

A comparison of institutional quality in the South Caucasus: Focus on Azerbaijan

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Much has happened in the three countries of the South Caucasus—namely, Azerbaijan, Georgia, and Armenia—since the collapse of the Soviet Union. Political events, institutional reforms, and economic development have resulted in greater economic welfare in these countries after the painful transition period of the 1990s. However, it remains to be seen whether they have achieved any solid results or whether they still have much to accomplish. While the answer is ambiguous, each country has followed a different political, geopolitical, economic, and institutional path and achieved different economic outcomes despite their close geographical proximity to each other. This paper compares the available data on economic and institutional quality in Azerbaijan, Georgia, and Armenia to portray the overall situation in terms of changes in institutional patterns. Then, special attention is given to Azerbaijan, as the country is considered to be oil-rich and thus resource-dependent. A comparative perspective on institutional quality suggests that Georgia has been a leading country in terms of institutions and effective bureaucracy-building, despite having lower economic indicators compared to Azerbaijan. Moreover, while Armenia is positioned between Georgia and Azerbaijan in terms of institutional quality, its economic growth is similar to Georgia's. Lastly, institutional variables (e.g., control of corruption, rule of law, and government effectiveness, and human rights) in Azerbaijan are negatively correlated with oil-related variables. This result aligns with the natural resource curse and Dutch disease theories, which posit that oil boom periods in mineral-rich countries are associated with a deterioration in institutional quality, thereby leading to slower growth. Also, the results are important to build up analytical frameworks to address the Dutch disease or resource curse studies in the case of Azerbaijan in a comparative manner with oil-poor countries even if the scope is limited to the South Caucasian former Soviet Union countries.

Keywords: South Caucasus, Azerbaijan economy, oil boom, institutional quality, correlation analysis

1. Introduction

Azerbaijan, Georgia, and Armenia are located in the most unstable part of the former Soviet Union. Nixey (2010, 125) described this region as follows: “existing at the intersection of Europe, Asia, and the Middle East, they share profoundly rooted colonial traumas, Soviet-era poor practice, economic mismanagement, inequality, societal challenges, dysfunctional governments, contradictory impulses towards authoritarianism and change, inter-ethnic discord, boundary tensions, and many low-intensity (or 'frozen') wars.” From an economic standpoint, De Waal (2012) called the South Caucasus a “broken region” due to the countries' lack of economic integrity to address chronic poverty, isolation, and interethnic majority–minority issues. Similarly,

Korganashvili et al. (2017) argued that, despite the many transformations—economic, political, and institutional—that have taken place in the South Caucasus, these have failed to yield any solid results, as the region remains one of the most problematic in the world. However, despite its long-standing image as an unstable or “broken” region, the South Caucasus holds considerable economic, political, and geographic importance.

The South Caucasus became a regional hotspot after the dissolution of the Union of Soviet Socialist Republics (USSR) in 1991 due to economic collapse, conflict, and a sudden deterioration in living standards (Matveeva 2002). Azerbaijan, Georgia, and Armenia experienced an increase in income inequality at the beginning of the transition period and a slowdown in economic decay in the late 2000s (Aristel and Perugini 2012). Aristel and Perugini (2012) attribute economic slowdowns to the transition from a command economy to a market economy. Although the economic downturns slowed in the early 2000s, a middle class formed in the region over a period of only eight to nine years. According to Roberts and Pollock (2011), members of this middle class became well-educated, and extensively employed by the public sector.

Each country followed a different pathway of economic, political, and institutional development. According to Simão (2011, 34), “the end of physical and intellectual isolation” after the break-up of the Soviet Union enabled the South Caucasian countries to perceive their strategic value to neighboring regions, including the European Union (EU), the Middle East, and Asia. Notably, Azerbaijan engaged in cooperation with Turkey, the EU, the United States, and Middle Eastern countries; Georgia fostered ties with Europe and the United States; and Armenia established economic and political partnerships with Russia (Pismennaya et al. 2017). After initial geopolitical routes were established, the strategic position of the South Caucasus led various stakeholders to implement international projects, which in turn increased the region’s energy transit role. More specifically, the region’s economic importance increased after the implementation of energy projects led by Azerbaijan and Georgia, which conveyed Azerbaijan’s energy resources to world markets (Nixey 2010).

The integration of the South Caucasus regional market and global markets has taken place since the late 1990s. For instance, economic projects such as the Baku–Tbilisi–Ceyhan (BTC) oil pipeline and the Baku–Tbilisi–Erzurum (BTE) gas pipeline have increased ties between Azerbaijan, Georgia, and Turkey (Cornell and Ismailzade 2005). In addition, the South Caucasus gained importance as a transit hub between Europe and Asia with the establishment of transportation projects such as the Baku–Tbilisi–Kars railroad (Lussac 2008). China’s Belt and Road Initiative (BRI) also increased the role of the South Caucasus as a recent economic initiative (Kohli et al. 2019). Chang et al. (2013) reported that, as part of increasing economic and political globalization, Azerbaijan’s high energy exports, which also integrated Georgia and Turkey into international commodity markets, have led to greater economic growth in the South Caucasus. Although the South Caucasus has undergone rapid transformation and economic growth, conflicting realities have contributed to an ambiguous impression of the countries’ real economic capacity and long-term sustainable prospects.

Despite Azerbaijan’s wealth from oil resources, democratization in Georgia, and support from a large diaspora and various aid programs in Armenia, poverty remains widespread in the South Caucasus 20 years after the collapse of the Soviet Union (Pearce et al. 2011). Furthermore, separatism has negatively impacted the

regional economy (Malek 2006). Despite the geographical proximity of the region's countries, wars and intercountry political disagreements disintegrated the region. Moreover, demographic shrinkage and unemployment are widely observed phenomena in the South Caucasus. Thus, solutions to the conflict resulting from country-specific realities, such as poverty, unemployment, inflation, demographic shrinkage, and official economic breakthrough, should be sought in institution-building, as institutions have become important determinants of the countries' economic output in recent years.

The role of institutions has been a focal point in development economics since the late 1990s, as it provided an alternative to theories that usually identified a lack of skills, technology, or capital as the source of economic and social problems (Holmberg et al. 2010). "Institutions" refers to the rules of the game and the organizations that enforce, execute, and promote these rules (Arkadie 1989). The quality of institutions determines the flow of foreign direct investments (FDI) and propensity to be corrupt (Yi et al. 2019); the activity level of entrepreneurship (Sautet 2020); innovativeness (Ventura et al. 2019), terms-of-trade volatility, government debt levels, and cost of servicing sovereign government debt (Bergman and Hutchison 2020); urbanization and city growth (Vernon et al. 2007); and economic diversification (Boschma and Capone 2015). In addition, there is a causal relationship between the quality of government, economic strength, and poverty reduction (Holmberg et al. 2010). Thus, the role of institutions in the South Caucasus should be analyzed to identify change patterns, convergences, and responses to the transition process and contextualize the region's economic growth and potential.

The legacy of the Soviet era significantly impacted the institution-building process during the transition period (Alieva 2000). Large-scale Sovietization changed social structures, eliminated traditional means of economic production, and aligned social standards with "Soviet standards" (Aliyev 2015b). "In other words, the Caucasus inherited a number of imperfect civil and state institutions, but the very same system produced politicians capable of acting in the absence of these institutions (Alieva 2000, 26)." Nevertheless, Russia remains highly influential to economic development in the South Caucasus (Silagadze 2019).

However, the region has not only attracted attention due to its economic projects and developments but also due to the war between Russia and Georgia in August 2008, which drew in large powers such as the United States (Nixey 2010). Freizer (2016) argued that the Russo-Georgian war, Russia's annexation of Crimea in 2014, and growing military clashes and tensions between Azerbaijan and Armenia since 2016 have divided the countries' aspirations towards the West. While Georgia is strongly pro-EU and pro-West in terms of institution-building, Armenia has rejected various partnership opportunities in favor of the pro-Russian Eurasian Economic Union, and Azerbaijan retains a balanced foreign policy. Therefore, considering the economic importance of the South Caucasus and the intersection of geopolitical interests, Nixey (2010, 125) viewed Georgia, Armenia, and Azerbaijan as three countries that could "create big problems for great powers" despite their small size. Thus, adopting a wider view of the South Caucasus enables an examination of the role and importance of domestic institutions in addressing economic, political, geopolitical, and military challenges.

According to Freizer (2016), conflicts in the South Caucasus have negatively impacted state-building, human rights, democratic institutions, economic growth, and regional trade. Therefore, economic integration and social and institutional endowments should be ensured to achieve peace and compatibility of the countries in order to enable long-term cooperation (Kupchan 2010). However, this may not be possible without efficient institution-building, which could in turn lead to sub-optimal economic performance. In fact, various researchers have raised concerns about Georgia, Armenia, and Azerbaijan's ability to catch up to developed countries in institutional and political terms.

