



UNIVERSIDADE CATÓLICA PORTUGUESA

Comparative Analysis of the European Courts

João Francisco Silva Pinho

Católica Porto Business School

Julho, 2024



UNIVERSIDADE CATÓLICA PORTUGUESA

Comparative Analysis of the European Courts

Final Work in Academic Context
presented to Universidade Católica Portuguesa
in order to obtain the master's degree in Management

by

João Francisco Silva Pinho

Under the guidance of
Professora Doutora Maria da Conceição Andrade Silva

Católica Porto Business School

Julho, 2024

1 Acknowledgements

I extend my deepest gratitude to my family, whose unwavering support sustained me throughout this journey despite the geographical distance. Your encouragement and belief in me have been invaluable, and I am profoundly grateful for your love and understanding.

I am indebted to my advisor, Dr. Maria da Conceição Andrade Silva, for her exceptional guidance, unwavering support, and profound insights throughout the entirety of my master's final assignment. Her mentorship has been instrumental in shaping my academic and professional growth. I am truly grateful for the opportunities she provided me to develop my skills and for her continuous encouragement that fueled my perseverance.

I would also like to express my appreciation to the friends I made during my master's program, whose camaraderie and shared experiences enriched my academic journey. Additionally, I am thankful for the friends I have made in my current job outside my home country, whose companionship and support have made my transition smoother and more enjoyable.

To all those who have played a role, big or small, in my academic and personal development, I offer my heartfelt thanks. Your contributions have been indispensable, and I am deeply grateful for your presence in my life.

2 Resumo

O funcionamento eficiente dos tribunais é crucial para garantir a entrega da justiça e manter os padrões legais. Este trabalho explora os fatores que influenciam a eficácia e eficiência dos tribunais, abrangendo taxas de resolução, tempos de disposição, acessibilidade e corrupção percebida.

O estudo visa identificar e abordar desafios como acumulação de processos e acessibilidade limitada que impedem o funcionamento ótimo dos tribunais. Ao formular questões pertinentes e procurando responder às mesmas, ao analisar formas de melhorar o desempenho dos tribunais e através de uma análise abrangente dos fatores que influenciam a eficácia dos tribunais, esta pesquisa contribui para o discurso em curso sobre a eficácia judicial dentro da União Europeia, aprofundando a nossa compreensão sobre a dinâmica do desempenho dos tribunais.

O nosso objetivo primordial é esclarecer de que forma vários elementos afetam a eficácia dos tribunais, com vista a fomentar a confiança pública e garantir resultados legais justos e equitativos.

Palavras-chave: Comparative Analysis, Benchmarking, European Courts, Courts Efficiency, Comparative Impact.

3 Abstract

The efficient operation of courts is fundamental to ensuring the delivery of justice and upholding legal standards. This research delves into the intricate factors that impact court effectiveness, ranging from clearance rates and disposition times to accessibility and perceptions of corruption.

Our study is dedicated to identifying and addressing key challenges such as backlog and limited accessibility, which significantly hinder the optimal functioning of courts. By posing pertinent questions and systematically analyzing the factors involved and answering them, we aim to provide valuable insights into court performance dynamics and contribute to the ongoing conversation surrounding judicial effectiveness within the European Union.

Through a thorough examination of these factors, we seek to draw conclusions on the influence of various aspects on court efficiency, efficacy, and accessibility. By doing so, we strive to foster public trust and promote equitable legal outcomes, ultimately deepening our understanding of court performance dynamics within the European Union.

Keywords: Comparative Analysis, Benchmarking, European Courts, Courts Efficiency, Comparative Impact.

Contents

1	Acknowledgements	v
2	Resumo	vii
3	Abstract	ix
4	Introduction	15
5	Literature Review	17
5.1	Role of the European Court of Justice (ECJ)	17
5.2	Effectiveness of Judicial Systems	17
5.3	Access to Justice	19
6	Methodology	21
7	Data	22
7.1	Raw Data	22
7.2	Metrics	23
7.3	Variables description	24
8	Data Analysis	26
8.1	Legal Expenditure and Clearance Rate	26
8.2	Law professionals efficiency	29
8.3	Incoming Cases: Three Influential Factors	32
9	Regression Analysis	36
9.1	Linear Regression Model Results	36
9.2	Graphic Visualization	38
10	Discussion	40
11	Conclusion	42
	References	45

List of Figures

1	Comparison of Legal Expenditure (% of GDP) with Clearance Rate throughout 2017,2018,2019	26
2	Comparison of Legal Expenditure with Clearance Rate for 2017	27
3	Comparison of Legal Expenditure with Clearance Rate for 2018-2019	28
4	Relationship between Mean Judges and Mean Cases Resolved across 2017,2018 and 2019	30
5	Mean of Incoming Cases by Country (2017 to 2019)	31
6	Average Number of Lawyers per 100,000 Inhabitants by Country (2017, 2018, 2019)	33
7	Fees for a 6000€ and 20000€ claim	33
8	How widespread European Union citizens think the problem of corruption is in their home countries in 2022	34
9	Relationship between Resolved Cases and Perceived Corruption	38
10	Relationship between Resolved Cases and €6000 Claims Fees	39

List of Tables

1	Variable's description	22
2	Scoring System	23
3	Descriptive summary of variables 2017	24
4	Descriptive summary of variables 2018	24
5	Descriptive summary of variables 2019	24
6	Regression Coefficients	37
7	Residuals	37

4 Introduction

This research investigates the efficiency of the European Courts and the factors influencing it, while considering the impact of data availability and consistency.

In any society, the efficient operation of the court system is critical to the administration of justice. A well-functioning judicial system is distinguished by timely case resolutions, fair hearings, and accessibility to justice. This research project intends to conduct a thorough examination of court performance, with a focus on clearance rate, legal expenditures, accessibility, and other relevant factors. Furthermore, it seeks to identify potential barriers to access to justice for specific individuals, such as economic considerations and perceived corruption, among other factors.

The primary objective of this research is to conduct a comprehensive analysis and comparison of the performance of the court system within the designated jurisdiction over a specific time period, with a particular focus on European courts. This analysis will encompass various aspects of court operations, including case clearance rates, to assess the effectiveness of the judicial system. By examining the existing literature and conducting in-depth research, we aim to gain insights into how European courts manage their caseloads and identify areas where potential improvements can be made to enhance their performance, while also considering similar aspects in other jurisdictions.

In the first step, we will investigate how legal expenditure influences case clearance rates within the court system. By examining the correlation between expenditure and clearance rates, we seek to understand how financial resources impact the efficiency of case processing.

In the second step, we will delve into the in-depth analysis of resolved cases across various court levels and categories. By examining resolved cases, we can identify patterns and factors influencing case resolutions, providing valuable insights into the effectiveness of the judicial process. This understanding will be crucial in pinpointing areas that need improvement to ensure timely delivery of justice.

Access to justice is a critical component of a just and inclusive legal system. Thus, the third goal of this research is to assess the accessibility of the court system by looking at the economic barriers that litigants face.

Individuals may be discouraged from pursuing legal recourse due to financial constraints such as court fees, legal representation expenses, and related costs. We also recognize that the perceived independence of courts and the prevalence of corruption significantly impact individuals' willingness to engage with the legal system. Thus, we have chosen to examine access to courts alongside the independence of the judiciary. Additionally, our investigation entails a comprehensive analysis of the incoming cases in each country. We will explore various

influencing factors, including fees, the number of lawyers and judges, and perceived corruption, to gain a deeper understanding of the dynamics surrounding access to justice.

It is important to clarify that we do not delve into the geographical accessibility of courts in this study.

In addressing these objectives, we will answer some pivotal questions, including: “Does spending more on legal matters result in more effective courts?”, “Does increased staffing in courts translate into increased efficiency?”. These questions and other related inquiries will guide our analysis and enable us to draw comprehensive conclusions regarding court efficiency, effectiveness and accessibility within the European Union.

This research will utilize data, from the European Commission for the Efficiency of Justice (CEPEJ) to explore aspects of court performance including clearance rates, processing times, incoming cases and metrics related to the judiciary’s capacity such as the number of lawyers and judges and the percentage of GDP dedicated to expenses. The extensive dataset provided by CEPEJ offers insights into how European courts operate.

Furthermore, to enhance our understanding of the factors affecting court performance and public perceptions of the system, this study will incorporate data from sources like Statista. Statista will offer insights into opinions on court systems in the countries being studied. This includes assessing how citizens view the integrity, transparency, and independence of systems, as well as evaluating levels of corruption within legal frameworks. By combining data from CEPEJ with perspectives from Statista, this study aims to provide a detailed analysis of European court efficiency and effectiveness while also highlighting socio-political influences on public trust in and access to justice.

5 Literature Review

This literature has the objective to contextualize, approach and analyse the multifaceted aspects surrounding the European Court of Justice (ECJ), judicial efficiency, access to justice, and the impact of corruption on judicial systems.

5.1 Role of the European Court of Justice (ECJ)

The European Court of Justice (ECJ) is the highest court in the European Union (EU) and plays a crucial role in ensuring the uniform interpretation and application of EU law across all member states. It has the power to interpret EU law and to provide preliminary rulings on questions of EU law referred to it by national courts.

