

# **BUILDING BRITAIN'S FUTURE?**

**THE CONSTRUCTION  
WORKFORCE  
AFTER BREXIT**

**Joe Dromey, Marley Morris  
and Luke Murphy**

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# SUMMARY

The construction industry is of vital strategic importance to the UK. A healthy construction industry will be essential if we are to build the homes, commercial property and infrastructure that our economy and our country needs. Yet the construction industry faces a grave threat from Brexit.

We have identified three significant challenges facing the construction industry.

1. **Productivity growth in construction has been stagnant**, with productivity in the industry increasing at just a fifth the rate of the whole economy in the last 20 years. Innovation and Research and Development (R&D) are low in construction and the industry has been slow to adopt modern technologies.
2. **Construction faces severe and growing skills shortages** which now represents the second most significant constraint on output. Employers in construction are failing to train sufficient workers and structural challenges such as excessive fragmentation and volatility reduce the incentive to train. The construction skills system is dysfunctional, with many people completing construction courses in further education failing to go on to careers in the industry. The number of construction apprenticeship starts remains below the pre-crash peak, and the apprenticeship levy will do little to boost investment in the industry; apprenticeship starts are likely to decrease in the sector. Construction is now subject to two training levies, which leads to unnecessary complexity. Construction faces a demographic time bomb, with two in five workers - a million in total - set to retire in the next 20 years.
3. **Construction has become increasingly reliant on EU migration** in order to meet growing skills gaps and labour shortages. The proportion of EU migrants increased five-fold between 2003 and 2016, and half of construction workers in London were not born in the UK. Four in five construction employers with five or more non-UK born staff expect restrictions on migration to impact their business. New IPPR modelling shows that construction is exceptionally vulnerable to changes in migration policy; **if the system for non-EU migrants was applied to EU-nationals, just seven per cent of current EU-born employees in construction in the UK would have been eligible to come here for work.**

We argue that **Brexit – and ending freedom of movement – risks turning the existing skills challenges into a workforce crisis for construction**, with grave consequences for our economy. The risk is particularly acute for London where skills shortages are greatest, where demand is growing fastest, and where one in three construction workers were born in the EU.

The government must recognise the scale of the threat, work with the industry to limit the impact, and ensure that we are still able to deliver the homes, commercial property and infrastructure that our country needs post-Brexit.

We set out recommendations in three areas.

1. **Implementing an industrial strategy for construction.** There must be a concerted effort by the industry, government, clients, and other stakeholders, to modernise construction. This should take the form of a bold industrial strategy, aimed at boosting productivity, quality and output:
  - **a new sectoral institution – Construction UK** – should be formed by merging CITB and the Construction Leadership Council. This would

be a social partnership organisation, tasked with driving a collective commitment to skills and productivity in the industry and implementing the **sector deal for construction**

- the government should set out a **national mission to become a world leader in modern methods of construction**, with an ambitious 50/50 target, of at least 50 per cent of homes built by 2022 to have at least 50 per cent of their value from offsite manufacturing
- governments should seek to **reduce volatility and boost predictability, so that employers have the confidence to invest in skills**. This should involve reducing reliance on the volatile private housing sector and delivering a major council housebuilding programme. Construction UK should establish a **national construction pipeline** to give employers and providers visibility of future demand.

**2. Building a skills strategy for construction.** As part of the wider industrial strategy, government and the industry must work together to develop a skills strategy for construction which addresses the failings in the skills system, boosts investment, and provides the skilled workforce the sector needs for the future.

- The CITB levy and the apprenticeship levy should be combined to form the **construction productivity and skills levy**. The levy should focus on boosting skills and productivity, with funds ring-fenced within the industry. Government should re-invest unspent apprenticeship levy funds in construction and other priority industries. If the levy fails sufficiently to increase investment, government should extend a levy to customers of the industry to drive behaviour change.
- The skills system must be reformed to ensure it delivers **high-quality provision that meets employer demand and supports sustainable careers**. Local areas should embrace outcome-based commissioning as part of skills devolution, with providers incentivised to support people into employment. An institute of technology for construction should be established in London to provide high-quality, high-level vocational training.
- Government should **use procurement and planning to drive investment in skills and productivity** with firms bidding for government construction projects, required to have 5 per cent of staff as apprentices.
- Construction UK must **make the system work for SMEs**, and it should be responsible for **boosting learner demand and making construction a career of choice**.

**3. Ensuring a migration policy that works for construction.** Given construction's strategic importance and high level of vulnerability to Brexit, government should work with the industry to ensure that it is not significantly impacted.

- In the **short term**, in order to address uncertainty and prevent existing workers from leaving the UK, government should **immediately guarantee the right of existing EU nationals to remain in the UK**.
- In the **medium term**, if government takes the political choice to end freedom of movement, it should seek to ensure that the construction industry **retains access to EU workers for a transitional period of at least five years**.
- In the **long term**, government should ensure that construction employers can still access the skilled workers that they need. If we retain free movement, or negotiate a variant of it, government could address popular concerns around migration through **labour market regulation**. If we do not retain free movement, government should introduce a **trusted sponsor scheme** that allows employers to access the skilled workers they need, but uses this as a lever to improve employment standards in the industry.

# INTRODUCTION

## THE IMPORTANCE OF CONSTRUCTION TO THE UK

### OUTPUT

The construction industry is a significant part of the UK economy, making up 6.2 per cent of GVA in 2016 (IPPR analysis of [ONS 2017](#)). When including construction contracting, construction services and construction products, the wider sector has a turnover of £370bn and contributes £138bn in value added to the UK economy ([BEIS 2017b](#)).

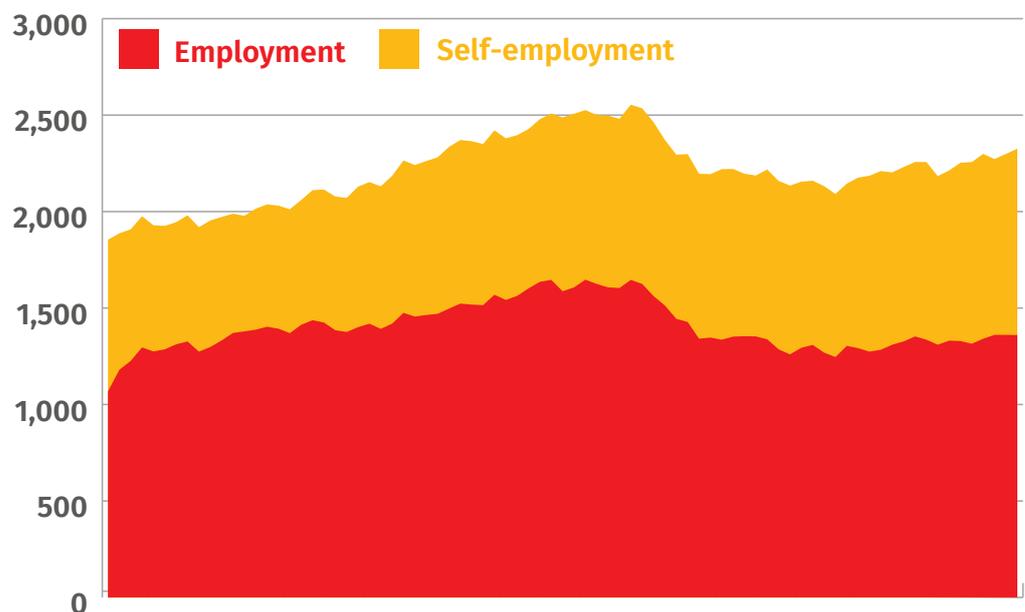
Output from the construction sector will need to grow significantly in the coming years in order to meet increasing demand. The government has set a target of delivering 1 million new homes between 2015 and 2020, and a further half a million by the end of 2022 ([Conservative Party 2017](#)). The recent budget set out a new target of delivering a net additional 300,000 a year on average by the mid-2020s (Hammond 2017). This would require a substantial increase on current house building levels. There is also a significant infrastructure and construction pipeline worth £222 billion to be delivered, including major projects such as high speed rail and new nuclear plants ([Infrastructure and Projects Authority 2017](#)).

Output from the sector is expected to increase by 1.7 per cent a year between 2017 and 2021, driven by very strong growth in infrastructure (5.4 per cent growth a year) and strong growth in private housing too (2.2 per cent) (CITB and Experian, 2017).

**FIGURE 1.1**

**Following strong growth in self-employment the construction workforce has almost returned to its peak**

*Employment and self-employment in the construction industry 1997-2017*



Source: [ONS 2017b](#)

## EMPLOYMENT

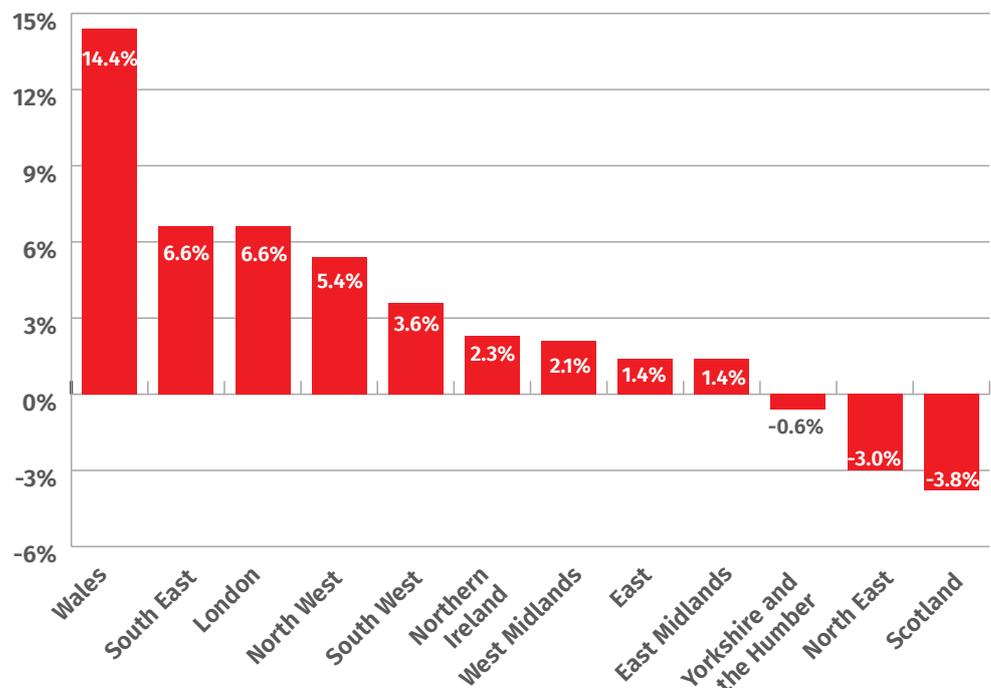
The construction sector is also a significant employer in the UK, accounting for 7.4 per cent of employment in June 2017 (IPPR analysis of [ONS 2017b](#)). Employment in construction fell substantially following the global financial crisis, declining from 2.5 million in 2008 to 2.1 million in 2013. The 18 per cent fall in employment during the recession was the largest for any industry (IPPR analysis of [ONS 2017b](#)). While the workforce has been recovering slowly, it is yet to reach its pre-crash peak.

Employment growth in construction is forecast to remain strong in the coming years, though it will vary significantly by region. As figure 1.2 shows, growth is set to be particularly strong in Wales, the southeast, and London, where the workforce is expected to increase by 6.6 per cent ([CITB and Experian 2017](#)).

**FIGURE 1.2**

**Construction employment growth is expected to be strongest in Wales, London and the South east**

*Total construction employment growth from 2017 to 2021*



Source: Adapted from [CITB and Experian 2017](#)

Self-employment in construction is exceedingly high. Two in five (42 per cent) workers in construction are self-employed, three times higher than the comparable figure for the rest of the economy (13 per cent) (IPPR analysis of [ONS 2017b](#)). Self-employment is higher still among non-UK nationals; 55.7 per cent of EU-born workers are self-employed, compared to 38.5 per cent of UK-born construction workers (*ibid*).

## THE STRATEGIC IMPORTANCE OF THE CONSTRUCTION INDUSTRY

While construction accounts for a significant proportion of output and employment, as the government's industrial strategy for the industry acknowledges, the industry has a strategic importance to the UK far beyond this ([HMG 2013](#)).

The construction industry will be vital to building the homes that we need to address the growing housing crisis. As we show in 'Challenge 2' below, housebuilding in England has been below demand for decades. Over the coming years, we will need significantly to increase housebuilding in order to make up the deficit and meet growing demand.

The construction industry will be vital to delivering the infrastructure that the UK needs. The government have set out a major infrastructure pipeline, and as their green paper on industrial strategy argues, delivering this is key to their aims of boosting productivity and growth in every part of the UK (BEIS 2017). The construction industry will also be vital to delivering and maintaining the commercial property that businesses need to flourish.

Given this, the strategic importance of the construction industry for the UK economy far outweighs its direct output and employment. Ensuring we have a robust construction industry that is able to deliver homes, infrastructure and commercial property should be a priority for government.

### **THE CONSTRUCTION WORKFORCE AFTER BREXIT**

In this report, we show that the construction industry already faces significant challenges, and that Brexit threatens to exacerbate these significantly, triggering a crisis for the industry which could have serious consequences for the UK economy.

In the first section of the report, we examine three key challenges facing the construction sector.

1. Low productivity and innovation in construction.
2. The growing skills crisis and a dysfunctional skills system.
3. The massive potential impact of Brexit.

We go on to set out recommendations to ensure that we are still able to build the homes, infrastructure and commercial property that we need after Brexit:

1. implementing an industrial strategy for construction
2. building a skills strategy for construction
3. ensuring a migration policy that works for construction.

# CHALLENGE 1

## LOW PRODUCTIVITY AND INNOVATION IN CONSTRUCTION

In this chapter, we highlight the longstanding challenge of low productivity in construction. We show that productivity in construction has grown far slower than in the rest of the economy, and that levels of innovation and R&D are low. We highlight how the sector and its clients have been slow to embrace new technology and techniques – including modern methods of construction (MMC) – which offer the opportunity to transform the sector and deliver a step-change in productivity.