This paper is based on the concept of change patterns in institutional quality in the South Caucasus, with a special focus on Azerbaijan. However, simple country comparisons are not sufficient to understand the underlying reasons for changes in institutional quality. Therefore, this study also uses correlation analysis to clarify the role of the oil sector in Azerbaijan to gain an insight into the mutual dynamics regarding the institutional variables. As the paper devotes and exclusive attention to Azerbaijan, the novelty of the current work is the correlation analysis which is based on country-specific de-trended data collected from various sources to portray the institutional change patterns in relation to the changes in the main oil-related variables. The research questions are as follows:

1. How has institutional quality in the South Caucasus changed since the collapse of the USSR?
2. What is the relationship between the oil sector-related economic indicators in the Azerbaijani economy and institutional quality?

The main research objectives cover the description and exploration of the institutional quality in the South Caucasus, comparison of the Azerbaijan-specific institutional quality to underlie the correlation with oil-related variables, and argument to evaluate the critical periods of Azerbaijan's institutional changes since independence. The answered questions and results represent an importance for the policymakers and scholars who seek to identify the possible adverse effects of the booming oil sector in the Azerbaijani economy. Therefore, institutional differences among the oil-rich and oil-poor countries in the region might reflect the further actions of the Azerbaijani government to overcome the policy failures to prevent the rent-seeking behavior or rentier state model that lacks sustainable long-term economic growth and development. Also, the diversification problem that occurs unfruitfully can be related to the institutional quality issues.

The paper is organized as follows: Section 2 describes data characteristics, data sources, and methodology; Section 3 presents the results from a comparison between Georgia, Armenia, and Azerbaijan and an Azerbaijan-specific analysis; Section 4 contains the discussion; and Section 5 provides concluding remarks.

2. Data and Methodology

The current study descriptively compares annual economic and institutional variables from the South Caucasus countries to explore differences and change patterns, mainly from 1996 to 2019. There are many reasons why institutional quality differs from

country to country, but Azerbaijan's economic dominance is understandable, given its rich oil and natural gas reserves. Identifying why institutional quality differs between countries is a challenging task, but this study is one of the first to systematically evaluate these differences. To this end, key economic and institutional variables are graphically analyzed to emphasize key periods and explore trends. More revealing further works are needed to explore cause-and-effect relationships in the institutional change patterns and important economic and geopolitical factors.

This paper focuses on Azerbaijan by investigating changes in institutional quality during the oil boom period (2008–2019), as measured through State Oil Fund revenues and proposed time period for the oil booming by Niftiyev (2020a). Furthermore, a Pearson's R correlation analysis was used to establish a preliminary picture of the association between institutional quality and oil-related variables. Although correlation analysis cannot provide a full assessment of institutional quality, it provides the necessary conceptual grounding to conduct future follow-up studies.

In this paper, institutional quality is measured through variables derived from the World Bank (2021a), such as voice and accountability, political stability, absence of violence, government effectiveness, regulatory quality, rule of law, and control of corruption. In addition, for Azerbaijan, additional variables such as human rights scores (Farris 2019), property rights (The Global Economy 2021), higher court independence, and the clean elections index were used from the data set provided by Coppedge et al. (2021). Table 1 provides a summary of the institutional variables used in descriptive statistics, the normality test, and the correlation analysis. Furthermore, as the appropriated indicators are exhaustive in this paper due to its comparative nature, the current section does not explain, describe and define the variables of interest individually. Accordingly, the results section of this paper contains brief explanations and individual levels of measurement for those variables as part of the description of the collected data (in other words, the necessary paragraphs in the results section will present the meaning of the employed indicators and subsequently, their levels of measurements are attached to each figure to explain how do they measure what they measure).

Table 1 Information about the variables used in descriptive statistics, normality test, and correlation analysis.

Variable name	Description	Variable name	Description
POL_ST	Political stability and absence of violence index	CLEAN_ELEC	Clean elections index
CONT_COR	Control of corruption index	SH_SOFAZ	Share of SOFAZ in the state budget, in %
RULE_O_LAW	Rule of law index	OIL_RENTS	Oil rents, % of GDP
GOV_EFF	Government effectiveness	MINING/GDP	Mining-to-GDP, ratio
VO_AND_ACC	Voice and accountability index	OIL_PRICES	Oil prices, USD per barrel
H_RIGHTS	Human rights scores		
PROP_RIGHTS	Property rights index		
HIGHER_COURT_INDP	Higher court independence scores		

Source: own construction

The main data source for the current study is The Global Economy (2021). Other sources include the State Oil Fund of the Republic of Azerbaijan (SOFAZ 2021) from where annual reports for data on the share of SOFAZ in the state budget were gathered, the State Statistical Committee of the Republic of Azerbaijan (SSCRA 2021) for data on mining and Gross Domestic Product (GDP), the World Bank (2021b) for data on oil rents, and the U.S. Energy Information Administration (UIA 2021) for data on oil prices and the Brent trademark.

A correlation analysis was also used for this paper in addition to descriptive and figure analysis. Correlation analysis is a useful quantitative method for assessing the direction and strength of a linear association between two normally distributed variables (Schober et al. 2018). A Pearson's R correlation analysis was used because most of the variables were normally distributed – one of the main assumptions of Pearson's R correlation – and ranged between -1 and $+1$. The correlation grows weaker as the value of Pearson's R approaches 0 and grows stronger as it approaches either -1 or $+1$, which indicates a negative and positive correlation, respectively. Table 2 reports descriptive statistics of the variables used in the correlation analysis (Gogtay and Thatte 2017).

Table 2 Descriptive statistics of variables used in the correlation analysis.

	<i>N</i>	<i>Min.</i>	<i>Max.</i>	<i>Mean</i>	<i>Std. dev.</i>	<i>Var.</i>	<i>Skewness</i>	<i>Kurtosis</i>
POL_ST	24	-1.193	-0.239	-0.737	0.260	0.068	0.186	-0.371
CONT_COR	24	-1.446	-0.829	-1.116	0.172	0.030	0.080	-0.778
RULE_O_LAW	24	-1.201	-0.520	-0.861	0.202	0.041	-0.100	-0.773
GOV_EFF	24	-1.006	-0.100	-0.661	0.302	0.091	0.776	-0.790
VO_AND_ACC	24	-1.565	-0.906	-1.241	0.214	0.046	-0.065	-1.293
H_RIGHTS	24	-0.756	-0.021	-0.327	0.161	0.026	-0.197	1.199
PROP_RIGHTS HIGHER_COU RT_INDP	24	20.000	59.000	30.167	10.441	109.014	1.666	2.588
CLEAN_ELEC	24	0.165	0.815	0.621	0.258	0.067	-0.946	-1.105
CLEAN_ELEC	24	0.058	0.173	0.108	0.037	0.001	0.410	-0.915
SH_SOFAZ	24	7.300	60.400	30.804	21.378	457.037	0.018	-1.909
OIL_RENTS	24	3.618	39.558	24.021	8.927	79.686	-0.238	-0.134
MINING/GDP	24	0.188	0.579	0.391	0.110	0.012	-0.046	-0.580
Oil_PRICES	24	12.760	111.63 0	56.760	31.984	1022.97 3	0.382	-1.035

Note. Calculated in SPSS.

Source: own construction

Before the correlation analysis, the variables were detrended using the Hodrick-Prescot filter in Microsoft Excel software, version 15.26 for Mac operation system (OS). The smoothing parameter – lambda was 100 due to the annual data type. Table 3 reports the results of the Shapiro-Wilk normality test, which show that the variables were normally distributed (excluding human rights scores and the higher court independence index). This means that Pearson's R correlation analysis can be used.

Table 3 Results of Shapiro-Wilk normality test.

	Shapiro-Wilk		
	statistic	df	Sig.
POL_ST	0.964	24	0.519
CONT_COR	0.984	24	0.953
RULE_O_LAW	0.961	24	0.453
GOV_EFF	0.947	24	0.233
VO_AND_ACC	0.960	24	0.429
H_RIGHTS	0.912	24	0.039
PROP_RIGHTS	0.947	24	0.233
HIGHER_COURT_INDP	0.913	24	0.041
CLEAN_ELEC	0.940	24	0.160
SH_SOFAZ	0.972	24	0.711
OIL_RENTS	0.960	24	0.432
MINING/GDP	0.977	24	0.837
Oil_prices	0.966	24	0.576

Note. Calculated in SPSS; *df* denotes the degrees of freedom.

Source: own construction

The variables for voice and accountability, political stability, government effectiveness, regulatory quality, rule of law, and control of corruption had values missing for 1997, 1999, and 2001. Thus, the missing values were replaced by the average values of 1996 and 1998 for 1997; 1999 and 2000 for 1999; and 2000 and 2002 for 2001.

Various institutional variables have been utilized to conduct the analysis. They are as follows: the rule of law index measures the extent to which citizens trust the quality of contract enforcement and property rights, the police, and the courts, as well as the overall propensity for crime and violence in society. The government effectiveness index reflects the quality of public services and the degree of freedom from political pressures. The control of corruption index describes the extent of petty or grand corruption and state capture in each country. Lastly, the regulatory quality index measures the extent to which regulations promote the development of the private sector through efficient and sound policies.

