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Do Law Professionals Lack Economic Knowledge?

Field Evidence from Greece¹

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Abstract

The scope of this study is to investigate how legal professionals can benefit from a comprehensive understanding of economic principles and practices, thereby enriching their analytical and decision-making capabilities. For this reason, we use data from a field survey of Greek law professionals practicing mainly in commercial and civil law to conduct rank-ordered logit regression analysis. Our econometric findings signify the LAPET survey's results regarding the lack of economics knowledge in several fields such as economics for business, the functioning of the markets, and competition economics. Furthermore, a gap between perceived usefulness and adequacy reveals a need for enhanced expertise in economics and business methods. Graduate studies in economics and business-related experience increase perceived competence in these areas, while self-employed practice is less beneficial. Our results underline the importance of further education and the role of business professional experience in enhancing lawyers' knowledge of economics and business methods.

Keywords: Law and economics; Survey; Interdisciplinarity; Economics Education; Rank-ordered logit

JEL Codes: A12, A20, A23, C40

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1. Introduction

It has long been recognized that knowledge of economics is valuable for practicing lawyers and other legal professionals. A fundamental grasp of economics aids in understanding issues that frequently arise across many areas of law (Landes and Posner, 1993; Trebilcock, 1993; Kaplow and Shavell, 2002) and in certain fields economic analysis is a crucial component of legal arguments made by both the prosecution and defense. Furthermore, legal professionals engaged in public policymaking regularly encounter economic matters, making economic knowledge essential for evaluating the impact of proposed legislation and regulations (White, 1985).

Economics training can provide lawyers with additional professional advantages in the labor market, often leading to higher earnings compared to lawyers with no formal training in economics (Craft and Baker, 2003; Winters, 2016). However, there is evidence highlighting the need for more training of law students in economics and business methods skills (see for example LAPET, 2024; Coates et al., 2015) along with views by legal scholars and higher education providers that the scope and content of interdisciplinary education for lawyers in economics and other related subjects should be expanded (Hunter, 2022; Weinstein, 1999).

This paper aims to provide insights to law students, law practitioners, and higher education institutions about the value of strengthening interdisciplinarity between economics and legal studies, particularly in areas of economics and business methods deemed more useful based on lawyers' practical experience already highlighted in a previous survey report (see LAPET, 2024).

This would enhance the professional competence and career opportunities of both seasoned and early-career lawyers, yielding benefits that extend to society. Specifically, we investigate -within the Greek context- the degree of usefulness that lawyers and other law professionals attribute to knowledge in various areas of economics and business methods based on their experience, using data from a survey of law professionals. We also explore the perceived (self-assessed) adequacy expressed by lawyers in these areas of economics and business methods and assess the extent to which is influenced by factors such as prior advanced education and professional roles. Our research focuses on lawyers working in private and public organizations as legal advisors and experts, or practicing independently in various areas of private law, who make up most lawyers in Greece.

This study addresses a gap in the literature, where the most valuable economics and business methods skills of lawyers have primarily been examined for those employed by big law firms (Coates et al., 2015). The comparative analysis of lawyers' self-assessed adequacy in economics and business methods and factors that may influence it provides a novel contribution, as this connection has not been previously explored in the literature to our knowledge.

2. Data and Methodology

The analysis draws on data collected from an online survey questionnaire targeting lawyers affiliated with the Piraeus Bar Association (PBA), graduates of the Law and Economics postgraduate program at the University of Piraeus, and lawyers employed by the Hellenic Competition Commission. The survey was conducted from December 2023 to March 2024, including a pilot phase in collaboration with the PBA.