The European Court of Justice (ECJ) plays a pivotal role in ensuring the uniform interpretation and application of European Union (EU) law across member states. This function is crucial in maintaining legal consistency within the EU, fostering a sense of unity and coherence among diverse legal systems. As Alter (2003) notes, the ECJ's influence extends beyond mere legal interpretation; it shapes the very structure of national legal systems, encouraging a gradual convergence towards a common European legal culture.

The ECJ's role in comparative analysis of European courts is significant. The court's decisions are binding on all EU member states, and its rulings have a direct impact on national legal systems. The ECJ has been instrumental in developing a common European legal culture and in promoting the harmonization of national legal systems (Lenaerts and Gutman, 2015).

5.2 Effectiveness of Judicial Systems

First and foremost, it is crucial to distinguish between effectiveness and efficiency, as they are often conflated. Voigt (2016) defines efficiency as the maximization of output with a given input or the realization of output with minimal input. In contrast, McCormick (1981) describes effectiveness as the degree of success in accomplishing a clearly defined objective.

While the emphasis within court systems is primarily on delivering prompt, transparent, and consistent services to the public, with a natural inclination towards effectiveness over efficiency, it's essential to recognize the significance of incorporating both aspects in our study. Neglecting efficiency could lead to what Voigt (2016) aptly describes as 'promoting the waste of resources.' Therefore, while our focus remains on achieving justice comprehensively and prioritizing outcomes, we acknowledge the importance of optimizing inputs to ensure the judicious use of resources.

The effectiveness of the judiciary, especially in the context of the ECJ, is marked by several key attributes: predictability, timeliness, and public accessibility. These factors not only enhance the

court's functionality but also bolster public trust in the EU's legal framework. As Stone Sweet (2004) articulates, the predictability of judicial decisions is essential in providing a stable legal environment for EU citizens and businesses.

An effective judiciary is predictable, resolves cases in a reasonable time frame, and is accessible to the public (Dakolias, 1999).

A predictable judiciary means that court decisions are consistent, based on established laws, and follow precedents. When the judiciary is predictable, it enhances legal certainty and fosters confidence in the legal system. Citizens and businesses can make informed decisions, knowing that their legal rights and obligations will be interpreted and applied in a consistent manner.

Swift and efficient resolution of cases is essential for a well-functioning judiciary. Delays in court proceedings can lead to backlogs, increased costs, and prolonged legal uncertainty for litigants. Courts with high clearance rates and efficient case management contribute to the timely delivery of justice.

In Lochav and Bhattacharjee (2018), the authors refer that the major cause of diminishing efficiency in judiciary is the lengthy court proceedings. Prolonged court proceedings can deprive individuals and businesses of timely access to justice. For parties involved in legal disputes, delays in court can cause financial strain, emotional stress, and uncertainty. It can also have broader economic and social implications. Businesses may face obstacles in planning and decision-making, being the justice system delays indicated as the top concern of a firm (Pereira and Wemans, 2017).

According to the CEPEJ, efficiency is one of the key objectives of justice systems, along with quality and independence. To measure efficiency, the CEPEJ uses two main indicators: the clearance rate (CR) and the disposition time (DT). The CR is the ratio of resolved cases over incoming cases in a given period, while the DT is the average length of time needed to resolve a case. A high CR indicates that a justice system is able to cope with its workload, while a low DT indicates that a justice system is able to deliver justice in a timely manner (CEPEJ, 2022).

While the CEPEJ categorizes clearance rate (CR) and disposition time (DT) as efficiency measures within justice systems, it's notable that these metrics do not directly account for inputs, which are essential for a comprehensive assessment of efficiency. Efficiency typically involves the optimization of inputs to maximize outputs, a dimension absent in the CEPEJ's classification. Instead, CR and DT primarily focus on the system's ability to handle caseloads and deliver timely justice, aspects that are more closely aligned with effectiveness rather than efficiency.

According to economic theory, the concept of efficiency is to produce the maximum output through the minimum input - this means being able to treat the maximum number of cases

with the smallest resources of people and capital. This concept can be applied to courts as well, as they aim to resolve disputes in a timely and cost-effective manner. However, efficiency is not the only goal of courts, as they also have to ensure justice, which means delivering fair and impartial decisions that respect the rights and interests of the parties and the society. Justice is not always compatible with efficiency, as it may require more resources, time, and deliberation. Therefore, courts have to balance these two goals and find the optimal level of efficiency and justice that enhances their legitimacy.

5.3 Access to Justice

Access to justice is a fundamental principle in any democratic society. A truly effective judiciary ensures that the legal system is accessible to all individuals, regardless of their socio-economic status or background. But first it is important to understand as (Rhode, 2000) mentions, what does meaningful access to law imply?

The concept of meaningful access to law is crucial to promoting the rule of law and ensuring that the legal system is accessible to all citizens, regardless of socioeconomic level or background. It is a key principle in any democratic society.

Accessibility involves various factors, such as physical access to court buildings, affordability of legal services, availability of information, and the ease of understanding legal procedures. Judicial services should be a non-excludability good, meaning no one should be excluded from any judicial services meaning if one person or firm files a case it does not reduce the opportunity for another person to file cases (Lochav and Bhattacharjee, 2018).

Access to justice is defined as the ability of both victims and accused to seek and obtain redress through the formal or informal legal system in an accessible, affordable, timely, and just manner, regardless of sex, age, socio-economic status, mental or physical capacity, or ethnicity (White et al., 2018).

However, for low-income individuals, access to justice can be particularly challenging due to factors such as the cost of legal services, lack of information about their rights and how to exercise them, and physical distance from court facilities (Manuel and Manuel, 2021). Justice has been viewed as the antithesis of poverty since a lack of access to it prevents people and communities from standing up for their rights and fighting injustice (Stevenson, 2014). These are not the only factors to keep in mind when studying the performance of the courts, being the planning of number of judges a key factor as well (Beenstock and Haitovsky, 1999).

Corruption can also affect the accessibility of the courts, which refers to the ability of people to seek and obtain justice through the judicial system. According to (Pahis, 2009), corruption can create barriers to access such as high fees, bribes, or favoritism, which can discourage or

exclude potential litigants from pursuing their cases. Corruption can also reduce the trust and confidence of the public in the judiciary, which can affect their willingness to use the courts as a means of dispute resolution.

A judiciary without honesty has little chance of executing constitutional duties, no matter how many rules of ethics exists (Pahis, 2009).

Corruption violates the principles of justice and grants certain people advantages over others. There is little evidence that countries can simply or even at all escape the curse of corruption (Uslaner, 2008).

Corruption in courts is a complex issue that can have significant impacts on their efficiency and accessibility. It can also undermine the rule of law, human rights, and democracy in a country.

According to Jennet (2014) , corruption in courts can take various forms, such as bribery, nepotism, favoritism, extortion, influence peddling, and judicial misconduct. Some of the causes of corruption in courts are the lack of transparency, accountability, and independence of the judicial system, the low salaries and poor working conditions of judges and other court personnel, the high demand for and low supply of justice services, the weak enforcement of anti-corruption laws and regulations, and the cultural and social norms that tolerate or encourage corrupt practices. The consequences of corruption in courts are manifold and detrimental to the society at large.

6 Methodology

The methodology that will be followed in this research is a quantitative approach to investigate the efficiency of European Courts and the factors influencing their performance, with a specific focus on clearance rates, legal expenditures, accessibility to justice, and potential barriers faced by litigants.

Data Collection

Quantitative data was collected from official records and databases such as CEPEJ and Statista for the designated jurisdiction over the period from 2017 to 2019 and data from 2021 and 2022. The data includes information about the factors that impact court effectiveness, efficiency, and accessibility.

Data Analysis

Quantitative data was analyzed using statistical tools such as descriptive statistics, regression analysis, and data visualization techniques, with a primary focus on RStudio for data organization, arrangement, regression modeling, and plot generation in our analysis.

The comprehensive understanding of the efficiency of European Courts, the factors influencing their performance, and the challenges faced by litigants in accessing justice, as obtained through the approaches employed in this research, will serve as a crucial foundation for further analyses. The insights gained from this study will enable us to construct a resilient framework for evaluating courts performance, focusing on identifying the factors contributing to both effective and ineffective court systems.

7 Data

7.1 Raw Data

The dataset employed in this study is sourced from the 2021 Justice Scoreboard quantitative factsheet, study prepared by CEPEJ. It compiles data related to legal proceedings in 27 different European countries, covering the years 2017 to 2019. Key aspects included in this dataset are the influx of new cases, duration for resolving cases, clearance rates, expenditure on legal courts, and the count of legal professionals, namely judges and lawyers. Moreover, the dataset also includes information on court fees for different monetary claims, specifically for claims amounting to 6,000 and 20,000 euros, allowing an examination of the financial barriers in accessing legal systems. These fees represent those applicable in 2021. However, for comparative analysis and historical context, we are treating the 2021 fees as representative of those for the years 2017, 2018, and 2019.

