

The European architectural sector

A scientific perspective on the debate about the economic impact of different regulatory approaches in the Member States of the EU

Discussion Paper, January 2017

A study by the European Centre for Liberal Professions (EuZFB)
of the University of Cologne

Economic expertise: Dr. Oliver Arentz (arentz@wiso.uni-koeln.de)
Clemens Recker, M. Sc. Econ. (clemens.recker@wiso.uni-koeln.de)

Legal expertise: Dr. Dirk Michel
Julia Pommerening, Assessor jur.
Andreas Riegler, Assessor jur.



University of Cologne

European Centre for Liberal Professions

Executive Summary

The EU Commission – in line with its mandate given by the member states – places an emphasis on the enhancement of the internal market for services. Through further harmonization of the so-called regulated professions, the EU Commission intends to intensify the competition and simplify and strengthen the cross-border provision of services.

The architectural profession belongs to this group of regulated professions. All Member States want to ensure a certain minimum quality in the field of architectural services via regulative market interventions. The reason for these market interventions is to ensure the protection of public interests – such as construction safety, consumer and environmental protection as well as cultural, historical, and artistic concerns. For this purpose, the Member States have chosen different approaches.

In continental Europe in particular, the Member States pursue an ex-ante approach. This approach is intended to ensure the desired minimum quality level through education requirements and further training. Exclusive professional rights are to guarantee that safety-relevant activities are only carried out by appropriately qualified persons. Monitoring is often organized within a framework of a professional self-administration in a chamber system.

Mainly in Northern Europe, the Member States follow an ex-post approach. This approach should ensure the desired minimum mainly quality through a more stringent liability right. High potential claims for compensation or corresponding premium adjustments in compulsory occupational liability insurance should prevent suppliers from offering poor quality.

In principle, the Member States are free to choose one of these historically developed approaches. European jurisprudence assesses both approaches as equal. However, the EU Commission assumes that a certain form of regulation could yield to better outcomes regarding the competitiveness of the architectural markets in the Member States. A more competition-friendly regulation should be beneficial for the consumers and other companies that purchase architectural services – at least as long as a more competition-friendly regulation leads to lower prices without threatening the required quality and safety standards. A further benefit of a more competition-friendly regulation could be better job opportunities for young professionals that want to enter a market. The EU Commission mainly relies on differences in aggregated statistical data and regulation indicators to demonstrate the thesis of different levels of competition across the architectural markets in the Member States.

But do the different regulatory approaches of the Member States indeed differ in terms of a different level of competition? This paper questions if these indicators are in fact evidence of a different level of competition on the architectural markets of the Member States. This question is relevant since a potential further harmonization of rules would need a target. If no regulatory approach can be identified as clearly superior, at least no economic justification could be given for a further harmonization of the regulatory environment. In this case it seems somehow hasty to abolish existing systems that are functional in the respective national context.¹

A summary of the indicators used by the EU Commission can be found in the first part of the interim report "mutual evaluation of regulated professions" for the profession of architects.² We have

¹ This research was supported in part by a research grant provided by the Architects Council of Europe (ACE)

² <http://ec.europa.eu/DocsRoom/documents/13382/attachments/1/translations/en/renditions/native>

analysed four theses, which are implicitly based on these indicators. We have come to the following conclusions:

- [Thesis number one: Enterprises in the architectural sector are too small due to insufficient competition](#)

This thesis is based on the observation of different average firm-size across the Member States. However, the simple observation of small enterprises in the European architectural sector is no reliable indicator for an improper regulation hampering potential adaptation processes and cost-savings. A smaller firm size could also be an adaptation to consumer preferences for local offices and/or a decision for outsourcing of some production stages.

- [Thesis number two: Too high profit margins in parts of the European architectural sector](#)

This thesis is based on the observation of an above-average gross operating rate in the architectural sector in most Member States in comparison to the total business economy and a great variation of the gross operating rate between the architectural sectors of the Member States. However, the gross operating rate is no reliable indicator for the level of competition. In the case of a high share of self-employed owners, this indicator is systematically biased. The proportion of self-employment is higher in the architectural sector than in the total business economy and varies to a very high extent across the Member States. Therefore, the gross operating rate cannot necessarily provide a reliable indication for potential reforms in the architectural sector. The interpretation of the gross-operating rate is even more difficult due to the varying share of intermediate inputs across the architectural sectors in the Member States.

- [Thesis number three: Too low productivity in the European architectural sector](#)

This thesis is based on the observation of a lower value-added per person employed in the architectural sector when compared to other sectors. However, a comparison of the value-added per person employed between more and less capital-intensive sectors is biased. Since the input of machineries in the labour-intensive architectural sector is below the economy-wide average, a lower value added per person employed is not uncommon. The observation of a different value-added per persons employed across sectors with different production structures is no reliable indicator for insufficient competition in the architectural sector.

- [Thesis number four: Anticompetitive regulation in some Member States compared to others based on the OECD-indicator](#)

This thesis is based on the observation on different values in the OECD-regulation indicator for architectural services across the Member States. However, the OECD regulation indicator does not sufficiently reflect the actual level of regulation in the Member States and favours the regulatory system of subsequent control (*ex-post regulation*).

Nevertheless, we see a certain need for further reforms in some Member States. These reforms could address restrictions of interprofessional cooperation and advertising restrictions. Regarding fixed fees, we see a need for further research.

Background of the ongoing debate on reforming the regulatory framework for regulated professions

The EU Commission is assigned various tasks by virtue of the EU treaties. Being the 'engine of the European agreement', it is its duty to, amongst other things, take political initiatives in the Union's interest. The EU Commission – in line with its mandate given by the member states – places one emphasis on the enhancement of the internal market for goods and services.

The European Union features a variety of so-called regulated professions. This term stems from the Directive on the Recognition of Professional Qualifications where 'regulated profession' is defined as '*a professional activity [...], access to which, the pursuit of which, or one of the modes of pursuit of which is subject, directly or indirectly, by virtue of legislative, regulatory or administrative provisions to the possession of specific professional qualifications*' (Article 3.1a of the Directive). The architectural profession also belongs to this group.

According to the EU Commission, such regulation hinders the internal market for services. Whilst the Commission does not urge the abolition of all regulation concerning the area of profession, it does call for a stronger harmonisation of the member states' own relevant provisions. In order to pursue this aim, the EU Commission has recently recommended an array of measures. As of recently, the EU-Commission undertook a procedure of mutual evaluation of regulated professions on the basis of Article 59 of the revised Directive on the Recognition of Professional Qualifications.³ The aim of this procedure is the evaluation of national provisions on admission to regulated professions. It is being examined whether these provisions are non-discriminatory⁴, whether the regulations on admission to the profession are 'justified by an overriding reason of general interest'⁵ and whether they are proportionate⁶.

The evaluation was not performed by the EU-Commission itself, but was instead made the responsibility of the member states. Member states which did not regulate a profession are meant to 'provide information on any alternative mechanisms guaranteeing the respect of an overriding reason of general interest. This should allow a dialogue between Member States using different approaches, where the impact of all types of formal and informal restrictions on the access to professional activities should be examined.'⁷

After the mutual evaluation's completion, the EU-Commission published various professional reports⁸, including one on the architecture profession. In this report the Commission firstly presents its economic assumptions which they base their actions upon. Subsequently, the conclusions of the reports stemming from the member states are summarised. The publication of the evaluation's results

³Directive 2005/36/EC of the European Parliament and of the Council of 7 September 2005 on the recognition of professional qualifications; Directive 2013/55/EU of the European Parliament and of the Council of 20 November 2013 amending Directive 2005/36/EC on the recognition of professional qualifications and Regulation (EU) No 1024/2012 on administrative cooperation through the Internal Market Information System ('IMI Regulation').

⁴Communication from the Commission to the European Parliament, the Council and The European Economic and Social Committee on Evaluating national regulations on access to professions, COM(2013) 676 final, p. 8.

⁵Communication 'Evaluating national regulations on access to profession', (Fn. 4), p. 8.

⁶Communication 'Evaluating national regulations on access to profession', (Fn. 4), p. 8.

⁷Communication 'Evaluating national regulations on access to profession', (Fn. 4), p. 8.

⁸http://ec.europa.eu/growth/single-market/services/free-movement-professionals/transparency-mutual-recognition/index_en.htm.

is planned for the end of 2016 / beginning of 2017.⁹ In addition, the EU-Commission put forward the idea of producing periodic reports on the progress of reforming regulated professions in the member states.¹⁰ By doing this, the EU-Commission does not only want to issue reports on the basis of qualitative and quantitative surveys and comparative investigations, but also looks at recommending possible reforms in the member states. The Commission wants to limit its actions on the professions of the 'priority sector', especially civil engineers and architects.¹¹

This research report analyses the economic observations and theses of the European Commission which state a further need for reforms in the European architectural sector.

⁹ Roadmap 'Guidance on reforms needs for Member States in regulation of professions', p. 3, http://ec.europa.eu/smart-regulation/roadmaps/docs/2016_grow_059_guidance_reform_needs_en.pdf.