Other indicators that served as proxies for institutional quality were voice and accountability, political stability, corruption perception, and political rights indices. The voice and accountability index encompasses issues related to a free press, free speech, and participation in government elections, while the political stability index evaluates the likelihood of terrorism and the unconstitutional and violent replacement of the government. The corruption perception index tracks the degree of public sector, political, and administrative corruption. The political rights index – which was devised by Freedom House – evaluates the electoral process, political pluralism, participation, and government functioning, which are crucial dimensions of the quality of a country's political institutions.

The civil liberties index captures individual rights, freedom of self-expression, personal autonomy, and associational and organizational rights. The cost of starting a

business is a suitable measure of institutional quality because it examines the official fees required by law to initiate commercial activities. Rising costs may reflect artificial barriers for business entities. Moreover, since the index excludes bribes, a decreasing number of businesses in the face of decreasing costs may indicate that unofficial payments are required to start a business. The latter scenario results from institutional deterioration and can also be traced to the share of the shadow economy in the national economy. The calculation for the size of the shadow economy was based on Medina and Schneider's (2018) methodology and provided by The Global Economy (2021). Lastly, the overall economic freedom index was used to assess the national economy in terms of market openness, regulatory efficiency, limited governments (unnecessary interventions by the governments), and rule of law.

Additional variables were useful for shedding light on the post-boom period in Azerbaijan. For example, the fragile state index describes a government's capacity to handle conflicts, together with the reflections of the necessary aspects of pre-conflict and post-conflict handling stages. The fragile state index also encompasses the security apparatus, human flight, brain drain, economic development, and certain aspects of state legitimacy. The state legitimacy index covers similar concerns as the fragile state index and tracks citizens' trust and confidence in the government and the manifestation of easiness of strikes and mass demonstrations. Furthermore, the uneven economic development index measures inequality, irrespective of economic performance (by mainly considering institutional capacity), and the human rights and rule of law index measures the extent to which fundamental human rights are protected. Overall, these indicators too can help understand the additional directions of institutional quality in Azerbaijan.

3. Results

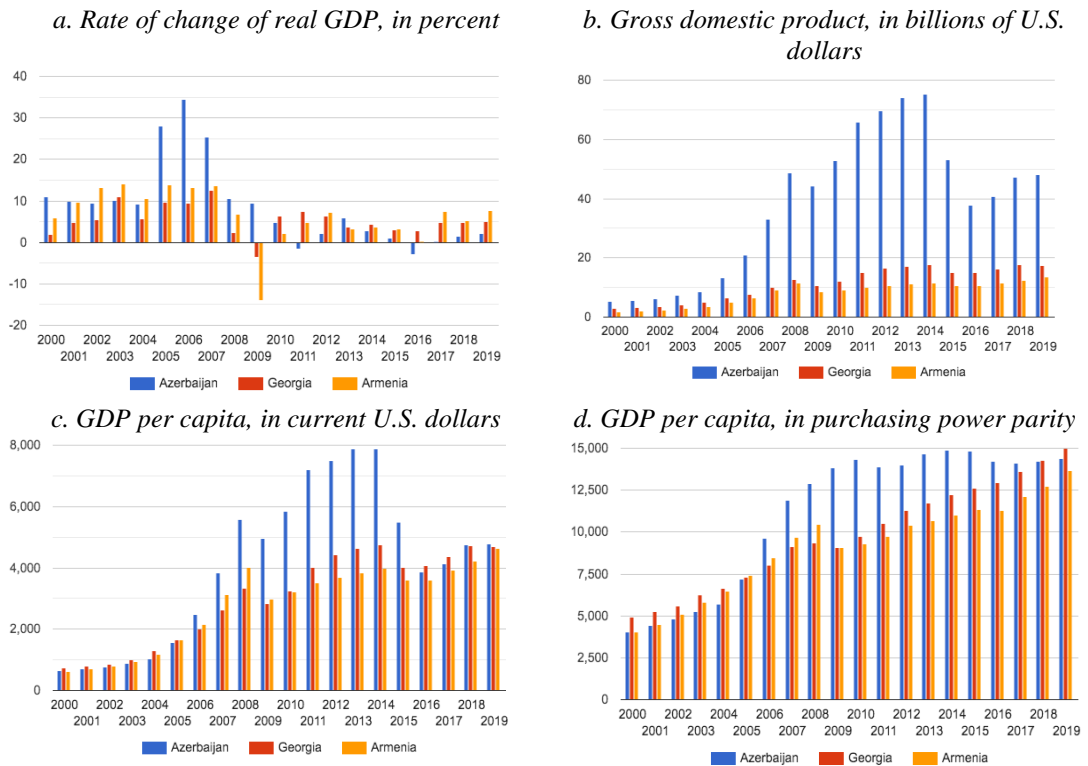
This section presents the results of the comparisons of economic and institutional variables. An institutional comparison allows differentiating among the South Caucasus countries in contrast to economic achievements and overall political and geopolitical climate in the region. The first results sub-section compares economic and institutional conditions in Georgia, Armenia, and Azerbaijan, while the second and third sub-sections focus on the role of oil in institutional quality in Azerbaijan.

3.1. Comparison of three post-Soviet South Caucasus countries

GDP and GDP per capita provide a bird's-eye view of a country's economic performance. Figure 1 (panels *a* and *b*) depict economic growth between 2000 and 2019, as measured in GDP and GDP per capita. Throughout this period, Azerbaijan was the clear leader in terms of GDP in current prices, followed by Georgia (see Figure 1, panel *b*). The rate of change of real GDP was consistently high in Armenia, while Azerbaijan saw notable increases during the oil boom (e.g., 27.96%, 34.47%, and 25.46% growth in 2005, 2006, and 2007, respectively). Georgia's economic growth lagged behind that of both Azerbaijan and Armenia between 2000 and 2009 but improved from 2010 to 2019.

Figure 1 (panel *c*) shows that GDP per capita in current U.S. dollars was similar in all three countries between 2000 and 2005, but Azerbaijan outpaced its neighbors between 2006 and 2014 and 2018 and 2019. Over the same periods, Armenia and Georgia shifted their places, with Georgia occupying a lead position since 2011. Moreover, in terms of purchasing power parity, Georgia has seen a consistent upward trend in GDP per capita since 2009, even outgrowing Azerbaijan in 2018 and 2019 for the first time in 19 years (see Figure 1, panel *d*). In Armenia's case, there are also developments similar to Georgia.

Figure 1 Changes in select economic indicators in the countries of the South Caucasus (2000–2019).



Sources: The Global Economy (2021); The World Bank (2021).

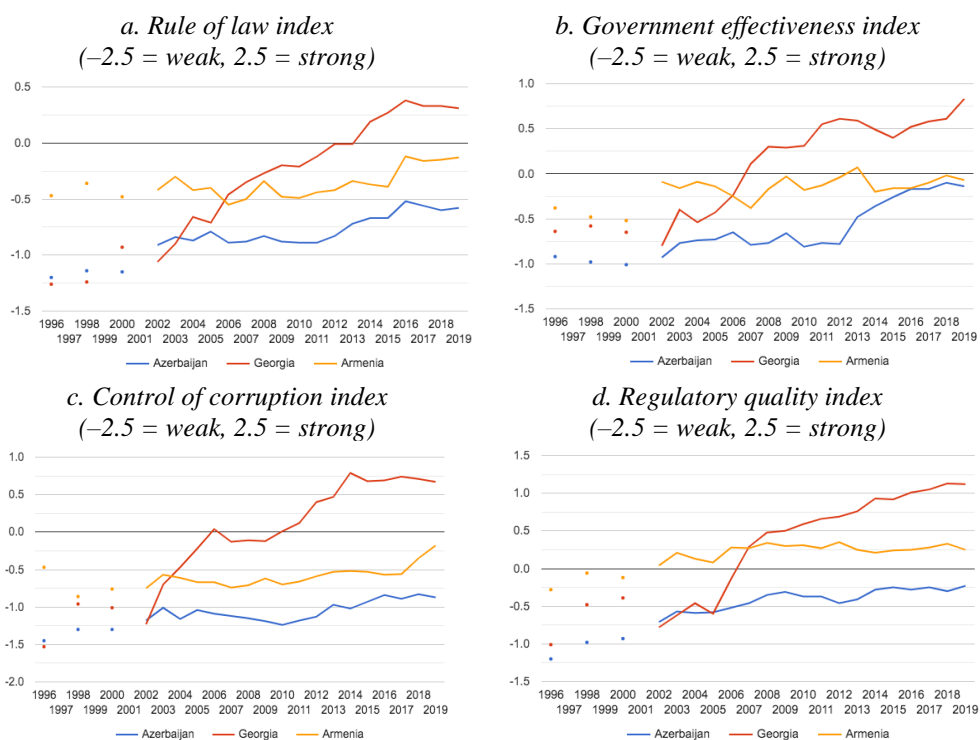
In terms of institutional variables such as rule of law, government effectiveness, control of corruption, and regulatory quality, Georgia has maintained a leading position since 2005 (see Figure 2, panels *a*, *b*, *c*, and *d*). Georgia was the only country that exhibited positive values on the rule of law index, beginning in 2013; however, a downward trend was observed from 2016 onwards (see Figure 2, panel *a*). Conversely, Azerbaijan had the lowest values, which hovered between -1.0 and -0.5 from 2002 to 2019. Armenia was somewhere in the middle. Results for the rule of law and other indices highlight that Georgia had the lowest values for institutional quality towards the end of the 1990s, while Azerbaijan and Armenia had relatively higher levels of institutional quality.

