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Economic values, support of labor unions, and salience of occupational licensing in the European Union

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Abstract

A large and growing literature has emerged in recent years on the effects of occupational licensing. What is less understood is the political origins of licensing. Using Europe as a case study, we examine: 1) the relationship between economic values at the country level and the percentage of licensed workers and 2) the relationship between union participation and percentage of licensed workers. We find some evidence that more pro-market countries tend to have fewer licensed workers, but the results are not statistically significant. We also find a negative correlation between support for labor unions and percentage of licensed workers at the country level – which indicates a possible competition between unions and licensing associations. Overall, our results are consistent with trends in union membership and occupational licensing in the US.

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1. Introduction

In the US in the last 10 years, there has been a significant increase in attention paid to occupational licensing by both policymakers and researchers (White House 2015, Kleiner 2015, Plemmons and Timmons 2021). Occupational licensing laws make it illegal for an individual to work if they have not satisfied minimum education and training requirements, paid fees, and passed exams. Licensing laws are most commonly set at the state level, but are also found federally and at the county or city level. The effect of occupational licensing laws on a large number of labor market outcomes has been examined in the existing literature. Several studies have shown that licensing increases the wages of licensees (Kleiner and Krueger 2010, 2013, Gittleman and Kleiner 2016, Gittleman, Klee, and Kleiner 2017, Ingram 2019). Studies focusing on licensing requirements for particular professions find similar results (Pagliero 2013, Thornton and Timmons 2013, Timmons and Thornton 2008 and 2010, Timmons 2018).

Licensing has also been shown to decrease the number of licensed practitioners and establishments (Hall and Pokharel 2016, Timmons and Thornton 2019) as well as reducing labor supply overall (Blair and Chung 2019, Kleiner and Soltas 2023). Licensing has also been found to reduce the number of employees that firms hire (Plemmons 2022). In addition, licensing has been found to reduce dynamism at both the firm level (Zapletal 2019) and individual worker level (Kleiner and Xu 2020). Research also finds evidence that licensing may contribute to income inequality in the US (Meehan et al. 2019) and Canada (Zhang and Gunderson 2020).

What is less understood is the mechanism and motivation for the passage of licensing in the first place. More specifically, what is the interplay between unions and licensing? Do the two labor market institutions substitute or complement one another? Also, do more liberal attitudes of the public help or hinder the passage of occupational licensing?

Using data from the European Values Survey (EVS) for 2017-2020 and data on the fraction of licensed workers in European countries from Koumenta and Pagliero (2019) we seek to better understand the answer for each of these proposed questions. Data limitations prevent us from performing causal inference, but we find evidence of a negative association between market oriented values and the fraction of licensed workers in European countries. Moreover, we also find some evidence of a negative association between positive views of unions as well as union participation and the fraction of licensed workers in European countries, but this result is largely driven by three countries. This finding raises the possibility of substitution between unions and licensing that is consistent with long run trends in the United States. After providing some background on the economic rationale for occupational licensing and its relationship with unionization, we discuss our data analysis and methodology before concluding the paper.

2. Background

2.1 Why licensing?

Economists have produced two guiding theories for why occupations are licensed.[1] Friedman (1962), Stigler (1971), and Maurizi (1974) have all proposed that licensing primarily evolves to restrict competition. Market participants in the licensed profession seek a means of limiting entry and therefore having opportunity to extract economic rents. Licensing gives market participants

[1] See Kleiner (2006) and Plemmons and Timmons (2021) for additional discussion on the historical origins of occupational licensing.

an opportunity to exploit the monopoly on force that the government enjoys and make it illegal for aspiring participants to enter the market without first meeting licensing requirements.

An alternative theory has been proposed that licensing may in fact improve market outcomes and be in the public interest. Building on the work of Akerlof (1970) and Arrow (1971), Leland (1979) makes the theoretical argument that licensing may be welfare enhancing in select cases. By setting a minimum quality standard, licensing helps alleviate the asymmetric information problem. It should be noted, however, that if market participants make the standards (and this is almost always the case with licensing) that entry standards are likely to be set too high to achieve optimal entry into the profession.