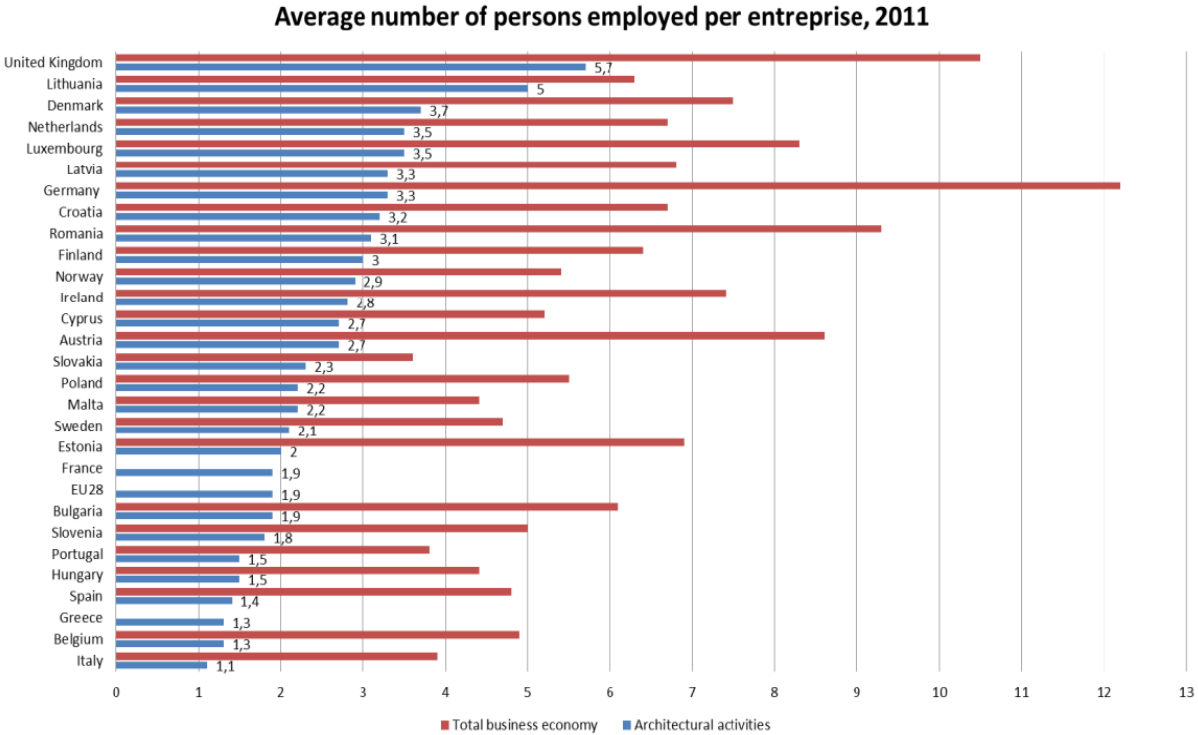
¹⁰ Roadmap 'Guidance on reforms needs for Member States in regulation of professions', p. 4, link see above

¹¹ Roadmap 'Guidance on reforms needs for Member States in regulation of professions', p. 4, link see above

Thesis number one: Enterprises in the architectural sector are too small due to insufficient competition

The European Commission states that the average enterprise in the European architectural sector has less employees than the average enterprise across all economic sectors. In almost all Member States¹², the average enterprise would have two or three times more employees than the average architectural office (see figure 1).

Figure 1: Thesis number one of the European Commission: Too small enterprises in the European architectural sector



Source: European Commission, Mutual evaluation of regulated professions, Overview of the regulatory framework in the business services sector by using the example of architects (GROW/E-5), p. 3 (2015)

Why should the average size of the enterprises constitute an indicator for potential reforms of the architects’ regulatory framework? The assumption is that a below-average company arises from an insufficient adaptation process due to inadequate regulation, which protects the enterprises from competition. One consequence of the insufficient competition may be that the enterprises do not make full use of resource-saving economies of scale, because there are few incentives for the

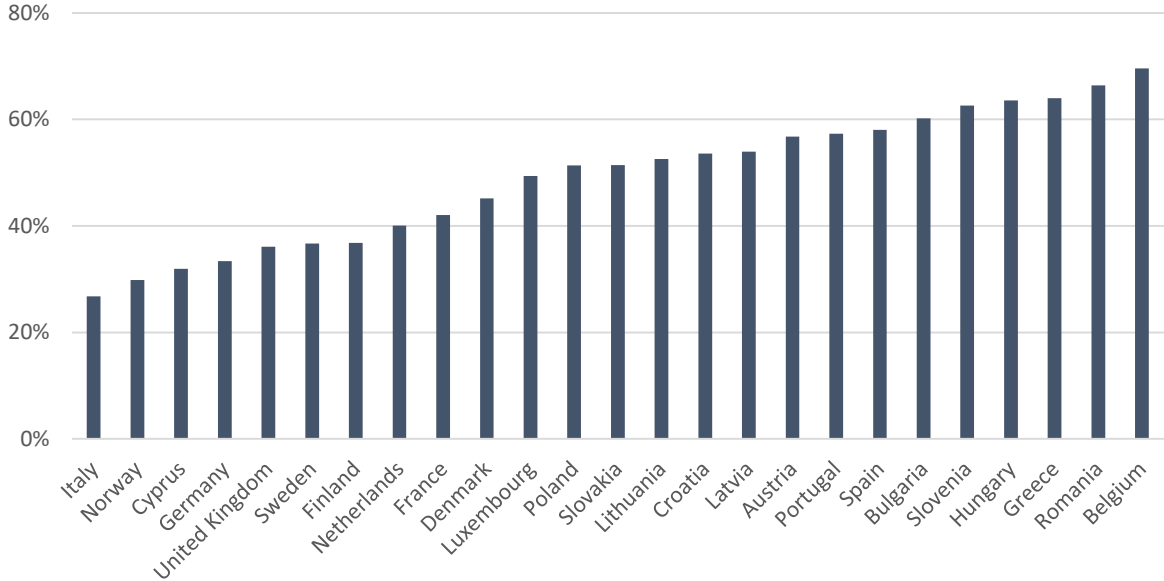
¹² For ease of reading, the EU Member States and Norway are referred to collectively as “Member States” in this document. Most statistical data in this report on the architectural sector is based on the annual detailed enterprise statistics for services (NACE Rev. 2 H-N and S95) for the year 2014. Czech Republic, Estonia, Malta reported no date to the annual detailed enterprise statistics for the architectural sector. For this reason, these Member States cannot be included in most statistical analysis. Link to the annual detailed enterprise statistics for the architectural sector: http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=sbs_na_1a_se_r2&lang=en

enterprises to grow or to merge. Potential cost savings in favour of the consumer would remain unrealised.

However, the average number of persons employed per enterprise cannot be interpreted as a proof or indicator for missing adaptation processes and inefficiencies in a specific sector. In economic theory, there is no external criterion to identify the optimal size of an enterprise. The appropriate company size depends on specific circumstances such as requirements and preferences of the customers regarding the product or the possibility to outsource parts of the production by buying suitable intermediate goods.

The share of intermediate inputs varies considerably across the architectural sectors of the Member States (see figure 2). In some Member States, the average architectural office purchases intermediate services and goods from other enterprises that count for about 60 percent of the total turnover. In many cases, there is an above-average amount of intermediate consumption in countries with smaller companies (see e.g. Belgium, Greece, Spain, Hungary, Slovenia and Bulgaria). In these Member States the companies seem to purchase intermediate inputs instead of producing them in-house with own employees. On the other side, in most countries with an above-average enterprise size the input-share is clearly below 50 percent. Apparently, the larger workforce seems (in part) to be used to keep more production steps in-house.

Figure 2: Purchased intermediate goods as a percentage of the turnover in the architectural sectors in the Member States of the EU (year 2014)



Source: Annual detailed enterprise statistics for services (NACE Rev. 2 H-N and S95), own calculation and presentation

However, the difference in purchased intermediate goods cannot explain the varying company sizes in total (see Italy for example). Therefore, it is important to understand that the firm’s decision of the optimal size is also affected by the requirements and preferences of the customers. Looking at architectural services, the majority of consumers (and corporate clients) in some Member States could

prefer individual solutions and local consulting. Such consumer demands may be best served by small, local architectural offices. In the case of individual, local solutions, the size advantages of a large company with more employees would be rather small.

Because there is no right or wrong on the specific consumer demands, no judgement can be made about the size of the enterprises that stems from the adaptation to the given demand. Since the observed firm sizes do not allow to draw any conclusions, it is important to look at the market processes that lead to the market outcome. As long as there is no specific regulation that prefers one company size to another, there is no plausible argument why the specific firm size in each Member State should not reflect the given preferences of the consumers (and cooperate clients) as well as the company's internal decision process about the risks and benefits of outsourcing parts of their production.

In the given context it is necessary to prove that there are no specific regulations that might put bigger companies at a systematic disadvantage. In the area of regulated professions, this could be non-necessary restrictions on inter-professional cooperation with other professions within one company as well as binding fixed fees. Restrictions on inter-professional cooperation could prevent potential benefits from economies of scope (synergies), e.g. the joint supply of services from architects and lawyers. Binding fixed fees could put bigger companies at a disadvantage since there is no possibility to share potential cost savings with potential customers in order to achieve a higher market share.