Figure 2 (panel *b*) shows that the government effectiveness index in Armenia fluctuated between -0.09 and -0.07 in 2002 and 2019 and did not exhibit notable improvement, while government effectiveness in Azerbaijan considerably increased from -0.78 in 2012 to -0.10 in 2018. Although Georgia and Azerbaijan started in similar positions in 2002, government effectiveness in Georgia had improved by 203.75% by 2019.

Figure 2 (panel *c*) displays changes in the control of corruption index within the three countries. Although Azerbaijan and Armenia exhibited modest and slightly better-than-modest improvements, respectively, Georgia has been in the lead since 2003. However, Armenia experienced a sharp increase in control of corruption in 2015, while the situation leveled off in Georgia and Azerbaijan.

Similarly, Georgia had the highest values in the regulatory quality index since 2007 (a jump of 146.56% compared to 2005), but Armenia's position remained virtually unchanged between 2006 and 2018. Despite a positive upward trend that can be observed between 1996 and 2019, Azerbaijan still lagged behind the two other countries in terms of regulatory quality (see Figure 2, panel *d*).

Figure 2 Changes in selected institutional variables in the countries of the South Caucasus (1996–2019).



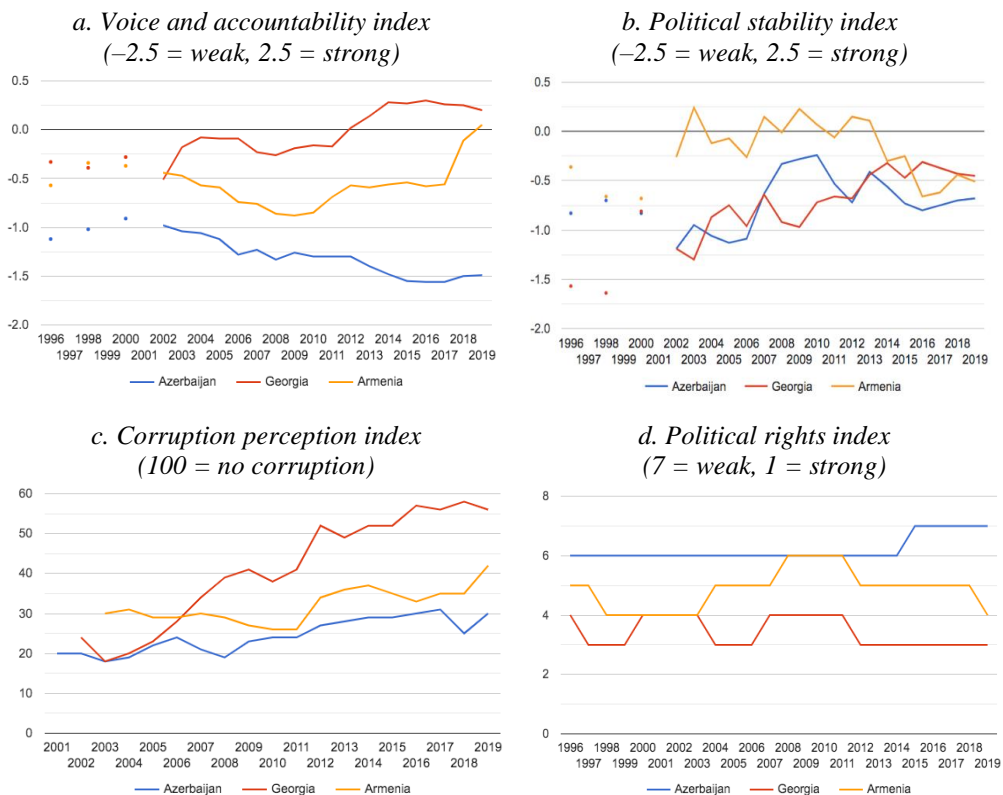
Sources: The Global Economy (2021); The World Bank (2021).

Georgia occupied a leading position with regard to the voice and accountability index. While Armenia began to converge with Georgia in 2017, the situation worsened in Azerbaijan (see Figure 3, panel *a*). The political stability index showed a similar but highly volatile picture – sometimes worsening, sometimes improving – in all three countries (see Figure 3, panel *b*).

Within a short period of time, Georgia surpassed both Azerbaijan and Armenia in terms of corruption perception (see Figure 3, panel *c*). However, Azerbaijan and Armenia also began to demonstrate improvements on the corruption perception index, as there was an upward trend in both countries.

Figure 3 (panel *d*) shows that, between 1996 and 2019, Georgia led the political rights index with a consistent score of 3–4. Meanwhile, Armenia’s political index score fell from 4 in 2003 to 6 in 2011, but it recovered to 4 in 2019. However, the trend remained stable in Azerbaijan; the country had a score of 6 between 1996 and 2014, which declined to 7 in 2015 and remained consistent until 2019.

Figure 3 Changes in selected institutional variables in the countries of the South Caucasus (1996–2019).



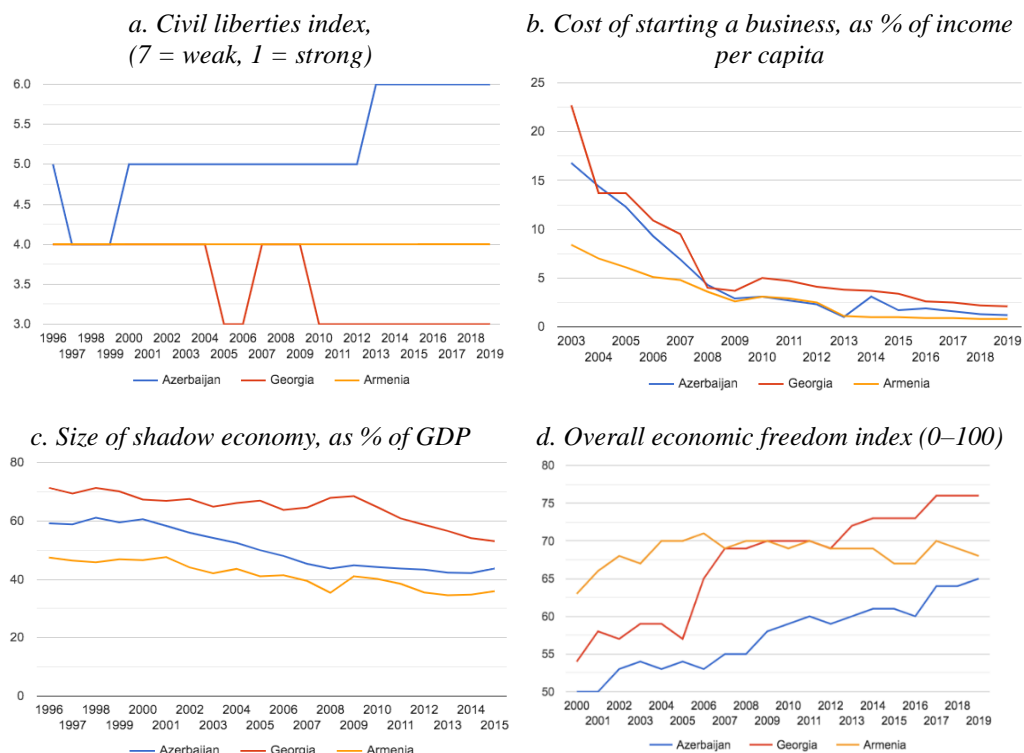
Sources: The Global Economy (2021); The World Bank (2021).

Figure 4 presents a third set of institutional variables to compare institutional quality in the three South Caucasian countries: the civil liberties index, the cost of starting a business, the size of shadow economy, and the overall economic freedom index. In Armenia, the status of civil liberties did not change over the 23-year period under examination (Figure 4, panel *a*). In Azerbaijan, civil liberties only improved between 1996 and 1999. Then, in 2000, Azerbaijan began to fall behind its two neighbors. In Georgia, civil liberties remained stable and the best values since 2010.

All three countries experienced a decline in the cost of starting a business between 2003 and 2019 (see Figure 4, panel *b*). More dramatic declines took place in Georgia (from 22.7% of income per capita in 2003 to 2.1% in 2019) and Azerbaijan (from 16.8% of income per capita in 2003 to 1.2% in 2019). In Armenia, the cost of starting a business decreased from 8.4% of income per capita in 2003 to 0.8% in 2019. However, the cost of starting a business was similar in terms of monetary values in all three countries during the last years as can be observed from Figure 4, panel *b*.

The size of the shadow economy was greatest in Georgia and smallest in Armenia, measured as a percentage of GDP (see Figure 4, panel *c*). Although Azerbaijan was ranked second and saw the sharpest declines in the size of its shadow economy, the share of the latter relative to the national economy increased from 42.15% in 2000 to 43.66% in 2014. A similar upward trend can be observed in Armenia since 2013.