There were 310 responses by lawyers in the survey's questionnaire.² Data includes demographic (sex, age), educational (e.g., possession of advanced degrees, area of postgraduate studies), and professional (e.g., roles as business legal advisors or self-employed lawyers) characteristics of the respondents (see Table A1 in the Appendix). Participants were also asked to rank the following in order of importance: (a) their fields of expertise within private law (selecting up to five out of twelve prespecified fields, ranked 1–5, with 1 indicating the most important and 5 the least), (b) knowledge in areas of economics and business-methods³ they find most useful in their work based on their experience (selecting up to five out of eight prespecified areas, ranked 1–5, with 1 being most useful and 5 least useful), and (c) their self-assessed knowledge adequacy in areas of economics and business-methods (selecting up to five out of eight prespecified areas, ranked 1–5, where 1 reflects the area of highest adequacy and 5 the lowest). Table A2 in the Appendix lists the specific fields of law and areas of economic and business-methods knowledge included in the questionnaire.

The estimates were obtained using the rank-ordered logit model, which was first applied in economics by Beggs et al. (1981) and further developed by Hausman and Ruud (1987) and generalized by Allison and Christakis (1994) to accommodate ties in the rankings.⁴ The rank-ordered logit model is employed to analyze and estimate preferences or perceptions when survey participants are asked to rank a set of alternative items. The model utilizes the entire ranking information provided by respondents, giving insight not only into the top choice but also into how each item

² The survey's total responses were 353, including respondents employed by law firms without being lawyers (paralegals). To deal with possible bias and measurement error in our regression analysis, we keep the responses from lawyers (approximately 88% of the total sample).

³ To facilitate comparisons, we have also included "*Law Office Organization*" as a ranked item, even though it is not primarily a field within economics or business studies.

⁴ The model is also known as the exploded logit model, which was independently developed by marketing researchers (Punj and Staelin, 1978; Chapman and Staelin, 1982).

compares with all others and thus providing more efficient estimates of their preferences (Fok et al., 2012). In a rank-ordered logit model, the probability of observing a specific ranking is determined by an underlying random utility model, which assumes each item has an associated latent utility. Respondents rank items based on perceived utility; however, since this utility cannot be directly observed, the model assumes that items with higher utility are ranked higher than those with lower utility.

Specifically, we assume each respondent ranks J items (e.g., areas of economic knowledge), with R_{ij} representing the ranking given by respondent i to item j . R_{ij} can take integer values from 1 to J , where 1 indicates the highest rank and J the lowest. According to the random utility model, respondent i derives utility from each item j , consisting of a systematic part μ_{ij} and a random part ε_{ij} :

$$U_{ij} = \mu_{ij} + \varepsilon_{ij} \quad (1)$$

If $U_{ij} > U_{ik}$ the respondent assigns greater utility to item j than to k . The random component ε_{ij} is assumed to be independent and identically distributed following an extreme value distribution with probability density function $f(\varepsilon) = \exp\{\varepsilon - \exp(\varepsilon)\}$. In this case, the probability that item j is ranked higher than k is given by $\exp\{\mu_{ij} - \mu_{ik}\}$.

The systematic part μ_{ij} can be expressed as a function of explanatory variables, leading to the equation:

$$U_{ij} = \beta_j x_i + \varepsilon_{ij} \quad (2)$$

where x is a vector of variables describing respondents (e.g., demographic or professional characteristics) that do not vary across items, and β is a vector of coefficients to be estimated. These coefficients vary between items and one of the β_j vectors must be set to 0 to achieve identification (reference or baseline item).

The model assumes the independence of irrelevant alternatives (IIA) which suggests that the relative preference between any two items remains consistent across all other characteristics of the choice set (Allison and Christakis, 1994). The IIA assumption primarily reflects the independence of the ε_{ij} terms across alternative items, though it also relies partly on the assumption of an extreme value distribution for these terms (Allison and Christakis, 1994). However, less-preferred items might be chosen more randomly compared to most preferred ones leading to biased parameter estimates and several procedures have been proposed to address this issue (Hausman and Ruud, 1987; Koop and Poirier, 1994, Fok et al., 2012). We have minimized the potential adverse effects of such randomness by instructing the respondents to select and rank only the top items, as suggested by Chapman and Staelin (1982), and by also limiting the number of items to rank. Furthermore, the survey population consists of highly educated individuals, which suggests that the random selection of least attractive items may be limited.