### LOW PRODUCTIVITY

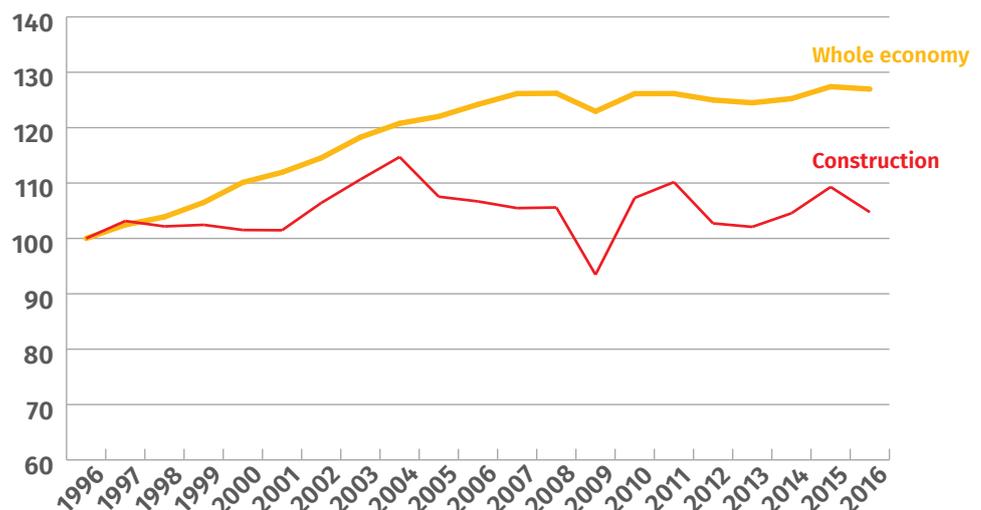
If the UK construction industry is to meet demand in the sector in the coming years, it will need significantly to increase productivity.

However, productivity growth in construction has been exceedingly slow in recent years. As figure C1.1 shows, productivity in construction has grown at a fifth the rate of the economy as a whole over the last two decades, increasing by just 4.7 per cent from 1996 to 2016, compared to 27.0 per cent across the whole economy.

**FIGURE C1.1**

**Productivity growth in construction has lagged behind the economy as a whole**

*Gross value added per hour worked in construction and the whole economy in the UK between 1993 and 2016, constant prices*



Source: IPPR calculations based on [OECD](#)

The UK is not alone in experiencing weak productivity growth in construction. While construction productivity in the UK is significantly below that of the US, it is around the same as in France and Italy, and higher than in Germany. While

productivity growth in construction has been slow in the last two decades compared to the rest of the economy, it has been slightly higher than productivity growth in the sector in other European countries ([CIOB 2016](#)).

While some areas of construction have innovated, adopted new technology, and increased productivity, in much of the industry processes have been relatively unchanged for decades. The sector has historically had low investment, and has been slow to embrace and spread innovation.

Construction has very low levels of Research and Development (R&D) investment. Just £89m was invested in R&D in construction in 2015; accounting for just 0.4 per cent of R&D investment across all industries ([IPPR analysis of ONS 2017](#)). As the Farmer Report, *Modernise or Die*, highlighted, low levels of investment are related to the highly cyclical and fragmented nature of the industry, and the relatively low margins that we highlight below (Farmer 2016).

In 2013, the government published *Construction 2025: Industrial strategy for construction*, presenting a long-term vision for the industry. This set out a series of targets, including boosting productivity. One of the five parts of the vision for Construction 2025 is for a 'smart' industry, which is 'efficient and technologically advanced'. It focusses particularly on the opportunities offered by digital technology and Building Information Management (BIM) (HM Government 2013). The Construction Leadership Council (CLC) was established to oversee the implementation of this industrial strategy. However, the impact of the CLC has been limited by its small budget and limited powers and it includes no representatives of either employees or from the SMEs that account for the vast majority of employment and output in the industry.

There are welcome signs that the government has recognised the importance of boosting innovation and productivity in the construction industry. The government announced in its white paper on industrial strategy that it had agreed a sector deal for the industry – Transforming Construction – which aimed to boost productivity through greater investment in innovation and skills, creating new and well-paid jobs and maximising export potential. This will include up to £170m of investment through the Industrial Strategy Challenge Fund ([BEIS 2017](#)).

### **MODERN METHODS OF CONSTRUCTION (MMC)**

There has recently been an increase in interest in MMC, including offsite manufacturing and modular construction, as offering the potential to modernise the industry and dramatically boost productivity.

There have been some significant private investments in MMC in recent years, such as those by Laing O'Rourke and Legal and General. Your Housing Group recently agreed a £2.5 billion joint venture with China National Building Material Company, a state-owned construction company to build 25,000 modular homes in the next five years. This will involve six new factories in the UK and 1,000 additional jobs ([Bury 2017](#)).

However, despite these investments, the wider industry and its clients have been relatively slow to embrace MMC, and offsite construction still accounts for less than 10 per cent of construction output ([CITB 2017](#)).

There seems to be a degree of appetite for increased use of MMC among employers in construction. A recent CITB survey found that among employers with some experience of using offsite construction, half (49 per cent) expected their use to increase in the next five years. Large businesses and those working on housing and commercial property are most likely to anticipate and increasing use of MMC (CITB 2017). A survey of SME housebuilders also suggests some growth in

use of MMC, with 28 per cent saying they may use offsite construction in the future, though 39 per cent said they could not see this (FMB 2017).

The government has taken some measures to stimulate the use of offsite construction and other forms of MMC. In addition to supporting the use of MMC through the Home Building Fund and the Accelerated Construction programme, the recently announced construction sector deal has a strong focus on promoting MMC (HCA 2016, CLG 2017, BEIS 2017b). The sector deal establishes a *'joint commitment to invest in a transformative programme which brings together the construction, digital technology, manufacturing, materials and energy sectors to develop and commercialise digital and offsite manufacturing technologies'* (BEIS 2017b).

However, there have been a number of factors that have limited uptake of and investment in MMC. First, investment in MMC often requires large upfront capital costs (CITB 2017). This, can be a significant challenge to an industry that tends to operate with low margins, is dominated by small businesses, which is highly cyclical and unpredictable, and which has traditionally had low levels of investment and innovation.

Second, while there is some crossover, MMC often requires different skill sets. Two out of five businesses expecting to use offsite construction in the next three to five years say they would need new or significantly improved skills within the business (CITB 2017). In addition to skills gaps among the current workforce, there is seen to be a lack of training provision focussed on the distinct skills required for MMC at a time when demand is growing (ibid).

Finally, as Farmer identified in 2016, there has been a lack of industry-wide strategic leadership driving MMC forward, and a lack of demand from clients for the industry to embrace this new and potentially transformative technology (Farmer 2016).

### **BUILDING INFORMATION MANAGEMENT (BIM)**

BIM is a process of developing and managing information as part of a construction project. It involves producing a Building Information Model, a digital representation of the building or infrastructure that is under construction, which is produced and used collaboratively and informs decision making and the process of building in order to maximise productivity and quality.

Promoting BIM was a key aim set out in Construction 2025, the industrial strategy for construction set out in 2013 by government and the construction industry (HMG 2013). As of April 2016, BIM Level 2 has been mandatory on all government procured construction contracts (ibid).

However, as with MMC, the uptake of BIM by the industry has been slowed by low levels of investment, sectoral fragmentation and a lack of sector-wide leadership.

### **SUMMARY**

Modernising the construction industry and boosting productivity will be vital to meeting rising demand in the coming years. Yet productivity growth in construction has been poor, lagging well behind the rest of the economy over the last two decades. The industry has traditionally had low levels of innovation and R&D, and it has been slow to adopt new technologies. Changing this trend, and embracing the potentially transformative opportunities offered by MMC will be vital to boosting productivity and output in order to meet demand in the future.

# CHALLENGE 2

## THE GROWING SKILLS CRISIS AND THE DYSFUNCTIONAL SKILLS SYSTEM

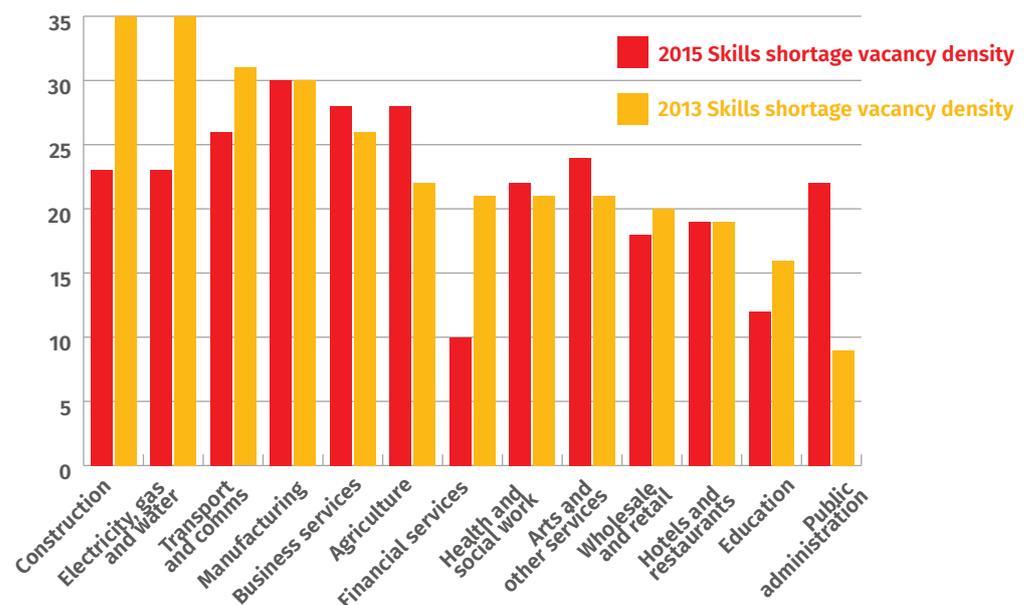
In this chapter we set out the significant and growing workforce crisis and skills shortages in construction, which are becoming an increasing constraint on output. This skills crisis is set to grow as a result of the demographic time bomb facing the construction workforce. We show that, despite these serious skills shortages, the construction sector has long failed to train sufficient workers, and that the wider skills system is dysfunctional and failing to provide the quantity and quality of training that is necessary. We highlight the systemic challenges in the construction sector that have limited employer training.

### SKILLS SHORTAGES IN CONSTRUCTION

The last UKCES Employer Skill Survey showed that construction had the joint highest proportion of skills shortage vacancies (SSVs) of any industry. These are vacancies that are hard to fill given the lack of skills, qualifications or experience among applicants. One in three vacancies (35 per cent) in construction in 2015 were SSVs compared to one in four (23 per cent) for the economy as a whole. The number of SSVs in the construction industry increased significantly from 5,000 in 2013 to 12,000 in 2015 (UKCES 2016).

FIGURE C2.1

**Construction has the joint highest density of skills shortage vacancies of all sectors**  
*Density of Skills Shortage Vacancies by sector*



Source: UKCES Employer Skills Survey

Skills shortage vacancies in construction are relatively high compared to the rest of the economy across a range of occupations. SSVs are particularly acute among machine operatives, associate professionals, professionals and elementary staff, showing they are present in both high-, mid- and low-skilled roles. One in three vacancies (35 per cent) for elementary staff in construction are skills shortage vacancies, twice as high as the average for elementary staff across all sectors (16 per cent) (ibid).

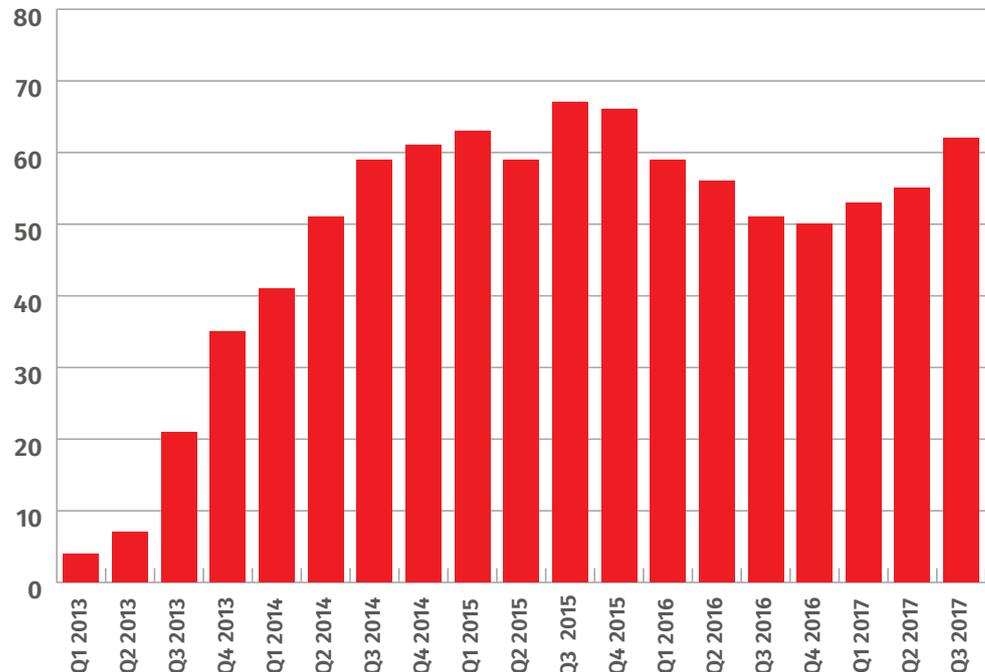
### THE IMPACT OF SKILLS SHORTAGES

Growing skills shortages in construction appear to be increasing constraint on output in the sector.

The Royal Institute of Chartered Surveyors run a regular survey asking surveyors what factors are limiting building activity. As figure C2.2 shows, In 2013, when the construction industry was recovering from the recession, fewer than one in twenty surveyors cited labour shortages as a constraint on building. However, labour shortages appear to have increased rapidly, and in every quarter in the last three years, at least half of surveyors have cited them as a constraint on output. In the last quarter, labour shortages were highlighted as limiting building by six in ten chartered surveyors, making it the second most commonly cited barrier to building, after financial constraints.

**FIGURE C2.2**

**The majority of chartered surveyors say that a shortage of labour is limiting building activity**



Source: RICS UK Construction and Infrastructure Market Survey, various waves

A similar pattern is visible in the Federation of Master Builders (FMB) survey of SME housebuilders. Two in five (42 per cent) FMB members highlight skills shortages as one of the main constraints on their ability to build, surpassed only by lack of finance and lack of land. The proportion of SMEs mentioning skills shortages as a

constraint has nearly doubled in two years, and small housebuilders expect skills shortages to continue to constrain output in the coming years (FMB 2017).

In addition to SSVs being more common in construction, employers in the industry facing SSVs are more likely to report an impact on their business. Over half (56 per cent) of construction firms that experience SSVs report losing business or orders to competitors as a result, compared to 44 per cent among all employers (UKCES 2016).

### THE DEMOGRAPHIC CHALLENGE

The construction sector faces a significant demographic challenge which is likely to exacerbate skills shortages in the coming years.