Figure 4 Changes in selected institutional variables in the countries of the South Caucasus (1996–2019).



Sources: The Global Economy (2021); The World Bank (2021).

Figure 4 (panel *d*) shows that overall economic freedom improved over a 20-year period in the South Caucasus. In Georgia, economic freedom dramatically increased, reaching 76 index points in 2019 and notably increasing by 21.05% from 2005 to 2007. Azerbaijan also achieved positive—albeit more gradual—growth. However, Armenia did not conform to this trend, exhibiting a similar level of economic freedom from 2015 to 2019 as it did from 2000 to 2003.

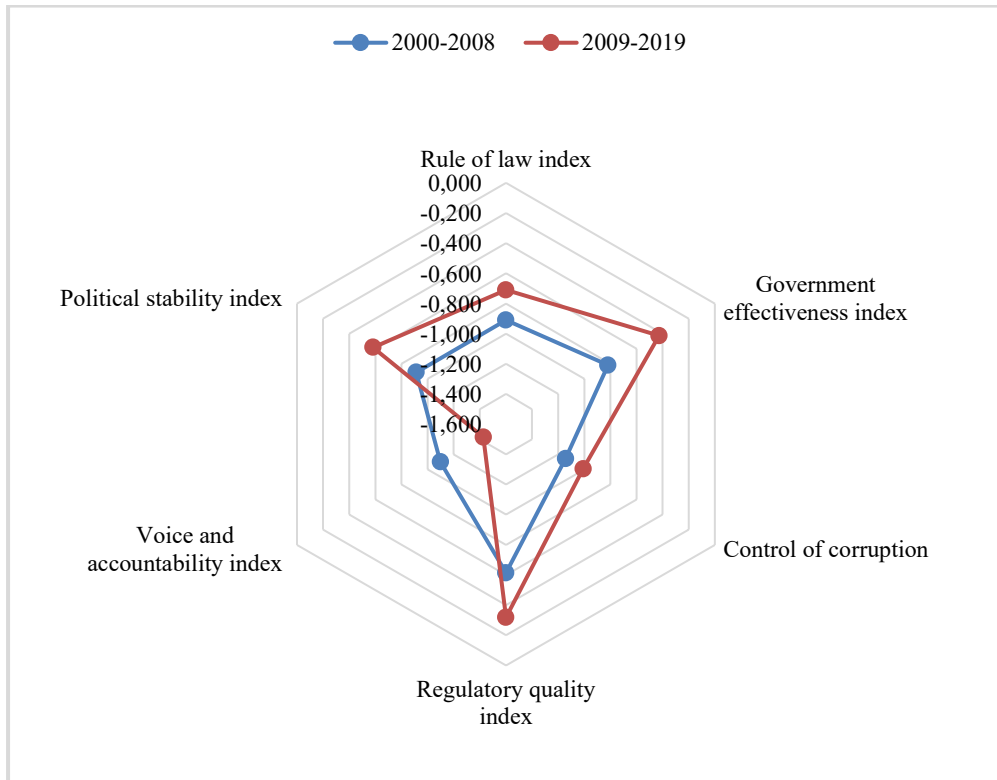
3.2. The relationship between institutional quality and oil in Azerbaijan

According to the natural resource curse, it is expected that lower institutional quality will be observed in mineral-rich countries during and after boom periods. Economic explanations of structural issues in such countries have drawn much attention, but these have recently been replaced by institutional explanations. Kolstad (2009) argued that sub-optimal social outcomes can be linked to poor institutions. Public sector employment and state subsidies rapidly increase during resource booms and can be channeled to various interest groups to secure votes (Azerki–Van der Ploeg 2007). In other words, the ability of entrepreneurs to choose between productive activities and rent-seeking depends on how institutional indicators such as rule of law, government effectiveness, and the quality of bureaucracy shape relative profitability (Mehlum et al. 2006). Similarly, Robinson et al. (2006) indicated that an incumbent politician can generate patronage networks to attract voters through extracted natural resources, which in turn creates inefficiencies in the public sector. Thus, institutional quality identifies the extent to which resource richness can negatively influence the private and public sectors.

As discussed in the first results subsection, multiple indicators were used to measure institutional quality and change patterns. Georgia, Armenia, and Azerbaijan have differed in terms of institutional progress since the collapse of the Soviet Union and the ensuing transition period. In addition, Azerbaijan's oil-led economic development and growth further distinguished it from its neighbors. Therefore, it can be assumed that there were differences in institutional quality in Azerbaijan that influenced the natural resource curse. Accordingly, by comparing institutional quality in Azerbaijan before and after the oil boom periods, it may be possible to identify differences resulting from a rise in oil extraction, exports, and prices. In fact, Ahmadov et al. (2013) have argued that natural resource rents adversely influence government effectiveness in the oil-rich countries of the Caspian Basin, where Azerbaijan is also located.

As illustrated in Figure 5, only one institutional indicator – the voice and accountability index – exhibited a lower average value (–1.43), while all other institutional indicators improved during the post-boom period (2009–2019) compared to the pre-boom period (2000–2008). The political stability and government effectiveness indices also noticeably improved during the post-boom period (from –0.91 to 0.58 and –0.82 to –0.43, respectively), while rule of law, control of corruption, and regulatory quality showed only slight improvements. However, the precise role of the oil revenue remains unclear. Moreover, there is a natural trend in institutional quality, which inflates overall improvements over the recent time periods. Thus, the average of pre-boom and post-boom periods of year-over-year growth rates were calculated and compared in Figure 6.

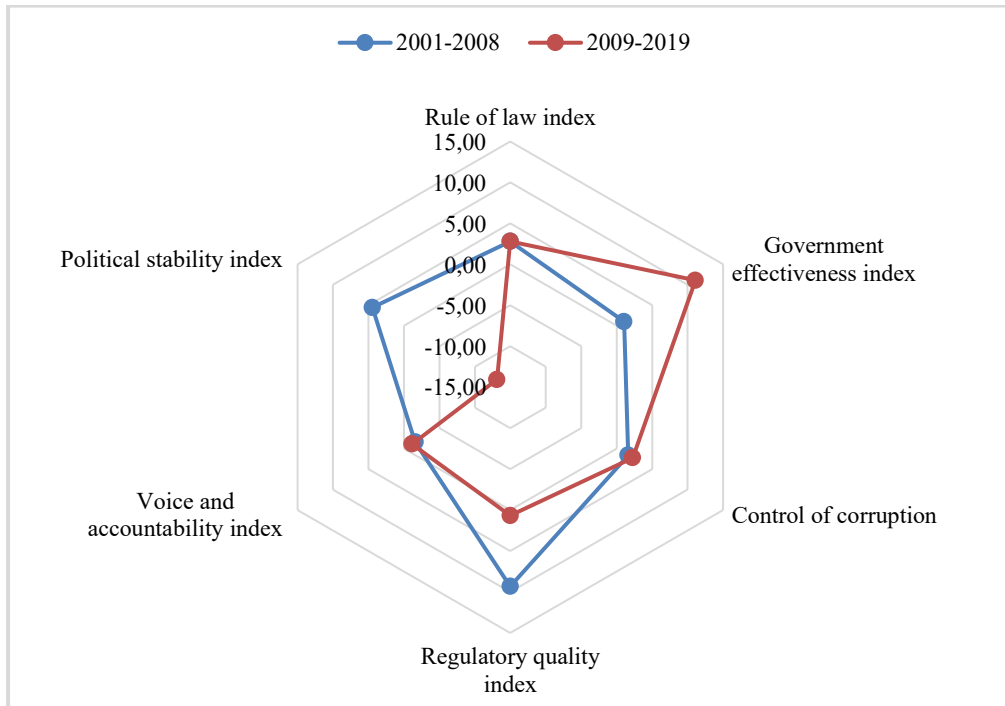
Figure 5 Pre-boom (2000–2008) and boom, and post-boom (2009–2019) averages of the institutional indicators in Azerbaijan.



Sources: The Global Economy (2021); The World Bank (2021).

According to Figure 6, the bold averages of the institutional indices may not reflect the truth, as year-over-year growth averages show little or no improvements in rule of law, voice and accountability, and control of corruption. In addition, the political stability index failed to show any significant improvement during the post-boom period, lagging far behind other institutional variables and falling from an average value of 4.45% from 2000 to 2008 to –13.12% from 2009 to 2019. On average, regulatory quality index also fell during the post-boom period, declining from 9.32 % to 0.67 %. Only the government effectiveness index improved, from an average of 1.3% from 2001 to 2008 to 11.11% from 2009 to 2019; this aligns with the findings in Figure 5.

Figure 6 Pre-boom (2001–2008) and boom, and post-boom (2009–2019) year-over-year growth averages of the institutional indicators in Azerbaijan.



Sources: The Global Economy (2021); The World Bank (2021).

