22.2**	**22.9**	**20.0**	**20.2**	**17.1**
Living Wage Rate (ex. London)	£ 7.45	£ 7.65	£ 7.85	£ 8.25	£ 8.45	£ 8.75	£ 9.00	£ 9.30	£ 9.50
Living Wage Rate (London)	£ 8.55	£ 8.80	£ 9.15	£ 9.40	£ 9.75	£ 10.20	£ 10.55	£ 10.75	£ 10.85

Source: ASHE/ONS

Note: this table uses workplace data

5.12 Pulling these different strands of the evidence together it becomes possible to see that approximately a fifth of the workforce of GM is low paid. This suggests that the scale of low pay in the GM city region is likely to be lower than the scale of skills under-utilisation (about 30%). As discussed previously, low paid people tend to suffer from greater skills under-utilisation and are more likely to work in sectors where skills under-use is more common, but the issue is likely to be common in better paid sections of the labour market as well.

What is the relationship between low pay and skills utilisation?

5.13 So what is the association between low pay levels and skills utilisation? To what extent can one explain the other? The relationship can be tested statistically through correlations, but the exercise demands several observations and caveats.

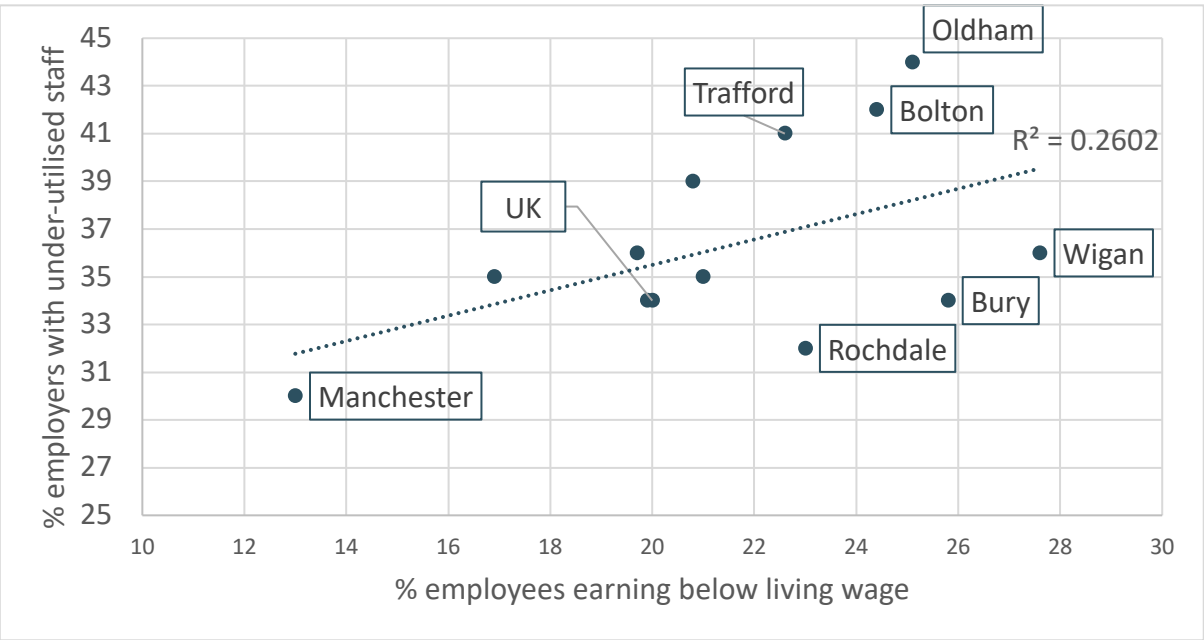
5.14 The best data on local skills under-utilisation comes from employers rather than individuals (the ESS, as discussed above); it refers to the employers who say they have staff with under-used skills and qualifications (with the most recent data referring to 2019). The data on low pay refers to the proportion of employees earning below the threshold level of the living wage *by place of work* rather than place of residence. This is why Manchester and Salford, areas containing the city

centre, appear to have a very low incidence of low pay: 13% in Manchester, for example – much lower than the UK average prevalence of low pay in 2019 (20%). If the pay data referred to the jobs of residents, there would be a higher proportion who are low paid in Manchester and Salford. Workplace data is appropriate here, however, as the comparison is with information from employers on skills. Finally, there are too few observations for meaningful statistics, so the results are indicative rather than definitive.