In table 1, was compiled a list of the variables under study in our research, along with their descriptions and respective unit measures.

Table 1: Variable's description

Variable	Variable Description	Units of Measurement
InCases	Number of Incoming cases	Cases per 100 inhabitants
DT	Estimated time needed to resolve the cases	In days
CR	Rate of resolving cases	Percentage of cases resolved against incoming cases
Pending	Number of Pending cases	Cases per 100 inhabitants
ExpTotal	Total expenditure on law courts	Per inhabitant / Percentage of GDP
N.JudLaw	Number of Judges and Lawyers	Per 100,000 inhabitants
Court.Fees	Fees to start judicial proceedings	In Euros
Corruption Indicators	Perceived corruption by the population	Scale from "Very rare" to "Very Widespread"
Resolved Cases	Number of Cases resolved	Cases per 100 inhabitants
Cases per Judge	Number of cases resolved single Judge	Cases per 100 inhabitants

In this analysis, we aim to draw pertinent conclusions from a range of diverse indicators, including case flow, disposition time, and incoming cases. It's noteworthy to mention that within our dataset, cases are classified into three distinct categories: non-criminal, litigious and commercial, and administrative. However, for the purpose of this study, we concentrate our analysis on non-criminal cases. This focus is attributed to the substantial volume of available data within this category, offering a more comprehensive basis for obtaining insights and fostering a deeper understanding of the judicial process.

The study also examines the total expenditure on law courts, both as a percentage of GDP and on a per capita basis. This analysis will explore the potential correlation between increased expenditure, court fees, and the efficiency or effectiveness of the judicial process.

The ratio of judges and lawyers per 100,000 inhabitants, will provide insight into the availability of legal professionals in different countries. By correlating this information with case load data and court fee structures, we can gain a deeper understanding of the accessibility and

efficiency of the judicial systems.

To assess case flow, we also consider resolved cases. Resolved cases are calculated as the incoming cases multiplied by the Clearance Rate, providing a measure of the efficiency and case-handling capacity of the judicial systems across different countries. This involves a comparative analysis of the annual number of new cases versus those resolved.

Subsequently, we divided the number of resolved cases by the total number of judges to obtain the cases resolved per judge. This data will help in understanding the distribution and workload of legal professionals, offering insights into whether the current numbers are sufficient to meet the demands of the judicial system.

Observing changes over the years within each country, we can identify trends of improvement, decline, or consistency in judicial processes, funding, and accessibility. Comparing these metrics across the different countries will reveal variations in the structure, efficiency, investment, and affordability of judicial systems.

7.2 Metrics

We also have data regarding corruption indicators, sourced from surveys that gauge public perceptions of corruption in 2022. This data illustrates the percentage of responses, ranging from 'very widespread' indicating a widespread perception of corruption within their courts, to 'very rare', suggesting a minimal perception of corruption.

This data was originally in a qualitative form. To facilitate our analysis, we transformed this qualitative data into quantitative.

To rank the countries from least corrupt to most corrupt we had to calculate an average corruption perception score for each country. We calculated that by assigning a numerical value to each response category, as we can see in Table 2.

Response	Value
Very widespread	5
Fairly widespread	4
Don't know	3
Fairly rare	2
Very rare	1

Table 2: Scoring System

Upon assigning a value to each response, we multiplied the percentage of responses in each category by the assigned numerical value and sum them up. To determine the average score for corruption perception, we divided the total by 100.

7.3 Variables description

We have compiled three tables containing all variables included in our study for the years 2017, 2018, and 2019. These tables provide a descriptive summary of the variables, showcasing measures such as the mean, standard deviation, median, lowest, and highest values. They offer an overview of how the factors are distributed throughout each specific time period, aiding in the interpretation of trends over the designated years.

Table 3: Descriptive summary of variables 2017

	Mean	Std.Dev	Min	Q1	Median	Q3	Max
Cases Resolved per Judge	0.79	1.25	0.14	0.31	0.46	0.68	6.05
CR non crim	1.01	0.046	0.933	0.99	1.01	1.03	1.13
DT non crim	179.25	239.62	22.49	62.843	107.36	163.19	1117.83
Incoming non crim	13.86	11.91	1.77	5.64	9.01	20.35	39.54
Number of Judges per 100 000	21.65	10.36	6.52	11.85	23.89	28.17	43.23
Number of Lawyers per 100 000	150.68	111.45	58.41	78.57	110.91	133.29	443.73
Pending non crim	3.45	2.12	0.97	1.47	2.80	5.93	7.25
Resolved non crim	14.05	12.09	2.01	5.49	8.68	21.17	39.44
Total expenditure on law Courts (% GDP)	0.33	0.12	0.13	0.26	0.30	0.41	0.63
Total expenditure on law Courts (per inhabitant)	71.20	28.64	30.48	52.59	61.03	93.03	129.56

Table 4: Descriptive summary of variables 2018

	Mean	Std.Dev	Min	Q1	Median	Q3	Max
Cases Resolved per Judge	0.78	1.26	0.17	0.26	0.48	0.57	6.05
CR non crim	1.02	0.07	0.92	0.99	1.01	1.04	1.25
DT non crim	163.08	171.55	24.14	61.41	90.74	161.57	736.53
Incoming non crim	13.35	11.78	2.39	5.41	7.54	21.65	39.22
Number of Judges per 100 000	21.82	10.17	6.46	11.90	24.10	28.44	41.66
Number of Lawyers per 100 000	154.81	113.48	58.65	84.96	112.95	138.19	458.04
Pending non crim	3.30	1.93	1.03	1.54	2.82	5.26	6.34
Resolved non crim	13.55	11.80	2.41	5.28	7.95	22.64	39.06
Total expenditure on law Courts (% GDP)	0.33	0.11	0.15	0.26	0.30	0.41	0.61
Total expenditure on law Courts (per inhabitant)	74.15	27.77	40.00	52.44	64.84	96.13	124.94

Table 5: Descriptive summary of variables 2019

	Mean	Std.Dev	Min	Q1	Median	Q3	Max
Cases Resolved per Judge	0.86	1.61	0.17	0.27	0.465	0.69	7.74
CR non crim	0.98	0.04	0.90	0.95	0.99	1.01	1.03
DT non crim	174.71	196.60	18.77	58.65	111.21	157.55	882.36
Incoming non crim	14.54	13.50	2.34	5.43	7.27	22.70	49.28
Number of Judges per 100 000	21.74	10.30	6.40	11.80	24.50	28.20	41.70
Number of Lawyers per 100 000	156.67	116.78	58.10	81.22	114.23	143.65	473.99
Pending non crim	3.59	2.42	1.01	1.52	2.84	4.95	9.78
Resolved non crim	14.24	13.29	2.30	5.38	7.28	22.71	49.55
Total expenditure on law Courts (% GDP)	0.34	0.13	0.14	0.27	0.31	0.41	0.70
Total expenditure on law Courts (per inhabitant)	79.05	27.22	34.47	61.74	71.46	99.12	127.82

The variable Cases Resolved per Judge represents the number of cases handled by each judge per 100 inhabitants. Over the three year period studied the average cases resolved per judge ranged from, about 0.78 to 0.86. There seems to be an uptick in this number from 2017 to 2019. It's worth noting the variability around this average as shown by the deviation. The peak value for cases resolved per judge occurred in 2019 for Denmark.

CR non Crim represents the percentage of non criminal cases among all resolved cases. It demonstrates fluctuations over the years with averages ranging from 0.98 to 1.02. The standard deviation is relatively low indicating proportions over time. The highest CR for non criminal cases was observed in Cyprus in 2018 at 1.249 while the lowest was seen in Poland in 2019 at 0.90.

DT non Crim means the number of non criminal cases resolved by judges. There is a rise in the number of non criminal cases resolved per judge between 2017 and 2019 with figures ranging from around 163.08 to 174.71. The highest recorded value is for Cyprus in 2017, at 1117 whereas Denmark had the value in 2019 with only 18.77.

The average number of Incoming non criminal cases has shown an increase, from 2017 to 2019. The figures range between 13.86 to 14.54 indicating an uptrend. Denmark reported the highest number of non criminal cases in 2019 at 49.28 while Cyprus had the lowest in 2017 at only 1.77.

When it comes to the density of judges per 100,000 inhabitants and the density of lawyers per 100,000 inhabitants both remain relatively stable over the years. The average number of judges ranges from around 21.65 to 21.82 and for lawyers it hovers between 150.68 to 156.67.

The average number of pending non criminal cases shows some variation across different years with means ranging from about 3.30 to 3.59.

The indicator "Total Expenditure on Law Courts, as a Percentage of GDP" reflects the proportion of GDP allocated towards law courts. Across years there has been a range of mean values, from, about 0.33% to 0.34%. Belgium stands out as the country that allocated the percentage of its GDP towards expenses in a single year reaching 70.3% in 2019 while Cyprus had the lowest expenditure in 2017 at just 13%.