For each respondent, the random utility model implies the following probability

$$\text{function } L_i = \prod_{j=1}^J \left[\frac{\exp\{\mu_{ij}\}}{\sum_{k=1}^J \delta_{ijk} \exp\{\mu_{ik}\}} \right] \quad (3)$$

where $\delta_{ijk} = 1$ if $R_{ik} \geq R_{ij}$, and 0 otherwise. The model estimates are based on a maximum likelihood procedure and are obtained as maximum partial likelihood estimates of an appropriately specified Cox regression model (Allison and Christakis, 1994).

For a sample of n respondents Eq. (3) implies a log-likelihood of the following form:

$$\log L = \sum_{i=1}^n \sum_{j=1}^{J_i} \mu_{ij} - \sum_{i=1}^n \sum_{j=1}^{J_i} \log \left[\sum_{k=1}^{J_i} \delta_{ijk} \exp(\mu_{ik}) \right] \quad (4)$$

By substituting Eq. (2) in Eq. (4) we can then maximize with respect to β_j coefficient vector. The data are stratified by respondent to calculate likelihoods within respondents and then multiplied across respondents. Our dataset contains ties (e.g., the same rank is assigned to items that are not chosen) that are handled using the method proposed by Efron (1977).

3. Results and Discussion

Table A3 in the Appendix provides estimates of β_j coefficients for respondents' specialization areas within private law. These estimates indicate that most survey participants primarily focus on Commercial, Civil, and Property Law. Other specializations appear less frequently and rank lower, with Criminal, Maritime, and Bankruptcy Law occupying the bottom positions.

Table 1 presents the estimated parameters β_j , their statistical significance and exponentiated values, indicating the usefulness lawyers assign to economics and business methods, as well as their self-assessed adequacy in these areas. Estimates are all in contrast with the reference category "Law Firm Organization". The LR chi-square statistics for the model suggest that respondents' views on the usefulness and adequacy of knowledge across areas differ. On average, lawyers rate knowledge in Economics for Business, The Functioning of Markets and Competition Economics as the most useful. For instance, Economics for Business shows 2.43 times higher perceived usefulness than Law Firm Organization. In contrast, fields like Finance and Accounting, Tax and Insurance, and Business Administration are considered equally or less useful than Law Firm Organization, with Macroeconomics rated as the least useful.

This finding is in alignment with earlier studies (see for example Whaples *et al.*, 1998) and can be attributed to the fact that the legal profession focuses on skills like legal research, reasoning, critical analysis, and communication. Macro-level economic theories, which analyze aggregate factors like national productivity, inflation, and unemployment, are generally not relevant to these tasks. Moreover, legal cases typically deal with micro-level issues (e.g., specific disputes, transactions, or regulatory matters) affecting individuals, corporations, or local governments.

The perceived adequacy of knowledge differs from the usefulness ranking. Economics for Business remains highly rated, but its difference from the reference category is less pronounced, with all other areas below it. This result indicates a need to enhance knowledge in economics and business methods, especially in areas considered highly useful by lawyers. Furthermore, although there are some differences in the ranking, the perceived adequacy of knowledge in economics and business methods does not vary significantly by sex or age, as shown by the Wald chi-square statistics in the estimates presented on Tables A4 and A5 in the Appendix.