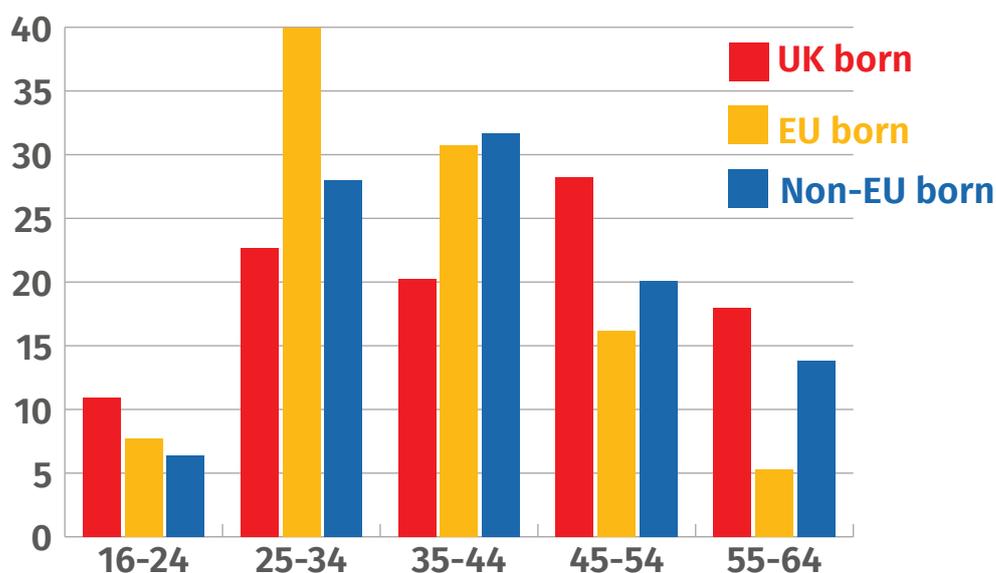
The construction workforce is older than the workforce as a whole and it is rapidly ageing. Two in five construction workers (43.3 per cent) are aged over 45, higher than the figure for all those in employment (40.7 per cent) (IPPR analysis of LFS 2016). This represents 387,000 construction workers who will approach retirement in the next decade, with 1 million workers approaching retirement in the next two decades.

The demographic challenge has been masked by migration to a certain extent, with an increasing number of younger EU-born workers entering the industry as UK-born workers retire. As figure C2.3 shows, the UK-born workforce is far older than the migrant workforce, particularly those from the rest of the EU. Nearly half (46.2 per cent) of UK-born workers in construction are aged over 45, compared to just a fifth (21.5 per cent) of EU-born workers.

**FIGURE C2.3**

**One in two UK-born workers in the construction sector are aged over 45 compared to one in five EU-born workers**

*Age profile of construction workers by place of birth*



Source: IPPR analysis of LFS 2016

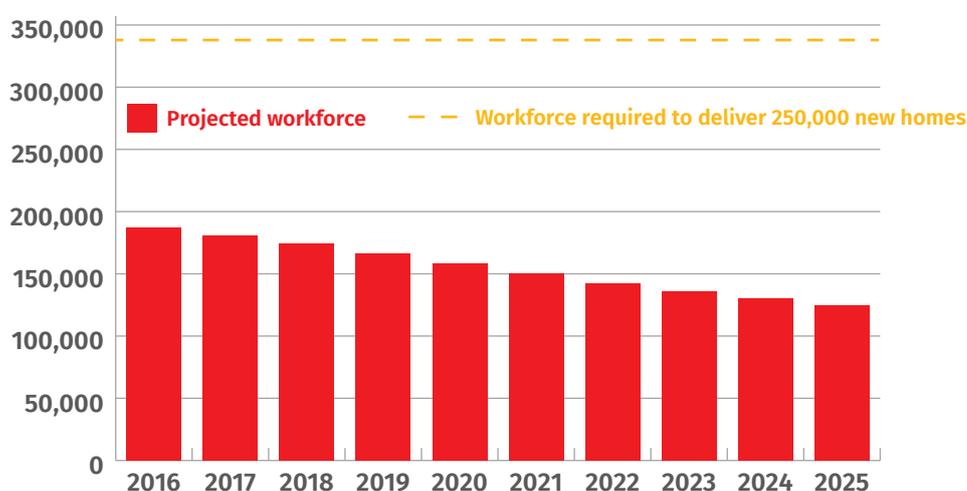
The Farmer Report warned that, based on the age of the existing workforce, the increasing number of workers leaving the industry, and the declining number of new entrants to the industry, we could see a decline of 20–25 per cent in the

construction labour force within a decade, which ‘threatens the very sustainability of the industry’ (Farmer 2017).

Looking at the housebuilding workforce specifically, In 2016, there were 187,000 workers in the sector, representing just 55 per cent of the workforce that would be necessary to build the required 250,000 homes per year. Yet with more workers leaving the industry than joining, Farmer has predicted that this will fall to just 124,000 workers in 2025 (Farmer 2016). Assuming productivity growth remained in line with the trend over last two decades, these projections would leave the housing workforce at just a third the size needed to build the 300,000 homes a year the government has targeted by the mid 2020s.

**FIGURE C2.4**

**The housebuilding workforce is projected to shrink by a third by 2025**



Source: Farmer 2016

Having set out the scale of the skills shortage in construction, we now go on to examine employer-provided training and the construction skills system.

### **LOW LEVELS OF EMPLOYER-PROVIDED TRAINING**

Despite the longstanding and growing skills shortages in construction, employers in the industry are less likely to train their employees than the average across the wider economy. Only 57 per cent of construction employers arranged or funded training for their staff in the last year, the second lowest of all industries, and far lower than the economy-wide average of 66 per cent. (UKCES 2016).

Among those employers that do provide training, construction firms train a smaller proportion of their staff. In construction firms that did provide training, just 53 per cent of employees were trained, compared to 63 per cent across the economy as a whole (UKCES 2016). As a result, the average number of days training per employee in construction is far lower than across the economy as a whole. There were just 3.5 days training per employee in 2015, compared to 4.2 days across the economy as a whole (UKCES 2016). Increasing the number of days of training provided per employee to the average for the economy as a whole would require an additional 820,000 days training.

While construction employers provide fewer days of training *per employee*, the very high level of self-employment in the sector means that gap is even bigger on a *per*

worker basis. In 2015, construction employers provided just 2.1 days training per worker (including employees and self-employed), compared to 3.6 days per worker across the economy as a whole (IPPR analysis based on UKCES 2016 and [ONS 2017b](#)).

Despite lower incidence of training in construction, employers spend more on training. The total spend on training in construction was £2.5 billion in 2015, equivalent to £4,090 per trainee or £2,170 per employee. Spend per trainee was 57 per cent higher than the economy-wide average, while spending per employee was 32 per cent higher (UKCES 2016). Employers in construction are also more likely to train towards recognised qualifications in construction than in other sectors (*ibid*).

Despite relatively low levels of training, there appears to be limited appetite for additional training in the construction industry. Among construction employers who do train their staff, most seem satisfied with the level of training provided, with only 40 per cent wanting to train more compared to 46 per cent across the economy. Among employers who would have liked to have provided more training, the biggest barriers were lack of training funds/expensive training (53 per cent) and inability to spare time for employees to be trained (49 per cent) (*ibid*).

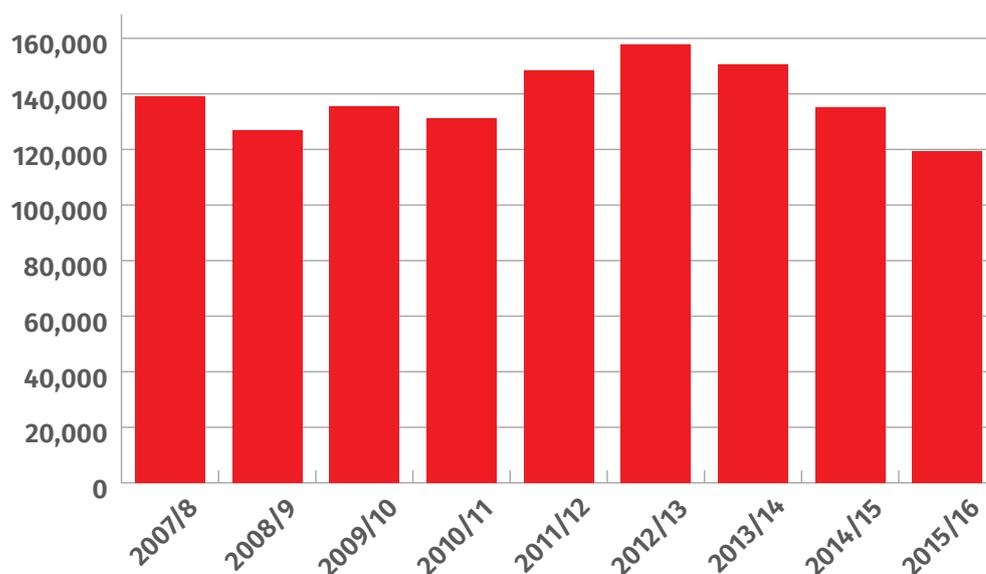
### FURTHER EDUCATION

Participation in FE has declined substantially and progressively in recent years. As figure C2.5 shows, the number of learner aims in construction and the built environment declined by 24.4 per cent between 2012/13 and 2015/16.<sup>1</sup> This suggests a substantial decline in the number of adults studying construction in FE, and it matches the decline seen across the FE sector following the restriction on entitlement to public funding for further education and the introduction of Advanced Learner Loans.

**FIGURE C2.5**

**The number of learning aims in Further Education in construction has declined by a quarter since 2012/13**

*Learner aims on education and training courses in construction and the built environment, 2007/8 to 2015/2016*



Source: IPPR analysis of [FE data library 2017](#)

<sup>1</sup> Learner aims relate to the number of learners studying a certain qualification each year. As learners may be studying more than one qualification, learners may be counted more than once. So this is a measure of qualifications being studied, rather than of learners.

The vast majority of courses in construction are delivered at low levels. As figure C2.6 shows, nearly nine in ten (86.1 per cent) FE courses in construction and the built environment in 2015/16 were delivered at level 2 or below, compared to seven in ten (73.0 per cent) across all subjects.

**FIGURE C2.6**

**Four out of five learner aims in construction in FE are at level 2 or below**

*Percentage of learner aims on education and training courses by level in construction and the built environment and for all subjects 2015–16*



Source: IPPR analysis of *DfE and ESFA 2017*

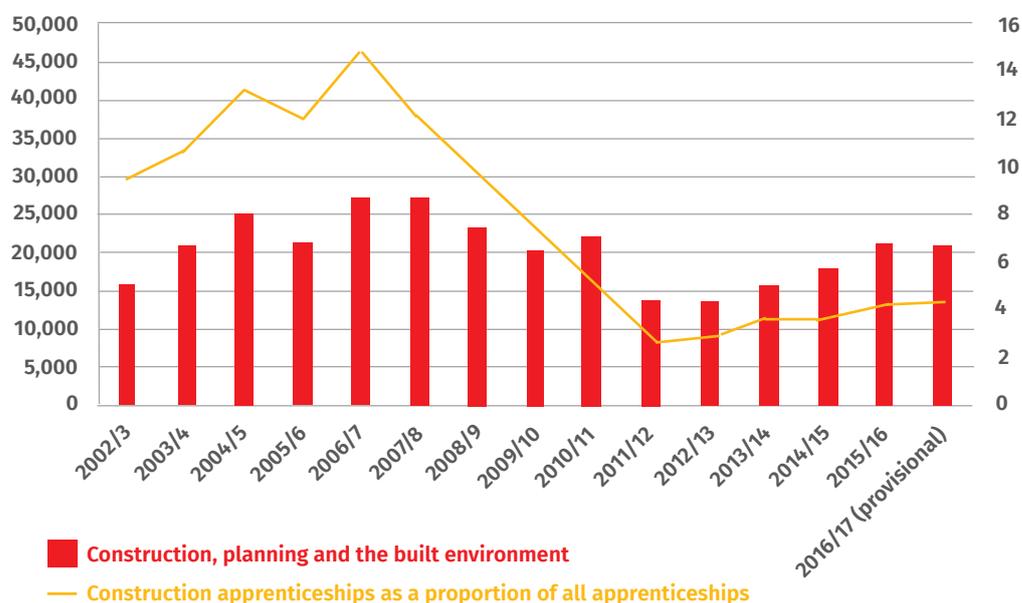
Despite the huge demand for skilled workers in the construction industry, outcomes from FE courses in construction are often poor, with too few graduates going on to sustainable careers. A recent study showed that six months after finishing a construction qualification in England, just two in five were employed in construction (25 per cent in a job, 16 per cent in an apprenticeship), with a further 25 per cent on another construction-related course, and 12 per cent being unemployed (*IFF 2017*). This suggests that the FE sector is often failing to give learners the skills and experience that they need to progress into a sustainable career in the industry, and it is failing to meet the needs of employers.

**APPRENTICESHIPS**

Construction has traditionally been a significant employer of apprentices. However, as figure C2.7 shows, the number of apprenticeships in planning and the built environment fell substantially following the recession. While the number of apprenticeships has increased in recent years, they are yet to reach the pre-crash level. Construction now accounts for a far lower proportion of all apprenticeships; just 4.3 per cent of all apprenticeships in 2016/17, compared to 14.8 per cent a decade earlier.

**FIGURE C2.7**

The number of construction apprenticeships has recovered following the recession but it makes up a smaller proportion of all apprenticeships



Source: IPPR calculation based on DfE 2017b

As with FE provision, apprenticeships in construction and the built environment tend to be delivered at lower levels. Three in four (76.2 per cent) apprenticeships started in 2016/17 were at level 2, compared to half (53.0 per cent) of all apprenticeships. Just 2.3 per cent of apprenticeships in construction are delivered at level 4, compared to 7.2 per cent of total apprenticeships. While the proportion of apprenticeships delivered at level 3 and above in construction is increasing, it is increasing at a slower rate than for total apprenticeships (IPPR analysis of DfE 2017).

**TABLE C2.1**

Three in four apprenticeships in construction and the built environment are delivered at intermediate level compared to half of all apprenticeships

Proportion of apprenticeships delivered by level in construction and the built environment and for all apprenticeships 2016–2017 (provisional)

	Construction and the built environment	All apprenticeships
Intermediate Apprenticeship (level 2)	74.6	52.8
Advanced Apprenticeship (level 3)	23.0	39.9
Higher Apprenticeship (level 4)	2.4	7.3

Source: IPPR analysis of FE Data Library 2017

As part of the government's reforms to the apprenticeship system, apprenticeship frameworks are being replaced with apprenticeship standards, designed by groups of employers who come together to form 'trailblazers'. Construction is notable in the sheer number of apprenticeship standards, with 65 developed as of September 2017. It is also notable in that just 37 per cent of the apprenticeship standards have been approved for delivery by the Institute for Apprenticeships, meaning they have an approved assessment plan in place and are ready for use by employers, compared to 55 per cent of apprenticeship standards in other sector subject areas ([IPPR analysis of IfA 2017](#)).