5.15 The ideal place to be on the chart below would be towards the bottom left corner with a small proportion of workers receiving low wages and a low incidence of skills under-use. Most districts in GM are towards the right-hand side of the chart denoting low pay is more prevalent than in the UK; a slight majority are in the top right, showing they have more pronounced problems of skills under-use as well.

5.16 Correlations measure the degree of association between two variables. A perfect correlation would be +1 indicating that as one changes so too does the other in lockstep. The correlation between skills under-use and low pay is 0.5 – a modest positive correlation. Meanwhile, the R2 value shown on the chart describes the amount of variance in one variable (skills use) that can be explained by the other (low pay). The R2 value is 0.26 meaning that just over a quarter of the variance in skills under-use can be explained by the scale of low pay. There is no definitive consensus on what a ‘significant’ R2 value is, but the incidence of low pay is very clearly one important influence on it – not the only or even the necessarily the main factor but certainly one powerful influence, as would be the expectation.

Figure 10: Skills utilisation and low pay, 2019-20



Source: Authors calculations from ASHE/ONS and ESS
Notes: Pay data refers to workplaces; Tameside removed due to erratic data

5.17 Judgements about job quality are always going to be open to challenge. Jobs are complex phenomena with a range of approaches in circulation for how they should be understood. In a labour market of 1.3 million people jobs are bound to be intensely mixed so discussion of 'quality' is always likely to generate different perspectives and controversy. Nevertheless, if the prevalence of low pay is viewed as a reasonable stand-in for job quality, it can be argued that there are more job quality problems in GM than is typical nationally. Slightly under a fifth of workers do not earn a living wage and in some GM districts the proportion is close to 30%. That does not mean work in GM is especially low quality as many city regions have worse rates. But it does substantiate the idea of job quality being a question the city region needs to grapple with. Poor use of skills is arguably a concomitant of poor job quality. The two go together as dimensions in an overall understanding of what job quality means. But disassembling the dimensions of job quality in the manner undertaken above also helps to clarify some useful points. Just over a quarter of the variation in skills underuse is explained by the scale of low wage work. The scale of low paid work – the proxy for low job quality – is a critical influence on the extent of skills underutilisation.

By implication, improvements in job quality/low pay will likely help improve skills use.

6. Discussion and conclusion

6.1 There are many good reasons to learn, of which labour market rationales seem to be increasingly prominent. Yet the one-way trajectory of qualifications in recent years has not necessarily been matched by the dynamics of the world of work, either in pace or nature. This report has sought to analyse an assortment of signals from the labour market which underscore the message that there are demand side deficiencies as well as a shortage of skills in GM. According to several GM documents, reviews and strategies, deficits on the demand side may well be the principal cause of the subdued impact of skills on growth (GM ESAP, 2022; GMCA 2020). The 'waste' of skills by employers can be seen as being one of the principal causes of the need for levelling up: "Unless the nature and volume of business need can be adjusted upwards, generating a need for more and higher-level skills, then upskilling the working population in any given locality may produce limited impacts by way of better jobs, higher pay and improved productivity within that locality. Business needs to up its game if the intended outcomes are to materialise" (Keep, 2022, p24).

6.2 Such signals include the comparatively modest scale of 'high skills work' in GM. With 47.4% of jobs in the top three major occupational categories (managers, professionals and associate professionals), GM ranks as a 'middling' city region; more prosperous areas offer deeper opportunities for highly skilled people, but at the same time GM is above the lowest performing areas on the prevalence of high skilled work. Probably linked to its occupational structure, GM has above average levels of skills-underutilisation among employers (36% of employers in GM had staff with qualifications and skills above what are needed in their roles compared with 34% in the UK in 2019), and a higher share of low paying, low quality jobs within a swelling group of industrial sectors that traditionally struggle with productivity. As always, data at the GM level masks large district variations; certain local authorities within GM exhibit all the tell-tale symptoms of low skills equilibria. Although some evidence suggests GM employers invest more in staff development than other parts of the UK, employers in GM are decreasing their investment in peoples' skills over time in line with national trends, as the responsibility for skills formation shifts to individuals and the state.