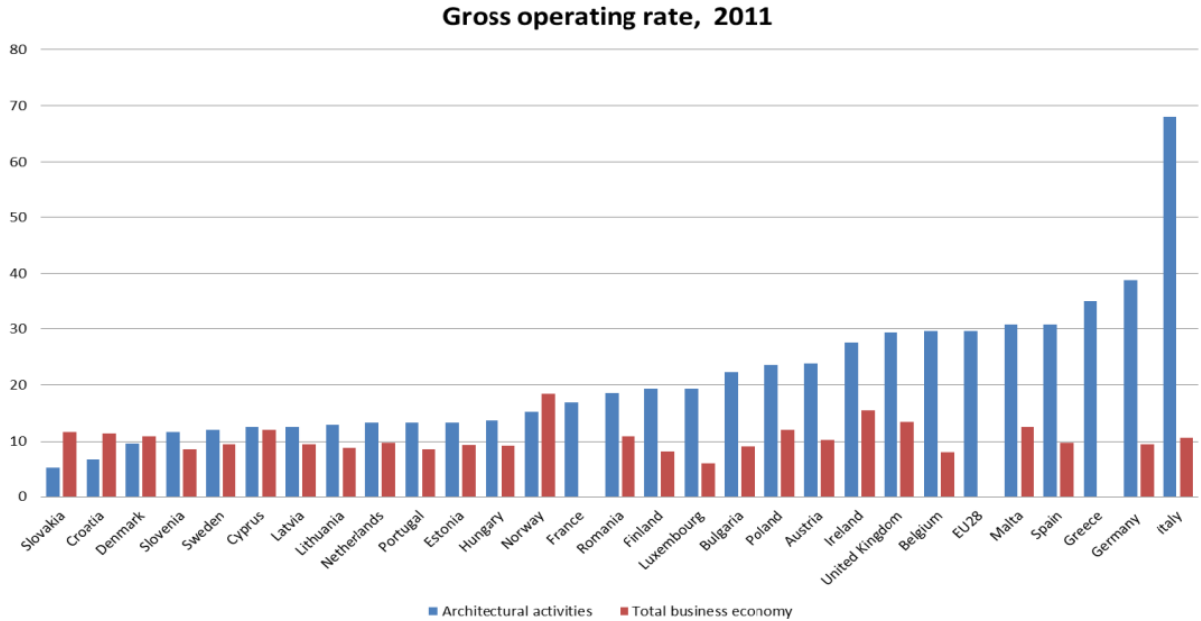
However, when looking at the country-specific regulations in the area of inter-professional cooperation or binding fixed fees, most Member States have no relevant restrictions here (see also OECD Product Market Regulation Database). Therefore, it is not to be expected that the varying observable size of architectural offices in Europe is systematically distorted in favour of smaller companies. To clarify this point, it is worth to have a look at Italy. In Italy, there are neither binding fees nor restrictions on inter-professional cooperation that would favour small companies. Nevertheless, there is a high number of small, local architectural offices that produce most of their services in-house. This specific production structure seems to meet the specific demand in this country. As long as there are no systematic restrictions for other firm sizes to enter the market, there is no stringent argument against such a firm structure, even if this means that the consumers would pay higher prices for their demanded more individualized solutions.

To sum up, the simple observation of small enterprises in the European architectural sector is no reliable indicator for an improper regulation hampering potential adaptation processes and cost-savings. A smaller firm size could also be an adaption to consumer preferences for smaller and local architect's offices and/or a decision for outsourcing of some production stages.

Thesis number two: Too high profit margins in parts of the European architectural sector

The European Commission states that the profitability of the architectural sector was higher than in the rest of the economy for the large majority of Member States. To support this thesis, the European Commission refers to the gross operating rates in the member states' architectural sectors in their report on the mutual evaluation of the regulatory framework for architects (see figure 3). The gross operating rate is the ratio of the gross operating surplus and the turnover of a running enterprise.

Figure 3: Thesis number two of the European Commission: Too high profit margins in parts of the European architectural sector



Source: European Commission, Mutual evaluation of regulated professions, Overview of the regulatory framework in the business services sector by using the example of architects (GROW/E-5), p. 4 (2015)

The European Commission interprets an above average gross operating rate as high company profits. The alleged high profit margins are used as an indicator for an anti-competitive regulation in the Member States concerned. The intuition behind this is that under perfect competitive conditions no company could make significant above average profits. High profit margins in a sector therefore serve as an indicator for a temporally shortage of a specific good or service. Under a competitive framework, other companies would enter the market for this specific good or service with lower prices to gain market shares. In the long-run, the surplus is supposed to settle on an average level.

It is questionable whether there actually is a relation between the gross operating rate and insufficient competition. There are some considerations with regard to small enterprises that have to be taken into account:

The gross operating surplus represents the excess amount of money generated by an enterprises' operating activities after paying for labour input costs and intermediate inputs that are purchased from

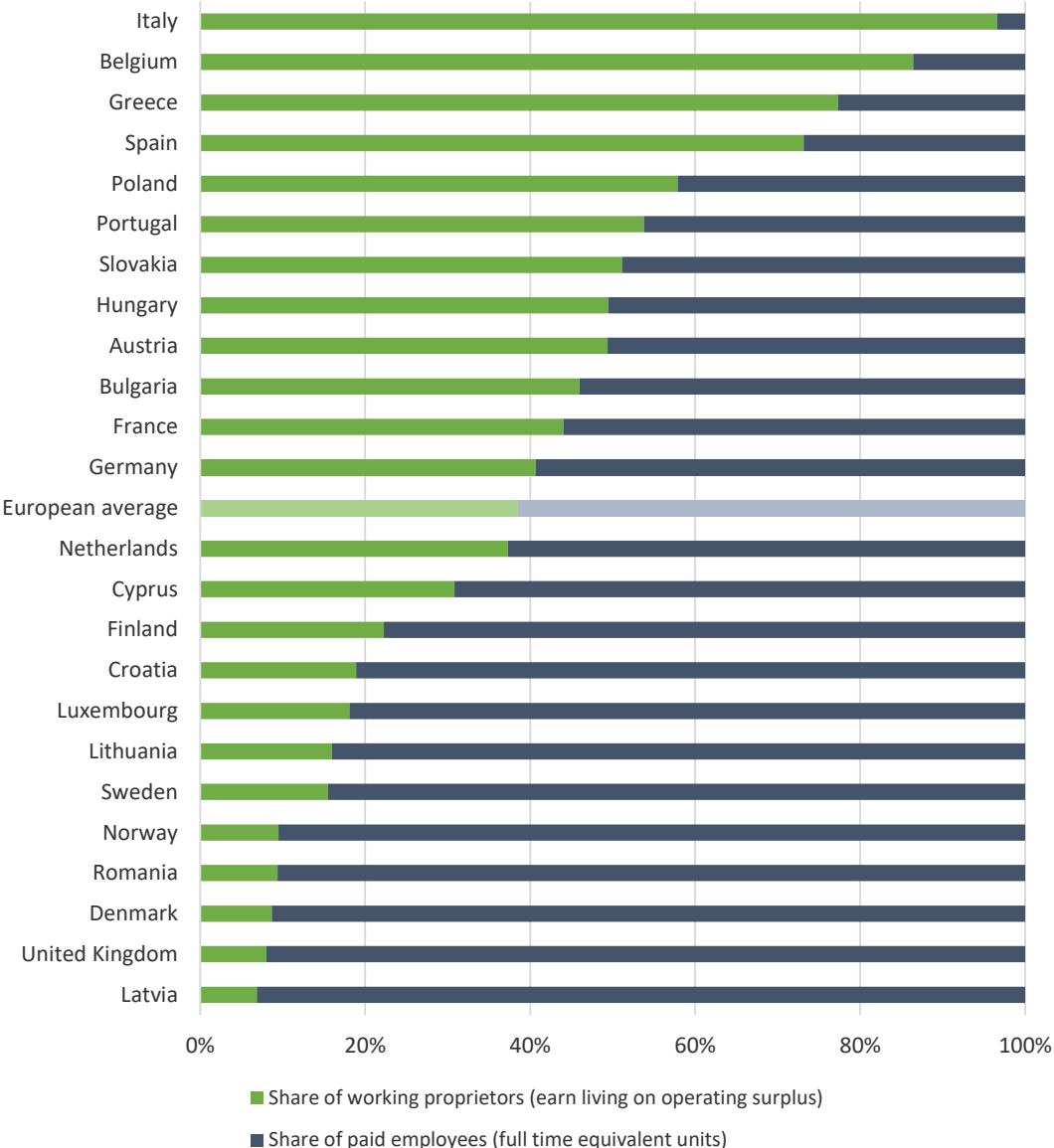
other firms. It is important to understand that labour input costs include only the wages for employees and not any salaries or hypothetical salaries for the working owner of the firm. In case of an owner-managed enterprise, the operating surplus is the capital available that provides the subsistence for the self-employed owner. Furthermore, the operating surplus of an enterprise can be used to repay creditors, to finance all or part of potential investment and to pay taxes (after the deduction of a hypothetical salary for the self-employed owner according to the country specific tax law)¹³.

In the hypothetical case of a small enterprise with a self-employed owner without employees and purchases of intermediate inputs from other firms, the gross operating rate would be per definition 100 percent of the firm's total turnover. In addition, this high gross operating rate is completely independent of how much the working owner earns by selling the produced goods or services. In this constructed example, the gross operating rate will remain at 100 percent, even if the profit margin can barely secure the subsistence of the self-employed owner.

This may be an extreme example, but it provides a possible explanation for the high variation of the operating rates in the architectural sectors of the Member States. The share of self-employed owners in the Member States varies extremely (see figure 4). On the one hand, less than 10 percent of the total employment in the architectural offices in some Member States such as Latvia, the United Kingdom, Denmark, Romania or Norway (as an associated country) are self-employed owners. On the other hand, 85 percent of the total employment in Belgium and 96 percent in Italy are self-employed owners.

¹³ For this reason, the use of the 'gross mixed income' from the national accounts may be a more appropriate indicator. While the gross operation surplus roughly describes the return on the owners' equity, the mixed income roughly represents the owners' combined income out of labour and equity invested. However, Eurostat does not provide data on the gross mixed income in the architectural sector. Furthermore, the comparison of the 'gross mixed income' as a percentage of the turnover (following the idea of the gross operating rate) across different countries is hardly feasible. Such an indicator would be systematically distorted by a varying turnover due to different firm size across the Member States.