### THE APPRENTICESHIP LEVY

The apprenticeship levy came into effect in April 2017. The levy is intended to boost employer investment in training and to deliver on the government's target of 3 million apprenticeship starts between 2015 and 2020. Under the levy, employers with a payroll bill of £3 million or more will see 0.5 per cent of their payroll bill above that threshold deducted by HMRC and placed into a digital account. Employers will be able to use these funds to pay for training of apprentices that they employ.

The apprenticeship levy will raise less money, and stimulate investment in apprenticeships less in construction than in other sectors. As it is a payroll tax, it will affect sectors more if they have a higher proportion of workers in larger firms, and lower levels of self-employment. However:

- compared to the rest of the economy, fewer workers in construction work for large employers. Only three in ten (30 per cent) employees work for a large employer (250+) in the sector, compared to over six in ten (63 per cent) across the economy as a whole ([IFS 2017](#))
- compared to the rest of the economy, construction has very high levels of self-employment. Two in five (42 per cent) workers in construction are self-employed, three times higher than the comparable figure for the rest of the economy (13 per cent) ([ONS 2017b](#)).

According to DfE estimates, just 880 employers in construction will pay the levy. This represents just 0.5 per cent of employers in the industry, compared to 1.3 per cent of employers across the whole economy. The levy is expected to raise just £50m in 2017/18 (DfE 2017e). This represents just 1.9 per cent of total levy funds raised across the economy, despite the fact that construction accounts for 7.4 per cent of employment. The amount raised by the apprenticeship levy is just a quarter of the sum raised by the CITB levy.

The apprenticeship reforms may even lead to a reduction of the number of apprentices in construction, particularly in the short term. A recent survey of employers found that non-levy paying firms – which account for 98.7 per cent of employers in construction – are more likely to say that apprenticeship recruitment will decrease rather than increase in both the short- and medium-term (IER 2017). The first figures for apprenticeship starts following the introduction of the apprenticeship levy seem to reflect this. The number of apprenticeship starts fell by 61 per cent in May–July 2017 compared to a year before ([DfE and ESFA 2017b](#)). In the Autumn Budget, the government announced a National Retraining Partnership to oversee 'targeted action in sectors with skills shortages'. This would initially be focused on construction and digital skills, and it will be provided with £65m over two years from 2018/19 – 2019/20. The Autumn Budget also announced £34m 'to scale up innovative training models across the country' (HMT 2017). However, at the time of writing it is unclear as to whether this funding will be continued, or how it will be used.

## THE CITB AND THE LEVY

The Construction Industry Training Board (CITB) aims to raise the level and quality of training for the construction workforce (CITB 2016). The CITB oversees a statutory levy which it uses to fund training in the sector. The levy must be renewed by Parliament every three years, and the CITB recently secured sufficient support from the consensus vote process to have its mandate renewed in 2018 (CITB 2017b).

The CITB creates and maintains standards and qualifications in the sector in consultation with employers. It operates a shared apprenticeship service to support SMEs to take on apprentices. The CITB provides direct training where the market does not offer adequate coverage (CITB 2016). Both CITB, and the levy it operates, are focussed on boosting skills, rather than more widely on boosting productivity.

The CITB levy is separate from the apprenticeship levy, meaning that some employers in construction now pay two levies. All employers within scope in the construction sector, with a pay bill of £80,000 and over are subject to the levy, with the rate for 2018/20 being 0.35 per cent of PAYE and 1.25 per cent of net payments under the Construction Industry Scheme (CIS) (CITB 2017b).<sup>2</sup> As the CITB levy applies both to directly employed staff and to self-employed contractors, it is better suited to the industry than the apprenticeship levy. Employers with pay bills of between £80k and £399k pay half the rate.

The CITB uses funds raised by the levy to provide grants to employers engaged in training as well as providing programme based funding. Unlike the apprenticeship levy funds, which are held in an individual digital account for employers to access, employers have to bid for grants from the CITB.

The CITB levy raised £198.2m in 2016 – four times as much as the apprenticeship levy is expected to raise this year. It had grant expenditure of £137.5m, distributed to 16,000 employers. This helped to support 25,000 apprentices, 3,000 Training and Development Plans and 18,000 vocational qualification achievements (CITB 2016). CITB operates a Shared Apprenticeship Scheme which aims to support SMEs to employ apprentices. However, it is relatively small in scale, supporting just 500 apprenticeship starts in 2016 (ibid).

Large employers benefit most from CITB grant support. As figure C2.7 shows, despite the exemption for firms with pay bills of less than £80,000, and the discount for those with pay bills of less than £400,000, large employers receive proportionately more back in support than they contribute in total funds. In 2016, large employers received grants and other contributions worth 88.7 per cent of their levy contributions. Medium sized employers received support equivalent to 78.2 per cent of their levy contributions, small employers received 59.1 per cent back, and micro employers received just 52.3 per cent. (IPPR analysis of CITB 2016).

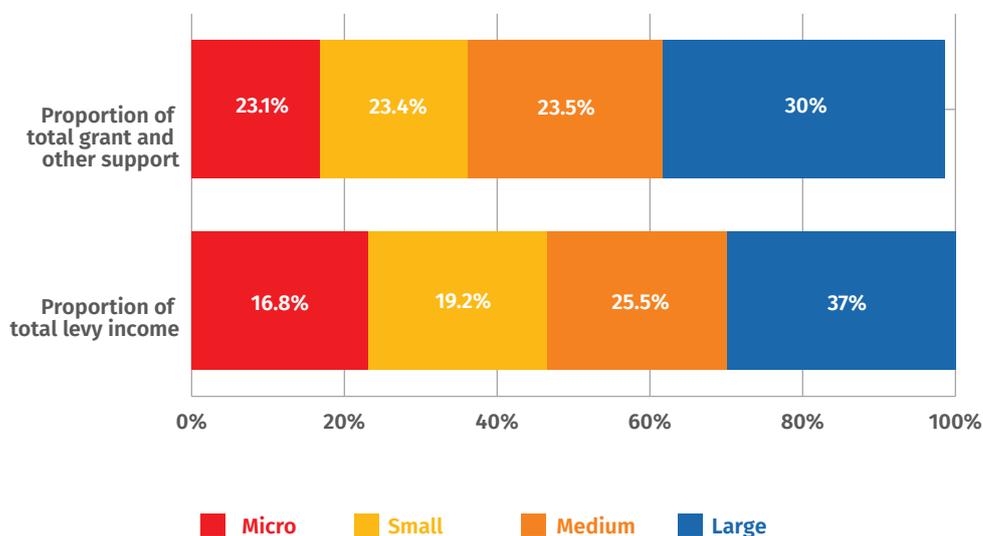
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<sup>2</sup> The CIS scheme was introduced in 1971 to prevent avoidance of tax in the construction sector. Under the scheme, contractors have to make deductions from a payment made for work done by a subcontractor, with these payments being set against the subcontractor's liability for tax and NICs (Seely 2017)

**FIGURE C2.7**

**Large employers get proportionately more of in CITB grants than they contribute in the CITB levy**

*Proportion of total levy income and proportion of total grant and other support by size (2016)*



Source: IPPR analysis of [CITB 2016](#)

Following the Farmer Report, government commissioned a full-scale review of the industry training boards, which was carried out by Paul Morrell, the former chief construction advisor. This review argued that there is a clear need for an industry body to address market failures in construction, and ensure that all employers are incentivised and supported to invest in skills. However, the Morrell Review highlights how the levy and grant system has come to be seen in transactional terms, with employers simply seeking to reclaim their levy payments, rather than aiming to get out of the system the skills that they need. In this sense, it has become ‘money in, money out’, rather than ‘money in, skills out’ (DfE 2017). The recently announced sector deal on construction has promised reforms to the CITB to ‘make it more strategic and industry led, and to enable the sector to make best use of funding from the Apprenticeship Levy’ ([BEIS 2017b](#))

We set out our recommendations for the reform of the CITB levy and the apprenticeship levy in ‘Solution 2’ below.

**WHY HAS THE CONSTRUCTION INDUSTRY FAILED TO TRAIN ENOUGH WORKERS?**

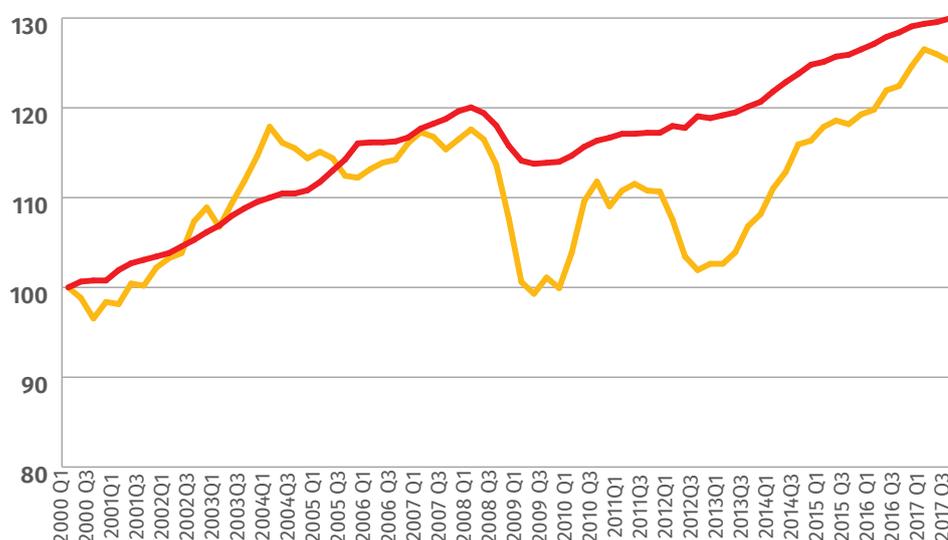
As we have set out above, despite the significant, and escalating skills shortages in construction, the industry has failed to train enough workers. In this section, we examine the structural factors that have limited employer training in construction, and which need to be overcome to meet the skills challenge.

**VOLATILITY AND LOW PREDICTABILITY**

The construction industry is highly volatile and unpredictable. As figure C2.8 shows, the construction sector saw a sharp drop in output following the global financial crisis. Construction GVA fell by 15.6 per cent between Q1 2008 and Q3 2009, nearly three times the decline seen across the economy as a whole (5.6 per cent) (IPPR analysis of [ONS 2017](#)). While there has been only one recession in the economy as a whole since 2003, there have been three significant recessions in construction in the same period.

**FIGURE C2.8**

**The construction sector has experienced three major recessions in the last 15 years**  
*Index of construction and non-construction GVA, 2000 – 2017 (Q1 2000 = 100)*



Source: IPPR analysis of [ONS 2017](#)

This volatility has been exacerbated by the changing business model of the residential construction sector, and the decline of council housebuilding. Traditionally, council housing represented a large part of the residential construction market, and was used as a ‘counter-cyclical demand tool’. However, the increasing move towards private housing has limited the ability to deliver a ‘soft landing’ when demand cools in the private market (Farmer 2016).

The shift in focus of the industry is clear in the statistics for housing starts by tenure. As table C2.2 shows, between 1972/3 and 1976/7, nearly half of housebuilding starts were delivered by local authorities and housing associations, with the vast majority of these being council houses. Over the last five years, the number of starts by local authorities and housing associations combined had fallen to just one in five, with only a tiny minority of these being council houses. The vast majority of homes are now built for private sale, and the vast majority of affordable homes built are delivered by housing associations whose business models are increasingly cyclical.

**TABLE C2.2**

**Delivery of affordable housing as a proportion of all housebuilding**

	House-building starts by local authorities per annum	House-building starts by housing associations per annum	Proportion of housebuilding starts delivered by local authorities and housing associations
1972/73–1976/77	105,200	15,300	44.9 per cent
2012/13–2016/17	1,800	24,500	19.1 per cent

Source: IPPR analysis of [CLG 2017](#)

In recent years, the government has substantially reduced capital investment in social housing. government investment fell from £11.4 billion or 0.7 per cent of GDP in 2009 to £5.3 billion, or 0.2 per cent of GDP (NHF 2017). While some social homes are being delivered by housing associations. These are now largely funded through cross-subsidy from build-for-sale. While this has allowed the sector to continue to deliver some social homes, it has meant that it is increasingly cyclical, and therefore faces similar barriers to training as the private sector.

The high level of volatility in demand, the lack of predictability and the regular recessions in construction promote a short-term business model and act as disincentives on employers investing in training their workforce.

### **FRAGMENTATION**

The construction sector is highly fragmented. First, there is a very high degree of sub-contracting, and a low-level of vertical integration. Second, construction is reliant on a large number of small and medium sized employers, with the industry accounting for just under a fifth (17 per cent) of all SMEs (BEIS 2016). Third, as set out above, construction has very high levels of self-employment. Two in five (42 per cent) workers in construction are self-employed, three times higher than the figure across the rest of the economy (13 per cent), and higher than any other industry (ONS 2017b).

Taken together, the high-levels of sub-contracting, high levels of SMEs, and high levels of self-employment in construction has contributed to excessive fragmentation, which has limited levels of employer-delivered training in the sector.

### **LOW LEARNER DEMAND**

In addition to the structural challenges that undermine incentives for employers to train their staff, construction faces a poor image, which undermines its status as a career of choice.

In particular, the construction industry has struggled to attract women. They account for just 12.4 per cent of the current construction workforce, a figure that has increased by just 0.4 percentage points in the last two decades (IPPR analysis of ONS 2017b).

A recent poll of 2,000 members of the public found that two in three (67 per cent) would never consider a career in construction, with just 17 per cent saying they would. Construction was most associated with being 'strenuous' and 'dirty', while very few saw it as 'exciting' (UK Construction Week 2016).

While some of these perceptions may seem to be unfair, many of them are grounded in reality. So while marketing the industry better may help, addressing the underlying challenges within construction is vital too.

### **ACCESS TO SKILLED MIGRANTS**

Finally, the construction industry has also been able to access a ready supply of skilled workers from across the EU.

While this may have a marginal impact on the readiness of construction employers to train workers, it should not be seen as a major factor. While the density of EU migrants in the construction sector varies very significantly by region, the challenges we see with low levels of training are UK-wide. While the number of migrant workers in construction has grown substantially in the last 12 years, problems with skills shortages and low levels of training pre-date the increase in migration.

