



# Effects of Regulation on Service Quality

Evidence from Six European Cases

— *Executive Summary* —

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## Executive Summary

Professional services are at the core of the Single Market. In January 2017 the Commission, as announced in its Single Market Strategy for goods and services of 28 October 2015<sup>1</sup>, came forward with two important policy initiatives. The 'Guidance on Reform Recommendations for Regulation in Professional Services' identifies opportunities for reform in 7 key professions (accountants, civil engineers, architects, lawyers, real estate agents, tourist guides and patent agents) across the Member States.<sup>2</sup> In addition, the proposal for a Proportionality Test Directive aims to provide Member States with a clear framework when assessing the proportionality of any new or amending professional regulation before it is introduced.<sup>3</sup> Whereas the 'Guidance' focuses on existing overly restrictive professional regulation, the 'Proportionality Test' aims to prevent any new unnecessary barriers from arising. Against the backdrop of these policy developments and given the imperative for evidence-based policymaking, the European Commission commissioned this research to examine the relationship between professional regulation and service quality focusing on specific professions and countries. The overarching aim of this study is to provide an in-depth understanding of the potential research designs and empirical strategies that can be used to understand this important policy theme and enhance the evidence base on the economic costs and benefits of professional regulation.

In this study we:

- Review the existing economic theory and evidence pertaining to the relationship between professional regulation and quality, discussing the advantages and disadvantages of the different available empirical tools and quality indicators.
- Develop six profession and country-specific case studies to empirically assess the effect of regulation on quality and illustrate different policy evaluation approaches. Each case study exploits either a reform in the regulation status or a variation in the stringency of the regulatory regime.
- Identify and develop quality indicators for the selected professions. These include indicators of process (e.g. customer complaints and consumer ratings), indicators of outcomes (e.g. occupation-specific quality outcomes) and value-added proxies (e.g. service availability, affordability, access). Where possible, we supplement these with data on entry and exit rates, employment creation and prices.
- Provide detailed estimates of the effects of the regulatory reform (or variation in the stringency of the regulatory regime) on each of the selected quality indicators.
- Provide recommendations on the development of suitable empirical strategies to address the complex relationship between professional regulation and quality.
- Provide some preliminary suggestions on how to take policy forward (where evidence is clear) or recommendations of how to improve the evidence base (where it is not).

Up to now, little is known about the empirical relation between regulation of professions and – broadly defined – quality of services. This study makes an exceptional attempt to contribute to the debate on the quality effects of regulation. We study six markets (lawyers, architects and engineers, pharmacists, tourist guides, driving instructors and ride hailing drivers) in six EU member states (Poland, Germany, Italy, Greece, UK and Ireland) and address the issue of measuring quality in each. Moreover, we exploit specific features in each regulated market to estimate the impact of regulations on quality.

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<sup>1</sup> Commission Communication - upgrading the Single Market: more opportunities for people and business, COM(2015) 550 final.

<sup>2</sup> Commission Communication - Communication on reform recommendations for regulation in professional services, COM(2016) 820 final

<sup>3</sup> Proposal for a Directive of the European Parliament and of the Council on a proportionality test before adoption of new regulation of professions, COM(2016) 822 final

What is quality? Our work clearly shows that quality is not only difficult to measure, but that even the very definition of quality varies a lot across and within markets. The quality of some services can be verified before purchase, others during or after provision of the service, and for yet others quality can be verified only if additional costs are incurred, or not at all. Consumer satisfaction, complaints and peer judgments for lawyers; peer rankings for architects and engineers; product availability for pharmacists; consumer evaluations for tourist guides; service availability, pass rates and fatal accidents for driving instructors; and consumer satisfaction, hard accelerations and braking for taxi drivers are all examples of the different meanings that the idea of quality might take in different markets.

Moreover, in most markets quality is multidimensional, and even a longer list of measures might not fully capture the full experience of a customer. Still, we take on the challenge and try to measure quality using the available data. While admittedly imperfect, the long list of measures used throughout the study provides a surprising variety of sources of information on quality.

In order to estimate the impact of regulation on quality, one not only needs measures of quality, but also variability in the intensity of regulation. Our case studies focus on a number of reforms, but also exploit variability occurring across municipalities, regions and EU member states. An important lesson from our work is that there is more than one way to approach this empirical question. Taken together, our case studies make use of an extensive empirical methods toolkit: simple difference in means, difference-in-differences, synthetic control methods, panel data regressions, instrumental variable regressions and regression discontinuity designs. This variety in empirical methods reflects the variety of data used for the analysis, which came in the form of individual data from service satisfaction surveys (lawyers), peer ratings and census data (architects and engineers), confidential administrative data (pharmacists), labour force survey data and online booking website (tourist guides), administrative data (driving instructors) and even big data from a giant of the gig economy (ride-hailing drivers).