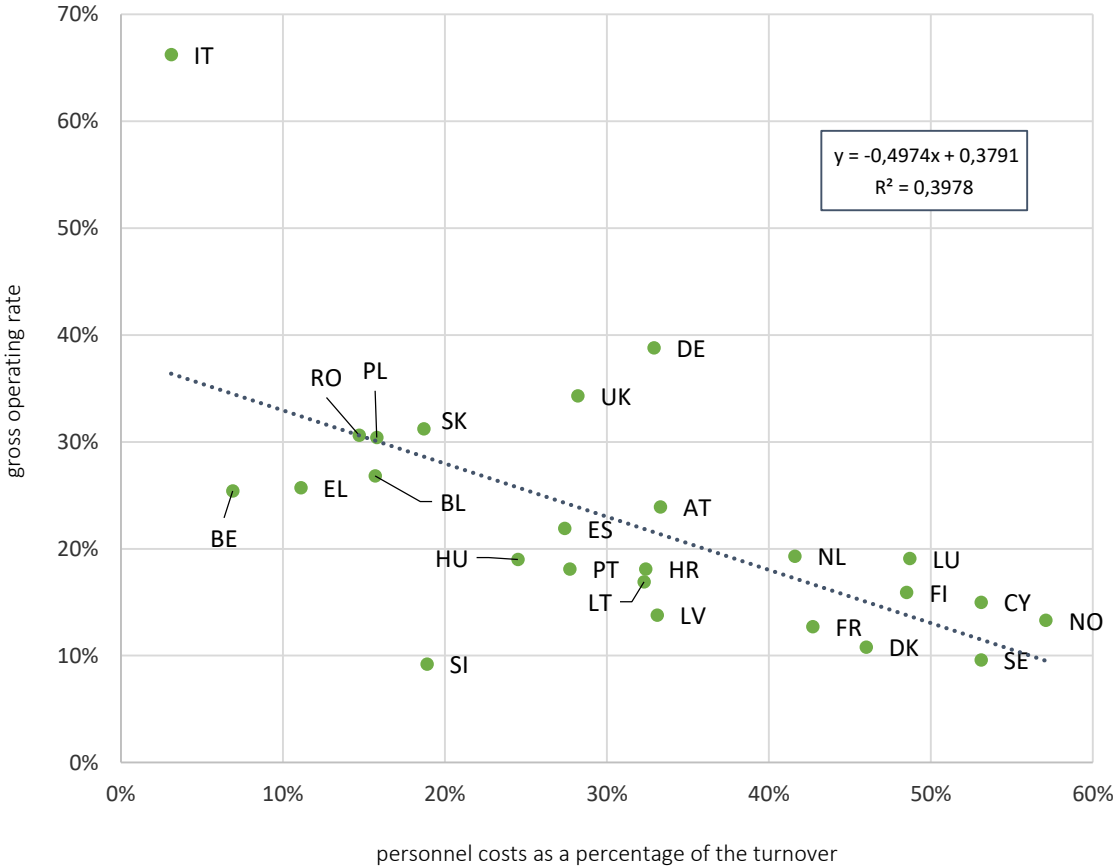
Figure 4: Share of (unpaid) self-employed owners on total employment who earn their living on the operating surplus (year 2014)



Source: Annual detailed enterprise statistics for services (NACE Rev. 2 H-N and S95), own calculation and presentation

As is to be expected, the share of self-employed owners is particularly high in those Member States that report an above average gross operating rate in their architectural sector. To make the connection between the share of self-employment and the resulting operating surplus even more clear, it is worthy to look at the correlation between these two statistical values across all Member States. Assuming that there is a simple linear relationship between declining surplus and increasing labour costs (due to a higher share of employees), a considerable part of the variation of the operating rates across the Member States can be explained (see figure 5).

Figure 5: Correlation between the gross operating rate and the personnel costs as a percentage of the turnover in the architectural sectors of the Member States (year 2014)



Source: Annual detailed enterprise statistics for services (NACE Rev. 2 H-N and S95), own calculation and presentation

The scatter plot shows that in most cases the gross operating surplus is relatively low when the share of self-employed owners who make their living on the gross operating surplus is relatively low, too. However, some results seem contradictory at first sight. For example, the average architectural enterprises in Italy and Belgium have roughly the same share of self-employed owners and thereof resulting low expenses for wage payments. Nevertheless, the gross operating surplus between both states varies to a high extend. To understand the main reason for this unexplained difference, a look at the different shares of purchased intermediate inputs between the sectors in the two countries is helpful (see figure 2).

The average architectural office in Belgium purchases intermediate inputs that account for almost 70 percent of the total turnover. This is the highest share of purchased intermediate inputs among all member states. For the statistical value of the gross operating rate, however, it makes no difference whether a large part of the turnover is generated by the work of paid employees or by acquisitions of intermediate inputs from other firms. In both cases, the share of the input of a self-employed owner in relation to the total turnover decreases. As a result, the observed operating surplus that remunerated the working owner decreases as well. Against this background it is not surprising that the

gross operating rate in the architectural sector of Belgium is relatively small, despite the high share of self-employment.

The opposite is true for Italy. The average architectural office in Italy purchases intermediate inputs that account for less than 30 percent of the total turnover. This is currently the lowest share of purchased inputs among the Member States. The large majority of the goods and services that generate the turnover is produced by self-employed owners. Only a very small part of the turnover is generated by employees or intermediate inputs. As an expected result, the gross operating rate is by far higher than in other Member State.

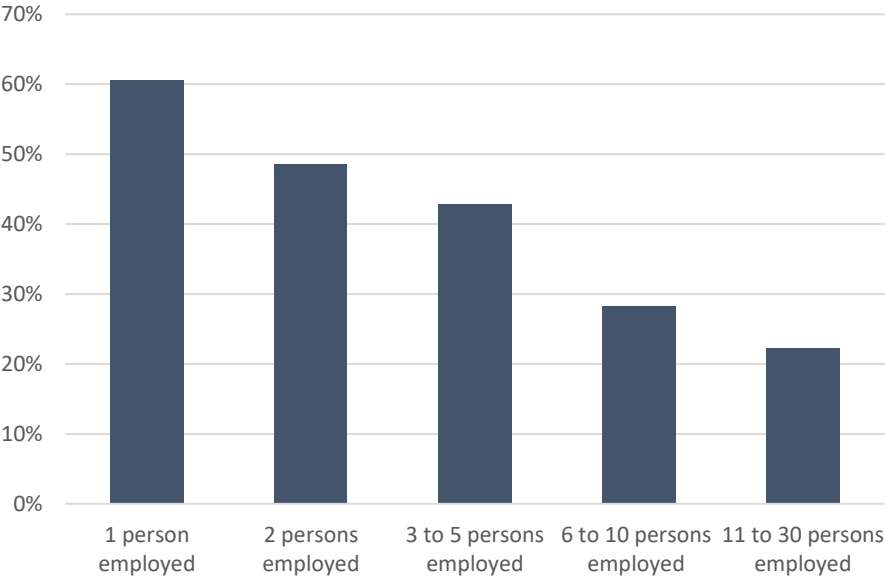
The influence of the intermediate input share on the operating surplus decreases with an increasing number of employees. Nevertheless, albeit to a lesser extent, a below average share of intermediate inputs seems to lead to above average gross operating rates in the architectural sectors of Great Britain or Germany. However, the under-average gross operating rates in Slovenia, Hungary or Greece could be influenced by the above average input-share in the sectors in these countries.

Aggregated country data enable a description of the relationship between a higher number of employees per architectural firm and a smaller operating surplus in a cross-country comparison as seen above. Furthermore, a sector study by the Architects Council of Europe (ACE) shows that this described relationship does also exist within each Member State, regardless of whether the average firm is rather small or big¹⁴. During this sector study, the operating surpluses were surveyed by company size for each Member State. Within all Member States, the statistical measure of the operating surplus decreases as the number of employees increases. The following figure illustrates the decreasing average surplus rate in the case of an increasing firm size (and therefore a lower work share of a potential self-employed owner) across all Member States (see figure 6).

¹⁴ Mirza & Nacey Research for ACE Europe, The Architectural Profession in Europe 2014, p. 40. In addition to the European Member States, the average surplus rate includes data from Switzerland and Turkey. No data for Czech Republic and Latvia:

http://www.ace-cae.eu/fileadmin/New_Upload/7_Publications/Sector_Study/2014/EN/2014_EN_FULL.pdf

Figure 6: Average surplus rate of architectural enterprises by numbers of persons employed across all European States.



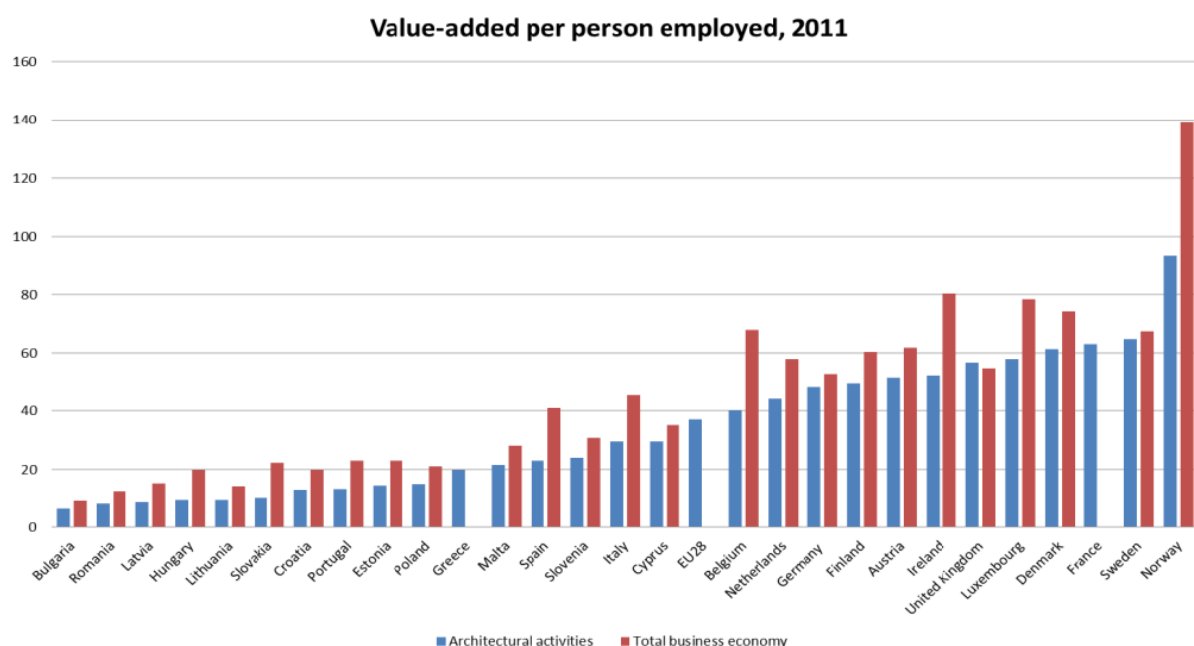
Source: ACE Europe, The Architectural Profession in Europe 2014, p. 40. In addition to the European Member States, the average surplus rate includes data from Switzerland and Turkey. No data for Czech Republic and Latvia. Own presentation.

