

Rule of Law and the interest rate spread

Garry Poluschkin and Robert Kirchner

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Executive Summary

- The COVID-19 crisis and the associated policy easing by the NBU spurred an active discussion on **monetary policy transmission** through the commercial banking sector and its potential hinderances
- In our previous study, we consider determinants of the interest rate spread and find that an improvement of Rule of Law has a statistical significant negative impact on the spread
- In this presentation, we focus on the question which **concrete areas** of Rule of Law are key determinants of the spread
- Our empirical analysis shows the following results with regard to model selection:
 - Models containing “**Absence of Corruption**” and “**Criminal Justice**” have the best model selection criteria
 - These areas are statistically significant and have a negative sign

Policy implications:

- Policy makers should focus their reform efforts on these two areas, as an improvement in these areas has the clearest impact on lowering the spread
- Furthermore, we provide a list of sub-indicators that show in more detail what legal changes are required to improve these areas

Structure

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1. Introduction

Background:

- The National Bank of Ukraine has lowered its key policy rate step-by-step from 18% p.a. in February 2019 to 6% in June 2020, a historic low
- The associated policy easing spurred an active discussion on monetary policy transmission from the key policy rate into the commercial banking sector in Ukraine and its potential constraints
- Rule of Law is usually discussed in the literature as one of determinants of monetary policy transmission
- In our Policy Briefing 09/2020, we show that in a large cross-country sample, Rule of Law has a statistical significant negative impact on the interest rate spread
- The Rule of Law composite index is an unweighted average of eight areas

Purposes of this Technical Note

- Assessing the areas of the Rule of Law index
- Analysing the impact of the individual areas on the interest rate spread, in order to identify their relative importance

2. Rule of Law Index and interest rate spread

Theoretical consideration:

- When the central bank cuts its key policy rate, commercial banks can transmit this change to the real economy by lowering lending and deposit rates
- An increase of the interest rate spread is defined by a smaller decrease of the lending rates than of the deposit rates, leading to an asymmetric pass-through in the commercial banking sector
- One determinant often discussed in the literature is Rule of Law:
 - Leuven and Majnoni (2003) argue that a transparent judicial system can provide a better protection to enforce lending contracts
 - Goel and Hasan (2011) show that corruption as an institutional variable has a strong positive influence on the level of non-performing loans
- Banks knowing these relations will offer high lending rates taking into account rent seeking and risk premia when they operate in an economic environments with a weaker Rule of law

2. Rule of Law Index and interest rate spread

Our previous results:

- In Policy Briefing 09/2020, we show that a Rule of Law Index has a statistically significant negative impact on the interest rate spread. An improvement in the Rule of Law index by 0.1 decreases the interest rate spread by 136 basis points
- We also find that bank market concentration has a statistically significant positive impact on the interest rate spread. A decrease in the share Top-5 banks' assets by 10 percentage points decreases the spread by 160 basis points
- All in all our analysis shows that a reform agenda focussing on institutional factors can incentivise more lending to the real economy, thereby fostering economic growth

Variable	Model 1	Model 2	Model 3	Model 4
Rule of Law (RoL)	-13.98*** (4.27)	-6.90 (7.17)	-9.19 (7.67)	-13.59* (7.83)
GDP per capita [in 1000]		-0.07 (0.06)	-0.06 (0.06)	-0.06 (0.06)
CPI			-0.07 (0.08)	-0.06 (0.08)
Market concentration [in %]				0.16*** (0.04)
AIC	595.36	595.82	597.06	542.40
BIC	600.47	603.48	607.28	554.73
R ²	0.10	0.12	0.12	0.26

Source: Own calculation, *significant at 10%, **significant at 5%, *** significant at 1%

3. Definition of Rule of Law Index

Background:

- The index usually used by the literature is that of the World Justice Project ([World Justice Project, 2020](#)). It ranges from 0 (lowest possible level of Rule of Law) to 1 (t highest possible level) and covers a wide sample of industrial as well as developing economies
- Moreover, it gives a time series overview and allows us to use averages between 2012 and 2018 values to account for outliers

Definition:

- The Rule of Law Index is an unweighted average of eight areas:
 - Area 1: Constraints on Government Powers
 - Area 2: Absence of Corruption
 - Area 3: Open Government
 - Area 4: Fundamental Rights
 - Area 5: Order and Security
 - Area 6: Regulatory Enforcement
 - Area 7: Civil Justice
 - Area 8: Criminal Justice
- Each of these eight areas has in turn a few further sub-indicators, which we do not include separately in our empirical specification

4. Empirical strategy

- To assess which of these eight areas need to receive the most attention, we use the following empirical approach:
- The values of the areas do not allow to insert all eight areas in one model to look for statistical significance as multicollinearity occurs across the areas
- Therefore, we include each of these eight areas in different regression models with CPI, real GDP per capita and bank market concentration and compare the model fit across the models
- All in all, we have eight regression models to be compared:
 - $\Delta i_{i,t} = \beta_0 + \beta_1 \text{area } 1_{i,t} + \beta_2 \text{GDP}_{i,t} + \beta_3 \text{CPI}_{i,t} + \beta_4 \text{MC}_{i,t} + \varepsilon_{i,t}$
 - \vdots
 - $\Delta i_{i,t} = \beta_0 + \beta_1 \text{area } 8_{i,t} + \beta_2 \text{GDP}_{i,t} + \beta_3 \text{CPI}_{i,t} + \beta_4 \text{MC}_{i,t} + \varepsilon_{i,t}$
- The eight regression models are compared by its R^2 , Akaike Information Criterion (AIC) and Bayesian Information Criterion (BIC)

5. Results and policy implications

	R ²	AIC	BIC	Coefficient in the model
Rule of Law Index (2012-2018)	0.2560	542.3986	554.7282	-13.59 (7.83)*
Areas				
1: Constraints on Government Powers	0.2308	545.2991	557.6287	-2.86 (5.97)
2: Absence of Corruption	0.3038	536.6249	548.9544	-14.49 (4.87)***
3: Open Government	0.2288	545.5231	557.8527	.95 (7.20)
4: Fundamental Rights	0.2302	545.3582	557.6877	-2.49 (5.98)
5: Order and Security	0.2511	542.9666	555.2962	-9.01 (5.74)
6: Regulatory Enforcement	0.2609	541.8202	554.1498	-13.26 (7.01)*
7: Civil Justice	0.2630	541.5769	553.9064	-14.43 (7.38)*
8: Criminal Justice	0.2967	537.4999	549.8294	-16.18 (5.74)***

Source: Own calculation, *significant at 10%, **significant at 5%, *** significant at 1%

- The model containing “Absence of Corruption” (area 2) and the one containing “Criminal Justice” (area 8) have the highest R² and the lowest information criterion values
- These areas are also statistically significant and have the expected negative sign
- **As a result, it can be concluded that these two areas of Rule of Law can be highlighted as ones that a respective reform agenda should focus on**

Policy implications:

- Absence of corruption reduces information asymmetry in the negotiation of lending contracts and thus reduces the necessity of risk premia accounting
- Effective criminal justice supports the absence of criminal behaviour in the relation between banks and lenders

5. Results and policy implications

- Each of these two areas has in turn a few further sub-indicators, which give an idea to policymakers on how to improve the performance in these areas
- Absence of corruption consists of the following sub-indicators:
 - 2.1 Government officials in the executive branch do not use public office for private gain
 - 2.2 Government officials in the judicial branch do not use public office for private gain
 - 2.3 Government officials in the police and the military do not use public office for private gain
 - 2.4 Government officials in the legislative branch do not use public office for private gain
- Criminal justice consists of the following sub-indicators:
 - 8.1 Criminal investigation system is effective
 - 8.2 Criminal adjudication system is timely and effective
 - 8.3 Correctional system is effective in reducing criminal behavior
 - 8.4 Criminal system is impartial
 - 8.5 Criminal system is free of corruption
 - 8.6 Criminal system is free of improper government influence
 - 8.7. Due process of the law and rights of the accused
- **All in all, such policy reforms can decrease the interest rate spread**
- **A reduction in the interest rate spread can support a decline of lending costs and foster investment in the economy**

References

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CONTACT

Garry Poluschkin, Project Manager Ukraine
poluschkin@berlin-economics.com

German Economic Team

c/o BE Berlin Economics GmbH

Schillerstraße 59

10627 Berlin

Tel: +49 30 / 20 61 34 64 0

info@german-economic-team.com

www.german-economic-team.com

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