

The relationship between private ICT investment and the strength of legal rights indices

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Abstract. Investment in ICT has been identified as an important driver of economic expansion and development. It is yet unclear how ICT affects the legal rights index, which regulates the activities of businesses. The proposal's goal is to examine how private ICT spending compares to the index measuring the robustness of legal rights for companies in Europe and Central Asia. This research proposal will investigate the relationship between private ICT investment and the strength of legal rights indices for companies throughout Europe and Central Asia. Dataset WDI.csv from the World Bank will be utilized for the proposed ICT research. This dataset contains indicators such as the index of the strength of legal rights, fixed telephone customers, and investment in public-private partnerships. R-studio will be used to do the actual analysis of the research findings. The results will help fill gaps in our understanding of how information and communication technologies affect the legal frameworks that govern businesses' operations, and they will inform policymakers and business managers about the value of ICT investment in bolstering the legal rights index and creating a favorable setting in which businesses can thrive.

Keywords: ICT, ICT investment, legal rights

1. Introduction

With the spread of globalization and advancements in technology, international business has become a rapidly changing and dynamic industry. With the expansion of global trade comes a greater requirement for companies to have a firm grasp on the myriad of elements that might influence their productivity and success in different regions [1]. The index of the strength of legal rights is an important indicator of business success since it measures the effectiveness of the legal system in protecting the property rights, enforcing the contracts, and resolving conflicts of a company. It is now widely accepted that investments in ICT play a crucial role in fostering global economic growth and development. However, research on how ICT affects the index of legal rights is still in its infancy [2]. The purpose of this research proposal is to examine the connection between private ICT investment and the index measuring the robustness of legal rights for firms in Europe and Central Asia. Insights into the link between ICT and legal

frameworks governing business operations may be gained by analyzing the effect of ICT on the strength of legal rights index in Europe and Central Asia, which is home to a wide variety of economies.

2. Research Question and Significance

The research question under study is: How does the ranking of legal rights index for companies in Europe and Central Asia change as a result of private investment in information and communication technology (ICT).

There is both theoretical and practical value in this research. Understanding why ICT investment is related to the legal rights index strength is theoretically important. The influence of information and communication technologies on the legal frameworks that regulate the operations of organizations is an area of active theoretical and empirical inquiry. Findings from this research will help policymakers make informed choices about how to strengthen legal frameworks for companies in Europe and Central Asia by shedding light on the elements that affect the strength of the legal rights index in these regions. This study has practical implications since it will educate policymakers and corporate management on how ICT investment may improve the strength of legal rights index, so creating a more welcoming setting for business. Businesses across Europe and Central Asia will benefit from the study's results because they will have a better understanding of the elements that shape the legal environment in which they operate.

3. Literature Review

Investment in information and communication technologies (ICT) has been found to improve a company's productivity and ability to compete in a number of studies. According to research by Lazonick et al (2013), investing in information and communication technologies raises output per worker, which in turn helps the economy expand [3]. Investment in ICT has been shown to increase business productivity in the European Union. These results indicate that ICT investments may have far-reaching effects on the commercial setting. Businesses thrive in a climate where their legal rights are protected. Myovella et al., (2020) argue that a robust legal system is necessary for economic development because it ensures that property rights are safeguarded, contracts are enforceable, and any conflicts can be resolved in court [4]. In addition, the World Bank (2019) notes that a country's legal rights framework is crucial in evaluating its business friendliness. Reduced transaction costs and increased investment are two ways in which legal institutions contribute to economic development [5]. According to these findings, legal protections are fundamental to a successful firm.

Insufficient research has been done to determine how ICT investment affects legal rights. Nonetheless, just a few research have looked at the connection between the two. Investment in information and communication technologies has been shown to increase the legal rights index. The authors argue that ICT has the potential to enhance legal rights by lowering information collecting costs and increasing dialogue between corporations and judicial bodies. ICT has a favorable effect on the quality of governance, which includes legal institutions, according to research by Chowdhury [6]. These findings imply that ICT investment could help in the creation of business-friendly legislative policies. Investment in information and communication technologies has been linked in the literature to the creation of legislative frameworks that are favorable to enterprises. Investment in ICT has been shown to positively affect the legal rights index in the limited number of research that have examined this link. Because of ICT's potential to lower data collection costs and improve communication between corporations and judicial institutions, it may have this effect.

4. Methodology

The proposed research will utilize a quantitative methodology to examine the connection between private ICT investment and an index measuring the robustness of legal rights protecting firms in Europe and Central Asia. The World Bank's World Development Indicators (WDI) dataset will be used as a secondary source for this analysis. More than 1,400 development indicators for more than 200 nations and territories are included in the WDI dataset. A selection of metrics concerning the legal rights index

and private investment in information and communication technologies will be examined. In particular, the following metrics will be examined:

- Index of the protection of individual liberties (0–12)
- The current US dollar value of private ICT investment.