6.3 Although the problems of skills under-utilisation and weakening skills demand have been known and understood for many years, what to do about them, and at what spatial scale, remain difficult questions. Whereas skills supply problems can theoretically be remedied by publicly funded skills interventions which can be targeted, monitored and evaluated, the policy response to feeble demand for skills and declining employer investment in people is not self-evident.

Explaining skills under-use

6.4 Much will depend on the understanding of the causes of skills under-use. This can be seen as a variation on the old structure-agency problem in social science. To what extent are the jobs the result of employer choices and employment strategies? Or are the structural constraints of certain sectors such that limitations are effectively embedded in the nature of the work? Answering such questions helps shape the balance of responses between regulation, exhortation and incentivisation.

6.5 The economist who will forever be linked to a pessimistic account of the low productivity tendencies inherent in the growth of service sector employment was William Baumol. Writing in the 1960s he warned that as advanced economies migrated more labour into services and away from technologically advanced production sectors, growth would inevitably slow. As it did so, costs would rise as employers would seek to retain their staff by paying fractionally more for them, but without underlying productivity gains to fund them (a phenomenon dubbed 'Baumol's cost disease'). Baumol made his point by reference to a musical performance. His favourite example of a 'service' in which productivity improvement was unimaginable was musical live performance. "A half hour horn quintet calls for the expenditure of two man hours in its performance, and any attempt to increase productivity here is likely to be viewed with concern by critics and audience alike," he wrote (Baumol, 1967). Baumol was writing in a pre-digital age and today the possibilities of digital technology to alter, if not necessarily transform, work are increasingly apparent, perhaps especially in the retail, wholesale and logisitics sectors. Yet still, it is easy to see that this same issue applies to many very varied kinds of jobs in diverse service sectors – hairdressers, care, bar work, hotels, leisure, sports, customer service and so on. Due to their labour-intensive, often interactive nature ('emotional labour' as some

call it) it seems highly unlikely that either digital advances or the injection of higher-level skills will radically alter the labour process or render the work more productive. Many of these jobs also have a degree of protection from being off-shored for the same reason.

6.6 Such a deterministic view is deeply unfashionable today, however. Instead, the use of skills is generally theorised as a reflection of the product market strategies of employers and hence there is scope for agential choice-making. Product market strategies, or PMS for short, refer to the ways that employers seek to compete in whatever market they operate in. The PMS 'high road' involves high value, skill-intensive products and services and calls for higher level skills, greater workforce investment and typically more autonomy in terms of how staff can deploy their skills. The 'low road' is competing on low cost, low value-added products and services with low-skilled staff who are interchangeable, cheap to train and tightly monitored (CIPD, 2019). Where an employer can remain adequately competitive through low road strategies there may be few incentives to take the high road.

6.7 The establishment of a causal link between competitive strategy and skills use has been developed in a series of research studies (Mason, 2004; Mason and Constable 2011). The research makes several points that are highly relevant to understanding skills use. It finds that although there are major differences between the business models and strategies that are typically found in different sectors, PMS can be extremely diverse even within the same industry. When a firm 'moves upmarket' there is typically a disproportionate increase in employers' demand for skills. Yet where a firm relies on low value PMS, increases of skill have at best a very modest impact. Meanwhile, higher value PMS was linked both to the degree of exposure to international competition and to company size. The implication of this research is that although sectoral norms are often powerful and difficult to shift, there is significant scope for improving skills use provided the strategic, competitive incentives for employers are seen to be sufficiently compelling.

