
An empirical analysis of the impact of institutions on economic growth: Evidence from Latin American countries

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Abstract

Aim: The aim of this article was to assess the impact of institutions on economic performance, using Latin American countries in the period of 1996-2021 as a case study.

Methodology: Data for this study were obtained from the World Bank and United Nations Development Programme. In this study, the measures proposed by Kaufmann and Kraay were employed. The study's time frame spanned the period 1996 to 2021. The geographical scope included 21 Latin American economies. Dynamic panel models were employed.

Results: The results revealed that institutions play a fundamental role in driving economic growth. The establishment of a proper set of institutions is essential for a country to escape from the poverty trap. Despite Latin American countries sharing similarities in terms of language, religion, and historical colonisation by European countries, they demonstrate significant economic disparities. For instance, Chile and Uruguay were able to successfully implement reform measures that set them on a path of economic growth.

Implications and recommendations: To achieve a high rate of economic growth, it is crucial to establish a suitable institutional framework. This leads to the conclusion that institutions serve as the primary driver of economic growth.

Originality/value: The problem of the impact of institutions on economic growth is discussed in the literature and has been the subject of empirical research. In this article, the empirical verification was carried out on the basis of Latin American countries, which is the originality of this study. In this way, it was confirmed on a new dataset that institutions do matter. On the other hand, it should be noted that Latin American countries, considered similar, are not so similar.

Keywords: institutions, economic growth, dynamic panel model, Latin America

1. Introduction

Economists have long been trying to find an answer to the question – why do different countries experience varying rates of economic growth? Adam Smith referred to this dilemma in the title of his significant work as far back as 1776 (Smith, 1776), and so far a definitive answer has not been found, remaining a significant subject of study in the field of economics. How do certain countries, for example Luxembourg, Singapore, and Ireland achieve remarkable GDP per capita (PPP) figures exceeding 100,000 USD, while the poorest nations such as Burundi or the Democratic Republic of the Congo have a significantly lower GDP per capita, hovering around 1,000 USD? The difference in prosperity is striking, with Ireland and Singapore being approximately 150 times wealthier than the latter countries. This vast contrast in economic performance is not fixed and unchangeable – notably, in 1990, Singapore did not rank among the top ten richest countries, and Ireland remained outside the top 30. At the time, Singapore was roughly 32 times wealthier than Burundi, and Ireland was over 22 times wealthier. However, over the following three decades, these countries managed to achieve substantially higher rates of economic growth than the other economies. Between 1990 and 2021, Singapore's economy grew at an average annual rate of 3.3%, while Ireland experienced even faster growth, averaging 4.3% per year. Burundi's economy faced negative growth with an average rate of -1.6% over the same period (all data sourced from the World Bank database). Consequently, the disparities between these countries have been steadily widening.

There is a consensus among economists who assert that until the year 1800, there had been little variation in wealth across various nations, however the Industrial Revolution in England was a significant turning point. Since this historical milestone, certain countries have experienced a steady pace of productivity growth. This rise in productivity is often attributed to technological innovations (Clark, 2014). Nevertheless, the question remains as to why some countries have benefited from it more than others. One plausible explanation for the observed income disparities between countries lies in the differences related to physical capital, human capital, and technology. Increasing investments in these domains could potentially lead all nations to experience higher rates of economic growth. However, despite the prospects of such an undertaking, other impediments seem to hinder the achievement of beneficial results, as various countries fail to witness a substantial increase in technology investments, bigger capital accumulation or significant growth in human capital. Consequently, it can be inferred that these factors serve only as indirect contributors to economic growth, and deeper underlying reasons govern the decisions for the allocation of resources (Acemoglu, 2007). Rodrik, Subramanian and Trebbi (2004) emphasised three main approaches to the explanation of wealth inequality. Firstly, they indicated geography, as it serves as a determinant for the climate, natural resources, and burden of disease. These factors, in turn, translate into variations in productivity and the quality of human resources within a given nation. The second contributing element is international trade, as an increased degree of integration tends to spur economic convergence. The last trend is the influence of institutions since they encompass the prevailing societal rules. North staunchly supports this perspective and has expressed his critique of the neoclassical approach, advocating for the creation of a precise theory of economic dynamics akin to the theory of general equilibrium. According to North, applying the neoclassical theory to development economics is incorrect, given its focus on the static view of market function, being devoid of any aspects relating to the development of an economy. Instead, this approach concentrates on technological development and investments in human capital, disregarding the vital role of incentives that encourage such activities (North, 1994).