Table 1: Lawyer perceptions regarding the usefulness and adequacy of knowledge in areas of economics and business-methods

Areas of economics and business-methods	Usefulness			Adequacy		
	Rank	Coef	Exp	Rank	Coef	Exp
Economics for Business	1	0.89*	2.43	1	0.20**	1.22
The Functioning of Markets	2	0.62*	1.86	4	-0.16***	0.85
Competition Economics	3	0.55*	1.73	3	0.00	1.00
Law Office Organization	4	0.00	1.00	2	0.00	1.00
Finance and Accounting	5	-0.09	0.91	6	-0.37*	0.69
Taxation and Insurance	6	-0.41*	0.67	7	-0.47*	0.63
Business Administration	7	-0.42*	0.66	5	-0.34*	0.71
Macroeconomics	8	-1.47*	0.23	8	-1.15*	0.32
Obs. (respondents-areas combinations)		2,480			2,480	
Number of respondents		310			310	
LR $\chi^2_{(7)}$		594.56			197.82	
<i>p-value</i>		0.000			0.000	

Note: All parameter estimates are in contrast with the reference category (Law Office Organization). *Indicates statistical significance at the 1% level. **Indicates statistical significance at the 5% level. ***Indicates statistical significance at the 10% level. Exponents (Exp) of the numerical values of coefficients indicate the odds of preferring an item over the reference item. The LR chi-square statistic tests the null hypothesis that all the parameters are zero (no differences among the areas of economics and business methods).

Perceived adequacy shows statistically significant variation based on the educational and professional backgrounds of the lawyers. The estimates on Table 2 suggest that holding a postgraduate degree in Economics is associated with higher perceived adequacy, especially in areas like Economics for Business, The Functioning of Markets, Business Administration, and Tax and Insurance, with these differences being statistically significant. Holding a postgraduate degree in Law is associated with significant differences in perceived adequacy only in Macroeconomics. These results underline the role of advanced economic education in enhancing adequacy in key economic and business methods that are deemed valuable to lawyers.

Table 2: Effect of advanced education on the perceived adequacy of lawyers in economics and business-methods

Areas of economics and business-methods	Postgraduate degree in Economics			Postgraduate degree in Law		
	No (=0)	Yes (=1)	<i>Dif</i>	No (=0) ^a	Yes (=1)	<i>Dif</i>
	Coef	Coef		Coef	Coef	
Economics for Business	0.10	0.87*	0.77*	0.09	0.10	0.01
Law Office Organization	0.00	0.00	0.00	0.00	0.00	0.00
Competition Economics	-0.05	0.34	0.39	-0.19	-0.01	0.18
The Functioning of Markets	-0.22**	0.28	0.50***	-0.08	-0.25**	-0.17
Business Administration	-0.48*	0.59**	1.07*	-0.44	-0.49*	-0.04
Finance and Accounting	-0.33*	-0.65**	-0.31	-0.60**	-0.28**	0.32
Taxation and Insurance	-0.54*	0.09	0.64**	-0.40	-0.58*	-0.19
Macroeconomics	-1.18*	-0.93*	0.26	-0.62**	-1.35*	-0.72**
Obs. (respondents-areas combinations)	2,480			2,152		
Number of respondents	310			269		
LR $\chi^2_{(15)}$	221.13			182.29		
<i>p-value</i>	0.000			0.000		
Wald $\chi^2_{(7)}$	26.94			14.46		
<i>p-value</i>	0.000			0.0435		

Note: All parameter estimates are in contrast with the reference category (Law Office Organization). *Indicates statistical significance at the 1% level. **Indicates statistical significance at the 5% level. ***Indicates statistical significance at the 10% level. The LR chi-square statistic tests the null hypothesis that all the parameters are zero (no differences among the areas of economics and business methods). The Wald chi-square statistic tests the hypothesis that there are no differences between groups. ^a Respondents with postgraduate degrees in economics are not included.

Professional experience as a business legal advisor significantly enhances perceived adequacy in main economics and business methods areas. The estimates on Table 3 reveal that, compared to those without this specific role, adequacy in Economics for Business, Business Administration, Competition Economics, and Finance and Accounting is significantly higher.⁵ Conversely, solo lawyer practice primarily strengthens competence in Law Office Organization, which is ranked highest in perceived adequacy but without statistically significant differences from many other areas. Self-employed (solo) lawyers report lower perceived adequacy in Economics for

⁵ This result remains consistent even after controlling for whether the individual holds a postgraduate degree in Economics.