8 Data Analysis

Efficiency and effectiveness within legal systems are pivotal for ensuring justice and upholding the rule of law. Therefore, comprehending the factors that influence the performance of courts is crucial. In this section, we delve into the intricate relationship between legal expenditure, judicial resources, and case resolution rates across various countries over a span of three years (2017-2019). By examining data on clearance rates, legal expenses as a percentage of GDP, the density of judicial personnel, and factors influencing the influx of legal cases, we aim to uncover insights into the resource management and operational dynamics of legal systems.

8.1 Legal Expenditure and Clearance Rate

Does spending more on legal matters result in more effective courts?

In this study, we explore the relationship between clearance rates for non-criminal matters and the proportion of a country's GDP allocated to legal expenses over three distinct years. Our goal is to identify any correlations and fluctuations in these metrics, offering insights into the resource management of legal systems.

Prior to delving into the detailed analysis of clearance rates across different years, we present a graphical representation showcasing the mean clearance rates and corresponding legal expenditures for an overall perspective on their distribution.

The Figure 1 was compiled by aggregating the mean Clearance Rates of three different categories, for non criminal cases, for civil and litigious and lastly for administrative cases. Given that we had a single Clearance Rate for a span of three years, 2017,2018 and 2019, we calculated the mean of these rates to derive our variables for a further analysis.

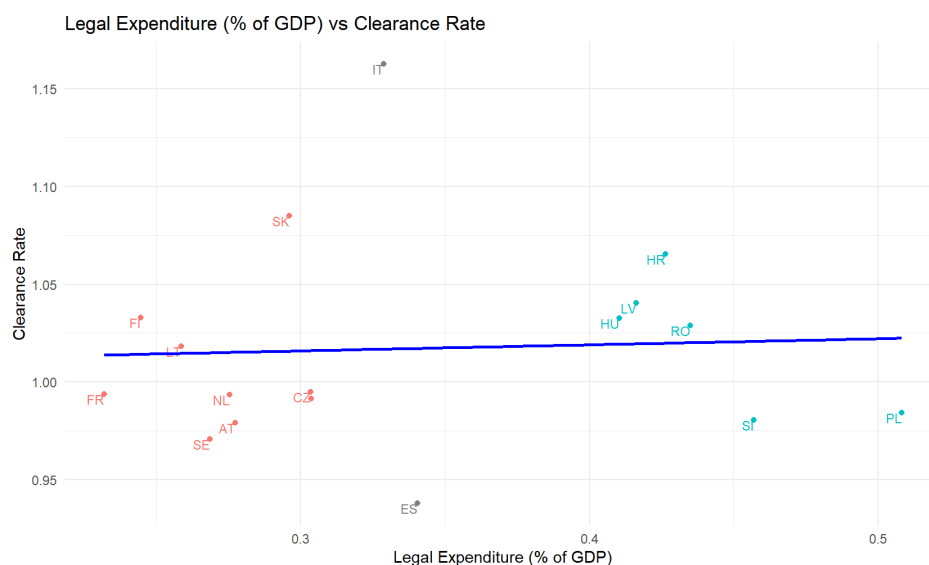


Figure 1: Comparison of Legal Expenditure (% of GDP) with Clearance Rate throughout 2017,2018,2019

As we can see in Figure 1, it is apparent that the majority of Countries are spread in two clusters. The first cluster, countries which allocate between 20 to 30% of their correspondent GDP to legal expenditure and the second cluster allocating between 40 to 50%. Surprisingly, the cluster with the highest percentage expenditure levels has a lower overall Clearance Rate, with an average of 0.997 compared to first cluster with an average of 1.021. Italy and Spain were considered outliers and are not included in any of the clusters.

We are now shifting our focus solely on criminal cases within our dataset due to their higher completeness and relevance, which enhances the quality of our analysis, and the corresponding percentage of GDP dedicated to legal expenses for the years in question. By comparing clearance rates with GDP spending on law for each year analyzed we hope to identify patterns and potential cause and effect relationships that can help us understand how legal systems evolve over time.

The Figure 2 and Figure 3 shows the percentage of Gross Domestic Product (GDP) spent on legal matters on the horizontal axis and the clearance rate for non criminal cases—measured as the ratio of resolved cases to incoming cases—on the vertical axis.

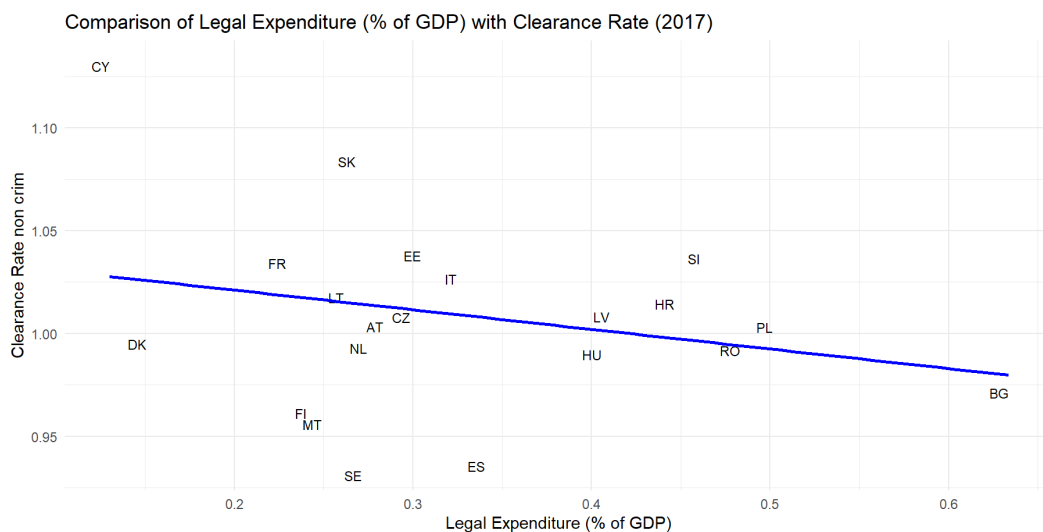


Figure 2: Comparison of Legal Expenditure with Clearance Rate for 2017

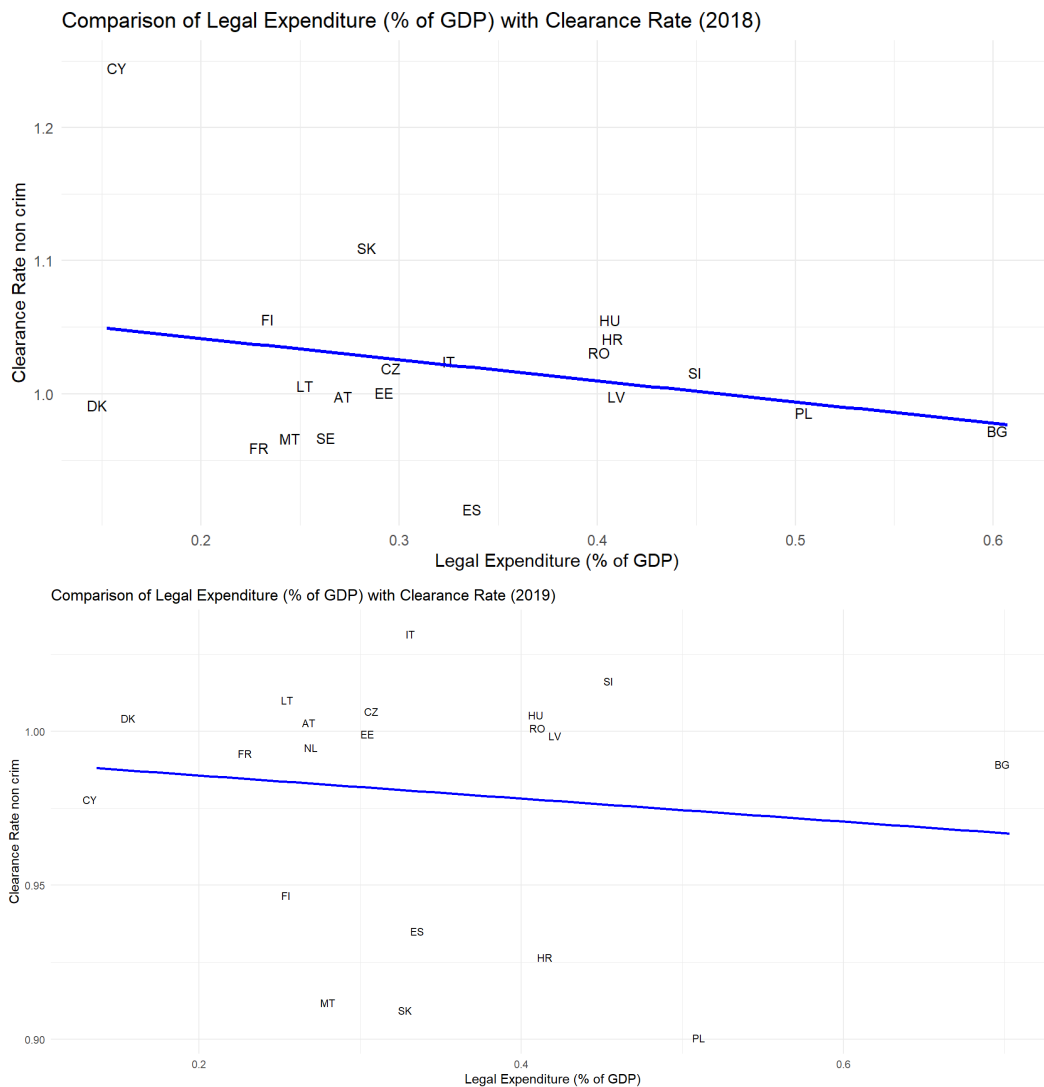


Figure 3: Comparison of Legal Expenditure with Clearance Rate for 2018-2019

While it may initially appear that there is not a linear relationship between legal spending and clearance rates across the countries included in our study, a deeper analysis reveals a negative correlation. Increasing legal expenditure was associated with decreasing clearance rates. However, it's crucial to note that this negative correlation isn't indicative of a straightforward causal relationship. Instead, it's influenced by outliers where some countries with lower legal spending demonstrate impressive clearance rates. Moreover, it's worth noting that the countries that performed the worst are the countries that spent the least in the legal system.

