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A review of occupational regulation and its impact

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A Review of Occupational Regulation and its Impact

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Introduction

The use of occupational licensing as a mechanism for increasing the demand for, and supply of, skills was considered – alongside other measures such as training levies – as part of the UK Commission's recent Review of Employer Collective Measures (Stanfield *et al.*, 2009). However, that Review acknowledged that the general topic of occupational regulation remains severely under researched in the UK. It went on to recommend that a further, more detailed investigation of the issue should be carried out. This report presents the findings from that investigation.

The overall aims of the research were to:

- map the current pattern of occupational regulation in the UK;
- review the theory regarding the operation and impact of occupational regulation;
- examine the existing evidence on the impacts of occupational regulation in the UK and abroad;
- provide initial estimates of the impact of occupational regulation on labour market outcomes such as skill levels, wages and employment in the UK.

The focus of the report

The report focuses on three forms of legal regulation (licensing, certification and registration) and one form of voluntary regulation (accreditation) that has no legal backing or state involvement.

- **Licensing:** This refers to situations in which it is unlawful to carry out a specified range of activities for pay without first having obtained a licence which confirms that the licence holder meets prescribed standards of competence. Workers who require such licences to practice in the UK include doctors, solicitors, veterinary nurses, private security guards, gas installers, taxi drivers and heavy goods vehicle drivers.
- **Certification:** This refers to situations in which there are no restrictions on the right to practice in an occupation, but job holders may voluntarily apply to be certified as competent by a state appointed regulatory body. Workers in the UK who may apply for certification include fitness instructors (who may apply to be certified by the Register of Exercise Professionals) and hairdressers (who may apply to be certified by the Hairdressing Council).

- **Registration:** This refers to situations in which it is unlawful to practice without having first registered one's name and address with the appropriate regulatory body. Registration thus provides some form of legal barrier to entry, but an explicit skill standard is not provided. An example in the UK is the requirement for estate agents to register with the Office of Fair Trading under regulations designed to prevent money laundering.
- **Accreditation:** We use this term to refer to situations in which an individual may apply to be accredited as competent by a recognised professional body or industry association. Accreditation is distinct from certification in that the criteria governing accreditation and the procedures regarding enforcement are entirely the responsibility of the accrediting body rather than the state. An example in the UK is the accreditation scheme for accountants, who may apply to the Institute of Chartered Accountants in England and Wales for accreditation as a Chartered Accountant.

In this report, we use the term 'occupational regulation' as a broad heading for these various forms of standard setting mechanisms. Occupations which are not regulated in any of these ways are termed 'unregulated'.

Theoretical perspectives on occupational regulation

A simple theory of licensing (the strictest form of occupational regulation) indicates that the imposition of a universal, skills based entry requirement through licensing can be expected to raise average skill levels in the occupation, since low quality workers who cannot meet the new entry requirement are forced out whilst other low quality workers must engage in job related training in order to increase their human capital to the new minimum standard. If the stock of human capital in the occupation rises because of the new entry requirement, then one may also expect the quality of the product or service to increase. Yet if prices and wages are free to respond to changes in quality or supply of qualified practitioners, then any restriction of the number of workers in the occupation may also drive prices upwards and allow wages to rise.

Employment levels within the occupation – and the availability of the associated product or service to consumers – may fall in the short term, as low quality workers who cannot meet the new minimum standard are barred from engaging in the now regulated activity. If their numbers are sufficient, their unemployment may drive down wages in the wider labour market. Consequently, there are potentially important spillover effects in the labour market, at least in the short term. In the medium to long term, however, any rise in average wages in the occupation may attract higher quality workers who now see the possibility of a return on their human capital investments. This could increase average skill levels further, whilst also depressing any negative employment effect.

Less restrictive forms of regulation such as certification and accreditation offer the possibility of ensuring quality for consumers and of providing practitioners with higher incomes and labour market status. However, they have the disadvantage of providing weaker incentives for upskilling since, in the absence of a universal entry barrier, the strength of any incentives for human capital investments will ultimately depend upon the degree of demand for certified/accredited workers in the product market.

Given that the theorised effects of occupational regulation are complex empirical studies are critical in understanding the effects of occupational regulation under different scenarios.

Existing evidence

As noted above, evidence of the impact of occupational regulation is limited, and that which is available tends to focus only on licensing, the strictest form of occupational regulation. The existing evidence is also heavily dominated by US studies.

The available evidence suggests that licensing is less common in the UK than it is in the US. The overall conclusions from the US studies on the impact of licensing are that, in general, occupational licensing increases the wage of licensed workers, reduces employment growth and raises the price of goods or services but without overall improvements in the quality of service or product offered. The magnitude of the effects vary by occupation and location. Notwithstanding this, there is very limited evidence on the impact on skill levels or the propensity to engage in job related training, as licensing tends not to have been introduced for these explicit purposes.