What is the impact of regulation of professions on quality? In the market for lawyers, we find little change in the overall quality of legal services following the Polish relaxation of entry requirements, yet the number of complaints per active advocate did decrease and a decline in good manners before a court as a quality component was reported. Overall quality of services provided by architects and engineers decreased with higher market concentration in response to higher insurance costs and higher service prices. In the pharmacy market, the availability of pharmacies seems to be correlated with a decrease in the number of hospital admissions related to influenza, suggesting a possible link between the availability of the services offered by pharmacists and consumer health. Tourist guides' level of education increase post reform but the guides that entered the market via the new regime are more likely to receive lower consumer ratings. An increase in the stringency of regulations pushed many driving instructors out of the market with no evidence of improved quality of instructors or of learner drivers. Finally, more stringent licensing regulations for ride hailing drivers have no effect on customer satisfaction ratings or measures of hard braking and accelerations.

Taken together, these case studies indicate that an increase in availability of service providers and/or competition does not necessarily have negative effects on the quality of the services provided or survey measures of consumer satisfaction and well-being. To the contrary, in a number of cases we find positive effects of increased availability and competition. Still, our work does not provide final conclusions. We provide a series of examples on how to approach the issue of measuring quality and how to use existing data to investigate the impact of regulation on quality. As for any empirical work, it is difficult to extrapolate from a sample and more work in this area is certainly needed.

The following table provides a summary of the six case studies, the quality indicators used in the analysis and the findings.

**Table EX.1. Summary of the six cases studies, the quality indicators, and the findings.**

Occupation and Country	Nature of Regulatory Reform	Quality Indicator	Summary of Findings
Advocates and Legal Advisors (Poland)	Change in restrictions relating to educational requirements (more transparent bar exam, shorter bar training, access to bar without training for selected legal professionals).	Service quality assessment from a survey on clients	No significant change in quality of legal services following regulatory changes
		Complaints and disciplinary cases against legal professionals-members of the bar	Declining number of complaints per active advocate. No change in indicators of legal professionalism
		Service quality assessment from a survey on judges	
		Measures of enterprise creation and turnover	Legal counsellors registering their firms increased from less than 100 yearly before the reform to 575 after
		Measures of employment creation	The number of advocates and legal advisors more than doubled
		Price levels	Prices of legal services providers increase more slowly than the average for all services
Architects and Civil Engineers (Germany)	Increase in price floors and ceilings Introduction of a minimum (professional indemnity) insurance coverage requirement	Score of an international peer-ranking of architectural firms	Negative effect on average score of -18%
		Exit rates	No evidence for effect on exit rates
		Continued education	No evidence for effect on continued education
		Professional-to-inhabitants-ratio	No evidence for effect on professional-to-inhabitants-ratio
		Number of firm owners	Probability of being self-employed decreased by 4%-points
		Number of employees	Number of employees increased by 6%

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Pharmacists (Italy)	Relaxation of quantitative/structural restrictions	Availability of pharmacies at the municipality level	Reduction of the number of hospital admissions relating to influenza-like illness
Tourist Guides (Greece)	Relaxation of the start-up process  Modifications of educational requirements (broadening access to training while increasing required entry level qualifications (university degrees in a range of subjects))	Indicators of tourist guides' labour market performance	Post reform tourist guides are more qualified and have stronger job attachment
		Quality proxies based on customers' evaluations (index) and tourist guide profile	Post reform tourist guides get lower ratings from customers
Driving Instructors (UK)	Restrictions on educational requirements	Service availability Indicators	Decrease in the number of non-fully qualified instructors, number of fully qualified instructors constant
		Indicators of student performance	Deterioration in driving test overall pass rates, pass rates at first attempt and zero faults pass rates
		Road accidents	Increase in serious accidents
		Price levels	Increase in the price of an 1-hour lesson
Ride Hailing Drivers (London and Dublin)	Variations in the stringency of the regulatory regime between Dublin (higher) and London (lower)	Customer satisfaction ratings	No evidence of statistically significant differences between London and Dublin
		Trip Safety Indicators	No evidence of statistically significant differences in hard braking between London and Dublin  No evidence of smoother journeys in Dublin (as measured by hard accelerations)
		Service Availability	Higher driver to population ratio in London

		Prices	Lower prices in London
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