Business, Finance and Macroeconomics, likely due to the broader focus of their legal practice, which contributes to the varied perceptions of economics and business-methods knowledge adequacy across professional roles.

Table 3: Effect of professional role on the perceived adequacy of lawyers in economics and business-methods

Areas of economics and business-methods	Legal Advisor in Businesses			Self-employed (Solo) Lawyer		
	No (=0) Coef	Yes (=1) Coef	Dif.	No (=0) Coef	Yes (=1) Coef	Dif.
Economics for Business	-0.01	0.69*	0.70*	0.39*	-0.02	-0.41**
Law Office Organization	0.00	0.00	0.00	0.00	0.00	0.00
Competition Economics	-0.13	0.29***	0.42**	0.09	-0.11	-0.20
The Functioning of Markets	-0.25**	0.05	0.31	-0.15	-0.18	-0.03
Business Administration	-0.56*	0.15	0.71*	-0.21	-0.50	-0.29
Finance and Accounting	-0.48*	-0.12	0.36***	-0.47	-0.26***	0.21
Taxation and Insurance	-0.49*	-0.41**	0.08	-0.55*	-0.38*	0.17
Macroeconomics	-1.15*	-1.20*	-0.05	-0.94*	-1.43*	-0.49**
Obs. (respondents-areas combinations)	2,480			2,480		
Number of respondents	310			310		
LR $\chi^2_{(15)}$	221.13			217.80		
<i>p-value</i>	0.000			0.000		
Wald $\chi^2_{(7)}$	23.12			19.86		
<i>p-value</i>	0.002			0.006		

Note: All parameter estimates are in contrast with the reference category (Law Office Organization). *Indicates statistical significance at the 1% level. **Indicates statistical significance at the 5% level. ***Indicates statistical significance at the 10% level. The LR chi-square statistic tests the null hypothesis that all the parameters are zero (no differences among the areas of economics and business methods). The Wald chi-square statistic tests the hypothesis that there are no differences between groups.

4. Conclusion

In this paper, we have explored the areas of economics and business methods that are most beneficial for lawyers primarily practicing in Commercial and Civil Law, along with their evaluations of their proficiency in these fields. The most valued knowledge includes Economics for Business, The Functioning of Markets, and Competition Economics. A gap between perceived usefulness and adequacy reveals a need for enhanced expertise in economics and business methods. Graduate studies in economics and business-related experience increase perceived competence in these

areas, while self-employed practice is less beneficial. Our results, which reinforce those of LAPET (2024), underline the importance of further education and the role of business professional experience in enhancing lawyers' knowledge of economics and business methods.

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Appendix

Table A1: Respondents' characteristics

Number of respondents (n)	310
	Percentage
<i>Sex</i>	
Male (=0)	39.35
Female (=1)	60.65
<i>Age</i>	
up to 35	45.48
36 to 45	17.42
46 to 55	22.58
56+	14.52
<i>Education</i>	
Possession of advanced degree* (=1)	81.61
Postgraduate studies in economics (=1)	13.23
<i>Professional roles</i>	
Legal advisor to businesses (=1)	29.68
Self-employed (solo) lawyer (=1)	46.45

*Including postgraduate degrees in Economics and Business.

Table A2: Legal fields and areas of economics and business-methods included in the survey

#	Legal field	#	Area of economics and business-methods
1.	Bankruptcy Law	1.	Economics for Business
2.	Civil Law	2.	Business Administration
3.	Commercial Law	3.	Competition Economics
4.	Consumer Protection Law	4.	Finance and Accounting
5.	Criminal Law	5.	Law Office Organization
6.	Family Law	6.	Macroeconomics
7.	Insurance Law	7.	The Functioning of Markets
8.	Intellectual Property Law	8.	Taxation and Insurance
9.	Labor Law		
10.	Maritime Law		
11.	Property Law		
12.	Public Procurement Law		