## SUMMARY

The construction industry faces significant and growing skills shortages, which are increasingly constraining output. Despite these skills shortages, and despite the best efforts of the CITB, employers in construction have consistently failed to train enough staff as a result of longstanding structural challenges with the sector.

The construction skills system is dysfunctional; there are not enough apprenticeships, and construction courses in further education system are too often failing to meet employer need or support people into sustainable careers. The CITB levy disadvantages SMEs, and employers have increasingly approached it in a transactional way. apprenticeship levy will do little to boost employer investment in training in the industry, and the wider apprenticeship reforms may even lead to fewer apprenticeships. Large employers in the sector now face a complex system with two levies.

In addition to the growing skills crisis in construction set out above, the industry now faces a significant risk from Brexit.

# CHALLENGE 3

## THE POTENTIAL IMPACT OF BREXIT

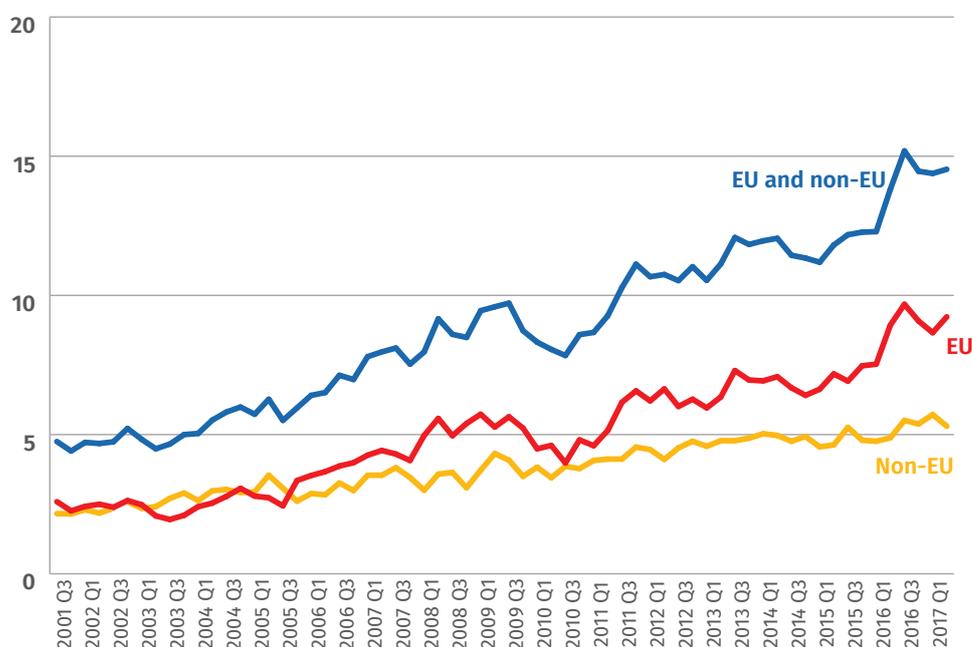
In this chapter, we examine how construction has become increasingly reliant on EU migrants in recent years in order to meet skills and labour shortages, particularly in London, where demand is highest. In the context of growing skills gaps, and rapidly increasing EU migration, we show that the construction industry is exceedingly vulnerable to potential changes in migration policy post-Brexit.

### EU WORKERS AND CONSTRUCTION

While non-UK workers make up a lower proportion of the construction workforce than in the rest of the economy, the industry is more reliant on EU migrants. 9.0 per cent of construction workers were born in the rest of the EU, compared to 7.4 per cent of workers across the rest of the economy (IPPR analysis of Labour Force Survey, 2016 Q1-Q4). As figure C3.1 shows, the presence of EU migrants in the sector has increased rapidly, increasing nearly five-fold between 2003 and 2016.

**FIGURE C3.1**

**The proportion of EU workers in construction has risen nearly five-fold since 2003**  
*Proportion of construction workforce born outside of the UK and in the rest of the EU*



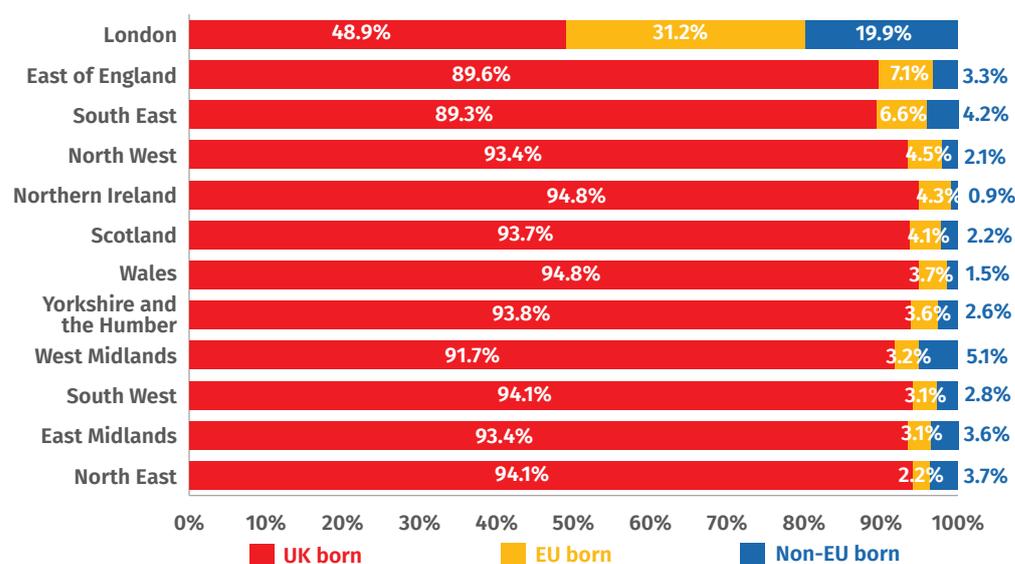
Source: IPPR analysis of Labour Force Survey, 2001 – 2017

The national figures mask very significant variations by region, with a very large concentration of EU workers in the London construction industry. As figure C3.2 shows, fewer than half (48.9 per cent) of construction workers in London were born in the UK, with nearly one in three (31.2 per cent) being born in the EU. In the rest of the UK, nine in ten (92.3 per cent) construction workers were born in the UK, with just 4.5 per cent born in the rest of the EU. The proportion of EU-born workers in the construction sector in London is seven times as high as the rest of the UK.

**FIGURE C3.2**

**Migrant workers in construction are heavily concentrated in London**

*Construction workers by country of birth, by region*



Source: IPPR analysis of LFS 2015 Q1 – 2016 Q4

As table C3.1 shows, EU migrants work in a wide range of sub-sectors in construction, with concentrations in other building completion and finishing, painting and glazing, and construction of residential and non-residential buildings.

**TABLE C3.1**

**Proportion of workers born in the UK, EU and rest of the world by sector, 2016**

Sub-sector	UK (per cent)	EU (per cent)	non-EU (per cent)
Other building completion and finishing	73.2	20.2	6.6
Painting and glazing	76.1	16.9	7.0
Construction of residential and non-residential buildings	82.0	11.3	6.7
Joinery installation	87.1	8.1	4.9
Construction of other civil engineering projects not elsewhere classified	88.8	4.8	6.4
Other specialised construction activities	91.9	5.3	2.9
Electrical installation	93.1	3.5	3.5
Plumbing, heat and air-conditioning installation	94.0	3.2	2.8

Source: IPPR analysis of ONS Labour Force Survey, LFS 2015 Q1–2016 Q4

While EU-born workers are spread across a broad range of industries, they are most heavily concentrated in construction trades not elsewhere classified (18.5 per cent), painters and decorators (15.2 per cent), elementary construction occupations (12.7 per cent), construction operatives not elsewhere classified (11.2 per cent), carpenters and joiners (10.7 per cent) and civil engineers (10.0 per cent) (IPPR analysis of ONS Labour Force Survey). This demonstrates the broad range of occupations – both high-skill, mid-skill and low-skill – where EU migrants play an important role in meeting skills needs.

There is a large difference in the age profile of UK-born and EU-born construction workers. Nearly half (46.2 per cent) of UK-born workers in construction are aged over 45, compared to just over a fifth (21.8 per cent) of EU-born workers (IPPR analysis of LFS 2016 Q1 Q4). In this sense, the growth in the EU-born workforce has masked the full extent of the ageing of the UK-born workforce.

There is a significant difference between the education level of UK-born and EU-born employees working in construction in the UK. Three in five (59.5 per cent) UK-born construction workers were educated to age 16 or below, compared to just one in six (15.8 per cent) EU-born construction workers. EU-born construction workers are nearly three times more likely to have been educated to age 21 or over (30.6 per cent compared to 11.8 per cent) (IPPR analysis of LFS 2016 Q1 Q4)

There is a small difference in pay between UK-born and EU-born workers in the industry. UK-born construction workers earned an average hourly wage of £12.49 in 2016, compared to £11.53 for EU-born workers. Employees born outside of the EU though tended to earn more, with an average hourly wage of £12.93 (IPPR analysis of LFS 2016 Q1 Q4).

EU-born workers are also far more likely to be self-employed. In 2016, over half (55.7 per cent) of EU-born construction workers were self-employed, compared to fewer than two in four (38.5 per cent) UK-born construction workers (IPPR analysis of LFS 2016 Q1-Q4) Non-UK born construction workers are more likely to be placed by employment agencies than UK-born workers (CITB 2017).

### EMPLOYER PERCEPTIONS OF EU-WORKERS

A recent CITB survey found that one in three (35 per cent) construction employers employed a non-UK worker either directly or indirectly, though this rose to four in five in London (CITB 2017).

**TABLE C3.2**

#### Employer use of non-UK workers by type in construction in UK and London

	UK (per cent)	London (per cent)
Use non-UK born workers (direct or indirect)	35	80
Employ non-UK born workers directly	24	61
Use non-UK workers indirectly (self-employment, labour-only subcontracting, or agency)	20	46

Source: CITB 2017

The CITB survey explored the reasons for employing non-UK workers.<sup>3</sup> It suggested that rather than actively seeking to recruit non-UK workers, employers are merely seeking skilled workers and responding to applicants. Just one per cent said they actively sought to recruit non-UK workers, though this did rise to seven per cent among firms with 100 or more employees (ibid).

When employers were asked why they recruited non-UK nationals, the reasons most often spontaneously cited were availability (42 per cent) and skills shortage (39 per cent), followed by better work ethic (26 per cent). Preferred rates of pay were mentioned by just one per cent (ibid).

When employers were prompted with a number of potential reasons, the lack of enough skilled UK applicants was again the most significant reason, cited by more than half (55 per cent) of employers. However, 45 per cent cited better work ethic, and 40 per cent better productivity among non-UK workers. One in four (23 per cent) cited better skills/qualifications and eight per cent highlighted the fact that they were cheaper. Among employers who said they were very or quite dependent on non-UK workers, 12 per cent said that price was a reason in recruiting them (ibid). This suggests that, while skills shortages and the availability of migrant workers is a factor, a significant minority of employers are motivated by more positive perceptions of migrant workers compared to UK-born workers.

**TABLE C3.3**

**Employers' reasons for employing non-UK workers in construction (prompted, per cent)**

	Not a reason (per cent)	Partial reason (per cent)	Key reason (per cent)
Not enough skilled UK applicants	36	22	35
They have a better attitude and work ethic	49	23	22
They are more productive than equivalent UK workers	50	20	20
They are better skilled/qualified than UK workers	71	15	8
Non-UK workers are cheaper	92	7	1

Source: CITB 2017

Agencies appear to employ a greater proportion of EU-born workers than the construction sector as a whole. According to recent CITB research, 30 per cent of agency workers in construction were EU-born, with 5 per cent being non-EU nationals. In terms of the reason for employing non-UK workers, agencies again tended to emphasise skills shortages and flexibility (ibid).

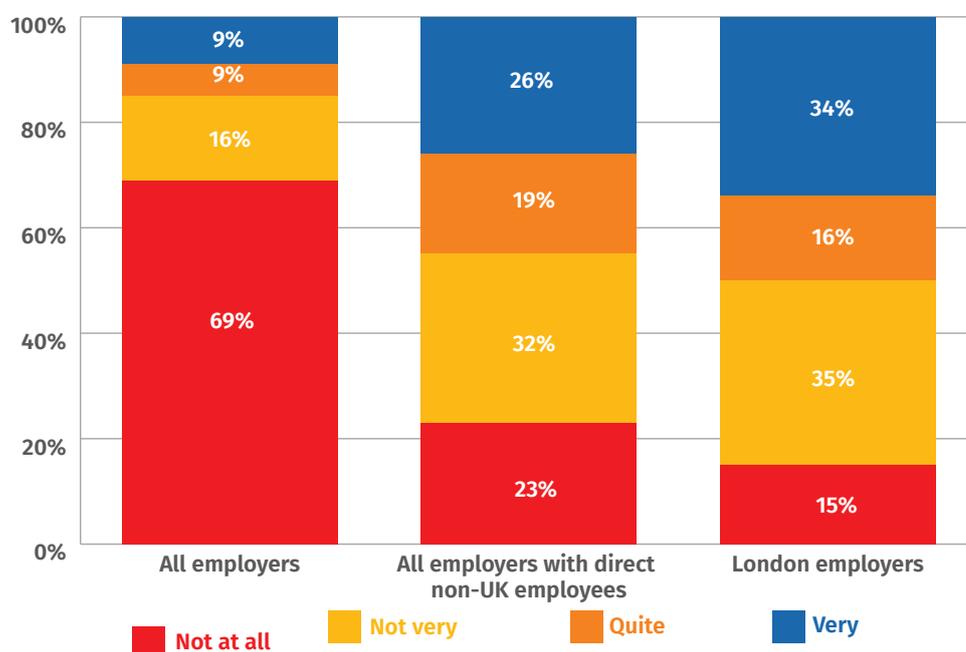
**RELIANCE ON MIGRANT WORKERS**

There are relatively high levels of reliance on non-UK workers among employers who do – directly or indirectly – use migrant workers. As figure C3.3 shows, nearly half of employers who do use non-UK workers say they are quite or very reliant on non-UK workers, with a quarter (26 per cent) being very dependent. In London half of all construction employers say they are quite or very reliant on non-UK workers, with a third (33 per cent) being very dependent (CITB 2017).

<sup>3</sup> This refers to all non-UK workers, rather than just EU-born workers. However, EU-born workers make up the large majority of non-UK born workers in the sector.