R-studio, an effective data analysis program that facilitates the manipulation and analysis of huge datasets, will be used to perform the analysis. The data will be summarized using descriptive statistics, and the study hypotheses will be tested using inferential statistics. Specifically, we will utilize multiple regression analysis to examine the association between ICT investment, private involvement, and the strength of legal rights index, while accounting for any confounding factors.

5. Testable hypothesis

Property rights, the enforceability of contracts, and dispute resolution processes all need to be safeguarded by the law in order for companies to thrive. It has also been acknowledged that investment in information and communication technology (ICT) is a major factor in the expansion and improvement of economies worldwide [7]. There hasn't been a lot of research done on how ICT affects the legal rights index, notably in the European and Central Asian contexts. Therefore, the purpose of this proposal is to look into the connection between private ICT investment and the index of legal rights strength for companies in Europe and Central Asia.

The following procedures will be used to test this hypothesis:

- **Data Collection:** The study will use the World Development Indicators (WDI) dataset to gather information on the level of legal rights protection and ICT investment with private sector engagement throughout Europe and Central Asia.
- The data will be cleansed, coded, and converted into a form appropriate for statistical analysis in R-studio as part of the data preparation process.
- Analyze the data to find the correlation between private ICT investment and the business legal rights index in Europe and Central Asia using a regression analysis. The independent variable will be investment in ICT with private involvement, while the dependent variable will be the strength of legal rights index.
- The findings of the regression analysis may be used to test the hypothesis. The hypothesis will be supported if the regression coefficient for private ICT investment is positive and statistically significant, indicating that such investment improves the legal rights index for businesses in Europe and Central Asia.
- **Interpretation:** Based on the findings, we'll deduce the nature and magnitude of the correlation between ICT spending and the protection of legal rights. Policymakers and corporate executives will benefit from hearing about the consequences of the research.

Investment in information and communication technologies (ICT) with private sector engagement is the independent variable, while the index of legal rights protection is the dependent variable. Additional variables, such as per capita GDP, political stability, and government efficiency that may affect the connection between the independent and dependent variables will be controlled for. We will utilize a subset of the WDI dataset including European Union member states, Hungary, and Romania to represent Europe and Central Asia.

The regression model will take the following form:

Strength of legal rights index = $\beta_0 + \beta_1$ (Investment in ICT with private participation) + β_2 (GDP per capita) + β_3 (Political stability) + β_4 (Government effectiveness) + ε

Where ε is the Error term, β_0 is the intercept, β_1 is the coefficient of interest, and β_2 , β_3 , and β_4 are the coefficients of the control variables.

An increase in ICT investment is predicted to result in a rise in the legal rights index, as measured by the coefficient of investment in ICT with private involvement, which is predicted to be positive and statistically significant. The statistical significance and predicted signals of the control variables suggest that they, too, contribute to the legal rights index's final value [8]. The purpose of this research is to examine the connection between the strength of legal rights index for companies in Europe and Central

Asia and private investment in ICT with private involvement. While other variables may be taken into account, it is hypothesized that there is a positive correlation between ICT investment and the strength of legal rights index. This study's contribution to our knowledge of how information and communication technology (ICT) affects the legal frameworks that regulate company activities is both theoretically and practically significant. It will also shed light on the relevance of ICT investment in strengthening the legal rights index, creating a more business-friendly climate, for policymakers and business managers.

6. Conclusion

This proposal aims to study the connection between private ICT investment and the index of legal rights' robustness for European and Central Asian firms. Secondary data from the World Bank's World Development Indicators dataset will be analyzed in R-Studio for the proposed research. The study's results will help shape theorization about how information and communication technologies affect the legal frameworks that govern businesses' operations and educate policymakers and business managers on the value of ICT investment in strengthening the legal rights index and creating a favorable setting for commercial activity.

It seeks to illuminate the connection between ICT investment and private involvement, and how this influences the legal rights index strength for firms in Europe and Central Asia. This research aims to shed light on the complex relationship between ICT investment, regulatory frameworks, and company operations by analyzing secondary data from the World Bank's World Development Indicators dataset using analytical tools like R-Studio. The results of this study will have far-reaching consequences. First, they'll help increase our understanding of how information and communication technology (ICT) affects the legal rights index. This research will contribute to the expanding body of literature on the issue by investigating the link between ICT investment and the robustness of legal safeguards for enterprises. Additionally, politicians and corporate managers will benefit greatly from the insights provided by this research. The findings will be helpful to policymakers since they may be used to shape legislation that fosters a prosperous economy. Policymakers may better prioritize activities that promote and facilitate ICT adoption by learning more about the favorable correlation between ICT investment and the strength of legal rights index. The result will be an atmosphere that encourages enterprise development, new ideas, and capital expenditures.

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