Table A3: Ranking of lawyers' expertise within fields of private law

<i>Rank</i>	Legal field	Coefficient	Exponent
1	Commercial Law	1.92*	6.83
2	Civil Law	1.77*	5.85
3	Property Law	1.11*	3.02
4	Insurance Law	0.65*	1.92
5	Family Law	0.63*	1.87
6	Consumer Protection Law	0.61*	1.83
7	Intellectual Property Law	0.55*	1.73
8	Labor Law	0.28***	1.33
9	Public Procurement Law	0.05	1.05
10	Criminal Law	0.00	1.00
11	Maritime Law	-0.58*	0.56
12	Bankruptcy Law	-0.63*	0.53
Obs. (respondents-legal fields combinations)		3,720	
Number of respondents		310	
LR $\chi^2_{(11)}$		837.43	
<i>p-value</i>		0.000	

Note: All parameter estimates are in contrast with the reference category (Criminal Law). *Indicates statistical significance at the 1% level. **Indicates statistical significance at the 5% level. ***Indicates statistical significance at the 10% level. Exponents of the numerical values of coefficients indicate the odds of preferring an item over the reference item. The LR chi-square statistic tests the null hypothesis that all the parameters are zero (no differences among the fields of private law).

Table A4: Lawyer perceptions regarding adequacy of knowledge in economics and business-methods, by sex

Areas of economics and business-methods	Male Coef	Female Coef	Difference
Economics for Business	0.20	0.19	-0.01
Law Office Organization	0.00	0.00	0.00
Competition Economics	-0.04	0.02	0.06
The Functioning of Markets	0.04	-0.29***	-0.33***
Business Administration	-0.46*	-0.27*	0.19
Finance and Accounting	-0.51*	-0.28*	0.23
Taxation and Insurance	-0.56*	-0.41*	0.15
Macroeconomics	-1.03*	-1.24*	-0.21
Obs. (respondents-areas combinations)	2,480		
Number of respondents	310		
LR $\chi^2_{(15)}$	209.13		
<i>p-value</i>	0.000		
Wald $\chi^2_{(7)}$	11.37		
<i>p-value</i>	0.123		

Note: All parameter estimates are in contrast with the reference category (Law Office Organization). *Indicates statistical significance at the 1% level. **Indicates statistical significance at the 5% level. ***Indicates statistical significance at the 10% level. The LR chi-square statistic tests the null hypothesis that all the parameters are zero (no differences among the areas of economics and business-methods). The Wald chi-square statistic tests the hypothesis that there no differences between groups.

Table A5: Lawyer perceptions regarding adequacy of knowledge in economics and business-methods, by age group

Areas of economics and business-methods	Age group			
	up to 35 Coef	36-45 Coef	46-56 Coef	56+ Coef
Economics for Business	0.29**	0.16	0.26	-0.11
Law Office Organization	0.00	0.00	0.00	0.00
Competition Economics	-0.02	0.19	-0.07	-0.07
The Functioning of Markets	-0.37**	0.03	-0.07	0.13
Business Administration	-0.48*	-0.13	-0.28	-0.26
Finance and Accounting	-0.35**	-0.50**	-0.34***	-0.35
Taxation and Insurance	-0.56*	-0.34	-0.43**	-0.37
Macroeconomics	-1.32*	-0.88*	-1.50*	-0.61**
Obs. (respondents-areas combinations)	2,480			
Number of respondents	310			
LR $\chi^2_{(31)}$	223.69			
<i>p-value</i>	0.000			
Wald $\chi^2_{(21)}$	25.54			
<i>p-value</i>	0.225			

Note: All parameter estimates are in contrast with the reference category (Law Office Organization).
 *Indicates statistical significance at the 1% level. **Indicates statistical significance at the 5% level.
 ***Indicates statistical significance at the 10% level. The LR chi-square statistic tests the null hypothesis that all the parameters are zero (no differences among the areas of economics and business-methods).
 The Wald chi-square statistic tests the hypothesis that there no differences between groups.