In terms of fragility, Figure 7 (panel *a*) demonstrates that, starting from 2009, Azerbaijan's fragility in pre-conflict, active conflict, and post-conflict situations improved despite the serious weakening represented by the period from 2009 to 2010 (The Fund for Peace 2021). The uneven economic development index also improved, decreasing from 7.4 in 2009 to 5.5 in 2019. However, the opposite trend was observed for the state legitimacy index. As soon as the boom period ended in 2011, the latter began to worsen.

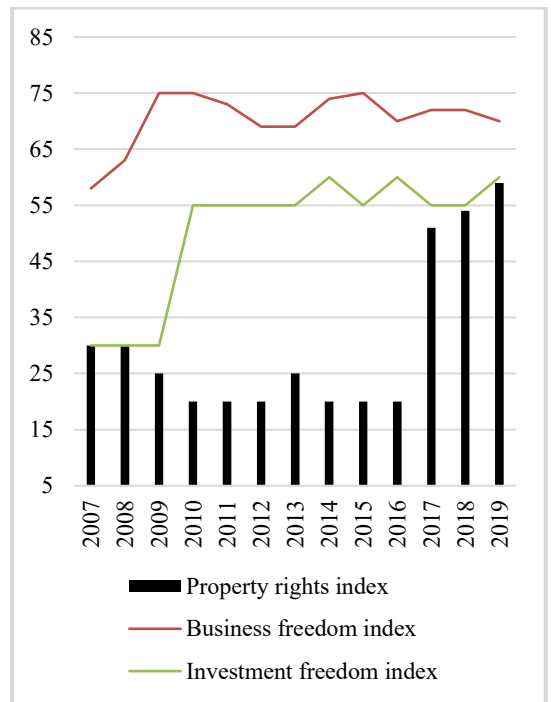
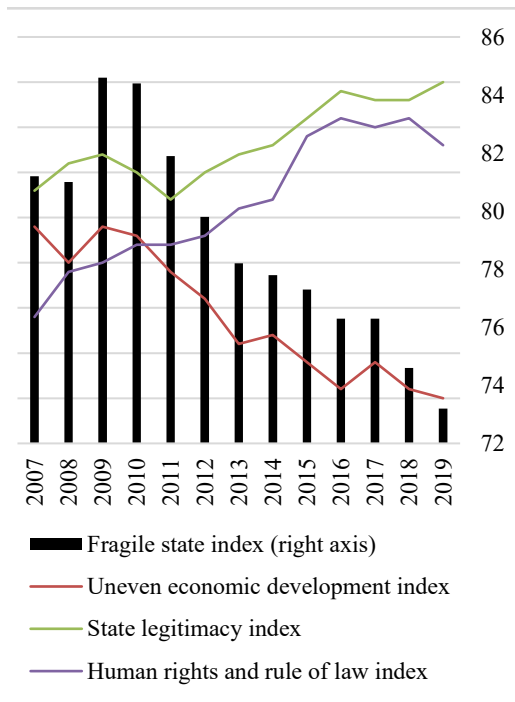
As measured by the Fund for Peace's (2021) human rights and rule of law index, institutional quality decreased in Azerbaijan throughout nearly the entirety of the boom and post-boom periods. From 2015 to 2019, there was a slight downward trend in the human rights and rule of law index, which represents progress.

Figure 7 (panel *b*) also depicts additional institutional variables in Azerbaijan. These include the property rights index, which measures how the government enforces property protection; the business freedom index, which evaluates the ability to start, operate, and close a business; and the business freedom index, which measures restrictions on investments within and across countries. Business freedom was found to be volatile after a period of noteworthy growth from 2007 to 2009; it worsened between 2015 and 2019, moving from an index value of 75 to 70. By contrast, property rights rapidly improved between 2017 and 2019. Lastly, the business freedom index took a sharp development in 2010 and hovered between an index value of 55 and 60.

Figure 7 Changes in institutional variables in Azerbaijan, during the boom and post-boom periods (2007–2019).

a. Fragile state index (0 = low to 120 = high), uneven economic development index, (0 = low to 10 = high), state legitimacy index, (0 = high to 10 = low), and human rights and rule of law index (0 = high to 10 = low).

b. Property rights index, (0 = low to 100 = high), business freedom index (0 = not free to most free =100), investment freedom index (0 not free to most free = 100).



Sources: The Global Economy (2021); The World Bank (2021).

3.3. Correlation analysis

Based on the inter-country comparisons and the analysis of institutional quality in Azerbaijan, the current subsection reports the results of the Pearson’s R correlation analysis of oil-related variables and selected institutional indices in Azerbaijan. The examined time period is 1996 to 2019, and the data was detrended. Table 4 summarizes the results of the analysis.

Table 4 Correlation Analysis (Pearson's R) of the detrended data regarded institutional quality in Azerbaijan, 1996–2019.

Variable	SOFAZ's share	Oil Rents	Mining/GDP	Oil Prices
POL_ST	0.761**	-0.071	0.140	0.251
CONT_COR	-0.736**	-0.227	-0.287	-0.365
RULE_O_LAW	-0.640**	-0.289	-0.398	-0.436**
GOV_EFF	-0.736**	-0.220	-0.319	-0.489**
VO_AND_ACC	0.203	0.102	-0.036	0.078
H_RIGHTS	-0.127	-0.310	-0.139	-0.280
PROP_RIGHTS	0.117	0.471*	0.519**	0.146
HIGHER_COURT_INDP	0.504*	0.220	0.319	0.109
CLEAN_ELEC	0.656**	-0.055	0.013	0.161

Note. Calculated in SPSS. (1) The symbols *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively. (2) Green shading indicates a positive correlation, and orange shading indicates a negative correlation. (3) The sample size for all correlations is 24. (4) Not all institutional variables were included in the correlation analysis. After the first set of experimental correlations were examined, only the most significant and relevant variables were incorporated into the latter.

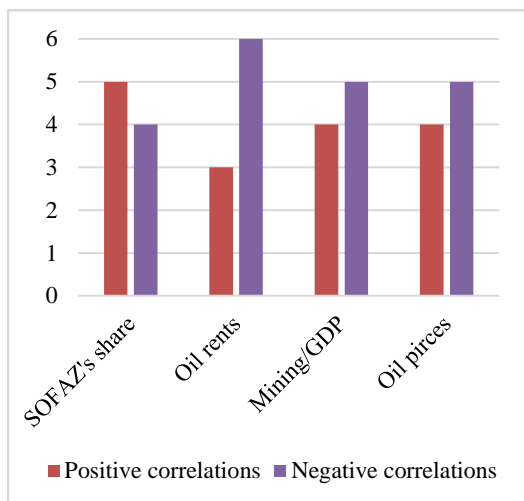
A strong, negative, and statistically significant correlation was found between SOFAZ's share in the state budget and the control of corruption, rule of law, and government effectiveness indices. In addition, a negative correlation—albeit weak and statistically insignificant—was found between SOFAZ's share and human rights scores. Moreover, the analysis revealed both statistically significant and insignificant and a positive correlation between SOFAZ's share and the political stability, higher court independence, clean elections, and voice and accountability indices. It should be noted that SOFAZ's share exhibited the highest number of statistically significant correlation coefficients compared to other oil-related variables in the correlation matrix.

In addition, oil rents were found to have mainly negative but weak associations with institutional quality in Azerbaijan. Only one statistically significant and positive correlation was found between property rights (0.471) and oil rents. The voice and accountability and higher court independence indices were also positively correlated with oil rents.

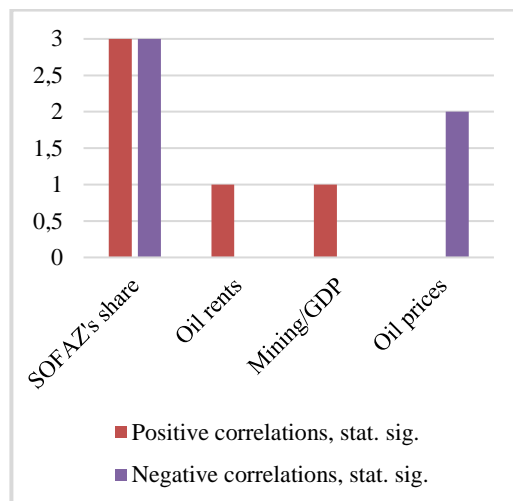
Multiple negative correlations—mostly statistically insignificant—were also found between mining-to-GDP (mining industry's share in GDP) and institutional variables, excluding the political stability, property rights, higher court independence, and clean elections indices. The correlation analysis yielded only one statistically significant correlation between mining-to-GDP ratio and the property rights index (0.519).

Figure 8 Frequency of positive and negative correlations between the oil-related variables and institutional variables.

a. Distribution of positive and negative correlations across oil-related variables.



b. Distribution of statistically significant positive and negative correlations across oil-related variables.



Note. Calculated in SPSS.

Lastly, oil prices were found to be negatively correlated with control of corruption, human rights, rule of law, and government effectiveness; the last two correlations were statistically significant. Oil prices were also positively correlated with political stability, voice and accountability, property rights, higher court independence, and clean elections; however, these correlations were not statistically significant.