Indeed, while lower spending countries may sometimes perform better, this does not contradict the statement that increasing the legal expenditure could in fact help see an increase in Clearance rate. Instead, it underscores the intricate interplay of various factors. These factors include the effectiveness of expenditure, quality of management, procedural laws, and the socio-economic environment. Thus, while resource allocation plays a role, it is not the sole determinant of clearance rates.

It's crucial to recognize that the effectiveness of a system, measured by its clearance rate is complex. Effectiveness can be influenced by the systems structure procedures in place, training and capacity of staff and broader societal elements like public trust in legal institutions. For instance a country may invest less in its system. Have efficient processes and modern case management technologies that improve performance and lead to higher clearance rates compared to countries, with higher spending but lacking such advancements.

When we look at the data from 2017 to 2019, we can see patterns and changes over time. These patterns help us better understand how legal spending as a percentage of GDP relates to clearance rates for criminal cases in the countries studied.

One notable observation is that there isn't a connection between legal spending and higher clearance rates. For instance Romania saw a decrease in spending as a percentage of GDP from nearly 50% in 2017 to around 40% in subsequent years. Surprisingly during this period Romania's clearance rate for criminal cases actually went up instead of down suggesting that reduced spending didn't negatively impact – and may have even coincided with – improved clearance rates.

On the other hand Poland consistently had legal spending across all three years but didn't see a similarly high clearance rate. This might indicate inefficiencies within the system. Imply that the country faces legal issues that require more than just financial resources to resolve.

Looking at Ireland's data reveals legal spending and clearance rates hinting at a possible connection, between under investment and judicial efficiency. However not all countries follow the pattern. Some nations, with smaller expenses maintain clearance rates similar to those with higher expenditures.

Another key finding is that the distribution of countries based on their clearance rates remains relatively consistent over time without convergence. This indicates that while individual countries may see fluctuations the overall distribution of clearance rates, across the sample remains stable. This suggests that systemic factors and broader legal contexts greatly influence clearance rates.

The absence of a clear positive trend across the data set over the three years indicates that the relationship between legal expenditure and clearance rates is not straightforward. This highlights the importance of delving into how legal systems operate and how resources are managed. Factors such as case handling, the balance of staff to workload technology integration, in legal procedures and public availability of legal services could all be influencing these rates.

8.2 Law professionals efficiency

Does increased staffing in courts translate into increased efficiency?

In Figure 4 we investigate the relationship between the mean number of judges per 100,000 inhabitants per country across all three years and the effectiveness of judicial systems in resolving cases, as measured by the mean number of cases resolved.

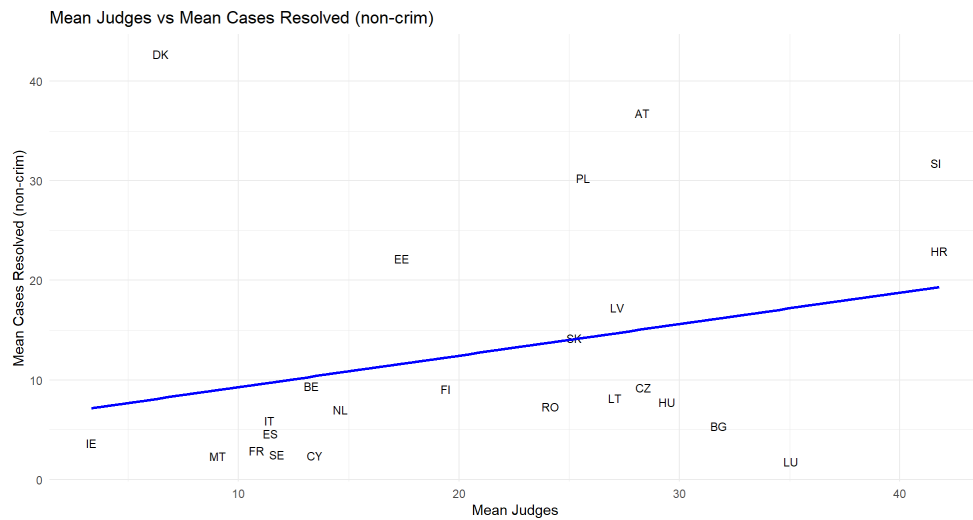


Figure 4: Relationship between Mean Judges and Mean Cases Resolved across 2017,2018 and 2019

It's worth noting that the number of cases resolved pertains exclusively to non-criminal cases. The primary aim is to explore whether there exists any discernible pattern between the density of judicial personnel, represented by the mean number of judges, and the efficiency of case resolution within each country.

Upon closer examination, we observe a striking disparity in the resolution rates across the depicted countries. Denmark ('DK') and Estonia ('EE') emerge as the most notable, suggesting an exceptionally effective judiciary system, having a remarkably low number of judges and a significantly high Resolved Cases .

Conversely, countries such as Luxembourg ('LU'), Bulgaria ('BG'), and Hungary ('HU') present a stark contrast, despite their substantial number of judges. This abundance of judicial resources does not correlate with a proportional increase in resolved cases. While at first glance this could be interpreted as inefficiency or a sluggish legal process, such a conclusion might be premature without a deeper understanding of the context. A low rate of case resolution in these countries could imply a variety of scenarios, including but not limited to:

- i) A deliberative approach to legal proceedings where emphasis is placed on comprehensive and careful adjudication over the speed of case resolution.
- ii) Complex legal matters that require extended time for each case, thus reducing the average number of cases judges can resolve.
- iii) An abundance of resources allocated to judges, allowing them to spend more time on individual cases, aiming for quality and thoroughness in legal decisions.

Moreover, the infrastructure of the judiciary, such as administrative support, budget allocations, and the availability of legal aides, can significantly impact the number of cases resolved. Cultural and procedural nuances within each country’s legal system also play a crucial role. For example, legal systems that prioritize in-depth investigation and analysis of each case may exhibit lower resolution rates but could potentially yield more judicious outcomes.

It is essential, therefore, to approach the data with a nuanced perspective, recognizing that a lower number of cases resolved does not necessarily equate to a less effective judiciary. Rather, it could reflect a system designed to ensure detailed attention to each case. Countries like Luxembourg, with fewer cases resolved per judge, may very well have a judicial system structured to prioritize quality over quantity, ensuring that each case is given the time and attention it requires for a fair and just resolution.

In summary, Figure 4 illustrates a positive linear regression, as anticipated, indicating that an increase in the number of judges correlates with a higher number of resolved cases. However, drawing definitive conclusions requires a more comprehensive analysis. It is imperative to empirically examine the influx of cases in each country. Merely increasing the number of judges may prove futile if there isn’t a corresponding increase in the volume of incoming cases.

To enhance our comprehension, it is imperative to analyze the influx of cases in recent years, as it is shown in Figure 5.

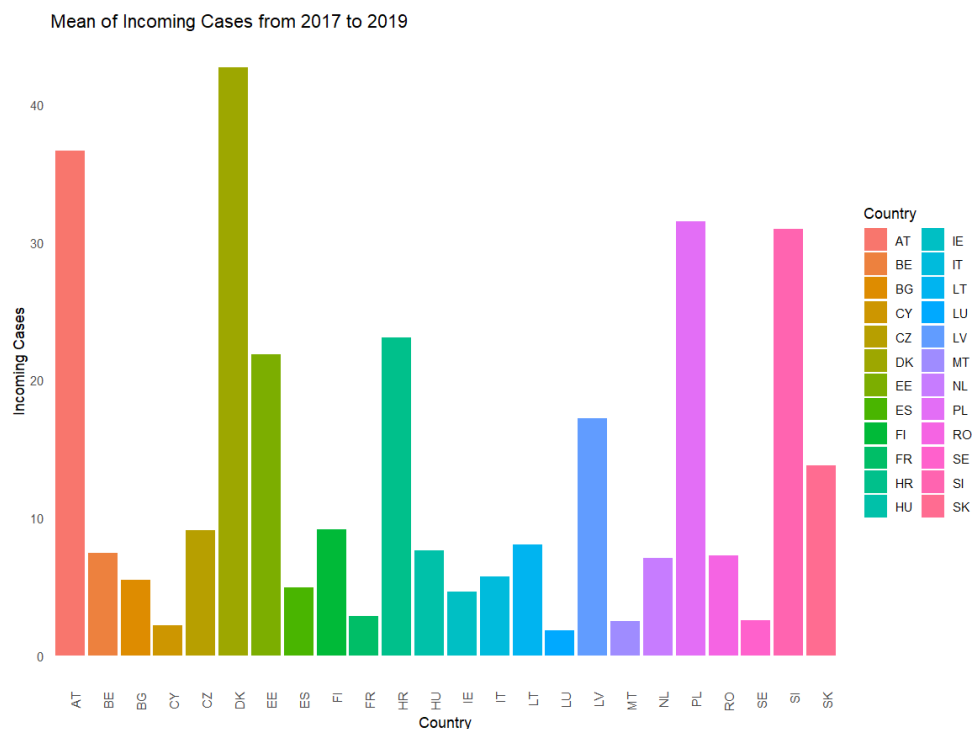


Figure 5: Mean of Incoming Cases by Country (2017 to 2019)

This examination will provide insights into the underlying reasons for the notably low

number of cases despite the high number of judges present, and consequently, shed light on the overall efficiency of the courts.