Instead of asymmetric information, Shapiro (1986) suggests that licensing can be welfare enhancing by increasing the human capital of professionals and limiting the moral hazard of providing low quality service. The result is qualified to preclude consumers that do not sufficiently value quality—consumers with lower quality standards can be harmed from licensing. With the caveats for each of these theories in mind, recent work from Kleiner and Soltas (2023) uses a structural model of the labor market to show that licensing decreases consumer welfare.

A recently published volume examines several case studies of licensing in Europe and the US and finds little to no evidence that licensing enhances the quality of services for consumers (Kleiner and Koumenta 2022). In short, recent research suggests that licensing primarily serves as a barrier to entry and reduces consumer welfare as suggested by Friedman, Maurizi, and Stigler.

2.2 Licensing and Unions

In the 1950s in the United States, approximately 5% of the workforce was licensed and nearly 35% was unionized.[2] Today, the fraction of licensed workers has more than quadrupled to almost 22%,[3] but unionization has declined to 10.3%.[4] The trends imply that there may be a tradeoff between licensing and unionization.[5] Both institutions provide opportunities for workers to earn higher wages and it can be argued that licensing provides better protection since decertification elections are common, but the removal of licensing (de-licensing) remains much less common. (Kleiner 2006, Thornton and Timmons 2015, Thornton, Timmons, and Kukaev 2021). Further, although licensing is ubiquitous in many high paying jobs like physicians and lawyers, it is also quite common in low paying occupations like beauty professions and bakers in the European Union. Unlike unionization, occupational licensing has a stated purpose of protecting the public whereas unions have a stated purpose of protecting workers (Gittleman and Kleiner 2016).

There is a small existing literature examining the relationship between unions and licensing. Work by Friedman (1965) examines the early years of licensing in the Progressive Era in the

[2] Work by Kleiner (2006) and Kleiner and Krueger (2010) illustrates recent trends in unionization and occupational licensing in the United States.
[3] https://www.bls.gov/cps/cpsaat49.htm
[4] https://www.bls.gov/news.release/pdf/union2.pdf
[5] If focusing on developing countries, the institutions may develop side-by-side. As legal institutions develop and regulatory frameworks are established, we might expect licensing and unionization to expand. In other words, we might expect an inverted U-shaped relationship.

United States and suggests that many professional groups desired the legal protections allowed by the passage of occupational licensing. Additional historical work has documented that barbers in Arkansas sought licensing as a more effective means of restricting competition (Corley and Witcher 2021). Today, membership in barber unions is very low and has followed national trends. Interestingly, in other professions like nursing where research suggests that licensing increases wages (Law and Marks 2017) unionization rates have remained more stable (Dube, Kaplan, and Thompson 2016).

There is one existing work that overlaps with our work. In a review piece by Pagliero (2019), a portion of the article explores simple correlations of licensing in the European Union with measures of the intensity of labor, collective relations, and social security laws. He finds evidence of a negative association of licensing and the intensity of labor and social security laws.

In our analysis, we look to better understand the relationship between unionization and licensing by using the European Union as a case study. We examine simple correlations of the fraction of the workforce that is licensed with citizen perceptions of the marketplace and unions and the fraction of the workforce that is unionized. Our data do not allow us to explore causal pathways and this study, much like Pagliero (2019), should be considered a first descriptive attempt at exploring the relationship between licensing and these possible explanatory variables.

3. Data and methods

To explore the possible relationship between economic values, labor unions, and occupational licensing in the European Union we retrieve data from the European Values Survey (EVS), for the years 2017-20.[6] For the percentage of licensed workers, we use data collected by Koumenta and Pagliero (2019).

Table 1 provides details on questions from the EVS that we use to measure economic values. *Left-right* is coded from one to ten with ten being more to the right (market oriented) and one being further to the left (more open to government involvement). *Income inequality* measures perceptions on income inequality on a one to ten scale. Again, 10 is more market oriented and 1 more sympathetic to government involvement. *State_private ownership*, *Individual responsibility*, and *Competition_is_good* are coded in a similar fashion—on a one to ten scale, and a higher score indicating more market-oriented values.

The last two questions in Table 1 capture union membership and attitudes towards unions. *Labor_union* is binary and is coded as one if the indicate union membership and zero otherwise. *Confidence_labor_union* is on a four point scale. A score of 1 indicates no confidence in unions and a score of 4 indicates high confidence in unions.