The results of the Pearson's R correlation analysis revealed that negative correlations between institutional quality and the oil sector in Azerbaijan outweighed positive correlations (see Figure 8, panel a). More specifically, there were 20 negative coefficients and 16 positive coefficients. However, only SOFAZ's share and oil prices were statistically significant, with three and two negative coefficients, respectively (see Figure 8, panel b). In addition, oil rents and oil prices had one positive and statistically significant correlation coefficient each, without any statistically significant negative coefficients.

4. Discussion

Post-Soviet countries still face challenges in terms of fostering institutions, state-building, and catching up to developed countries due to issues that arise from premature bureaucracy and inadequate governmental policies. Institutional quality strongly differs between Georgia, Armenia, and Azerbaijan, as measured by various institutional, political, and governance indicators. However, some trends also overlap among transition and South Caucasian countries. For instance, unofficial payments in transition

countries remain widespread (EBRD 2011), and taxpayer honesty is low in the South Caucasus region (Malek 2006). In addition, Aliyev (2015a) argued that there is a high level of informality in Georgia and Azerbaijan due to failed institution-building following transitional challenges and economic and political instability. Moreover, Korganashvili et al. (2017) evaluated the political and economic transformation of the region and concluded that the transformation has not led to any solid benefits for the countries, which gives rise to a serious doubt of the role of domestic institutional quality in socio-economic development. There are also external factors that decrease the motivation of governments in the South Caucasus to achieve a high rule of law. For example, in Azerbaijan, the EU's oil interests decrease pressure on the national government to promote reforms and fill the blank gaps in institution-building to integrate with the EU (Guliyeva 2005).

In the early 1990s, internal and external threats forced the South Caucasian countries to adopt presidential power, which in turn gave rise to patronage. In Armenia, the effects of nationalism and the Nagorno-Karabakh war in the early 1990s were heavily felt, while a more balanced domestic and foreign policy was apparent in Azerbaijan and Georgia (Alieva 2000). However, more recent developments in the form of military actions between Russia and Georgia show the fragility of the overall situation in the region (Kakachia 2011). Both external and internal factors extensively influence and differentiate conditions of institution-building in the South Caucasian countries.

The results of this study reveal that, despite improved political rights in Georgia and Armenia, the overall political instability of the region remains. Azerbaijan and Armenia seem to exhibit volatile indicators related to the quality of democracy due to ever-changing political and social realities (Malek 2006). In addition, Georgia's occasional difficulties in building a coalition government and Armenia's recent revolution have contributed to this instability. Because the variables that measure the institutional quality of political institutions are highly interdependent, this also sheds light on the underdeveloped status of civil liberties in Armenia and has worsened the situation in Azerbaijan.

The figure analysis suggests that there are particular years in which institutional quality in the South Caucasus dramatically changed. For instance, this corresponds to the period between 2003 and 2004 in Georgia: "since 2004, Georgia has made huge strides toward strengthening state structures, reforming the bureaucracy, and removing corruption from the lives of ordinary citizens" (Beacháin-Coene 2014, 938). This was the result of Mikheil Saakashvili's presidency, which brought pro-democracy, pro-NATO, and pro-European Union policy. Moreover, Aliyev (2015c, 30) argued that "Saakashvili's Georgia achieved a notable success in weakening such deeply rooted informal practices as gift-giving and reciprocal favours offered in return for preferential treatment informal institutions." Georgia's active participation in the Eastern Partnership program, which was initiated by the EU, also positively impacted institutional quality (Delcour 2013). However, Georgia's efforts are considered to be insufficient due to external threats from Russia, low levels of political resistance in parliament, internal failures in state-building, and territorial conflicts such as those in South Ossetia and Abkhazia (Mitchell 2009). Moreover, informal connections, kinship relationships, and friendships still play an important role in job seeking or handling crises in Georgia (Aliyev 2015c). In addition, weak anti-monopoly regulations,

corruption, inefficient state governance, and issues with bureaucracy (Lekashvili 2017) have shed light on why particular institutional variables have started to decline over the past five to six years.

In Azerbaijan, the period from 2009 to 2014 was distinctive, according to the figure analysis in this paper, as civil society experienced difficulties resulting from harsh crackdowns and a decline in educational programs (Ibadoglu 2018). The political rights, civil liberties, and even political stability indices worsened from 2009 to 2014, which overlaps with the early years of the oil boom and post-boom periods. These periods were accompanied by serious shortcomings in public procurement and state budget transparency (Ibadoglu–Bayramov 2019). On the other hand, the business freedom index and investment freedom index sharply improved in 2009, which may reflect increased political stability due to the presidential election in 2008 and constitutional election in 2009. According to Dutta and Roy (2011), higher political stability is associated with high levels of FDI. Moreover, the results of this paper have shown significant developments in the property rights index in Azerbaijan from 2017 to 2019, which may result from crucial developments in real estate registration and transparency improvement in property management (Doing Business 2020).

In Armenia, the most crucial time was 2017, when the non-violent Velvet Revolution occurred. This revolution, along with a series of reforms and institutional changes, improved institutional quality, as measured by the voice and accountability, political stability, political rights, corruption perception, and civil liberties indices. However, it was a difficult task to eliminate all the shortcomings and drawbacks that secluded foreign policy preferences of the previous rulers had brought until 2017. Despite these changes, deep-rooted, country-specific, and systemic challenges did not allow us to expect more (Dorodnova 2019). Recent developments, such as COVID-19 and the second Nagorno-Karabakh war, have deeply destabilized Armenia, pushing it into a political crisis (Taghizade 2021). However, the pre- and post-revolution periods are distinct in terms of the dynamics of institutional quality change patterns in Armenia.

In the South Caucasus, the improvement of institutional quality was closely associated with particular trends, such as the decline of the shadow economy, a decrease in the cost of starting a business, and an increase in economic freedom (excluding Armenia, in the case of the last variable). Informal and non-official parts of the economy are believed to occupy a large share of the economy in ex-Soviet and transitional countries. However, separation from the Soviet Union stimulated the countries of the South Caucasus to reform as quickly as possible in the early 1990s to attract FDI. Despite optimistic trends in the South Caucasus, as measured by the abovementioned institutional variables, quantitative and numerical measurements are still new and may obscure multifaceted issues such as informality in the South Caucasus. Polese and Rekhviashvili (2017) argued that there is a long-standing lack of research on informality in the South Caucasus. Government and institutional failures have stimulated the shadow economy in transition countries (Eilat et al. 2002). The informal economy has accounted for as much as 67.3%, 60.6%, and 46.3% of the economy in Georgia, Azerbaijan, and Armenia, respectively, after a decade of independence from the Soviet Union (Malek 2006). Although the shadow economy has generally been on a downward trend since 2001, there have been some increases in Azerbaijan and Armenia in recent years, which requires more research. Thus, despite positive trends, further institutional

strengthening is needed to improve regulations, bureaucracy, corruption, and the judicial system to combat the shadow economy and associated issues.

The case of Azerbaijan is unique in the region, as the country has followed an oil-led economy, which is usually associated with various challenges in the form of the resource curse or Dutch disease (Ibadoghlu–Conway 2010, Hasanov 2013, Niftiyev 2020b). Despite this, Azerbaijan has implemented various economic reforms to increase diversification, market liberalization, governance efficiency, the efficiency of the banking sector (Aliyev 2015a). Nevertheless, the role of institutions arises when low levels of economic diversification are observed despite all efforts. In fact, Azerbaijan was ranked last in terms of its commitment to reducing the gap between rich and poor around 2010 (EBRD 2011). Moreover, “Azerbaijan is the only country for which satisfaction with service delivery for most public services in 2010 is lower than in 2006” (EBRD 2011, 35).

The main economic indicators, such as GDP, the growth rate of real GDP, and GDP per capita, show that, out of the three South Caucasian countries, Azerbaijan possesses a volatile economy, because it has failed to achieve high growth rates in the real economy after the completion of large oil and natural gas projects. The national economy is highly interconnected with international commodity markets and any boom or bust in oil prices determines export revenue. Although the global financial crisis impacted Armenia and Georgia more severely, Azerbaijan's economic speed slowed down during and after the period from 2014 to 2015, which was notable for sharp downturns in price in international commodity markets. However, one must not think of Azerbaijan's economy as very superior to the other South Caucasian countries or a second-string player among them due to the apparent similarities in socio-economic realities. Labor markets in the South Caucasus share similarities in the form of youth unemployment, low labor productivity, and labor migration to Russia (Pismennaya et al. 2017). Private entrepreneurs must face numerous obstacles, such as a lack of financial support for startups, high levels of inflation, an overwhelmed and low-skilled labor force due to outward migration, and bureaucratic barriers, which are typical in post-communist and transition countries with sluggish institutional development (Pismennaya et al. 2017). Dermendzhieva (2011) voiced concerns about brain drain due to the difficulty of finding job opportunities in the South Caucasus countries, even if skilled workers have good chances of finding a job within domestic borders. In addition, the author mentioned that policy must focus on improving non-agricultural economic activities in rural areas, which aligns with the argument that the private sector's development is not at the desired level in the South Caucasus.