Street (Harriss et al., 1995) argued that the institutional economics approach is appropriate in the study of development economics in Sub-Saharan Africa and Latin American countries. New institutional economics is an attempt to incorporate institutional theory into economics, the approach based on neoclassical theory, but extends and modifies it. Advocates of this trend repeal the basic assumption of neoclassical economics about the full rationality of entities, because the available information is incomplete and the ability of individuals to process it is limited. Both these aspects

determine the occurrence of transaction costs, and it is also known that these costs are greater than zero. Moreover, mental models that are conditioned by culture and one's own experiences are important when making decisions. Taking into account transaction costs makes institutions matter. Bad institutions cause entities to make permanently wrong decisions, which in turn translates into a lack of productivity growth. In this way, economic backwardness can be explained and at the same time that this backwardness may persist due to path dependence, whilst by creating good institutions, the economy can enter a path of rapid and lasting economic growth (North, 2003).

The aim of this article was to determine the level of influence institutions exert on economic performance in Latin American countries between 1996 and 2021. To achieve this goal, dynamic panel models were applied as they proved to be the most suitable tools for examining such relations in earlier research. The vast majority of studies on the subject present discussions on economies that have experienced sustainable economic growth or those that are the poorest, such as African countries. Latin American countries, despite possessing untapped potential, receive less attention because they do not fall into the extreme categories of high growth nor extreme poverty – hence the decision to choose the spatial scope, with the time frame of 1996-2021.

The article comprises a section on the theoretical background and research findings, followed by an explanation of the research method and the rationale behind it. The results of the study are presented in the fourth section, and the article concludes with a summary of the findings with a synthetic approach.

2. The review of the literature

Sala-i-Martin stressed the empirical significance of institutions, which encompass various aspects of law enforcement, market functioning, social inequalities, political systems, and healthcare, financial, and government institutions, and argued that economies with poor institutions are inefficient, requiring more resources to produce a given output. This inefficiency affects motivation to invest in both physical and human capital (Sala-i-Martin, 2002). North (1990) played a crucial role in spreading the awareness of the importance of institutions for economic performance and defined institutions as the 'rules of the game' in society, shaping human interactions through man-made constraints, which can be formal (e.g. constitutions, laws, regulations) or informal (e.g. conventions, customs, codes of conduct). It is vital to differentiate between the terms of institutions and politics, as the difference between their meanings is quite subtle. Institutions, both formal and informal, create frameworks for the individuals and enterprises to make decisions, while politics refers to government actions aimed at achieving its goals, and may also exert influence on institutions (Hasan et al., 2006). According to North's approach, institutions profoundly impact society's motivational structure. Good institutions encourage productive activities, while poor ones might promote unproductive ones, leading to poverty in some countries. North suggested that good institutions should minimise uncertainty and transaction costs in the market, advocating for competitive markets over monopolised ones as the latter discourage the search for better and more cost-effective solutions (North, 1990).