**FIGURE C3.3**

**Half of construction firms in London are quite or very reliant on non-UK workers**  
*Employer perceptions of reliance on non-UK workers in construction, 2017*



Source: CITB 2017

### **ANTICIPATED REACTIONS TO BREXIT**

A significant minority of employers have already experienced some impact from the EU referendum result. One in four employers say they have seen an impact from the referendum, rising to nearly half of those who directly employ five or more EU workers. Among employers with at least one non-UK worker, eight per cent say they have already seen staff shortages as a result of Brexit, with 13 per cent of employers in London reporting this (ibid).

Employer opinions on the impact of Brexit and potential restrictions on access to migrant workers are closely related to whether the organisation employs EU workers. While just one in three (34 per cent) construction employers expect Brexit to have any impact on their organisation in the next five years, this rises to half (51 per cent) of employers with five or more EU workers. Among all employers, just one in five (22 per cent) believe that restrictions on access to migrant workers would impact their business, rising to four in five (78 per cent) among those with five or more EU workers (ibid).

**TABLE C3.4****Employer perception of potential impact of Brexit and migrant worker restrictions**

	Any impacts to date (per cent)	Any Brexit impacts in next 5 years (per cent)	Any impacts if greater migrant worker restrictions (per cent)
All employers	25	34	22
Directly employing any EU workers	35	39	44
Directly employing 5+ EU workers	45	51	78

Source: CITB 2017

When prompted, three in ten employers (31 per cent) thought wage inflation and higher costs would be fairly or very likely, with slightly fewer (27 per cent) believing skills shortages would increase. However, under one in four (23 per cent) believed they would need to spend more on training as a result (CITB 2017).

**TABLE C3.5****Anticipated impact on businesses if the number of migrant workers was greatly restricted (prompted)**

	Not at all likely (per cent)	Not very likely (per cent)	Fairly likely (per cent)	Very likely (per cent)
Wage inflation and higher costs	39	24	22	9
Increased skills shortages	47	24	19	8
Need to spend more on training	48	25	13	10

Source: CITB 2017

A recent survey by the Federation of Master Builders showed concern among SMEs in the sector. One in three (33 per cent) members believing that the ending of free movement would have some impact in constraining their ability to build (FMB 2017).

The CITB survey of employment agencies serving the construction industry showed more concern about the potential impact of restricting access to migrant labour. Two out of three (64 per cent) thought that restricting migration would impact businesses, three times higher than the figure among all employers. Two in five (42 per cent) said that this would lead to general staff shortages, with a quarter being concerned about skills shortages (24 per cent) (CITB 2017). This may be related to higher usage of EU-workers among agencies, but it may also reflect a greater visibility of the sector and of recruitment, and a greater understanding of the potential impact of restricting migration on the industry.

**THE POTENTIAL IMPACT OF BREXIT ON THE CONSTRUCTION WORKFORCE**

Having considered the increasing proportion of EU nationals in the construction sector, and employer perspectives of the impact of Brexit, below we model the potential impact of changes in migration policy after Brexit. We find that the construction workforce is exceedingly vulnerable to these potential changes.

Even before the UK has left the EU, there is evidence of an impact on the sector. In addition to the reported impact from employers identified above, net migration

figures for 2016 show a fall in net migration, driven by a statistically significant increase in emigration by EU citizens (ONS 2017c). This is likely to be related to the significant fall in the value of sterling; the pound lost 17.6 per cent of its value compared to the Euro between the night of the referendum and August 2017, before recovering slightly.<sup>4</sup> The fall in the pound has reduced the value of both remittances and savings of EU-nationals working in the UK, making the country less attractive relative to other member states. The increase in emigration may also be related to perceptions of uncertainty and insecurity among EU nationals who do not yet have a guarantee of their right to remain in the UK after Brexit.

According to a recent CITB survey, employers in construction are more concerned about retaining existing non-UK workers than potential restrictions on future recruitment (CITB 2017). However, the same survey found the vast majority of migrant workers in construction intended to remain in the UK. Three quarters (77 per cent) of non-UK construction workers are planning to continue to work in the industry in the UK in the next 12 months, with just 6 per cent planned to work in another country, and 15 per cent not having definite plans (CITB 2017). This suggests that employer concerns over retention may be exaggerated.

The government is committed both to withdrawing from the European Single Market and to reducing net migration to below 100,000 a year (The Conservative Party 2017). While they have yet to set out proposals for a post-Brexit migration system, a white paper on the future of the migration system is expected soon. The final outcome in terms of the migration settlement is dependent on negotiations.

There are a number of factors that account for the high level of vulnerability of the construction industry to changes in migration policy post-Brexit.

- The construction industry has a greater proportion of EU migrants; 9.0 per cent of construction workers were born in the rest of the EU compared to 7.4 per cent for the rest of the economy.
- The proportion of EU-born workers in the construction sector has increased rapidly; growing by nearly five-fold between 2003 and 2016.
- The construction industry has a higher proportion of self-employed workers than the rest of the economy; 42 per cent of construction workers are self-employed, over three times the level in the rest of the economy, with self-employment among EU migrants being even higher still at 55.7 per cent. Currently, the migration system for non-EU workers makes it almost impossible for people to come to the UK in order to work self-employed.
- Construction has very few occupations on the shortage of occupation list, and those that are on the list are limited to relatively high-skill engineering construction occupations (Home Office 2016).

To examine the potential impact of Brexit on the construction workforce, we model the impact of four potential post-Brexit immigration systems on EU migrants currently employed in construction, using the same methodology as Morris (2017). By examining how many of the *current* EU-born employees working in construction would have been able to come to the UK under different scenarios, we are able to assess the likely *future* impact of these different scenarios on the construction sector, and on accessibility of migrant workers. The migration systems we model are as follows<sup>5</sup>.

- **Extending the current Tier 2 system** – from non-EU migrants to cover EU migrants.
- **Apply relaxed skill/income thresholds** – the rules used are the same as for the Tier 2 system, however, in this case eligible respondents are employed in any occupation at NQF level 4 or above, and a minimum income threshold of £20,800 applies to all respondents.

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4 IPPR analysis based on <http://www.xe.com/currencycharts/?from=GBP&to=EUR&view=2Y>

5 For full details of scenarios, see Appendix 1 in [Morris 2017](#)

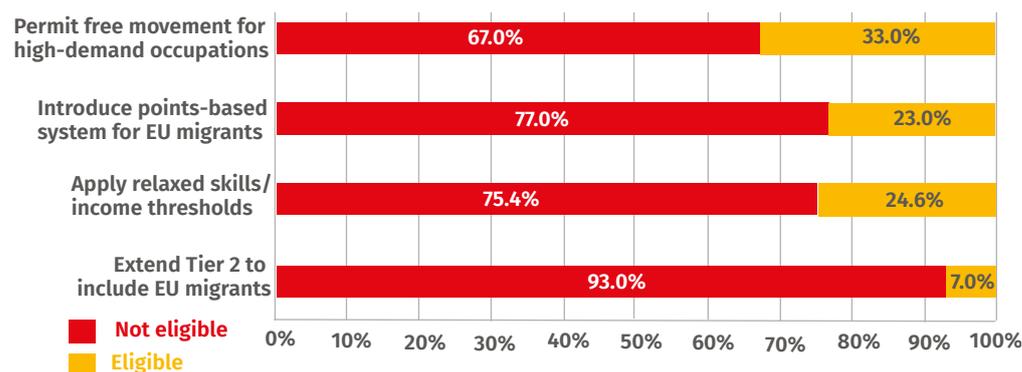
- **Permit free movement for high demand occupations** – the rules used are the same as for the Tier 2 system; however, EU nationals working in occupations deemed ‘high-priority’ are automatically granted eligibility.
- **Introduce points-based system for EU migrants** – a rudimentary points-based system based on education level and age. Eligible respondents are aged 35 or under and have completed full-time education at age 21 or over.

As figure C3.4 shows, in all four scenarios, the large majority of existing EU migrants employed in the construction sector would not be entitled to come to the UK. The impact is particularly significant from extending the Tier 2 system to EU-born workers, so it is effectively nationality-blind. Under this scenario, just 7.0 per cent of current EU-born construction employees in the UK would have been eligible to come to work here. Even under the least restrictive of the four systems – permitting free movement for high-demand occupations – two in three (67.0 per cent) EU-born construction employees in the UK still would not be eligible to work here.

**FIGURE C3.4**

**Few EU-born construction employees would be eligible to work in the UK under potential post-Brexit migration systems**

*Proportion of recent EU-born construction employees who would have been eligible to come to the UK under various possible post-Brexit migration scenarios*



IPPR analysis of ONS Labour Force Survey, LFS 2015 Q1–2016 Q4

**SUMMARY**

In this chapter, we have shown that the UK construction industry has become increasingly reliant on EU migrants in order to meet skills and labour gaps, particularly in London where demand is highest. There seems to be a significant amount of concern among the many employers in the industry who do use migrant workers about the impact on Brexit and on restricting immigration. Our new modelling of potential post-Brexit migration policies shows that this concern is well-placed, and if anything, it is underplays the potentially seismic impact of ending freedom of movement on the sector.

These findings suggest that under each of our possible post-Brexit migration policy scenarios, the ability of construction to recruit EU-nationals will fall very substantially indeed. In the context of large and growing skills gaps, this is likely to have a significant impact on the ability of the industry to recruit the workers that it needs to meet replacement demand.

# BUILDING BRITAIN'S FUTURE?

## POTENTIAL POLICY SOLUTIONS

The construction industry faces significant challenges. Productivity growth has been sluggish as a result of low levels of investment and innovation, and a failure to modernise the industry and embrace new technologies. Despite high level of skills shortages, employers in the sector do not train enough workers and the wider construction skills system is dysfunctional. With a poor reputation – some of which is deserved – the industry has struggled to attract new recruits, and the aging workforce means replacement demand will increase significantly in coming years.

On top of the existing challenges, construction is hugely vulnerable to the ending of freedom of movement. The industry has become increasingly reliant on EU migrants, particularly in London and the south east, where demand is highest, and where skills gaps are most prevalent already. Given the nature of the construction workforce, the industry is highly vulnerable to changes in migration policy post Brexit, with each of our four post-Brexit migration scenarios likely to reduce construction migration significantly.

The skills challenges are longstanding, yet the industry has failed to address them. Successive governments have sought to diagnose and treat the systemic and structural weaknesses in the construction industry. Major reviews have been conducted by Latham, Egan, Wolstenholme and Farmer. Yet many of the challenges they identified remain unaddressed. Previous warnings of the growing workforce challenges have failed to provoke the level of action required. Brexit threatens to turn the growing skills challenge into a crisis for the industry, with significant negative consequences for our economy, and significant impacts on our ability to build the homes, commercial property and infrastructure that our country needs.

Despite this, construction does not appear to be a high priority for the government in terms of managing the impact of Brexit. A document leaked to the Times reportedly produced in November 2016 categorised industries in 'high', 'medium' and 'low' priority, based on the level of assistance the sector was expected to need in adapting to Brexit. Construction was placed in the low priority group (Coates 2017). The announcement of additional funding for skills and innovation in the Autumn Budget suggests this might be changing. But the scale of action is so far insufficient compared to the scale of the challenge.

### RECOMMENDATIONS:

**The government should recognise the potentially devastating impact of Brexit on the construction sector, and the impact that this could have on the housing crisis and the wider economy.**

**The government should make construction a priority industry, it should seek to work with the sector to adapt to the changes that Brexit may bring, and it should seek to limit the impact of Brexit on the sector.**

In the following sections we set out how government and the construction industry could work together to limit the impact of Brexit. We set out solutions in three areas; industrial strategy, skills policy, and migration policy.

# SOLUTION 1

## IMPLEMENTING AN INDUSTRIAL STRATEGY FOR CONSTRUCTION

The construction industry is already struggling to recruit and retain a sufficient workforce to meet demand. This is likely to get worse in the future as demand grows, the workforce ages and access to migrant workers is restricted.

In this context, boosting productivity will be absolutely vital. The industry will need to ensure that, as well as addressing skills shortages, it can deliver more output per unit of labour. If we fail to achieve this, a stagnant or shrinking workforce in construction risks leading to stagnant or shrinking output, jeopardising our ability to build the homes, commercial property and infrastructure that our country so desperately needs.

This would involve a significant reversal of recent trends. Productivity in construction has barely grown in the last 20 years, and it has been flat for a decade.

The government has previously sought to set out an industrial strategy for construction. Even before their recent focus on industrial strategy, the government worked with the industry to set out a collective vision for the future of construction. Their industrial strategy *Construction 2025*, released in 2013, included the aspiration for an industry that is ‘*efficient and technologically advanced*’, with higher levels of productivity (HMG 2013). However, since the launch of the industrial strategy, productivity growth in construction has remained sluggish, and the industry has failed to address many of the structural challenges that it faces. In their industrial strategy white paper, the government announced that they have agreed a sector deal for construction, which aims to boost productivity through greater investment in innovation and skills (BEIS 2017). This includes up to £170m provided through the Industrial Strategy Challenge Fund to support innovation in construction (ibid). However, this funding remains small compared to the scale of the challenge.

There must now be a concerted effort by the industry, with the support of government and customers, to modernise construction and to boost productivity, quality and output. This should be the key aim of a bold and radical industrial strategy for construction. This industrial strategy should encompass a new approach to skills policy set out in 'Solution 2', as well as the measures set out below.

### CONSTRUCTION UK – A NEW SECTORAL INSTITUTION FOR THE INDUSTRY

The UK economy has traditionally suffered from a lack of strong and effective sectoral institutions to deliver on shared objectives, including supporting training and boosting productivity (Dromey et al 2017). This is recognised in the government’s industrial strategy green paper, which states:

*‘Competitor economies often have better developed sectoral institutions and stronger local institutions than the UK. The creation of*

*a modern industrial strategy for Britain is our opportunity to put this right' (BEIS 2017)*

The Construction industry faces particular challenges with a lack of strong industry-wide leadership, and a lack of robust collective action to address shared challenges.

There are two significant *sectoral* bodies in construction.

- The CITB was established to oversee a collective commitment to training in the sector. While it has played an important role in overseeing the CITB levy and the wider skills system, it has failed to address the deep structural challenges that have led to low levels of training in the sector. It also has a narrow remit, focussed only on skills, rather than on boosting productivity and overseeing industrial strategy.
- The Construction Leadership Council (CLC) was established to oversee the implementation of Construction 2025, the government's long-term vision for the sector. However, it lacks sufficient scale and resources to make an impact on the sector. It also lacks representation from the SMEs that account for a majority of output and employment, or any representation from the workforce.

The Morrell Review of the industry training boards highlighted the importance of CITB in delivering *Construction 2025* (DfE 2017). However, having one body focussed on boosting skills and a separate – and under-resourced – body focussed on driving industrial strategy, is limiting the effectiveness of both, and preventing a coherent approach to driving skills and productivity in the industry.