To sum up, the gross operating rate is no reliable indicator for the level of competition in the architectural sector. In the case of a high share of self-employed owners, this indicator is systematically biased. The proportion of self-employment varies to a very high extend across the Member States. Therefore, cross-country comparisons of the gross operating rate cannot necessarily provide a reliable indication for potential reforms in the architectural sector. The interpretation of the gross-operating rate is even more difficult due to the varying share of intermediate inputs across the architectural sectors in the Member States.

Thesis number three: Too low productivity in the European architectural sector

The European Commission states that the labour productivity in the architectural sector is comparatively low. To support this thesis, the European Commission refers to the value-added per person employed (see figure 6). The European Commission interprets this ratio as an indicator for how productively labour is used in the architectural sector. To indicate a below-average labour productivity in the respective national architectural sector, the value value-added per person employed is compared to the average value across all economic sectors (including primary sector, manufacturing sector and services sector) in every Member State¹⁵.

Figure 7: Thesis number three of the European Commission: Too low labour productivity in the European architectural sector



Source: European Commission, Mutual evaluation of regulated professions, Overview of the regulatory framework in the business services sector by using the example of architects (GROW/E-5), p. 4 (2015)

Why is the value-added per person employed relevant in the ongoing debate on potential reforms of the regulatory framework of architects? The intuition behind is that a below-average value-added per person employed could be an indicator for insufficient competition because enterprises with a low productivity would not survive in a competitive environment.

In a cross-country comparison, the value-added per person in absolute terms (measured in Euro) is difficult to interpret. In a country with comparatively high wages and a high price level, hiring an employee usually leads to a higher value-added compared to a country with lower wages. Therefore, it is not surprising that the difference in value added (in absolute terms) is driven by the different wage levels across the Member States. The lowest value added per person employed can be found in

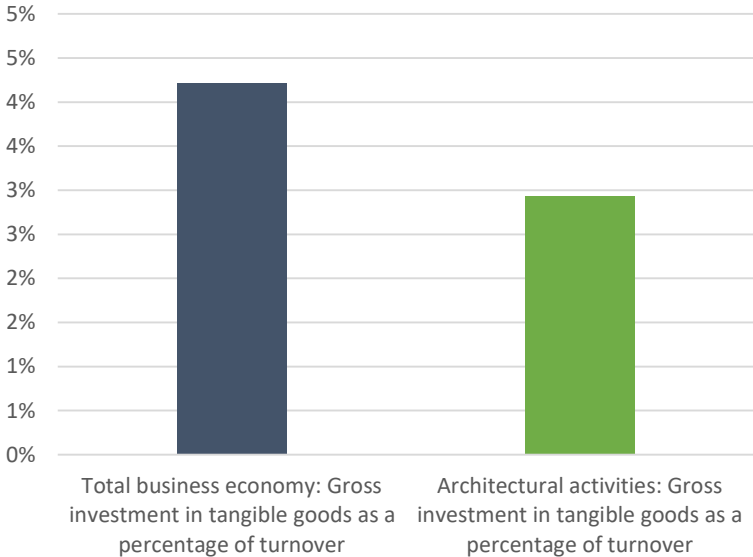
¹⁵ The comparison group of „Total business economy“ aggregates all economic sectors except financial and insurance activities, see: http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=sbs_na_sca_r2&lang=en

Bulgaria, the Member State with the lowest average hourly wage of all Member States (3.80 Euro in 2014 according to Eurostat). The highest value-added can be found in Norway, the country with the highest average hourly wage across all compared countries (54.00 Euro in 2014 according to Eurostat).

For this reason, the European Commission compares the value-added per person in the architectural sector with the average corresponding value across all other sectors within every Member State. However, this comparison is also of little significance. In short, the value-added per person employed can be increased by a higher performance of the employees (for example as a result of a better qualification) or by the additional use of machines.¹⁶ The latter makes a cross-sectoral comparison difficult. For example, the value-added in parts of the manufacturing sector can be increased by a more capital intensive production. This would be the case if fewer employees operate more and more machines and production lines. In the services sector, especially in the case of architectural services, this form of substitutability is generally lower.

Since the number and qualification level of the workforce also influence the value added per person employed, the exact influence of a more capital-intensive production is hardly empirically observable. However, if the other influencing factors are assumed to be constant, a less capital-intensive production leads to a lower value added per person employed (what is defined as lower labour productivity). Therefore, it is nevertheless informative to compare the capital intensity of the production in the architectural sector and the whole economy (see figure 7).

Figure 8: Gross investment rate as an indicator for a low capital intensive production in the average European architectural sector (year 2014)



Source: Annual detailed enterprise statistics for services (NACE Rev. 2 H-N and S95) and annual enterprise statistics for special aggregates of activities (NACE Rev. 2), own calculation and presentation

¹⁶ Theoretically, the value-added can also be increased simply by the fact that a company or a sector can achieve higher prices for an unchanged product or service. This could happen in the case of market power or in the case of low competition. An under-average value-added (or value-added per person employed) can therefore theoretically also be a hint to a particularly intense competition in a sector.

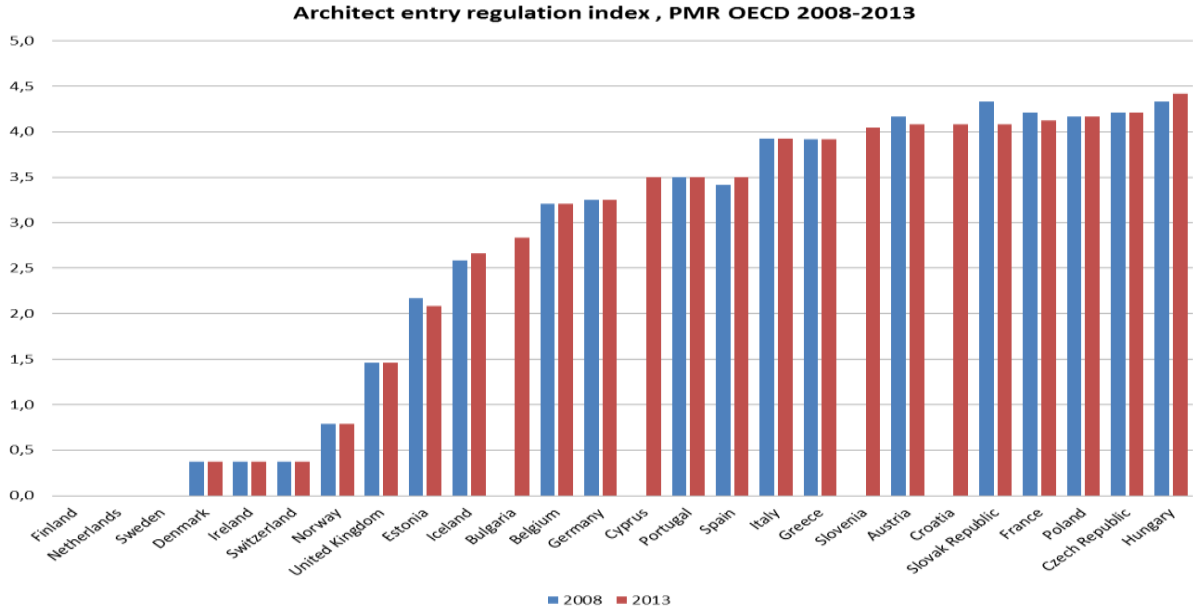
The gross investments in tangible goods as a percentage of the turnover provides an indicator for the capital intensity of the production of an enterprise or a sector. The gross investment in tangible goods is defined as expenditure on purchases of long-term tangible assets such as machinery, production halls, computers and software solutions etc. The average investment rate in tangible goods across the whole economy including all economic sectors in all Member States was 4.21 percent in the year 2014. The aggregated average investment rate in the European architectural sector was 2.93 percent and thus about 30 percent lower than in total business economy. Therefore, there are good reasons to assume that the below average productivity in architecture is more of an indicator for the relatively low importance of capital investments than an indicator for insufficient competition.

To sum up, a comparison of the value-added per person employed between more and less capital-intensive sectors is biased. Since the input of machineries in the labour-intensive architectural sector is below the economy-wide average, a lower value added per person employed is not uncommon. The observation of a different value-added per persons employed across sectors with different production structures is no reliable indicator for insufficient competition in the architectural sector.

Thesis number four: Anticompetitive regulation in some Member States compared to others based on the OECD-indicator

The European Commission states that the regulatory framework is not pro-competitive in the majority of the Member States. To support this thesis, the European Commission refers to the OECD regulation index for product market regulation (see figure 8)¹⁷. Every five years, the OECD conducts a survey amongst its members to build an indicator that is supposed to measure the intensity of regulatory restrictions in selected markets. Within professional services, four professions are examined, including architectural services. The indicator consists of the categories “market entry regulations” (e.g. requirements for profession-specific educational qualifications, membership in a chamber) and “behavioural regulations” (e.g. fee scales, bans on advertisement). The index calculated by the OECD fulfils two functions, a descriptive and an evaluative one. First of all, the Competition Law and Policy Database¹⁸, which the indicator is based upon, is meant to merely describe the regulation in the member state. An example for this would be the description whether there are chambers or not. Then, the indicator additionally evaluates the current regulation. In order to do this the different aspects of the regulation are being evaluated on a scale of 0 to 6. A lower value shows a competition-friendly regulation in the eyes of the OECD. To do this the OECD has to evaluate whether the existence of chambers has a positive or negative effect on the competitiveness of a member state. The OECD has evaluated the existence of chambers with a 6. In the eyes of the OECD the existence of chambers therefore has an extremely bad influence on competitiveness of a member state.