This paper's findings clarify that institutional progress in Azerbaijan is slow. This is not surprising if we consider the possible negative effects predicted by the natural resource curse, such as rent-seeking behavior, the non-overlapping interests of ruling elites with the society, the rentier state model that endangers long-term sustainable economic growth, and development, etc. Matveeva (2002) argued that, between 1991 and 2002, various problems were observed in Azerbaijan, such as low democratic values, press freedom, political turmoil, and the repression of non-governmental organizations. Guliyeva (2005) mentioned that legislative and constitutional reforms improved the overall situation regarding rule of law; however, the high concentration of power among executives created many barriers to the stable and positive development

of the latter following transitional issues, as well as economic and political instabilities, in Azerbaijan. Thus, the implementation of laws was not forceful enough to achieve the necessary checks and balances over centers of power.

In addition, this paper's findings show that little or no significant improvement occurred over the past 20 years in Azerbaijan (except for government effectiveness) in terms of average growth rates of the institutional variables during the pre- and post-boom periods. While Georgia has demonstrated obvious improvements in institution-building and Armenia is also more or less progressing on this front, the situation in oil-rich Azerbaijan raises several questions about the adverse effects of the oil boom on institutional quality. Moreover, based on the results of the correlation analysis, the most relevant channels of the impact of the oil industry seem to be oil prices and oil revenue as they had the highest statistically significant correlation coefficients. However, the results remain mixed, because SOFAZ's share was also positively and statistically significantly correlated with institutional variables in Azerbaijan. Furthermore, measures such as oil rents and the mining-to-GDP ratio seem to be positively and significantly correlated with institutional variables. Here comes the difficulty of the specification of the exact effects of the oil industry on institutional quality and variables, because boom industries usually provide the positive multiplicative spillover effects too. However, according to Sadik-Zada et al. (2019), job creation remains low in the oil sector, while the processing industry is the only sector that has positively contributed to the rest of the economy. At the risk of oversimplification, this is likely why government effectiveness is the only index that showed noteworthy progress in Azerbaijan to manage oil-specific investments, revenue, etc. Thus, both statistically significant and insignificant correlation coefficients favor a negative correlation between oil industry-related variables and institutional variables, which supports the natural resource curse hypothesis that oil-rich countries may experience adverse effects and slower growth compared to resource-poor countries.

It has been mentioned in this paper that, in terms of the government effectiveness index, the situation in Azerbaijan is optimistic compared to Armenia. However, recent studies have focused on the efficiency and transparency of government spending, which raises the actuality of institutional development. For example, a study by Gumus and Mammadov (2019, 31) showed that "government expenditures in Azerbaijan may have problems indicating inefficient resource utilization," because the authors could not find any statistically significant relationship between real economic growth and government expenditures. Thus, despite periodic positive trends in the government effectiveness index, the economic aspects still fail to capture the proper results of this because the economic efficiency is still to be achieved. Malek (2006) argued that corruption, the misuse of public resources, and the ineffective fight against organized crime are common among state institutions in the South Caucasus as well as in Commonwealth of Independent States countries in general.

There are also other concerns. For example, even if the state fragility index improved in Azerbaijan during the boom and post-boom periods, the country's status is still classified under the "warning" status of the same index, which means that there is still room for crucial improvements (The Fund For Peace 2021). Thus, on the one hand, there have been improvements in inequality and conflict, and risk management in Azerbaijan since 2007, as measured by the state fragility and uneven economic

development indices. On the other hand, there are signs of institutional decline, as measured by the state legitimacy, human rights, and rule of law indices. These indices are highly correlated with each other, as a decline in one tends to lead to a decline in the others.

The results illustrate stark differences in civil liberties. The South Caucasian countries differ in terms of their civil society activities. Recent studies also support this idea. For instance, Georgia is believed to be active and well-organized, while Armenia is still undergoing a transformative process to enable civil society to play a role in political changes. However, Azerbaijan shows low promise due to the artificial hardships inhibiting foreign funding for the Non-government Organizations (NGOs) and the government's lack of interest in fast improvements in civil liberties (Luciani 2021).

The South Caucasus has a rich history of religion and cultural traditions that can be blended with the further development of the institutional quality as they are gaining new momentum in the social and political life of the region. For instance, religious institutions are the most trusted institutions after the army in Armenia and Georgia, while the third most trusted in Azerbaijan (Charles 2010). In fact, in all three South Caucasus countries, religion revived itself after independence from the USSR, increasing its public appearance and following the political imperatives (Jödicke 2014). However, the political agenda of the region's countries lack ideological foundations and proper politicians of the public requirements (Shirinov 2014). Meanwhile, the cultural traditions have been preserved in all three South Caucasian countries. For instance, the central role of family, its honor and name, hospitality, freedom, and courage are pivotal cultural elements among the South Caucasian countries (Coene 2009). Therefore, Caucasian culture and values must be at the center of attention when state-building or institution-building is concerned. The South Caucasus is still the region where the informal practice of social and public work is present, corruption is a challenge, and cultural pride is a survival tool (Coene 2009).

Sustainable and long-term economic development is the main concern for all countries in the South Caucasus. However, this can only be achieved in a peaceful and integrated environment, which has not been observed for long enough in the region (Korganashvili et al. 2017). Chronic security concerns between Azerbaijan and Armenia, as well as Georgia and the Abkhazia region, have diminished economic incentives to integrate with each other (De Waal 2012). Based on the findings of this paper, the following research question can be formulated and a follow-up study can be arranged: "What are the most pressing dimensions of the institutional reforms needed to achieve sustainable institutional and economic development in the South Caucasus to ensure regional integration and cooperation?"

5. Concluding Remarks

Numerous studies have demonstrated that institutional quality is necessary to achieve long-term and sustainable economic functions within a country. Institutional failures lead to other types of failures when economic agents cannot trust each other, do not cooperate with domestic or international actors in global value chains, and do not fulfill the demands of citizens. In this regard, the South Caucasus has witnessed colorful and

diverse political, institutional, and economic transformations since the collapse of the Soviet Union. Successfully weathering current changes and those that may occur during unstable and uncertain times depends on institutional quality. Governments must consider the far-reaching consequences of underdeveloped institutions and worsening trends in institutional quality.

This paper has shown that Georgia is a leader in overall institution-building, effective bureaucracy, and civil society promotion among the three South Caucasian countries, even if this trend is slowing and new challenges are emerging. The situation in Azerbaijan has challenged policymakers and decision makers to rethink measures of progress in institutional quality. Although much has been achieved since the 1990s in terms of GDP and GDP per capita growth in the South Caucasus, as a mineral-rich and boom-experienced country, tranquility based on oil revenue cannot sustain long-term economic prosperity in Azerbaijan. This paper shows that, compared to Georgia and Armenia, Azerbaijan lags in terms of institutional quality despite having better economic indicators. Moreover, internal factors (as measured by the increasing role of SOFAZ in the state budget) and external factors (as measured by oil prices) were negatively and significantly correlated with institutional quality (as measured by the control of corruption, rule of law, and government effectiveness indices) from 1996 to 2019.

Recovery in post-Soviet countries should not be solely measured through the main macroeconomic indicators but also regional comparisons of institutional change patterns. Better institutional quality ensures better recovery during times of crisis and decreases risks and uncertainties in integrated economies. The post-Soviet and post-transition periods must be supported by effective, sound, and inclusive institution-building to address the essential challenges of modern economic growth and development. The government's agenda must center not only on the development of new extractive industry projects, infrastructure enhancements, and diversification but also on institutional quality. Otherwise, the very main foundation of sustainable economic structure, according to institutionalism, of course, will be unstable irrespective of how much effort is being done in monetary terms.

Several limitations must be noted regarding the current study. First, measuring institutional quality is a difficult task, and the use of values from existing indices may not reflect realities in each country. This paper has mainly focused on the direction and evolution of main economic indicators and measures of institutional quality that mirror the political, social, and governance dynamics within a country. However, there are many country-specific factors related to institutional quality that remain untouched and lie outside the scope of this comparative work. Secondly, correlation analysis does not necessarily indicate a causal relationship between the variables of interest, and the results of such an analysis should not be interpreted in terms of the agreements between the variables (Schober et al. 2018). Rather, correlation analysis is limited to the calculation of correlation coefficients and significance, and solely correlation analysis is seldom in academic research. Usually, a regression analysis follows a correlation analysis to outline the relationship between the dependent and independent variable(s) (Goktay–Thatte 2017). While this paper does not draw any causal conclusions about the relationship between oil-related variables and institutional quality in Azerbaijan, its main purpose has been to comparatively assess the relevance of the impact of oil revenue on the economy. In other words, if the changes in the institutional quality and

oil-related variables occur jointly, there might be a solid presumption of the relevance of the natural resource curse theory in Azerbaijan's case. Therefore, the correlation analysis simply displays initial intuition for such an expectation, yet deficient to be decisive. Lastly, not only should governmental dynamics in institutional quality be analyzed, but societal change patterns should also be incorporated into the analysis via surveys to portray the other side of the institutional quality which is essentially about the citizens' perceptions, actions, and expectations. Future studies could examine citizens' reflections on institutional and political issues. To this end, the World Value Survey database would be useful.

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