Skills in the UK construction Industry

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The breakdown of the job in the UK construction industry is as follows: When we think

| Worker Employed in Construction in 2013 | 2.9 Million |
|--|-------------|
| White Collar Jobs | 22% |
| Executive & Managerial | 11% |
| Civil Mechanical Electrical Engineers | 5% |
| Architects, town planners, surveyors | 6% |
| Blue Collar Jobs | 40% |
| Metal, electrical and mechanical trades | 10% |
| Painters | 3% |
| Bricklayers, masons, roofers, tilers | 3% |
| Plumbers and heating and ventilating engineers | 5% |
| Plasterers, glaziers and other trades | 5% |
| Plant and machine operatives and drivers | 7% |
| Carpenters and joiners | 7% |
| Other occupations | 37% |

of the skill problem in the UK, or more specifically in the UK construction industry, it is not universal. There are some segments that more affected than others.

One way to ask the skill-gap question is ask why doesn't the compensation¹ ensure the the skill gaps are filled up by people.

The fact that skill gap is not being filled means either

- i. the skills take a large amount of time and money to acquire, i.e., becoming an architect or
- ii. that in certain skills segments construction industry is not looked at as an lucrative trade and workers are not ready to make a commitment to the industry.

My hunch is that the answer would depend on the skills segment we are looking at.

¹wage as well as other non-pecuniary aspects of the compensation

Across the economy, the "task-framework" breaks down occupations in to the following different categories. The table below categorises the jobs into high, middle and low paying occupations. The table also scores each job according to routine task intensity (basically probability that the job will be automated in future) and Offshorability (the job can potentially be outsourced).

Routine Task Intensity Index and Offshorablity of European Occupations

| Occupations ranked by mean European wage | Routine Task Intensity Index | Offshorability | Employment Share in 1993 | % change 1993 – 2010 |
|--|---------------------------------|----------------|-----------------------------|-------------------------|
| High-paying occupations | -0.72 | -0.12 | 31.67 | 5.62 |
| Corporate managers | -0.75 | -0.32 | 5.65 | 0.59 |
| Physical, mathematical, and engineering professionals | -0.82 | 1.05 | 2.93 | 1.36 |
| Life science and health professionals | -1.00 | -0.76 | 2.01 | 0.57 |
| Other professionals | -0.73 | 0.21 | 2.79 | 1.38 |
| Managers of small enterprises | -1.52 | -0.63 | 4.16 | 0.17 |
| Physical, mathematical, and engineering associate professionals | -0.40 | -0.12 | 4.44 | 0.21 |
| Other associate professionals | -0.44 | 0.10 | 7.24 | 0.79 |
| Life science and health associate professionals | -0.33 | -0.75 | 2.45 | 0.55 |
| Middling occupations | 0.69 | 0.24 | 46.75 | -9.27 |
| Stationary plant and related operators | 0.32 | 1.59 | 1.70 | -0.25 |
| Metal, machinery, and related trade work | 0.46 | -0.45 | 8.78 | -2.08 |
| Drivers and mobile plant operators | -1.50 | -1.00 | 5.03 | -0.48 |
| Office clerks | 2.24 | 0.40 | 10.60 | -2.06 |
| Precision, handicraft, craft printing, and related trade workers | 1.59 | 1.66 | 1.45 | -0.54 |
| Extraction and building trades workers | -0.19 | -0.93 | 1.45 | -0.54 |
| Customer service clerks | 1.41 | -0.25 | 7.35 | -0.64 |
| Machine operators and assemblers | 0.49 | 2.35 | 2.13 | 0.06 |
| Other craft and related trade workers | 1.24 | 1.15 | 5.99 | -1.63 |
| Low-paying occupations | -0.08 | -0.84 | 21.56 | 3.65 |
| Labourers in mining, construction, manufacturing, and transport | 0.45 | -0.66 | 4.26 | -0.55 |
| Personal and protective service workers | -0.60 | -0.94 | 6.86 | 2.36 |
| Models, salespersons, and demonstrators | 0.05 | -0.89 | 6.06 | -0.11 |
| Sales and service elementary occupations | 0.03 | -0.81 | 4.38 | 1.95 |

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²The "task framework" is the way in which labour economics is analysing jobs. More on this at

This table arranges the jobs according to their automation risk and offshorability. The jobs that correspond to the construction industry are in the bold.

Routinisation and Offshorability in Occupations

| Occupations | Non-Routine Occupations | Routine Occupations |
|--------------------|--|---|
| Low-offshorability | High Paying occupations Corporate managers Life science and health professionals Managers of small enterprises Physical, mathematical, and engineering associate professionals Life science and health associate professionals Middling Occupations Drivers and mobile plant operators Extraction and building trades workers Low-paying occupations Personal and protective service workers | Middling Occupations Metal, machinery, and related trade work Customer service clerks Low-paying occupations Labourers in mining, construction, manufacturing, and transport Models, salespersons, and demonstrators Sales and service elementary occupations |
| High-offshorablity | High Paying occupations Physical, mathematical, and engineering professionals Other professionals Other associate professionals | Middling Occupations Stationary plant and related operators Office clerks Precision, handicraft, craft printing, and related trade workers Machine operators and assemblers Other craft and related trade workers |

The blue jobs are the safest jobs that cannot be either automated or outsourced in the near future. You would notice that there are no low paying blue jobs. The red jobs are most as risk. They are all middle paying jobs. Thus, it is not surprising the labour force does not look at the construction industry as a safe bet in the middle and low paying segments. The high paying segments don't have a problem attracting people.

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