Studying the incoming cases per 100 inhabitants can offer insights, into how legal systems operate in different countries. It's important to dig into the factors that impact this aspect.

Slovenia stands out due to its number of incoming cases which aligns with our earlier observation of Slovenia having a high average number of judges and a great case resolution, as we can observe in Figure 4. This connection suggests that the country's strong judicial capacity plays a role in attracting a high number of incoming cases.

Denmark again leads with the number of incoming cases, which matches our previous discussions about Denmark having fewer judges but resolving a high number of cases per judge. The substantial influx of cases further highlights Denmark's system.

In contrast Bulgaria falls behind in terms of incoming cases despite having one of the highest averages for the number of judges. This discrepancy helps explain why Bulgaria has a lower-than-expected rate of cases resolved. Our prior observations suggest that Bulgaria's surplus of judges surpasses the demand posed by incoming cases, highlighting inefficiencies in resource management and allocation. This analysis underscores the need for Bulgaria to reassess its judicial infrastructure to ensure optimal efficiency and resource utilization.

8.3 Incoming Cases: Three Influential Factors

There are three factors that could possibly be influencing the number of incoming cases and, consequently, the efficiency metric.

The first factor is the total number of lawyers per 100,000 inhabitants, as it is described in Figure 6.

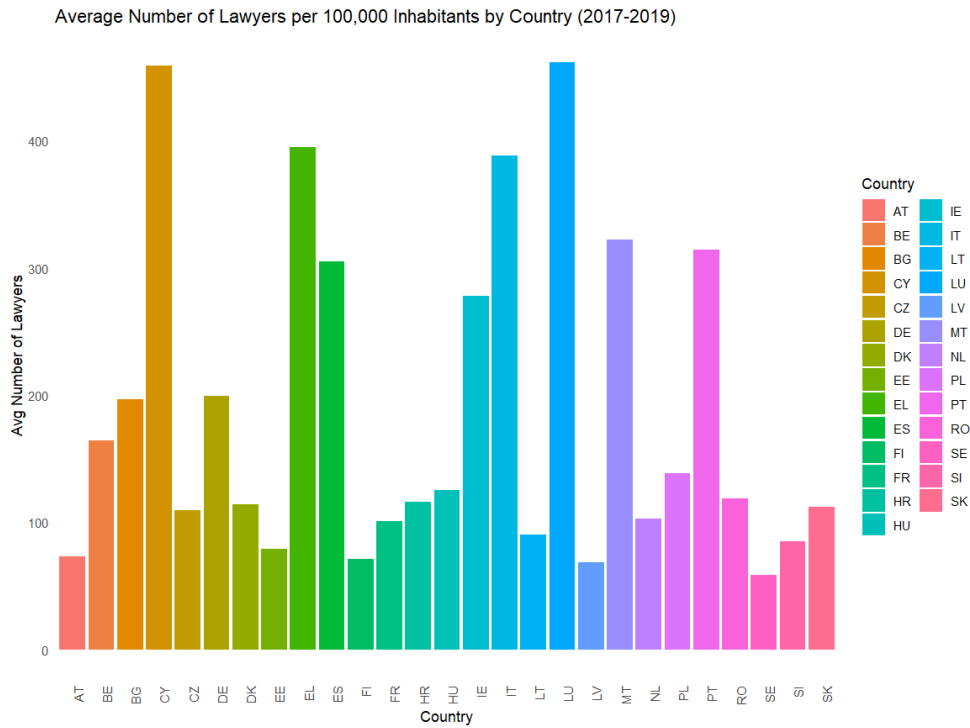


Figure 6: Average Number of Lawyers per 100,000 Inhabitants by Country (2017, 2018, 2019)

A higher concentration of legal professionals may encourage individuals to seek legal recourse, leading to an increase in the number of cases. The accessibility and availability of legal expertise play a crucial role in shaping the legal landscape.

The second factor is the court fees, which determine the cost associated with initiating a case in court, as it is well represented in Figure 7.

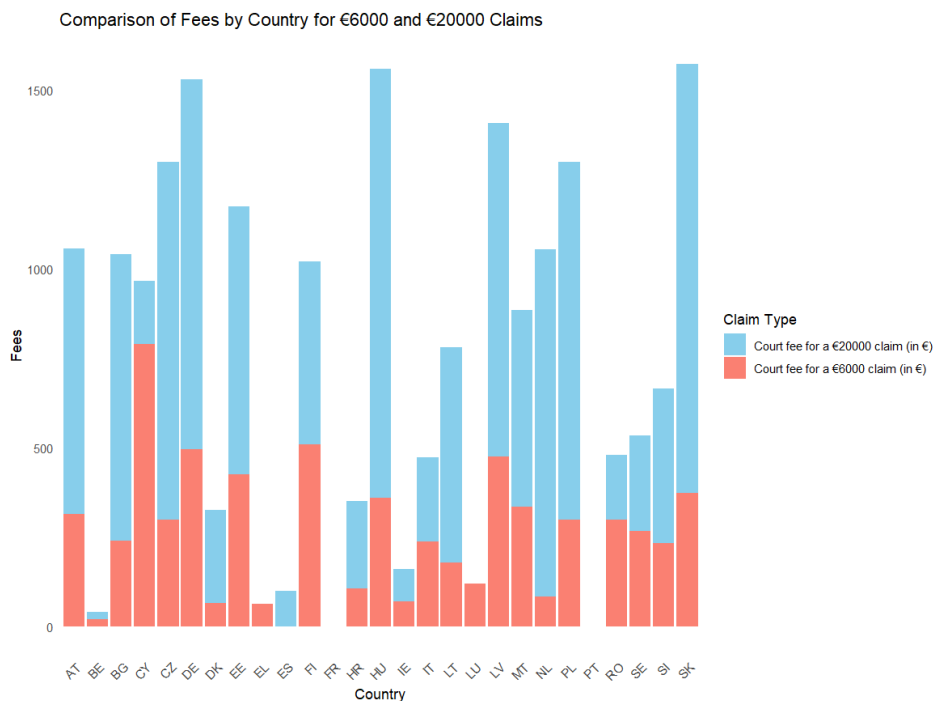


Figure 7: Fees for a 6000€ and 20000€ claim

This aspect is closely tied to accessibility, as the financial burden imposed by court fees may deter individuals from pursuing legal action. In cases where the majority of people cannot afford these fees, it acts as a barrier to accessing the legal system, potentially influencing the overall volume of incoming cases.

The third and equally significant factor is the perception of the legal system by individuals in their respective countries, demonstrated in Figure 8.

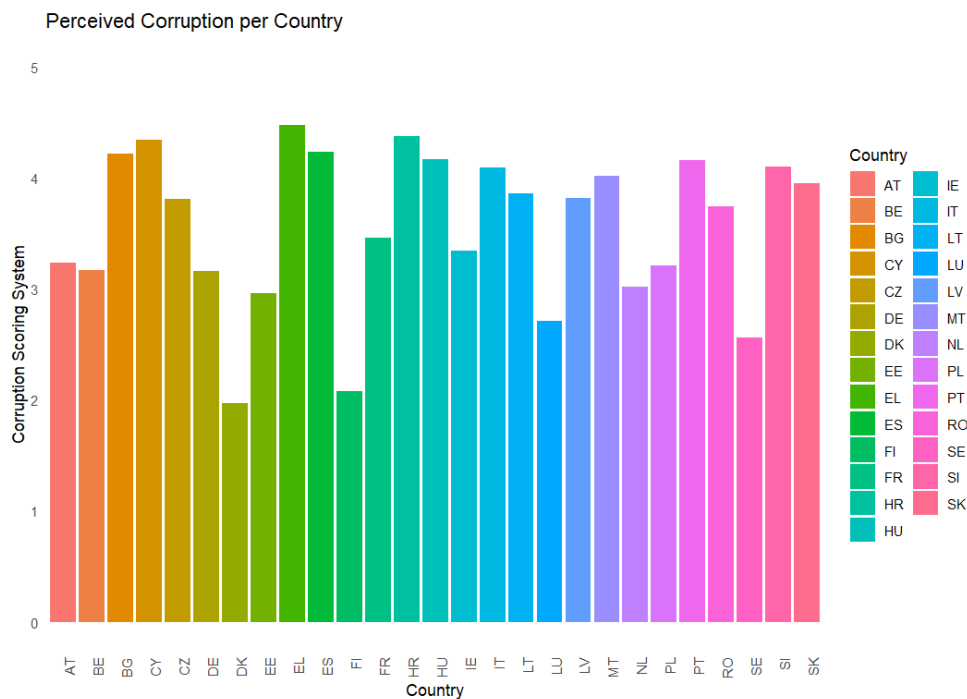


Figure 8: How widespread European Union citizens think the problem of corruption is in their home countries in 2022

If there is a prevailing belief that the legal system is corrupt or lacks fairness, individuals may be less inclined to engage in legal proceedings. This perception can act as a deterrent, as individuals might perceive the legal process as an uphill battle, leading to a lower incentive to navigate through court fees and other procedural hurdles. Understanding how individuals perceive the integrity and fairness of the legal system is crucial in comprehending the dynamics that shape the number of incoming cases and, consequently, the efficiency of the judicial system.