Table 1: Economic Values[7]

Variable	Question No. in EVS	Question
Left-right	E033	Self-positioning in political scale. 1= left, 10 = right
Income_inequality	E035	1 = Incomes should be made more equal, 10 = We need larger income differences as incentives.

[6] https://europeanvaluesstudy.eu/ We use data from years 2017-20 because they are closer to 2015, the year where licensing data was collected as reported by Koumenta and Pagliero (2019).

[7] Some variables have been recoded so that higher values mean pro-market beliefs.

State_private_ownership	E036	1 = Government ownership of businesses should be increased, 10 = Private ownership of business should be increased
Individual_responsibility	E037	1 = The state [WVS: government] should take more responsibility to ensure that everyone is provided for, 10 = Individuals [WVS: people] should take more responsibility for providing for themselves
Competition _is_good	E039	1 = Competition is harmful, it brings out the worst in people, 10 = Competition is good, it stimulates people to work hard and develop new ideas
Labor_union	A067	Member: Belong to a labor union. 1 = Mentioned, 0 = Not mentioned
Confidence_labor_union	E069_5	Confidence: Labour Unions. 1 = none at all, 4 = a great deal

Note: All variables are collected from the European Values Survey (2017-2020).

Table 2.1 shows the descriptive statistics of the economic values and union variables in Europe. Respondents to the survey seem to have a more positive view of competition, and less market oriented responses to the other questions. Perceptions of unions also appear to be somewhat mixed in our sample and just 14% of respondents report belonging to a labor union.

Table 2.1: Europe, Economic Values – Descriptive Statistics

	n	Mean	sd	median	min	max	range
left_right	46755	5.46	2.30	5	1	10	9
income_inequality	56834	5.68	2.89	6	1	10	9
state_private_ownership	53821	5.69	2.57	6	1	10	9
individual_responsibility	56956	5.83	2.78	6	1	10	9
competition_is_good	56227	7.29	2.39	8	1	10	9
labor_union	56938	0.14	0.35	0	0	1	1
Confidence_labor_union	53078	2.23	0.83	2	1	4	3

Note: All data are collected from the European Values Survey (2017-2020).

Table 2.2: USA, Economic Values – Descriptive Statistics

	n	Mean	sd	median	min	max	range
Left_right	2537	5.22	2.52	5	1	10	9
Income_inequality	2574	4.93	2.84	5	1	10	9
State_private_ownership	2573	7.32	2.27	7	1	10	9
Individual_responsibility	2577	5.57	2.97	5	1	10	9
Competition_is_good	2576	7.77	2.15	8	1	10	9
Labor_union	2572	0.08	0.27	0	0	1	1
Confidence_labor_union	2551	2.23	0.78	2	1	4	3

Data are collected from the World Values Survey, Wave 7 (2017-2022).

For comparison purposes we include table 2.2 which include the descriptive statistics for the same variables for the United States. Some differences stand out: *Left_Right* and *Individual_responsibility* are higher in the US. *State_private_ownership*, *Competition_is_good*, and *Labor_union* are notably lower in the US as compared to the EU.

Table 3 shows the aggregate figures of economic values at the country level (averages for 2017, 2018, 2019, and 2020). Note that *Lic_Share* comes from Koumenta and Pagliero (2019). This table shows that Croatia is the country with the largest percentage of licensed workers (31.2%), and Denmark has the smallest percentage (14%). Regarding labor-union membership, the largest percentage is in Denmark (49.6%), and the smallest in Portugal (1.2%). Croatia also has a below average fraction of respondents reporting union membership (9.2%).