**RECOMMENDATION:**

**The CLC should merge with CITB to form Construction UK, a sector-wide body responsible for driving improvements in the construction industry. Construction UK should be responsible for the following.**

- **Boosting the quantity and quality of training.** Construction UK should be responsible for forecasting construction demand and the associated demand for skills; designing the content of apprenticeships, T-Levels and other training standards; overseeing the operation of the construction productivity and skills levy (see 'Solution 2' below); and collectively investing unspent levy funds.
- **Boosting productivity through the construction sector deal.** Construction UK should be responsible for overseeing industrial strategy in the construction industry, and for implementing the sector deal. It should aim to boost investment, innovation and productivity in the sector.

Construction UK should have a broad membership, including:

- **construction employers** – including some of the largest firms and trade bodies, as well as representatives of the SMEs that account for the majority of both delivery and training
- **construction clients** – including private clients, central and local government
- **the government** – including a ministerial co-chair, and the chief construction advisor<sup>6</sup> and the devolved administrations
- **employee representatives** – including construction unions and professional associations
- **training providers** – including AoC, AELP and large providers.

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<sup>6</sup> The government should re-introduce the role of chief construction advisor (CCA). The role was created in 2008 to support joint working between government and the industry, but scrapped in 2015. The chief construction advisor should sit on Construction UK and form the main link between government and the sector.

Construction UK should have a core team of permanent staff, and it should be funded through a top-slice of the construction productivity and skills levy. This would ensure that it has sustainable funding and independence from government.

Having received the backing of enough trade bodies through the consensus vote process, CITB is set to have its mandate renewed for a further three years in 2018. The government has set out that it has no immediate plans for changes in primary legislation regarding CITB, but that this will be reconsidered following the next CITB consensus round in 2020 (DfE 2017c). This would be a wasted opportunity; the industry cannot wait another three years to see the reform of the institutions that are necessary. Therefore, we recommend that the government should take the opportunity of the current mandate renewal in 2018 to set out a new direction for CITB, and to begin the process of creating Construction UK.

### DELIVERING THE SECTOR DEAL FOR CONSTRUCTION

The government's white paper on industrial strategy announced the agreement of a sector deal for construction, which aims to boost productivity through greater investment in innovation and skills ([BEIS 2017b](#))

#### RECOMMENDATION:

**The government's sector deal should aim to boost productivity, quality and output, through greater investment in innovation and skills. The sector deal should bring together not just employers, but employees - represented through trade unions - clients of the sector, and other stakeholders such as national and local government, and training providers. Construction UK should be responsible for implementing the sector deal, and driving a collective commitment to productivity and skills across the sector.**

The sector deal should be industry-wide, bringing together housebuilding, infrastructure, commercial property and repair and maintenance to address shared challenges.

The construction sector deal should be focussed on boosting productivity, quality and output in the sector by:

- **boosting skills** through stimulating employer investment and improving the skills system (see 'Solution 2' above)
- **promoting investment and innovation** including spreading the use of digital technology including BIM and Modern Methods of Construction (MMC) (see below)
- **facilitating long-term patient investment** and coordination between suppliers, primes and customers.

The green paper sets out a number of areas in which sectors can request support from government ([BEIS 2017](#)). The construction sector deal should set out a number of asks from government, including:

- supporting the creation of a new institution in Construction UK (see above)
- reforming the construction skills system including the operation of the apprenticeship levy and further education (see 'Solution 2')
- improving procurement practices to incentivise investment in skills and MMC (see 'Solution 2')
- re-aligning and increasing existing housing spend to focus on investment in social and affordable housing (see below).

The industrial strategy should be overseen and driven by Construction UK. This sectoral institution should be responsible not just for improving the quantity and quality of training – the current focus of CITB – but on implementing the

sector deal and delivering an industrial strategy that boosts productivity, quality and output in the sector. This would be a broader and more ambitious role than the current CITB mandate. As set out below, this should be reflected in greater flexibility for employers in their use of the construction productivity and skills levy, allowing them to invest in measures to boost productivity beyond just training.

### **A NATIONAL MISSION TO BE A WORLD-LEADER IN MMC**

As set out above, productivity in construction has been flat over the last decade. Levels of investment and innovation are low in the industry, and employers have been slow to embrace the potentially transformative potential of MMC and – to a lesser extent – BIM.

The uptake of and investment in such new technologies has been limited by structural challenges, by a lack of skills, as well as by a lack of leadership and a sense of inertia across the industry. The government has reiterated its desire to promote the use of MMC by the construction industry, and this forms a key part of the recently announced sector deal for construction (BEIS 2017b).

The government can play a significant role in driving innovation. As Mariana Mazzucato has set out, the state has historically played a major role in innovation-led growth, and has not just ‘fixed’ markets, but actively created and shaped them. She has called for ‘mission-oriented’ investments by the government, led by dynamic public agencies, that create and shape markets and ‘crowd-in’ investment from the private sector in order to tackle major strategic priorities (Mazzucato 2017).

#### **RECOMMENDATION:**

**The government, Construction UK and the wider industry should set out a national mission to be a world-leader in low-carbon MMC.**

This should be demonstrated by and driven by an ambitious and stretching target for the use of MMC across the construction sector. **In housebuilding, government should set a ‘50/50’ target.** Similar to the target set by the GLA (GLA 2017), this would aim to ensure that by the end of the Parliament, at least half of all new homes have a pre-manufactured value of over 50 per cent.<sup>7</sup> In addition to targets around the use of MMC in domestic developments, government and the industry should aspire to being a net-exporter of MMC expertise and products, rather than being reliant of foreign investment to drive modernisation of the domestic industry. The government has reiterated its desire to promote the use of MMC by the construction industry, and this forms a key part of the recently announced sector deal for construction (BEIS 2017b).

In order to support progress towards this target, central and local government could use procurement to encourage the use of MMC. The government should consider promoting the use of MMC through its grant funding programme for affordable housing. Similarly, local authorities could also target a proportion of pre-manufactured value in delivery of council housing. government and Construction UK should encourage other large-scale customers of the industry to also require the use of MMC as part of developments, particularly in areas like build-to-rent.

If the industry is to maximise the opportunity offered by MMC, we need to ensure that the workforce have the requisite skills. This requires both supporting existing workers to update their skills, ensuring that the knowledge and techniques required for MMC is mainstreamed into training for new entrants to the industry, and meeting specific skills gaps for new roles (CITB 2017). Construction UK

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<sup>7</sup> Pre-manufactured value is calculated according to the proportion of costs of construction that are spent on components manufactured offsite

should be responsible for delivering this, ensuring that it supports retraining opportunities for existing workers, that MMC is mainstreamed into all training standards, and that specialist provision is available to meet specific identified skills needs. This may require focusing additional capital investment on expanding facilities in the FE sector to teach MMC, and investing in training additional expert instructors to deliver the skills required for MMC.

Finally, government should work with Construction UK to support long-term and patient investment in MMC. This should involve providing confidence through setting out long-term visibility of demand and ensuring the availability of patient capital to support MMC. While the government's announcement of £170m at the Autumn Budget to support innovation in the construction industry is welcome, it remains relatively small compared to the scale of the challenge. Government should increase funding to support innovation and diffusion of new technology, focused in particular on MMC. This should be delivered through Construction UK. Construction UK should use this public investment to 'crowd-in' private investment, supporting businesses to come together to collectively invest in MMC, in order to reduce the risk, share the high up-front capital cost, and share the benefits of innovation. Government should also consider capital allowances to stimulate employer investment in MMC.

### ENSURING PREDICTABILITY OF DEMAND

The construction industry suffers from high levels of volatility and cyclicity, and a lack of predictability and visibility of demand, particularly in housing. This has been exacerbated by changes in the housing market, and by the increasing reliance on private housing at the expense of social housing.

In Construction 2025, government and the industry made a joint commitment to work together to develop and refine the pipeline of future work opportunities across the of the construction sector, to improve predictability of demand (HMG 2013). However, there remains little visibility of and confidence in future demand in too much of the sector. This high level of volatility and lack of predictability encourages a short-termist business model, and limits the willingness of employers to act in the long term by investing in training and other measures to boost productivity.

#### RECOMMENDATION:

**The government and Construction UK should seek to reduce the excessive volatility and cyclicity of the construction industry, and ensure that employers have predictability of demand.**

The government should **boost confidence and support employers to invest through actively seeking to reduce the volatility and cyclicity of the construction industry**. This should be delivered through a move away from the over-reliance on private for-sale housebuilding, and a support for greater tenure diversity. Building on the recommendations of the Farmer Report (Farmer 2016), this should involve the following.

- Supporting a large-scale council housebuilding programme, delivered by local government. As IPPR have previously recommended, this should be enabled through devolved grant-funding from central government and the lifting of the borrowing cap on the Housing Revenue Account.
- Supporting housing associations to deliver more grant-funded affordable housing.
- Supporting the development of the build to rent sector, through large-scale institutional investment and preferential planning arrangements.

Given the urgent need to stimulate the delivery of social homes, the need to move away from a reliance on the private sector and cross-subsidy in the housing

association sector, and the historically low cost of borrowing, government should seek to increase its investment in genuinely affordable housing to rent delivered through housing associations and local authorities. Investment in council housebuilding and grant funding for housing associations should be counter-cyclical, with greater investment when demand falls in the private housing market, in order to smooth the business cycle and prevent the regular construction recessions. This would ensure there is still training taking place even when the private market is contracting, and the reduced cyclical would give employers confidence to train and invest.

As well as providing more predictable and less cyclical demand, this greater tenure diversity would provide good opportunities to expand the use of MMC. As set out above, grants for council housebuilding and affordable housing delivery by housing associations should be contingent on targets for the inclusion of MMC, in order to stimulate greater investment in and wider adoption of this new technology.

In addition to actively seeking to smooth demand, Construction UK should **boost confidence and support employers to invest through forecasting future demand and skills needs in the sector**. Building on the success of the National Infrastructure Pipeline, Construction UK should establish a National Construction Pipeline. This should bring together forecasts of demand across sub-sectors, including infrastructure, housebuilding, commercial property and repair and maintenance. Construction UK should set out both their expectations of future demand and the projected skills requirements that will go along with this. These skills forecasts should be used to inform Construction UK's work and the investment of the construction productivity and skills levy.

Construction UK should make the data publicly available through an expanded data tool such as SkillsPlanner.<sup>8</sup> The information should be provided as open data, allowing others to use it and build tools based on it.

### SUMMARY

- A **new sectoral institution – Construction UK** – should be formed to oversee a collective commitment to skills and productivity in the industry.
- The government's new sector deal should aim to **boost productivity, quality and output, through greater investment in innovation and skills**. The sector deal should be overseen by Construction UK.
- The government should set out a **national mission to become a world leader in MMC**, with an ambitious **'50/50' targets** for off-site manufacture.
- The government should seek to **reduce volatility and boost predictability in the market, so that employers have the confidence to invest in skills**. This should be delivered through a shift away from excessive reliance on the volatile private housing market, and by better forecasting to give employers visibility of future demand.

<sup>8</sup> SkillsPlanner is a data-led approach to solving skills shortages. It is an open data platform that seeks to share past, present and future skills data, in order to inform training provision. Funded by Innovate UK, SkillsPlanner launched in February 2016, initially focussed on London. It brings together a number of employers in the industry, as well as wider stakeholders ([www.skillsplanner.com](http://www.skillsplanner.com))

## SOLUTION 2

# BUILDING A SKILLS STRATEGY FOR CONSTRUCTION

As we have demonstrated in Challenge 2, the construction sector faces significant and growing skills shortages, which are increasingly limiting output. Yet despite these skills shortages – and despite previous efforts by government, the industry and CITB – the construction sector has consistently failed to train enough workers.

While there is a strong case for a sectoral body to address collective action problems and support investment in training, the CITB is not working as effectively as it could be and its scope is too narrowly focussed on skills. While the apprenticeship levy may boost investment in apprenticeships across the wider economy, it will have a very limited impact on construction, given the high levels of self-employment and the predominance of SMEs, and apprenticeship starts in construction are likely to fall.

The government seems to have recognised the challenges with the construction skills system. They recently commissioned a review into CITB, and they have promised reform of the body (DfE 2017). The construction sector deal has set out an aim to *'drive increased investment in skills development, whilst adopting a more strategic and coordinated approach to recruitment, and equipping workers with the skills that they will need for the future'* (BEIS 2017b). The government announced that construction would be a priority for the new National Retraining Scheme announced in the budget, with £34m of additional investment over the next two years (HMT 2017). However, this funding is relatively small by comparison to the scale of the challenge; it represents just 7 per cent of the amount that will be raised by the apprenticeship levy and the CITB levy next year.

As part of the wider industrial strategy, the government and the industry must work together to develop a skills strategy for construction which addresses the failing in the skills system, significantly boosts investment, and provides the skilled workforce that the sector needs for the future.

### THE CONSTRUCTION PRODUCTIVITY AND SKILLS LEVY

While the CITB levy has helped to address some of the collective action problems and boost training in the construction industry, training remains low compared to other industries.

The apprenticeship levy will do little to stimulate training in construction, but it will add to complexity as some employers will now face two levies, which are calculated based on different formulas, and which have different mechanisms for investing funds.

#### RECOMMENDATION:

**The CITB levy and the apprenticeship levy should be replaced by a single levy – the construction productivity and skills levy – operated by Construction UK.**

Given the high levels of self-employment, sub-contracting and agency work in construction, the construction productivity and skills levy should be based either on a combination of PAYE and net payments under CIS as with the CITB levy, or on

payroll. This would ensure that large employers in the sector contribute their fair share to training costs within the sector, rather than devolving responsibility down the supply chain.

The construction productivity and skills levy should be more flexible and broader than both the apprenticeship levy and the CITB levy. Levy funds should be redeemable not just on apprenticeships, but on other high-quality training approved by Construction UK. Employers should be able to retain half of their levy funds for a period of up to two years, as with the apprenticeship levy, to invest in training of their own workers, or to devolve to employers within their supply chain. The remaining half of the funds, and any levy funds that remain unspent after two years should revert to Construction UK in order to provide grant funding for employers to bid for, as well as for wider strategic investment for industry-wide priorities. Any unspent funds from the construction productivity and skills levy should be ring-fenced for construction.

The construction productivity and skills levy should focus not just on supporting training, but on encouraging innovation and other measures to boost productivity.

The government has recognised the need for additional investment in skills in construction, a small amount of additional funding in the Autumn Budget. In addition to ring-fencing funds, government should also provide additional investment for the construction sector, and for other sectors that face both significant skills gaps, and a potentially high impact from ending freedom of movement. This should be delivered through re-investing unspent apprenticeship levy funds from other sectors in construction through Construction UK.