6.8 Naturally, firms pursuing low value PMS will be unevenly distributed across the UK. It follows that low skills demand will be more embedded in the economies of poorer regions. Indeed, previous studies in GM have found that the city region is

more likely than other parts of the UK to have employers that compete on low value strategies (New Economy, 2016). In turn these strategies are more likely to generate the phenomena that are often mentioned in the same breath as poor skills utilisation: poor job quality and low pay. Such considerations mean skills utilisation is profoundly important to levelling up (HMG, 2022) and played a prominent role in the recommendations of the *Prosperity Review: One Year On* report (GMCA, 2020).

Levelling up and moving up-market

6.9 But if the suggestion seems to be for firms to 'move upmarket' in order to use skills more effectively why is 'downmarket' so enduringly comfortable? On this, studies of skills utilisation tend to overlap with studies of management: poor skills use links to historic problems with the quality of British management. To inadequately summarise a voluminous research literature, organisations may fail to get the best out of people on account of 'the four 'i's. First, there is *ignorance* in that employers may not know about workforce development, organisational development or market opportunities. Next, there is *inertia*, the eternal friend of 'the old ways'. Third, there is *inadequacy*, a failure to be willing to drive through the necessary changes. And finally there is *integration* in the sense of a failure to recognise that improvement in one area of an enterprise mandates stepwise change elsewhere - in the use of technology, corporate structures, financial arrangements, and the management of people; acting on one aspect without corresponding change elsewhere can hinder rather than help the shift toward high performance (Brown and Armstrong, 2019; Stone et al, 2012).

6.10 As this paper has demonstrated, skills demand and use is unavoidably interconnected with a host of other issues. This itself is an important finding in shaping responses. Just before it was scrapped to make way for a new Future Skills Unit, the Skills and Productivity Board published a collection of research papers, two of which made exactly this point in the context of the levelling up agenda. "Addressing just one aspect of the area's disadvantage is likely to pay limited dividends. It [an area] suffers from a systemic problem for which systemic measures are likely to be needed if it is to escape from its low-income equilibrium" (Mayhew, 2022, p4). In a similar vein, Keep writes: "The clear majority view from the policy and research literature is that the way to maximise

the impact of skills interventions on levelling up is nesting them withing a range of other policies, such as housing, transport, job quality, economic development and business improvement and innovation support to form a combined local stimulus package" Keep, 2022 p36).

6.11 This interconnectedness of skills with other policy areas implies that what is needed, in brief, is industrial strategy (especially place-based industrial strategy). Local economic development is a long-term process requiring co-ordination across multiple fields rather than self-enclosed programmes. In this light, there seems to be a strong rationale for GM's position of nurturing the multiple needs of its 'frontier' sectors (those with future productivity potential) while seeking incremental improvement in its 'foundational' core (those with high employment) (GMCA, 2019).

6.12 City regions within the centralised political structures of the UK do not have a complete quiver of policy arrows with which to target skills demand and use. Much depends on national policy positions – for instance, concerning occupational licensing, qualifications frameworks, employment regulation, collective bargaining, skills funding and so on. But the quiver is not empty. The importance of the Good Employment Charter in simultaneously addressing several elements of job quality in GM has been noted at various points in this paper. *The Prosperity Review: One Year On* recommended that as well as employment standards, the charter should be used "as a mechanism for improving leadership, skill utilisation and productivity" (GMCA, 2020, p10).

6.13 In addition, and to help achieve such aims, a GM programme to nurture leadership and management capabilities in local businesses (including in workforce development and progression) has been running since January 2022. The programme taps into the insight that using the skills and talents of workers is itself a managerial and organisational skill. The programme has online elements[11] focussed on small and medium sized businesses and developed by the city region's business schools, as well as more traditional management development

[11] Home - Open SME

interventions delivered by GM's Business Growth Hub[12]. An evaluation has been commissioned.

6.14 Upping the game of the city region's employers on how to make better use of the evolving talents and capabilities of the population is a very large and long-term undertaking with many sectoral and occupational intricacies and a residual degree of novelty to it. The interconnectedness can make it difficult to pinpoint what needs to change and which strategic actors need to make it happen. In the meantime, there is also a battle of ideas to be won: the 'more skills' message is straightforward and familiar, but the accompanying 'better business' message is increasingly urgent.

[12] Leadership | GC Business Growth Hub

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