Figure 9: Thesis number four of the European Commission: Anticompetitive regulation in some Member States compared to others based on the OECD-indicator.



Source: European Commission, Mutual evaluation of regulated professions, Overview of the regulatory framework in the business services sector by using the example of architects (GROW/E-5), p. 5 (2015)

¹⁷ The OECD indicator can be found via <http://www.oecd.org/economy/growth/indicatorsofproductmarketregulationhomepage.htm>
¹⁸ <https://www.oecd.org/eco/reform/CLP-all-data-2013.xlsx>

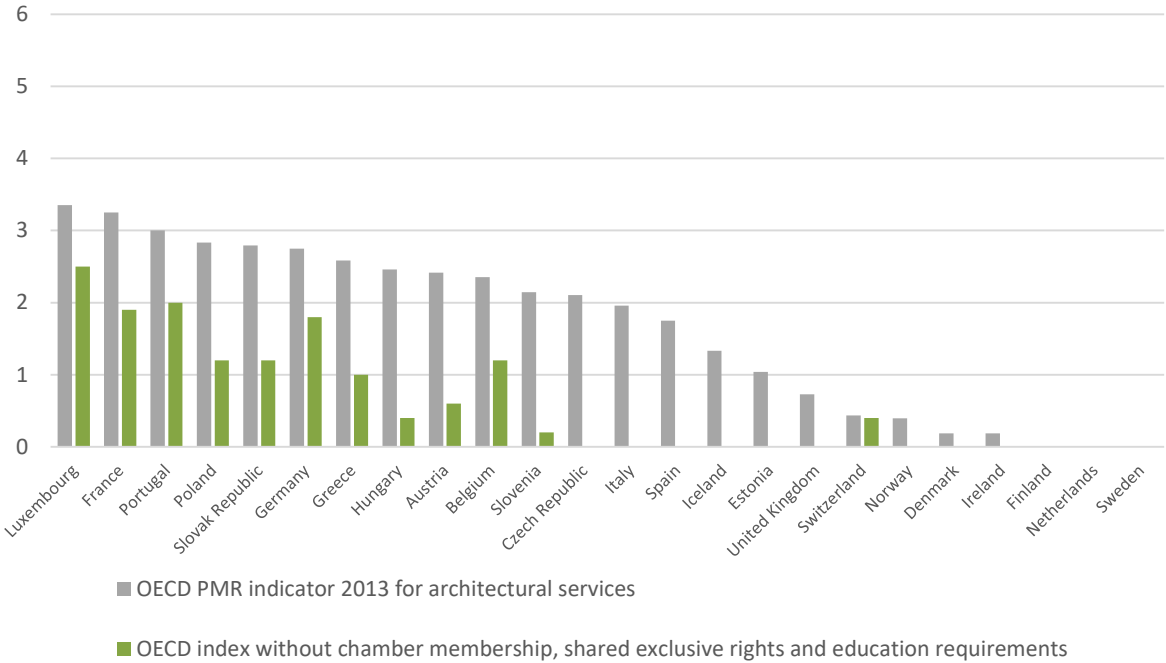
If – on the basis of the OECD indicator – recommendations for future reforms are made, the indicator should firstly replicate the regulation in a complete and correct manner. If one looks closely, a few inaccuracies can be noticed. For example the indicator shows jumping values for Germany, even though no change of regulation has taken place in the concerned field¹⁹. The OECD surveys the regulation by way of questionnaires that are sent to the responsible ministries of the member states. A cause of these inaccuracies could be non-transparent questions, which are being understood in different ways. Such issues can, however, barely be avoided when it comes to international surveys. Apart from these minor inaccuracies, the OECD indicator is generally able to correctly describe the situation. Of course the above is only true to the extent that all relevant questions have been asked.

This leads to the question whether the OECD index covers all relevant criteria. Some states like to guarantee the quality of architectural services by way of entry and conduct regulation. Part of this idea is the self-regulation of professions by chambers (*ex-ante*). Other states guarantee the quality of services by way of a stronger liability system and/or surveillance by the responsible bodies (*ex-post*). Such measures of course interfere with the exercise of profession. However, these relevant areas are not covered by the OECD when describing the state of regulation.

As a next step, the question arises whether the description of the current regulation is consistent and plausible. The OECD sees an *ex-ante* regulation, including chamber membership, education requirements and shared exclusive rights, as an interference of competition on the architecture sector. However, regulatory requirements linked with *ex-post* regulation like extended insurance obligations are not covered by the OECD. Therefore, it is not surprising that the main variation of the OECD indicator between the Member States is driven by the OECD judgment of the *ex-ante* regulatory approach (see figure 9). The OECD's way of evaluation should therefore be subject of detailed examination.

¹⁹ The reasons for jumping values are altering answers in the Competition Law and Policy Database related to the criteria "Education requirements" and "Exclusive or shared exclusive rights".

Figure 10: OECD PMR indicator for architecture 2013 without chamber membership, shared exclusive rights and education requirements



Source: OECD (2013), Product Market Regulation Database, own calculation and presentation

Educational requirements, access to profession and chamber membership

The pursuit of the architecture profession generally requires qualifications related to the field. These will usually be attained by way of higher education, which is often supplemented by compulsory practice. However, there are exceptions to this. Denmark, Finland, Ireland, the Netherlands and Sweden have not informed the OECD of any education requirements for access to the profession.

For a lawful pursuit of the profession, the states of Austria, Belgium, Czech Republic, France, Germany, Greece, Hungary, Italy, Luxembourg, Poland, Portugal, Slovakia, Spain, Bulgaria, Croatia, Cyprus, Latvia and Romania require a separate professional admission by way of obligatory membership of an association or chamber of architects, resulting in a higher index value for these countries.

Particular questions of the OECD-Indicator are designed in a way that only vaguely reflects the actual degree of regulation. States in which the exertion of planning tasks does not require architectural admission are being recorded as missing an admission requirement and therefore receive a lower indicator value. However, this indicator value does not take into account that in these states the occupational title ‘architect’ is only to be used after registration with the competent authority (protection of professional title). To be registered there is usually a university degree needed, followed by professional training and compliance with professional conduct rules to be set by the registration authority. Furthermore, it disregards the fact that a meaningful offer of planning services on the market is only possible with the appropriate qualifications. Considering these aspects, the impact that the criterion of ‘entry requirements’ has on the market of architectural services is a lot smaller than the indicator value might suggest.

This effect is strengthened by faulty OECD data. For instance, neither the Netherlands nor the United Kingdom grant exclusive rights for architects, but do arrange for protection of the professional title. Whilst the Netherlands as well as Finland and Ireland, disregarding protection of title, did not report any regulation concerning professional admission, the United Kingdom listed the requirements of receipt of the title ‘architect’ in this category. Provided that similar regulation is in place elsewhere, this leads to a deviating indicator value and thus to a distorted account of competitiveness. This is because **Finland** requires a degree from professionals who elaborate blue prints.²⁰ The **Netherlands**²¹, just like **Ireland**²², only permit the occupational title ‘architect’ if the professional is registered in the respective profession’s register. Requirement for such a registration is a degree. In the Netherlands, a registration at the *Bureau Architectenregister*²³ is needed. The *Royal Institute of the Architects of Ireland (RIAI)*²⁴ is the corresponding Irish corporation. Registration is mandatory for being able to use the title. An (additional) membership is optional.

According to the OECD indicator, the requirement of compulsory membership in an association or chamber of architects hinders competition and thus leads to a higher indicator value. States without compulsory membership receive a lower indicator value. However, considering the criterion of compulsory membership on its own leads to distorted results. Member states with low indicator values such as the **Netherlands** or the **United Kingdom** also require the professional to register at the *Bureau Architectenregister* and the *Architects Registration Board (ARB)* respectively in order to carry the title ‘architect’. Both institutions also function as supervisory authorities and therefore take on tasks which are similar to those the chambers of architects are concerned with. Due to a meaningful market presence only being possible under the title of an ‘architect’, the criterion of compulsory membership actually has a much smaller significance than the indicator value would suggest. Beyond that, compulsory membership in a professional association or a chamber of architects is the requirement for their supervision. This supervision will still be performed, even if it was not transferred to an association or a chamber of architects. In that case, it will be the duty of the state to fulfil the task. The regulatory standard is the same in both systems. Indeed, although representing similar competitive levels, they display different indicator values regarding competition. Some more evidence for comparable regulatory standards in Member States with or without a supervision through a chamber system can be found in a EU Commission report on regulation in the construction sector. For example, **Denmark**, a Member State with an architectural sector that is described as nearly unregulated by the OECD, is reported to have the strictest building regulations²⁵. In this case, the supervision is conducted completely by the state itself.

²⁰ Art. 3 Land Use and Building Decree: “A person drawing up a plan must have a university degree appropriate for the task and the experience that is called for by the difficulty of the task.”

²¹ Wet op de architectentitel (Academic Titles (Architects) Act).

²² Art. 18 Building Control Act 2007.

²³ <https://www.architectenregister.nl/Home/index.aspx>.

²⁴ <http://www.riai.ie/>.