Table 3: Economic Values – Aggregate values by Country

Country	*left_ right*	*income_ inequality*	*state_ private_ ownership*	*individual_ responsibility*	*competition_ is_good*	*labor_ union*	*Confidence_lab or_union*	*Lic_Share*
Austria	5.167	4.865	6.182	6.490	7.471	0.122	2.491	0.222
Bulgaria	5.799	6.100	5.103	6.270	7.774	0.078	1.865	0.213
Czechia	5.510	5.074	5.914	6.222	7.896	0.077	2.015	0.244
Germany	4.897	5.615	5.754	6.015	7.621	0.134	2.422	0.329
Denmark	5.252	5.644	6.554	6.583	7.406	0.496	2.636	0.140
Estonia	5.633	6.100	5.937	6.365	7.858	0.024	2.452	0.192
Spain	4.872	5.262	4.873	4.888	6.671	0.057	2.039	0.166
Finland	5.884	5.410	5.941	6.319	7.016	0.405	2.484	0.167
France	5.169	5.061	6.073	6.309	6.514	0.059	2.132	0.160
Great Britain[8]	5.280	5.635	5.675	6.309	7.205	0.100	2.210	0.195
Croatia	5.342	4.873	5.476	5.729	7.759	0.092	1.798	0.312
Hungary	6.039	5.689	6.067	5.664	7.384	0.040	1.952	0.262
Italy	5.600	5.575	5.825	5.519	6.825	0.027	2.036	0.193
Lithuania	5.885	4.651	5.868	6.348	7.006	0.054	2.440	0.175
Netherlands	5.475	5.587	5.574	6.005	6.109	0.167	2.375	0.246
Poland	6.304	7.253	5.109	5.676	7.417	0.049	2.081	0.205
Potugal	5.020	5.068	6.076	6.894	6.954	0.012	2.290	0.165
Romania	5.847	7.470	5.617	6.465	8.192	0.073	2.007	0.217
Sweden	5.481	6.392	6.248	6.622	7.741	0.409	2.545	0.153
Slovenia	4.783	5.658	6.254	6.176	6.865	0.120	1.972	0.202
Slovakia	5.515	4.870	5.417	5.584	7.260	0.045	2.483	0.268

Note: All data are collected from the European Values Survey (2017-2020). Data on licensing comes from Koumenta and Pagliero (2019).

4. Analysis

We now turn to additional comparisons of citizen values and the fraction of licensed workers in each European country. Figure 1 shows the relationship of percentage of licensed workers and percentage of union members. Overall a negative relationship can be observed. A closer look reveals that this relationship is primarily driven by countries like Finland, Sweden, and Denmark where there is a relatively high percentage of labor-union members but a relatively small percentage of licensed workers. Several individual countries (e.g., Lithuania, Portugal, Spain, and France) have low fractions of licensed workers and low unionization rates.[9]

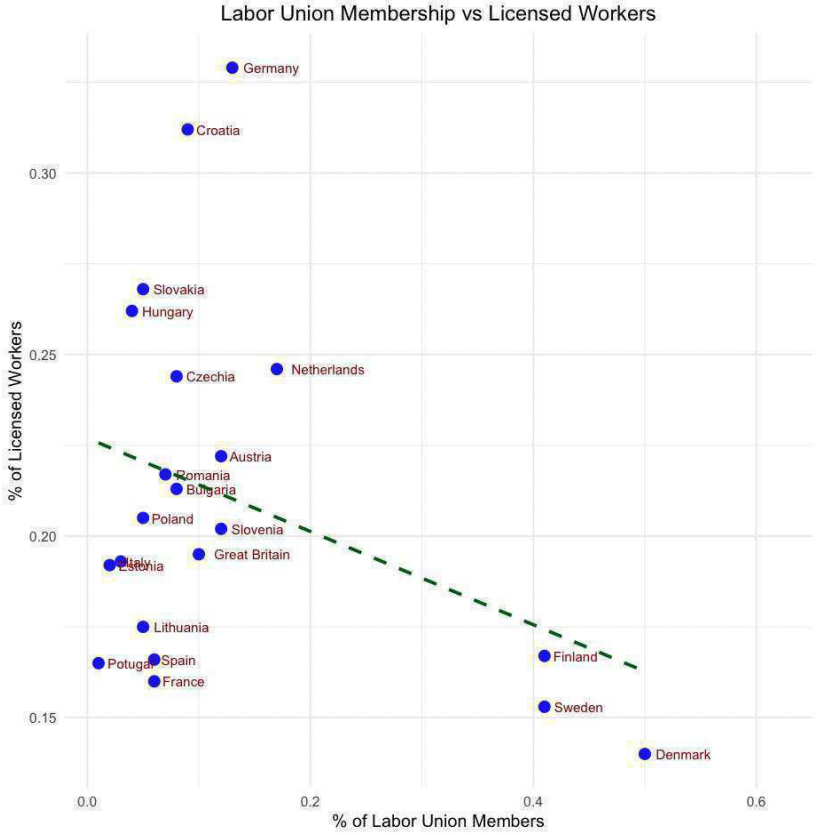
It is important to note that occupational licensing and unionization share an important feature with respect to their impact. For unions, many workers (in some cases nearly all) may be eligible for collective bargaining even if they do not belong to a union. The benefits of licensing may also