Upon analyzing the graphs, some clear patterns emerge. Slovenia caught our attention initially, given its notable uptick in incoming cases, as it is demonstrated in Figure 5. We aimed to understand how this correlated with its efficiency in resolving cases. Notably, with one of the highest numbers of judges per 100,000 inhabitants, Slovenia efficiently managed its substantial workload. This synergy between a high volume of incoming cases and a sufficient number of judges likely contributed to Slovenia’s impressive rate of resolved cases. Delving into the incoming cases, which were significant, we found an interesting trend. Looking at the three graphs, we observed that the number of lawyers per 100,000 inhabitants in Slovenia is

unexpectedly low, especially given the high number of judges. On the flip side, the fees for a court claim in Slovenia are remarkably low, making it more accessible for people to take their cases to court.

Turning our attention to Denmark and going back to Figure 6, we noticed it had the highest number of resolved cases with relatively low legal expenditure. This naturally leads to one of the lowest counts of lawyers in the dataset. Interestingly, the fees for a 6k case in Denmark are notably high, but for a 20k claim, they are lower. Furthermore, when examining the perceived corruption graph, it becomes evident that Denmark boasts the lowest level of perceived corruption among its citizens. A significant majority believes that corruption is either fairly rare or very rare in the country's courts. This observation aligns with the efficient handling of cases and the judicious allocation of legal resources, suggesting a positive correlation between a streamlined legal system, low legal expenditure, and a high level of public trust in the judiciary.

9 Regression Analysis

As we delve deeper into understanding the intricacies of court performance, it becomes essential to move beyond simple correlations and explore the nuanced relationships between multiple factors influencing the Resolved non crim cases. While our initial analysis provided valuable insights through scatter plots, it's imperative to employ more sophisticated statistical technique to uncover the underlying patterns and assess the significance of various predictors.

In this study, we extend our analysis beyond the simplistic association between the number of judges and cases resolved to include a comprehensive set of variables that may impact court efficiency. By utilizing regression analysis, we aim to untangle the complex web of factors affecting court performance over a three-year period.

We conducted a multiple linear regression analysis using the model:

$$\begin{aligned} \text{lm(Resolved Cases} &\sim \text{Legal Expenditure(GDP)} \\ &+ \text{Judges} \\ &+ \text{Lawyers} \\ &+ \text{Perceived Corruption in Courts} \\ &+ \text{Court fees for a 6000€ claim} \\ &+ \text{Court fees for a 20000€ claim)} \end{aligned}$$

Our study examine the impact of five distinct factors: Legal Expenditure, number of judges per 100 inhabitants, number of lawyers per 100 inhabitants, perceived corruption in courts by the inhabitants in each country and finally court fees.

Through this analysis, we seek to provide insights into the complex dynamics that shape the number of Resolved cases for each country, giving us insight into the effectiveness of those same countries.

9.1 Linear Regression Model Results

Model Interpretation

Regarding the residuals and how well the model fits the regression analysis, observed in Table 6 and 7, we uncovered a number of findings.

The residuals, which represent the deviations between observed and predicted values, were observed ranging from -19.24 to 23.51, with quartiles spanning from -7.75 to 7.06. These

Table 6: Regression Coefficients

	Coef.	Std.Error	p-value
Constant	47.76	7.50	4.70e-08 ***
Total Expenditure on Law Courts (%GDP)	-23.47	14.61	0.11
Number of Judges per 100,000	1.33	0.26	3.45e-06 ***
Number of Lawyers per 100,000	0.07	0.02	0.00649 **
Perceived corruption in Courts	-17.23	3.38	4.68e-06 ***
Court fee for a €6,000 claim	-0.02	0.009	0.02069 *
Court fee for a €20,000 claim	0.004	0.004	0.29330
R-squared	0.46		
Adj R-squared	0.40		
F-statistic	7.50		
p-value	7.612e-06		

Table 7: Residuals

Residuals	
Min	-19.24
1Q	-7.75
Median	-0.41
3Q	7.06
Max	23.51

values indicate a degree of variability around the regression line, a typical observation in such analyses.

When considering the model fit, the adjusted R-squared value, accounting for the number of predictors, was notably high at 0.40. This suggests that approximately 40% of the variability in the dependent variable, resolved cases, is explained by the independent variables included in the model. Similarly, the multiple R-squared value was 0.46, indicating that around 46% of the variability in the dependent variable is explained by the independent variables.

Moreover, the F statistic, which evaluates the significance of the model showed a p value of 7.612e-06 suggesting that the model is significance as a whole.

Variables Interpretation:

After examining the regression coefficients and their significance, as shown in Table 6, multiple intriguing conclusions are revealed. Firstly, the significant factors consist of the number of judges and lawyers, perceived corruption, and court fees for a 6,000€ claim. By analyzing the signs of the coefficients, we can deduce how they affect the outcomes of resolved cases. The total expenditure has a negative coefficient, indicating an adverse impact on case resolution. The negative coefficient for perceived corruption suggests that higher levels of corruption adversely affect case resolution. On the other hand, the fact that judges and lawyers have positive coefficients suggests that an increase in these numbers will result in more cases

being resolved. An increase in fees negatively impacts a claim of 6,000€, as shown by the negative coefficient.

9.2 Graphic Visualization

After careful examination and analysis of the findings acquired via the Regression model, the next step within the framework of the research is to use graphic tools for a graphical representation of the complex relationships between variables. Such graphs are essential for explicating the complex dynamics and inter-dependencies and accents present in the dataset and for grasping the correlations and coefficients between the variables analyzed better.

One of the variables that exerts a notable influence on the Resolved Cases ratio, and emerges as highly significant in our Regression analysis, is the perception of corruption, as it is represented in Figure 9.

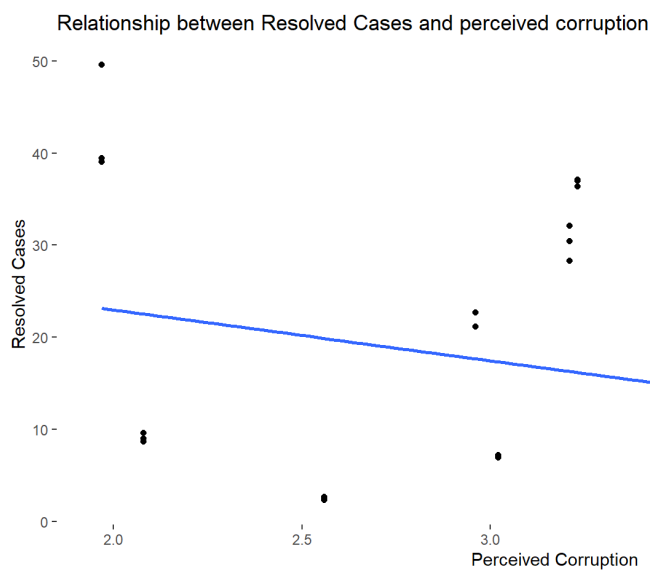


Figure 9: Relationship between Resolved Cases and Perceived Corruption

As evidenced earlier, a higher perception of corruption correlates with a significant decrease in the Resolved Cases ratio. Throughout our study, we have consistently highlighted the perception of corruption as a disincentive to the pursuit of justice, thereby impeding accessibility to the judicial system. Notably, incoming cases flux serves as a pertinent parameter for assessing accessibility, with the Resolved Cases ratio directly impacted by the influx of incoming cases. In contexts where trust in the judiciary is eroded and individuals refrain from utilizing it, a decline in incoming cases is anticipated, consequently leading to an increase in the Resolved Cases ratio. This underscores the intricate relationship between perceptions of corruption, accessibility to justice, and the dynamics of case resolution.

Additionally, our analysis delves into the impact of court fees for a €6000 claim on the

Resolved Cases ratio, as presented in Figure 10.