²⁵ The study referred to the construction of a one-floor 2-bedroom house and a 10-floor office building as case-studies. For further reading see the EU-COM report “Simplification and mutual recognition in the construction sector under the Services Directive” (MARKT/2014/087/E);

http://ec.europa.eu/growth/tools-databases/newsroom/cf/itemdetail.cfm?item_id=8657&lang=en

Furthermore, there are also restrictions concerning not necessarily directly and alone the architectural profession, but regulating nevertheless the access to the profession. For instance, Denmark actually hinders the access to the architectural Service Market by regulating cross-border services.²⁶

Exclusive rights

Exclusive rights affect competition to a particularly high degree. It is therefore of interest which profession-specific tasks can be performed by architects only and which ones can also be fulfilled by third parties. Services that are exclusive or shared exclusive to the architecture profession are feasibility studies, topographical determination, demarcation, land surveying, planning, requests for construction permits, preparation and monitoring of construction/execution, technical control and certification, construction cost management, urban and landscape planning and interior design.

The OECD indicator permits a classification into states with strong, medium and less distinct regulation. A high number of exclusive or shared rights can be found in Austria, Czech Republic, Estonia, Greece, Italy, Portugal, Spain, Cyprus, Malta and Romania. France, Hungary, Luxembourg, Poland, Slovakia, Slovenia, Croatia, Latvia and Lithuania show a medium degree of regulation. Only few exclusive or shared rights are found in Denmark, Germany, Ireland, Great Britain and Bulgaria.

The OECD indicator's criterion of 'exclusive or shared exclusive right' only inaccurately pictures a state's competitiveness. States that grant their architects few or no 'exclusive or shared exclusive rights' receive a low indicator value. What is not being taken into account is, however, the way in which states ensure the compliance with building regulations in force. In states with 'exclusive or shared exclusive rights' this responsibility lies with the architects, being the reason why **Germany** or **Italy** (to name but a few) do not provide for an inspection by the building supervisory authority. In states without 'exclusive or shared exclusive right' such an inspection usually takes place in the course of the building permit process, e.g. in **Denmark**, **Sweden** or **Finland**, by architects or civil engineers who work in the responsible administrative authority. The overall competitiveness is similar, even though the OECD indicator declares very different values.

Different regulatory approaches in Europe

The Member States operate different systems which are meant to guarantee the quality of architectural services. The quality can cover different components such as construction safety, consumer and environmental protection as well as cultural, historical, archaeological and artistic concerns. In general, two different regulatory approaches or philosophies can be observed and distinguished:

The first system (*ex-ante*), mainly pursued in continental Europe, reaches guarantee of quality by way of precautionary quality control. The second system (*ex-post*), mainly pursued in northern Europe, pursues the idea that quality should be mainly guaranteed by compensating occurred damage (compensatory model). To reach this objective, the liability system must be strict enough so providers

²⁶ Denmark requires a fee-based registration in the *Register for udenlandske tjenesteydere* established for foreign corporations as well as a fee-based registration in the general corporate register. This requirement also applies to the occasional service delivery. If a company car is to be used for cross-border services, a fee-based registration in the *Motorregistret* may be required leading to costs of up to 150% of the actual vehicle's value.

are no longer inclined to offer faulty quality. This second approach is also known as a system of subsequent control.

Member states that follow the *ex-ante* system traditionally feature a higher degree of entry and conduct regulation. To this end, specific requirements for vocational training and admission to the profession, obligations of further training as well as regulations governing professional practice are put in place. These states regularly also provide for a chamber of architects. Member states that follow the second system (*ex-post*) regulate by way of a stricter responsibility for builders and real estate developers²⁷ as well as more surveillance of the entire building process.

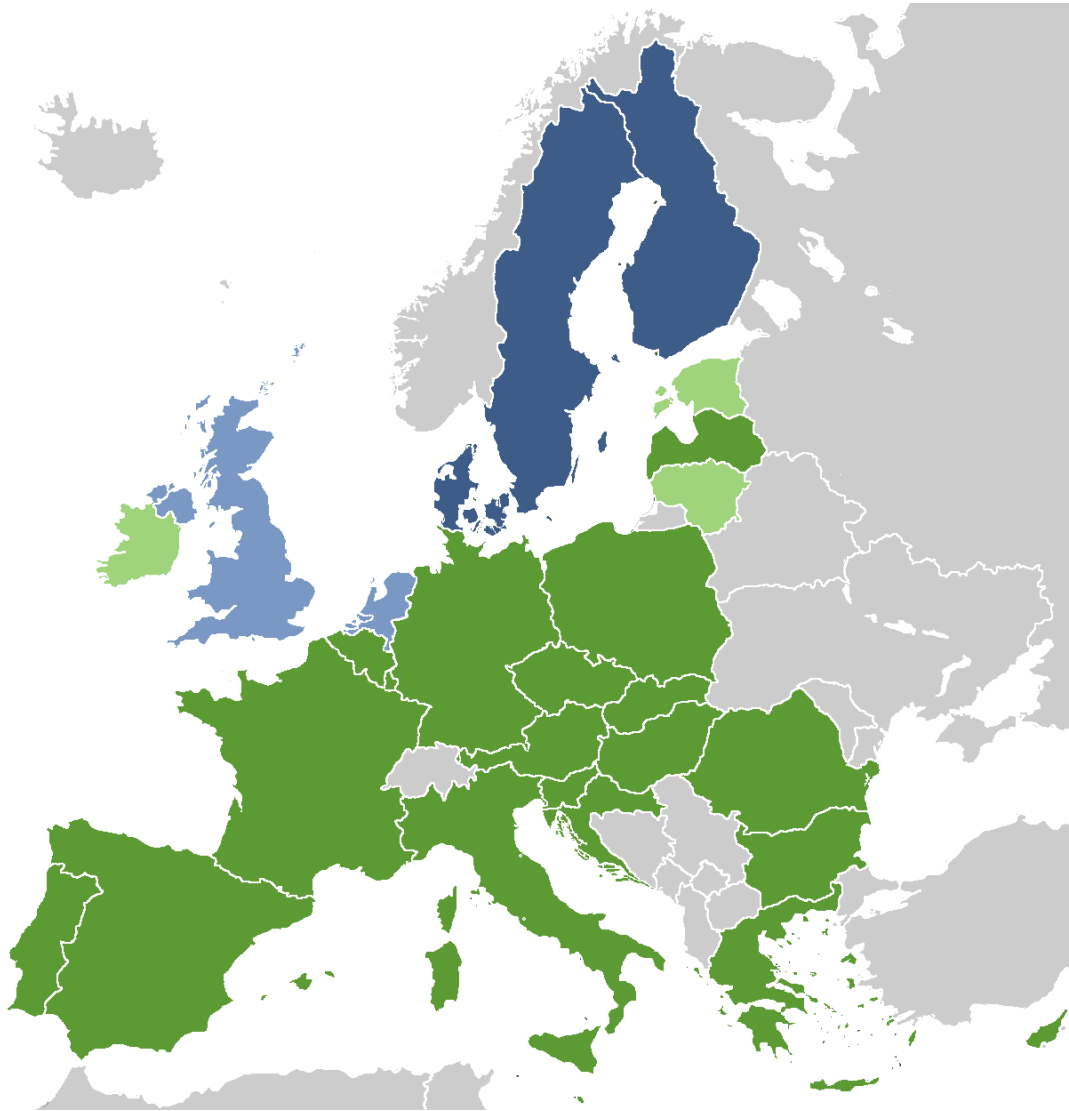
The division of the Member towards one of these two regulatory approaches is somewhat arbitrary. There is a great continuum of regulatory frameworks between the poles of solely *ex-ante* and solely *ex-post* regulation. However, the Member States can be grouped based on the introduced criteria, at least to some extent. In the field of architectural services, one main feature of the *ex-ante* approach of precautionary control is the existence of exclusive rights. As seen above, these exclusive rights are to guarantee that safety-relevant activities are only carried out by registered and approved experts. When it comes to architectural services, these safety-relevant tasks are mainly the planning process and the request for construction permit. For the OECD indicator, all Member States report if they grant exclusive rights. In the map below (see figure 11), all Member States that grant exclusive rights for these tasks are coloured in green. To provide these architectural core services in these Member States, a future architect has to register at a professional chamber that supervises, inter alia, the specific educational requirements. Only in two Baltic states, the registration and licensing process is done by the state.

In the remaining Member States, theoretically everybody is free to offer architectural planning services. The northern Member States Sweden, Finland and Denmark have no specific entry regulation such as compulsory educational requirements. The United Kingdom and the Netherlands are somewhat in between. Although not granting specific exclusive rights, these countries grant title protection. As mentioned above, in this case a future architect usually needs to register at a professional association in order to carry the title 'architect'. For a registration, these professional associations do have educational requirements that are comparable to the professional chambers in other Member States. At least to some extent, this title protection is an element of precautionary quality control. The main difference is that more responsibility lays with the consumer as he is free to choose an educated expert with the title "architect" or not.

²⁷ One example for such a stricter responsibility through liability rules is the deposit of a security that is common in Denmark (all contracts that apply AB92 or ABT93). After the conclusion of the contract, the contractor usually deposits a security of 15 percent of the contract volume. After the acceptance of the work, the deposit is paid back in several stages.

For more information, see also the database on country-specific regulation of the architectural department of the University of Siegen (in German language only): http://export.architektur.uni-siegen.de/index.php/europe/9-daenemark#_ftn6

Figure 11: Different regulatory approaches of architectural services: A tendency towards ex-ante regulation in continental Europe and towards ex-post regulation in northern Europe



Member States that apply an ex-ante approach are coloured in green. Member States that have a tendency towards an ex-post approach are coloured in dark blue. Own presentation based on the criterion of exclusive rights for the architectural tasks of “planning ((elaboration of blue prints)” and “Request for construction permit” in the Member States that have a tendency towards ex-ante regulation. Data form OECD (2013), Product Market Regulation Database. Basic map form Europe under free public Wikimedia Commons licensing.