[8] Lic_Share data are for the United Kingdom. Data for the rest of the variables are for Great Britain.

[9] We also estimated the relationship between licensing and alternative measures of licensing using International Labour Organization and Organisation for Economic Co-operation and Development data on union membership. The results are very similar.

accrue to workers that do not attain the license. In other words, we can distinguish between licensing "attainment"—whether a worker has a license—and licensing "coverage"—whether workers benefit from the licensing law (Deyo et al. 2018). We are not able to observe licensing coverage in our data, only licensing attainment. For this reason, we focus our attention on the relationship between licensing attainment and union coverage.

Figure 1: Licensing and Union membership in EU countries



Note: All data are collected from the European Values Survey (2017-2020). Data on licensing comes from Koumenta and Pagliero (2019).

We now turn to European views of the market. Table 4 presents our main results. There is a negative relationship between Lic_Share and the different economic values, with one exception (*competition_is_good*). There is also a negative correlation between *Lic_Share* and *labor_union* and *confidence_in-labor_union*. These correlations are not statistically significant at the 10 percent level of confidence.

Table 4: Correlation Table

	left_right	*income_inequality*	*state_private_ownership*	*individual_responsibility*	*competition_is_good*	*labor_union*	*confidence_labor_union*	*Lic_Share*
left_right								
income_inequality	0.453* *(.039)*							

state_private_ownership	-0.225 *(.327)*	-0.196 *(.394)*					
individual_responsibility	-0.045 *(.845)*	0.074 *(.749)*	0.655*** *(.001)*				
competition_is_good	0.288 *(.206)*	0.412 *(.063)*	0.015 *(.947)*	0.257 *(.260)*			
labor_union	-0.047 *(.839)*	0.089 *(.700)*	0.465* *(.034)*	0.360 *(.109)*	0.043 *(.852)*		
Confidence_labor_union	-0.098 *(.672)*	-0.163 *(.479)*	0.455* *(.038)*	0.422 *(.057)*	-0.100 *(.667)*	0.553** *(.009)*	
Lic_Share	-0.011 *(.964)*	-0.109 *(.638)*	-0.286 *(.210)*	-0.345 *(.126)*	0.282 *(.215)*	-0.345 *(.126)*	-0.288 *(.206)*

Computed correlation used Pearson-method with listwise-deletion.
p-values are in parenthesis.

Note: All data are collected from the European Values Survey (2017-2020). Data on licensing comes from Koumenta and Pagliero (2019).

5. Conclusion

In this paper, we make a first attempt at trying to better understand the political motivations for licensing in Europe. Using a single cross section, we observe a negative relationship between unionization and occupational licensing. Admittedly, this effect is primarily driven by Finland and Sweden that have very high unionization rates and very low fractions of the workforce that are licensed. Some European countries have very low rates of both licensing and unionization (for example, France and Portugal).

The possibility of a tradeoff of licensing aligns with time series analysis of the United States that has shown occupational licensing increasing as unionization declines. This relationship clearly warrants further study.

We also examine citizen attitudes regarding the market and occupational licensing. Here our results are less conclusive. It could be that occupational licensing does not align with typical market or socialist tendencies. Turning to the US again for context, we observe very high numbers of licenses in otherwise economically free states like Texas.[10]

The political underpinnings of occupational licensing are not very well understood and our paper should be considered a first look at this important question using Europe as a case study. Future work might consider analyzing countries with richer datasets that are able to track the evolution of occupational licensing laws over time.

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[10] See the recently published State Occupational Licensing Index by Trudeau and Timmons (2023): https://www.archbridgeinstitute.org/state-occupational-licensing-index-2023/

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