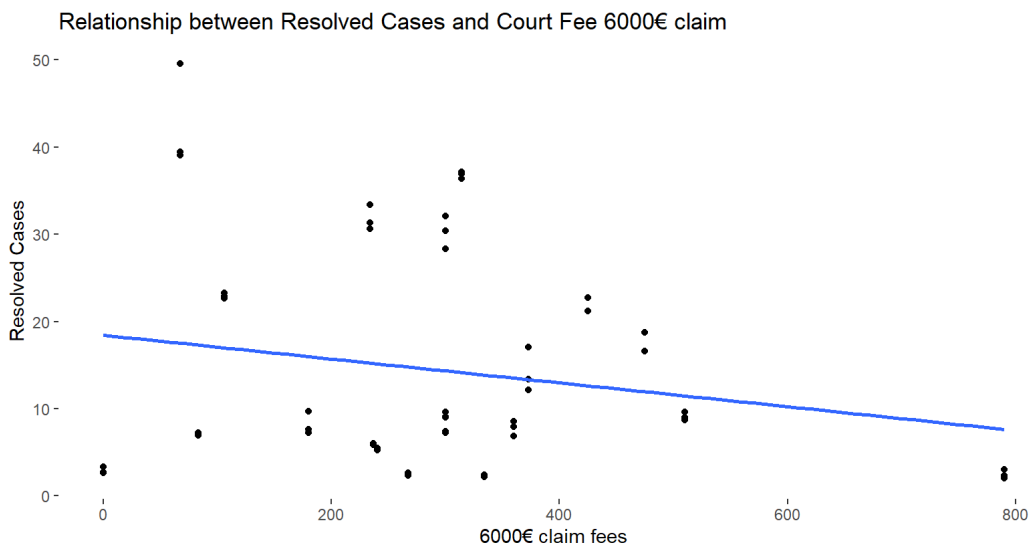


Figure 10: Relationship between Resolved Cases and €6000 Claims Fees

As expected, we observe a negative linear regression trend in our graphical representation, illustrating a decline in the Resolved Cases ratio with escalating court fees. This finding underscores the differential impact of fee adjustments across varying claim values and highlights the nuanced dynamics shaping accessibility and outcomes within the judicial system.

10 Discussion

When examining expenditure clearance rates, the efficiency of law professionals and incoming cases, across countries we discover a complex combination of factors that impact the performance of our judiciary system. It's important to note that there was a negative correlation between expenditure and clearance rates. This underscores the nature of the issue at hand. While financial resources undoubtedly play a role in ensuring a functioning judiciary it's equally crucial to consider how those resources are allocated and utilized.

The analysis suggests that simply having a expenditure doesn't guarantee an equivalent increase in clearance rates. This reinforces the need for an approach to enhance efficiency. The relationship between spending, procedural laws, administrative effectiveness and socio-economic context calls for exploration beyond just financial metrics. It is important to highlight that even though there was a negative correlation, the worst performers in terms of Clearance Rate were still countries with a lower percentage of legal expenditure.

When assessing the efficiency of law professionals based on Resolved Cases, we encounter aspects to consider. A comparative analysis reveals disparities among nations. Denmark and Estonia demonstrate efficiency in this regard while Luxembourg, Bulgaria and Hungary exhibit lower case resolution rates. There are a complexity of factors influencing resolution rates. Even though, an increase in the number of Judges is correlated with a higher resolution rate, that alone is not enough. Flux of incoming cases and the procedural approaches and infrastructure within the system also take part on that matter.

Denmark is an example of management of resources, in the judicial system as they have a low number of judges but still manage to resolve cases efficiently. On the hand, Belgium and Hungary despite having high legal expenditures and judge numbers, seem to struggle with proportionality when it comes to resolving cases. This makes it important to closely examine the factors that contribute to case influx as they are intricately connected to the efficiency of the system.

When we investigate cases we find three factors; the concentration of lawyers, court fees and public perception of the legal system. These elements shed light on how complex dynamics shape the landscape. For example Slovenia experiences an influx of cases due to court fees and ease of access for people seeking justice even though they have fewer lawyers. Denmark's success in resolving cases can be attributed to trust in their system, which is reflected in lower fees for higher claims.

Furthermore corruption perception plays a role in determining how people engage with the system. Despite charging fees for claims Denmark manages to resolve a high number of cases while keeping legal expenditures lower than expected. This suggests that public trust

encourages people to seek solutions when needed. On the hand countries with perceived corruption may experience more case influx since there is a positive relationship between trust, in the legal system and public involvement. Essentially the effectiveness of systems depends on a combination of financial investments, procedural strategies, institutional capabilities and societal trust.

11 Conclusion

In the pursuit of comprehending the multifaceted nature of European court performance, our investigation delved deeply into both numeric and non-numeric factors that underpin the efficiency and effectiveness of judicial systems across Europe.

Throughout our analysis, we meticulously examined the influence of legal expenditure, number of lawyers and judges, court fees, perceived corruption, and other numeric metrics on court performance. While these metrics provide valuable insights into the functioning of judicial systems, our findings reveal a complex landscape, devoid of simple cause-and-effect relationships. Indeed, our exploration highlighted that increasing legal expenditure or employing more lawyers, for instance, does not guarantee improved performance. Instead, we uncovered nuanced correlations that necessitate a deeper understanding of contextual factors.

Our study underscores the importance of recognizing the limitations of numeric analysis alone. Beyond the quantitative realm lie unexplored territories, such as geographical location, socioeconomic disparities, cultural norms, and historical contexts, which significantly impact court performance but were beyond the scope of our investigation. These qualitative dimensions of judicial systems add layers of complexity, requiring a holistic approach to comprehension.

Central to our analysis is the acknowledgment that court performance is not solely determined by financial investments or numeric indicators. Rather, it is shaped by a myriad of factors, including procedural laws, administrative efficiency, public trust and societal attitudes towards the legal system. For instance, our examination of perceived corruption revealed its profound influence on the willingness of individuals to engage with the judiciary, thereby affecting the volume of incoming cases.

Moreover, our comparative analysis across European countries illuminated disparities in court performance, highlighting the need for context-specific approaches to judicial reform. Factors such as legal culture, geographical location and institutional capacity play pivotal roles in shaping the efficacy of judicial systems. Therefore, any endeavour to enhance court performance must encompass a nuanced understanding of these contextual nuances.

As we conclude our work, we emphasize the necessity of continued research and collaboration in the field of judicial studies. By bridging the gap between quantitative analysis and qualitative insight, we can foster a more comprehensive understanding of court performance and pave the way for evidence-based policy reforms. Our thesis serves as a foundational contribution to this ongoing dialogue, offering valuable insights and directions for future inquiry.

In essence, our investigation into European court performance serves as a testament to the complexity of judicial systems. While challenges persist, our endeavours offer a pathway

towards a more equitable and efficient legal landscape for all European citizens.

References

- Alter, K. J. (2003). *Establishing the Supremacy of European Law: The Making of an International Rule of Law in Europe*. Oxford University Press.
- Beenstock, M. and Haitovsky, Y. (1999). The supply of justice.
- CEPEJ (2022). European judicial systems cepej evaluation report.
- Dakolias, M. (1999). Issue 1 yale human rights and development journal article 2 1999 court performance around the world: A comparative perspective, 2 yale hum.
- Jennet (2014). Fighting judicial corruption topic guide.
- Lenaerts, K. and Gutman, K. (2015). 141The Comparative Law Method and the Court of Justice of the European Union: Interlocking Legal Orders Revisited. In *Courts and Comparative Law*. Oxford University Press.
- Lochav, M. and Bhattacharjee, M. (2018). Factors influencing the efficiency of judiciary-a public good provision factors influencing the efficiency of judiciary a public good provision.
- Manuel, M. and Manuel, C. (2021). People-centred justice for all a route to scaling up access to justice advice and assistance in low-income countries.
- McCormick, J. (1981). Effectiveness and efficiency. *The Journal of the Royal College of General Practitioners*, 31(226):299–302.
- Pahis, S. (2009). Corruption in our courts: What it looks like and where it is hidden. *The Yale Law Journal*, pages 1900–1943.
- Pereira, M. C. and Wemans, L. (2017). Productivity in civil justice in portugal: A crucial issue in a congested system. *Banco de Portugal Economic Studies*, 3(1):1–29.
- Rhode, D. L. (2000). Access to justice. *Fordham L. Rev.*, 69:1785.
- Stevenson, B. (2014). *Just mercy: a story of justice and redemption*. new york: Spiegel graun.
- Stone Sweet, A. (2004). *The Judicial Construction of Europe*. Oxford University Press.
- Uslaner, E. M. (2008). *Corruption, inequality, and the rule of law : the bulging pocket makes the easy life*. Cambridge University Press.
- Voigt, S. (2016). Determinants of judicial efficiency: a survey. *European Journal of Law and Economics*, 42(2):183–208.

White, H., Higginson, A., Saran, A., Adona, J., Chukwudozie, A., Taremwa, R. B., Kachero, B., and Zhen, L. (2018). Access to justice for the poor and disadvantaged in low-and middle-income countries: An evidence and gap map (title registration).