Given the longstanding skills challenges in the construction industry, and the failure of successive efforts to address these, further action should be taken if the government fails significantly to boost investment in training. Government and Construction UK should set out a series of targets for training provision and investment to be delivered by 2022. If these are not met, then government should introduce a construction clients levy. Similar to Farmer's recommendation, the levy should aim to shape commissioning behaviour. Set at 0.5 per cent of the total value of projects, the levy should have exemptions for customers who can demonstrate significant investment in skills and/or innovation (Farmer 2016). The funds from the levy should be allocated by Construction UK to boost investment in skills and productivity.

### **ENSURING HIGH-QUALITY PROVISION THAT MEETS EMPLOYER DEMANDS**

While there has been a decline in participation in construction courses in further education (FE), there are still tens of thousands of people completing construction courses every year.

However, the vast majority of these courses are delivered at low level, and many do not lead to employment and sustainable careers. In this sense, they are not meeting the needs of learners or employers. Some areas are seeking to improve outcomes from construction training, with the GLA setting the target of doubling the proportion of construction qualifications that lead to employment in construction to 50 per cent by 2021 (GLA 2017).

#### **RECOMMENDATION:**

**In the short term, sector bodies and the Institute for Apprenticeships should, as a matter of urgency, seek to approve the remaining standards for construction apprenticeships before the existing frameworks are abolished in 2019/20.**

**In the medium term, Construction UK should be responsible for designing the content of qualifications in construction, including apprenticeship standards, the**

technical route in construction, and relevant T Levels. These should be focussed not just on meeting current employer needs, but on ensuring that workers are given the skills they will need in the modern construction industry, including MMC and BIM.

The government has set out plans to create new institutes of technology, which would increase the provision of higher-level technical education (BEIS 2017). **A construction institute of technology should be established in London to address the lack of high-level, high-quality vocational provision.** The institute should be tasked with delivering high-quality vocational provision at level 4 and above in the construction technical route. The institute should focus, not just on delivering traditional construction skills, but on the skills needed to deliver MMC and BIM. It should be delivered through a partnership between Construction UK and the Mayor of London, as part of the proposed Mayor's Construction Academy, with funding from both parties matched by DfE<sup>9</sup>. The institute of technology should have extensive links both to industry and to universities.

**FE provision should be commissioned using high-quality regional labour market information,** provided by Construction UK. This should set out the current skills needs of employers, forecast future skills needs, and data on skills supply and skills shortages.

In the long term, as part of the devolution of skills, there should be a move away from the current model of output-based funding, to **outcome-based funding, with a focus on supporting participants into sustainable careers.** Local areas should aim substantially to increase the proportion of construction qualifications that lead to employment in the industry. This could involve setting a target of **doubling the proportion of construction courses that lead to employment or apprenticeships in construction within six months to 80 per cent.** This would have the effect of better incentivising employers to focus on employability, to ensure provision matches employer need, to provide effective work experience, and to offer post-qualification support and placement.

## USING PROCUREMENT AND PLANNING TO DRIVE INVESTMENT IN SKILLS AND PRODUCTIVITY

As a major client of the construction industry, national and local government should use their procurement and planning powers to drive investment in both skills and productivity. The government has recently introduced an apprenticeship target that requires public bodies with 250 or more staff in England to employ an average of at least 2.3 per cent of their new staff as apprentices from 2017–2021 (DfE 2017d).

### RECOMMENDATION:

**The government and local government should set a higher target for the construction projects that they procure, requiring employers to employ at least 5.0 per cent of new staff as apprentices between 2018 and 2022. Along with this requirement, government and local government should use procurement to incentivise the use of MMC, as set out above.**

As part of the sector deal, government should also encourage other large-scale clients of the construction industry – including housing developers and commercial property companies – to act as responsible customers by encouraging investment in skills and productivity.

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<sup>9</sup> The Mayor's Construction Academy Scheme is being set up alongside the housebuilding industry to ensure there is a sufficiently skilled construction workforce to deliver on the Mayor of London's housing ambitions. The Academy aims to coordinate existing provision and to drive up quality.

The planning system should be better used to incentivise and support training and investment in MMC in construction. **Section 106 should be reformed so that it provides more effective training and employment opportunities** across a wider geographical level. This could be delivered through requiring half of the training and employment opportunities to be delivered at a local level (in the local authority/ authorities conducting the planning process), with the other half pooled on a regional or sub-regional level. Construction UK should be responsible for working with local government to invest the pooled funds at the regional/sub-regional level.

### **MAKING THE SYSTEM WORK FOR SMES**

While construction is dominated by SMEs, the current skills system disadvantages them.

Despite the fact that many SMEs don't pay the CITB levy, or pay a discounted rate, SMEs recoup a smaller proportion of their CITB levy payments than larger firms. The lack of predictability of demand in construction mean that it is often difficult for them to take the long-term investment in employing an apprentice, and their lack of HR capacity among SMEs makes it difficult for them to navigate the complex apprenticeship system. Changes in the apprenticeship system may lead to a fall in the number of apprenticeships among SMEs in construction.

#### **RECOMMENDATION:**

**Construction UK should be representative of the industry, including extensive representation of SMEs on its board.**

Construction UK should ensure that the construction productivity and skills levy better supports the small and micro businesses that make up the majority of the construction sector to invest in skills and productivity. This should include a **responsibility to ensure that micro and small firms receive proportionately more grant funding and other support as a share of their levy contributions than larger firms**, reversing the current pattern with the CITB levy. In order to deliver this, and to support SMEs to navigate the skills system, Construction UK should invest in brokers, to engage with SMEs in the sector, to support them to identify skills gaps, to match them with available training, and to support them in identifying other opportunities to boost their productivity.

Construction UK should introduce a **significantly larger shared apprenticeship scheme**, building on the CITB scheme. Management fees must be limited so as to make them affordable for SMEs to participate in.

### **MAKING CONSTRUCTION A CAREER OF CHOICE AND BOOSTING LEARNER DEMAND**

Construction is not seen as a career of choice for many people, and negative perceptions of the sector are widespread. These perceptions in part reflect stereotypes, but they also in part reflect realities in terms of much of the construction workforce.

Construction has a very poor record on diversity, with women making up just 12.4 per cent of the workforce (Bahra 2016). There has been a significant drop in participation in construction courses delivered through FE since the restriction of eligibility for public funding and the introduction of Advanced Learner Loans.

#### **RECOMMENDATION:**

**In addition to improving the quality of work and the availability of training in the industry, Construction UK should be responsible for delivering a coordinated marketing programme to promote construction as a career of choice. This should include outreach to schools, colleges and universities.**

Construction UK should also seek to **address the significant imbalances in the current construction workforce**, particularly by attracting more women to work in the industry.

In order to reverse the decline in participation in FE, **entitlement to publicly funded training for construction should be extended up to level 3 courses**. This would involve replacing the Advanced Learner Loans system with grant funding, though it should go along with outcome-based funding to ensure that provision is focused on supporting people into sustainable employment.

### SUMMARY

- The government should bring together the CITB levy and the apprenticeship levy to form the **construction productivity and skills levy**. Based on either on PAYE and CIS as with the CITB levy, or on turnover, the levy should be focussed on boosting both skills and productivity in the sector, with funds ring-fenced to be spent within the industry. If the levy fails sufficiently to boost investment, government should consider a construction client levy to ensure customers play their part in driving improvements in the industry.
- The government should reform the construction skills system to ensure it delivers **high-quality skills provision that meets employer demand**. Construction UK should be responsible for designing training content and standards and local areas should use the opportunity of skills devolution to move towards outcome-based commissioning. The GLA and government should work with the industry to establish an Institute of Technology for construction in London.
- The government should **use procurement and planning to drive investment in skills and productivity**. There should be an apprenticeship target of five per cent for government construction projects, and reform of Section 106 with sub-regional pooling to deliver a more coherent approach to training opportunities arising from local developments.
- The government needs to **make the system work for SMEs**. Construction UK should be tasked with ensuring SMEs get proportionately more out of the levy than they put in, and there should be a greater focus on shared apprenticeship schemes to support SMEs to invest in the next generation.
- Construction UK should be responsible for **boosting learner demand and making construction a destination of choice**. This should be supported by a coordinated marketing approach from Construction UK, and a concerted effort to address the gender imbalance in the workforce. The government should replace Advanced Learner Loans with grants for construction FE courses to reverse the decline in participation.

## SOLUTION 3

### ENSURING A MIGRATION POLICY THAT WORKS FOR CONSTRUCTION

The construction industry has become increasingly reliant on migrant labour – particularly from the EU – to meet its growing workforce shortages and skills gaps. The proportion of EU migrant workers in the construction workforce has increased nearly five-fold in the last 14 years, and it is significantly higher than the UK average. The reliance on migrant workers is highest in London, where demand is highest, and where skills shortages are most acute.

Construction is highly vulnerable to changes in migration policy post-Brexit. As we set out in 'Challenge 3', the nature of the construction workforce, with the exceedingly high levels of self-employment, mean that ending freedom of movement and introducing new restrictions on migration for EU workers would have a disproportionate impact on the construction industry. Under all of the potential post-Brexit migration policies we examined, a large majority of existing EU-migrants in the UK construction industry would not have been able to work in the UK.

Meeting skills demands from the existing population would be very challenging in the short and medium term. There is very little slack in the labour market. Unemployment is at 4.3 per cent, the lowest level since 1975. Inactivity is also at the lowest level since records began in 1971 (ONS 2017). Construction struggles to attract new entrants to the industry due to negative perceptions of the sector which are in part based on the reality of employment in many areas. Even if there was slack in the labour market, and a willing pool of potential workers, the sector would need to very significantly ramp up training, and there would then be a time lag before the trained workers start to flow into the workforce.

Restrictive and bureaucratic migration restrictions may significantly disadvantage a sector which experiences significant volatility of demand, and which comprises of a large number of SMEs with often limited HR capacity.

Below are a series of recommendations for migration policy, focussing on the short, medium and long term, to ensure that we are still able to build the homes, commercial property and infrastructure we need after Brexit.

#### SHORT TERM

When the UK leaves the EU, the basis under which EU nationals in the UK are resident will come to an end. While the government has stated its desire to ensure that existing EU workers in the UK are able to remain, this is conditional on the Brexit negotiations and there remains uncertainty over their future rights.

Qualitative interviews carried out by CITB in early 2017 suggested that employers with non-UK workers were more concerned about retaining existing migrant workers than they were about post-Brexit migration policy limiting access to new EU workers (CITB 2017). Recent migration statistics have shown a statistically significant increase in the number of EU nationals leaving the UK.

#### **RECOMMENDATION:**

**In order to remove this uncertainty, and to prevent existing workers from leaving the UK, the government should immediately guarantee all EU nationals in the UK – including but not limited to those working in construction – the continuation of their existing rights as EU nationals, including the unconditional and permanent right to remain and work in the UK.**

#### **MEDIUM TERM**

As we set out above, given the current and growing skills challenges facing construction, meeting the skills requirements of the industry from the existing UK-resident workforce will be exceedingly challenging.

The government has set out its plans for a transition period following the UK leaving the EU in April 2019, and lasting for two years. During this period, EU nationals will be free to come to live and work in the UK as currently, though they will be required to register ([May 2017](#)).

However, even if the industry and the government address the challenges in the skills system, and develop and implement an effective industrial strategy to boost productivity, this period is unlikely to be sufficient for the industry to adapt, as the APPG on Excellence in the Built Environment found.

*‘Unless there is a dramatic downturn in the economy, construction will need to be able to draw upon workers from the EU countries and foreign workers generally over the next five to 10 years, while we increase the domestic workforce.’ (APPG EBE 2017)*

#### **RECOMMENDATION:**

**In the medium term, if the government takes the political choice to end freedom of movement, it should seek to ensure that the construction industry retains access to EU workers for a transitional period of at least five years. This should last from the date of leaving the EU until April 2024.**

During this transitional period, the government should work with the construction industry to boost both the quantity and quality of training, and to drive improvements in productivity, so that it is not significantly impacted by the move to a longer-term post-Brexit migration settlement.

#### **LONG TERM**

In addition to boosting training and productivity in the sector, in the long term, even if the government takes the political choice to end freedom of movement, it must ensure that any post-Brexit migration system does not prevent construction employers from accessing the skilled workers that they need.

#### **RECOMMENDATION:**

**As IPPR have previously recommended, government could introduce a trusted sponsor scheme, where employers are given greater access to EU workers in order to meet their skills needs in exchange for demonstrating good employment practices (Morris and Griffith, forthcoming). This would offer a route to good employers to access migrant workers when they need to do so. This could involve:**

- paying the living wage and/or collectively agreed rates for the job
- investing in training, through for example employing 5.0 per cent of employees as apprentices.

In this way, the government can ensure that employers are still able to access the skilled workers that they need, but that the migration system is used as a lever

to encourage good practice in the labour market. This could be combined with regional flexibility, to allow areas that are most likely to face challenges in the future – notably London – to access the skilled workers that are needed.

Alternatively, if we retain free movement, or negotiate a variant of it, government could **seek to use labour market regulation to improve employment practice in the industry and address popular concerns around migration**. Meardi has shown how Norway and Switzerland offer alternative approaches to regulating EU migrant labour in construction, in order to prevent exploitation and address concerns about undercutting, with both countries using legally-binding collective agreements to set terms and labour inspectorates to enforce them (Meardi 2017). Should the UK maintain freedom of movement, or negotiate something close to it, an alternative model could involve regulation of terms and conditions through collective bargaining, a compulsory construction certification scheme, and more rigorous labour market enforcement (ibid).

The government should consider **adding a number of occupations to the shortage of occupation list**. There are currently very few construction occupations on the shortage of occupation list, and those that are on the list are limited to relatively high-skill engineering construction occupations. The government and Construction UK should review the shortage of occupations list before any transition to a new migration system to ensure employers do not face serious skills shortages.

The post-Brexit migration system must continue to allow for reciprocal arrangements that allow global construction companies to move staff between projects, including through inter-company transfers and posted workers (APPG EBE 2017). However, **in order to prevent social dumping, posted workers should be required to pay the collectively agreed rate for the job**.

#### SUMMARY

- In the short term, in order to address uncertainty and prevent existing workers from leaving the UK, government should **immediately guarantee the right of existing EU nationals to remain in the UK**.
- In the medium term, if government takes the political choice to end freedom of movement, it should seek to ensure that the construction industry **retains access to EU workers for a transitional period of at least five years**.
- In the long term, government should ensure that construction employers can still access the skilled workers that they need, by **introducing a Trusted Sponsor scheme** that drives up employment standards in the industry.

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