In relation to many EU countries it appears that the UK is less restrictive in its approach to regulating some professions, but that it is more restrictive than many in its approach to regulating lower skilled occupations. The available evidence on the operation of occupational regulation within countries such as Germany, France and Italy is extremely limited. However, wage premia do seem lower in some EU countries such as Germany than they are in the US. Post entry controls on the level of professionals' fees and, by implication, earnings have been offered as one potential explanation. This serves to indicate the importance of the broader regulatory framework (particularly competition law) in shaping the effects of occupational licensing.

In the UK, there is some evidence that the training requirements recommended or imposed in lower skilled occupations, through licensing, have had some effect in increasing the level of training and qualifications (e.g. among care workers). In other cases, however, (e.g. security guards) the existing evidence suggests that the new skill

standards have been too low (or the barriers to access them have been too high) to result in any substantial up skilling of the workforce in question. Existing research also indicates licensing is associated with a wage premium in the UK and that this is higher for the more skilled and better paid occupations. However, firm evidence on the employment effects of licensing is currently missing, as is evidence on the impact of regulation on product markets.

Mapping occupational regulation in the UK

In order to address the absence of any comprehensive information on the prevalence or nature of occupational regulation in the UK, we draw up a map of occupational regulation in the UK. The map has been compiled at SOC(2000) Unit Group level and classifies the type of occupational regulation that applies within each Unit Group, as well as providing a range of details about the characteristics and enforcement of these regulations. Among the 353 Unit Groups in the SOC(2000) Classification, some 82 contain jobs require licences to practice, 19 contain jobs for which there is a state based certification scheme, whilst 20 contain jobs that are subject to registration requirements. A further 67 Unit Groups contain jobs for which there exists a recognised, non-governmental accreditation scheme. This leaves 165 Unit Groups that are classified as being 'unregulated'.

The prevalence of occupational regulation in the UK

Estimates of the prevalence of occupational regulation are derived using data from the UK's Quarterly Labour Force Survey (QLFS). By matching the mapping spreadsheet to the QLFS one is able to classify each job in the economy according to the regulatory characteristics of the Unit Group to which it belongs. The estimates indicate that at least 14 per cent of all jobs in the UK are subject to licensing. At least three per cent have the option of certification, whilst at least 10 per cent have the option of accreditation. At least two per cent are subject to registration requirements. The true figures are likely to be higher, as precise estimates cannot be obtained for jobs belonging to Unit Groups where only some tasks are regulated. In total, at least 28 per cent of all jobs in the UK are covered by one of the four types of regulation, although the true figure is likely to be at least one third and may be as high as fifty per cent. The share of all jobs that are subject to regulation has risen over the period 2001-2010 through the combined effect of employment growth in occupations that were regulated in 2001 and the extension of regulation to occupations which were unregulated in 2001.

Professional occupations are the most likely to be regulated followed by Process, plant and machine operatives. Sales occupations, Skilled trades, Personal service occupations and Elementary occupations are the least likely to be regulated. Regulated jobs are more

likely to be held by men than by women. Those in the licensing and accreditation groups tend to be older, on average, than other groups, which may be related to the time investment that is sometimes needed in order to gain the qualifications or work experience that is required under a licence to practice or an accreditation.

The impact of regulation on qualification levels, training and wages in the UK

In order to provide new evidence on the labour market outcomes of occupational regulation in the UK, qualification levels, training receipt and wages among groups of employees who are subject to different forms of occupational regulation (including those in occupations which are unregulated) were compared using data from the QLFS.

Cross-sectional analysis was used to examine the extent to which any raw differences in wage levels, qualifications and the take up of job related training between workers in regulated and unregulated occupations persist after controlling for demographic and other job characteristics. Among Professional occupations and Associate Professional and Technical occupations, qualifications, wages and the take up of job related training were found to be higher among workers in licensed jobs than among workers in unregulated jobs, as the theory would predict. However, no consistent patterns are identified among other occupational groups or for other types of regulation. This suggests that unobservable factors may be at work which we were unable to account for in this cross-sectional framework with the data available from the QLFS. Such unobservable factors would confound any attempts to identify a causal effect of occupational regulation through cross-sectional analysis.

A difference-in-differences (DiD) approach was employed in an attempt to identify the causal relationship between occupational regulation and labour market outcomes. The analysis examined the wage differential (say) between the workers in a soon to be regulated occupation (the treatment group) and the workers in similar unregulated occupation (the comparison group). It then examined whether the magnitude of that differential changes after the treatment group becomes regulated.

The analysis focused on five occupations which saw either the introduction of regulation or a change in the type of regulation over the period 2001-2010, namely: security guards; care workers; social care managers; childcare workers; and automotive technicians. It identified some effects which could plausibly be attributed to the introduction of occupational regulation. These included a rise in wages among security guards following the introduction of a licensing system in 2003 and a rise in qualification levels and job related training among care workers as a result of the introduction of a organisation level licensing system in 2005.