These described differences, stemming from a variety of established regulatory systems in Europe, can be found not only in the area of regulation of architects, but also elsewhere. Continental Europe operates a consumer protection system which is mainly based on the principle of prevention. This is due an established preventive legal system. The consumer is to be given legal certainty and transparency by regulating entry and conduct of the profession. The aim is to ensure a high level of qualification already for admission making it dependent on certain conditions. Furthermore, the quality of professional practice is being secured by compulsory professional training. Moreover, chambers support this process by monitoring and sanctioning breaches of duty.

A different system prevails in the Northern and Anglo-Saxon member states. These states have less *ex-ante* regulation rules. Therefore, consumer protection is not primarily ruled by preventive provisions against abuse or improper performance, but a more 'compensatory' model which means to guarantee consumer protection mainly by way of liability mechanisms. Further measures are usually only applicable if the professional has previously joined a – in most cases non-compulsory – private law organisation.²⁸

Both approaches are to be seen as equivalent, the decision for one of the systems lays, from a legal perspective, with the member states. Yet, the OECD indicator favours the system of subsequent control. This is because due to the OECD's criteria, the system of precautionary control is awarded a high indicator value, whereas the system of subsequent control's value is lower. Based on this analysis, the regulatory system in the Member States that follow the first approach cannot be generally classified as being less pro-competitive. There is no systematic indicator for the economic performance being better or worse in the Member States which implemented a chamber system and the associated regulations. However, the ongoing debate on an appropriate regulatory framework for the architectural sector is driven by arguments based on statistical data. The question though is how to measure the performance of existing different regulatory systems. The indicators that the European Commission has put into the debate (number of persons employed per enterprise, gross operating rate, value-added per person employed) have proved unsuitable for the architectural sector in this analysis.

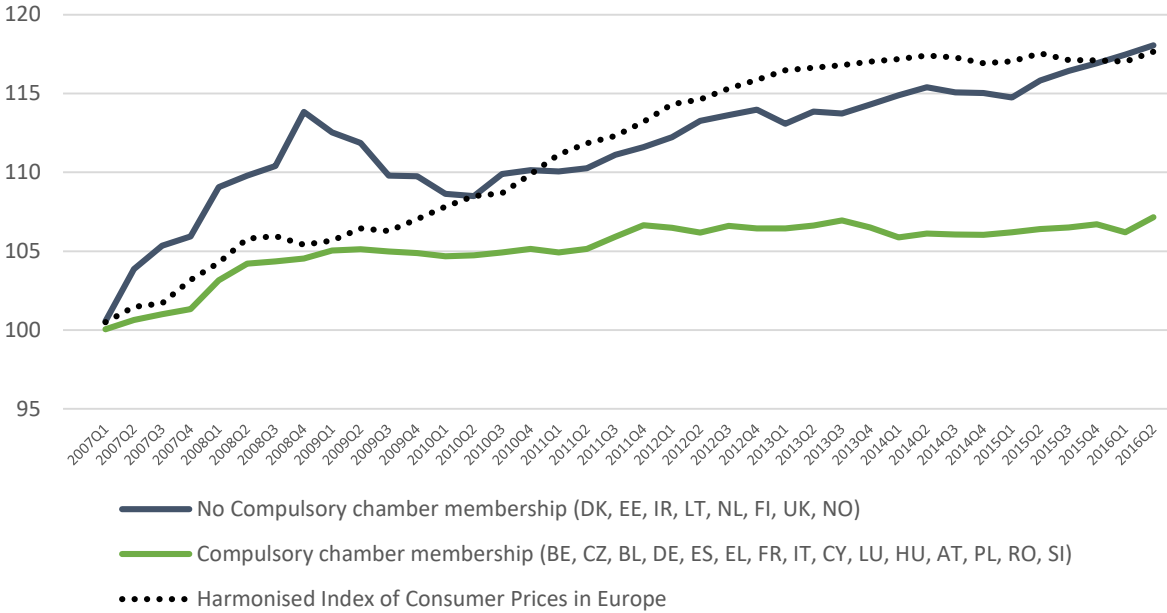
On an abstract level, the performance of a regulatory system should be measured on the basis of the criterion "appropriate quality for a reasonable price". Regarding the quality, there seems to be no evidence for the superiority of one of the two approaches found in the Member States. Measurable quality aspects could be above-average frequent planning errors. Aesthetic aspects of architecture as a part of quality do not appear to be comparable in a reasonable way. With regard to the price for architectural services, the price development in the Member States can be compared. Again, the question arises what could be a suitable categorisation of the Member States for such a comparison. Since the question of a compulsory chamber membership is one important aspect of the ongoing debate of different regulatory approaches, we decided to categorise the Member States based on this criterion.

Eurostat calculates a producer price index for several services (SPPI). Architectural services are grouped with engineering services in this price index. This fact is not problematic when looking at the possible effect of a compulsory chamber membership. In the Member States with a chamber system for architects there is usually also a chamber system for engineers. When considering the aggregated price development, there is no indication that the Member States with regulatory systems based on a compulsory chamber membership perform worse. In the recent past, the increase of costs for architectural services in those Member States was even below the general price trend of the harmonized index of consumer prices in Europe (see figure 10).

²⁸ See Metzler, *Regulierung der Freien Berufe und Verbraucherschutz*, S. 2 ff., http://ec.europa.eu/competition/sectors/professional_services/conferences/20031028/arno_metzler.pdf.

Figure 12: Development of producer prices for architectural and engineering services between Member States with and without a compulsory chamber system.

Trend between the years 2007 and 2016, standardized to the year 2007 = 100 percent



Source: Eurostat, Services producer price index (SPPI), own calculation and presentation

To sum up, the OECD regulation indicator does not reflect the actual level of regulation in the Member States. The indicator incidentally favours the regulatory system of subsequent control (*ex-post regulation*). This is because due to the OECD’s criteria, the system of precautionary control (*ex-ante regulation*) is awarded a high indicator value, whereas the system of subsequent control’s value is lower. Systematically, however, this different valuation cannot be substantiated.

Summary and outlook on potential useful reforms

The main result of this research report is that there is no evidence of the superiority of one of the two different regulatory approaches in the Member States. Based on the indicators used by the EU-Commission neither the ex-post approach nor ex-ante approach for the regulation of architectural services can be identified as more or less competition-friendly. Therefore, both systems are to be seen as equivalent not only from a legal but also from an economic perspective. The decision for one of the systems should lay with the member states.

But the OECD database shows some country-specific rules that are not directly related to the general regulation approach in ex-post vs. ex-ante context. In many cases, there is no functional equivalent in the other Member States. Therefore, it is advisable to check the need for this regulation on the level of the respective Member States. These regulatory differences relate to rules of inter-professional co-operation, advertising regulations and regulated prices and fees.

Inter-professional co-operation

According to the OECD indicator, most states do not have any restrictions concerning the inter-professional co-operation of architects with other liberal professions. This is the case for Czech Republic, Denmark, Estonia, Finland, Germany, Greece, Hungary, Italy, the Netherlands, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Great Britain, Croatia, Latvia, Lithuania and Malta. In other states, a co-operation is only permitted regarding comparable professions, as is the case for France, Luxembourg, Cyprus and Romania. In Austria and Belgium, however, most forms of co-operation are allowed. As far as architectural services are concerned, restrictions on possible co-operations do not make much sense, but they hinder the supply of joint services within one firm. It is therefore appropriate that restrictions of co-operation have a negative effect on the regulation indicator of the OECD in case of the profession of architects. Such limitations might however be justified for other professional groups to protect the client's privacy (e.g. lawyers, tax advisers, auditors, healthcare professionals).

Advertising restrictions

Within the group of the European OECD Member States, most countries do not have special advertising restrictions for architects. Only Belgium, France, Germany, Luxembourg, Portugal, Croatia and Cyprus report restrictions. In principle, two cases have to be distinguished: The first case concerns the promotion of one's own architecture office and its services. The second case concerns advertising for third parties, e.g. window manufactures. In the first case of self-promotion, there is no objective reason for special regulations in the area of architects. The general rules against misleading advertising should be sufficient to protect the consumers of architectural services. In the second case of advertising for third parties, advertising bans should ensure the independent consultation of the clients by the architect. There seems to be a fear that without such a ban, some architects would primarily recommend products from those manufacturers to their clients, with whom they have entered into an advertising agreement. The extent to which an advertising restriction for third parties can actually ensure transparent and independent advice in favors of the consumer would have to be investigated separately.

Regulations on prices and fees

A few Member States have regulated fees or prices. Germany, Greece, Hungary, Luxembourg, Portugal, Slovenia, Bulgaria, Croatia, Malta and Romania state that their fees/prices are determined by the state or by way of self-administration. The only states with binding minimum prices are Germany, Bulgaria and Croatia. In the remaining countries, there are only recommendations in place from which the parties of the contract may deviate. On the 17th of November 2016, the EU Commission decided to take legal actions at the European Court of Justice concerning the ongoing infringement proceeding against Germany's binding minimum and maximum prices. At present, economic theory does not have a definitive answer to the question to what extent a higher income level through guaranteed fixed fees could indeed guarantee a higher quality in a market for credence goods like architectural services.

Conclusion

The current debate on the economic impact of different regulatory approaches is dominated by numbers and indicators. The objective of these numbers and indicators is to collect broad empirical evidence on the advantages or disadvantages of different regulatory approaches in the Member States. Appropriate indicators can indeed support the political decision-making process with helpful structural knowledge.

However, improperly selected or interpreted numbers or indicators can lead to incorrect conclusions on the need for action. In case of the regulation of architectural services, the Member States apply different regulatory approaches. These different approaches can be roughly divided into an ex-ante and an ex-post approach. At first glance, the numbers and indicators that are discussed in the ongoing debate may suggest that the ex-post regulation might be superior regarding the effects on competition. However, our research has shown that this conclusion is not valid, when the whole regulatory framework is taken into account.