Elsewhere, in the case of childcare workers and automotive technicians, we found no evidence that the introduction of occupational regulation had affected qualification levels, the take up of job related training or the level of wages. This may be because the regulations were somewhat weaker in these instances, placing qualifications requirements only on a minority of workers (in the case of childcare) or comprising only of a voluntary scheme (in the case of vehicle repairers). It is difficult to make generalisations from these few cases, but the evidence provided by the DiD analysis does suggest, quite plausibly, that the effects of occupational regulation can be expected to be stronger when the entry requirements are either higher or are more extensively applied.

Implications for action by policymakers and employers

This Evidence Report helps inform the implementation of policy in this area in England. The coalition government's skills strategy, *Skills for Sustainable Growth* (Department for Business, Innovation and Skills, 2010), expresses an intention to work with employers in introducing forms of occupational regulation, not just for consumer protection or for the public interest, but also to assist industry in becoming more competitive by raising skill levels. In working with employers to do this, the government has indicated that there is not a "one-size-fits-all solution". Indeed, in encouraging the design and establishment of new occupational regulation schemes to raise skills, the skills strategy requires industry itself to determine what would fit best for an occupation or sector.

Forms of occupational regulation, such as licensing, certification and accreditation, clearly have the potential to raise average skill levels in an occupation. They do so by providing new incentives for workers or firms to invest in occupation specific human capital. The incentives are clearly strongest – and more equally felt by both workers and firms – in the case of licensing.

The limited pre-existing evidence on the impact of occupational regulation in the UK indicated that such upskilling has occurred in some specific cases, and our analysis found further empirical support for this. However, our analysis also supported the notion that the effects on skill levels can also sometimes be limited. We find no widespread and consistent effects on skill levels. The effects appear to be heavily contingent upon the prevailing circumstances within a particular occupation (such as existing levels of training), the nature of the regulatory regime (e.g. the stringency of the new skill requirement) and the characteristics of the occupation's wider labour and product market.

At the heart of any policy on whether or not to regulate an occupation is a trade off between the potential benefits of occupational regulation and its potential costs. Economic theory tells us that the benefits of occupational regulation can include a more

highly skilled labour force, at least in the regulated sector, improvements in quality of goods or services provided in the regulated sector, and welfare benefits for the regulated sector in terms of wages and profits. It also tells us that the potential downsides include possible negative spillovers into the unregulated sector of the labour market, such as the depression of wages in adjacent labour markets due to labour supply shocks, and a diminution in the number of providers.

Our research has found some evidence of wage increases among regulated occupations, but the results were not consistent across all of the occupations that we have studied. We found no evidence of negative effects on employment. The potential downsides of occupational regulation were thus not prominent in our findings. However we were able to look at employment effects for only a small number of occupations and we were unable to look at price/quality effects. The evidence base on these issues thus remains relatively limited for the UK.

If policymakers or employers believe there is a strong prima facie case for regulation of a particular occupation, the other issue they face is how to regulate that occupation. This raises questions about:

- the **design** of the regulation (e.g. should a skill standard be mandatory or voluntary? At what level should the skill standard be set? Is this imposed on the employer or the individual? Is it a one-off enhancement or will there be a requirement to impose continuing professional development to continue to raise skills?);
- its **implementation** (e.g. should grandfathering be allowed for occupational incumbents?); and
- its **governance** (e.g. who is empowered to regulate the scheme? How and how often will standards be monitored to ensure these remain fit for purpose?).

These major design factors can be crucial in determining the actual effects of regulation, although there remains little research evidence on their relative impact.

Two policy considerations emerge from the discussion above. The first is whether there is a prima facie case for regulating a particular occupation. The second consideration is how to go about creating, enforcing and monitoring the regulation. One would expect the latter to be just as important as the former in determining ultimate labour market and product market outcomes.

There may be analogies with the policy making considerations which surrounded the introduction and enforcement of the statutory national minimum wage. The costs and

benefits of the regulation of prices for labour were central in that instance, as were alternative models for setting a wage and enforcing it. If anything, occupational regulation is liable to be more complicated since it must cover a variety of different policy instruments relating to different occupations. The design of such policies therefore requires extensive knowledge of labour market and product markets, and of the incentives and constraints which apply to the various actors within them. The analysis conducted in this research project has identified considerable heterogeneity, both in the design of occupational regulations within the UK and in the apparent impact of regulation across different occupations. This indicates that the detailed outcomes of regulation – and thus the case for regulating – can only be determined on a case by case basis. However, the research also serves to indicate the wide range of factors which should be taken into account in that determination.

Executive Summaries present the key findings of the research produced by the UK Commission for Employment and Skills. More detailed analytical results are presented in Evidence Reports and all outputs are accessible on the UK Commission's website www.ukces.org.uk

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