Most economists agree that the primary drivers of economic growth lie in the private sector incentives for capital accumulation and the development of human capital. These factors seem crucial as they may be efficiently transformed into marketable products. However, for this transformation to occur, it is imperative to establish and maintain secure and stable property rights, alongside a robust rule of law. Smith stressed the significance of individuals feeling secure in their ownership of property, with the state ensuring the enforcement of contractual agreements (Hasan et al., 2006). Rodrik (2000) referred to recommendations prevalent in the 1980s, which advocated price reforms, privatisation, and macroeconomic stability as the key drivers of economic success, disregarding the influence of institutional factors. However, the implementation of these recommendations in Russia failed to

produce expected outcomes due to deficiencies in the legal, regulatory, and political systems. In contrast, Latin American reforms did not entail changes in social security or stability. The Asian financial crisis and other similar events demonstrated that unregulated markets could lead to a collapse, so economists have concluded that markets need support from non-market institutions. Nevertheless, it is essential to acknowledge that some non-market institutions may not be conducive to a market economy and might result in undesirable social effects, and at times it becomes necessary to intervene in the mechanism of a market to achieve broader objectives, such as stability and social cohesion. The study also suggested that the absence of effective institutions can lead to economic stagnation, hence laws must be clearly defined and enforced through sanctions. Entities must be fully aware of the penalties they will incur if they break the law, and the state must possess the authority to uphold these rules.

In his research, Rodrik (2000) identified five crucial markets – supporting institutions that are essential for promoting economic development. These include property rights, regulatory bodies, macroeconomic stabilization entities, social security systems, and conflict management establishments. Successful economies rely heavily on well-defined private property rights, which serve as incentives for capital accumulation and innovation. Control however is more important than ownership, as strong control rights might compensate for the absence of formal ownership rights. In Russia, ownership rights are assigned to entities, but they do not have control over their enterprises. In China, on the other hand, there are no private property rights, but the introduced rights of control have become a sufficient stimulus to encourage entrepreneurial initiatives. Therefore, legislation by itself is inadequate to ensure secure control rights. The optimal approach seems to involve a balanced combination of legislation, private and public enforcement, and respect for traditions and customs. Moreover, the proper supervision of the functioning of markets is essential to prevent them from failing, which requires the establishment of an effective regulatory system. The greater the freedom in the market, the greater the burden on regulatory institutions, as evidenced by emerging crises and breakdowns. This also illustrates the view that macroeconomic instability is an inherent feature of an economy. Developed economies have successfully implemented fiscal and monetary institutions to prevent crises, although some economic theorists question the effectiveness of stabilisation measures by means of a monetary or fiscal policy. In certain Latin American countries, fiscal and monetary institutions have been criticised for exacerbating macroeconomic instability due to their pro-cyclical policies. Another vital measure for stability and social cohesion is the implementation of a social security system. Note that such systems come with economic and social costs, such as increasing expenses and long-term unemployment. However, the lack of social security systems has been linked to the failure of reforms in Latin American countries. Social security is designed to bridge the tensions between market forces and economic security. Finally, some attention must be given to conflict management, as societal heterogeneity can lead to divisions based on ethnicity, language, or income, hindering cooperation and implementation of projects. These divisions also contribute to uncertainty and might prove detrimental to the economy. To limit such divisions, appropriate institutions should be established, including the rule of law, social security, high-quality judiciary, free elections, and the representation of minority groups.

Acemoglu (2007) adopted a similar approach to explain income disparities among countries, underlining the pivotal role of economic institutions. These institutions encompass the structure of property rights, the functioning of markets, and the prospects for contracting among individuals and enterprises, which collectively establish incentives for efficient resource allocation. In the absence of clear ownership rights, entities lack motivation to invest in physical and human capital or adopt more effective strategies. Similarly, adverse effects occur in malfunctioning markets.

Acemoglu and Robinson (2020) highlighted the concept of freedom, which encompasses the ability to take actions and make decisions related to one's property and person without the interference of others. Attaining this level of freedom requires both a robust state and a strong society. The state is responsible for enacting laws, ensuring security, and providing public services, while society must

exercise control over the state's actions and occasionally impose constraints on its conduct. This dynamic interaction forms, as they called it, the "narrow corridor" where the state and society collaborate, complement each other, and compete. This competitive process ensures that the economy remains within the narrow corridor, and the competition is viewed as a positive force that can yield beneficial outcomes. The cooperation between the state and society enables the fulfilment of increasing societal needs, yet society must stay vigilant and monitor the state's actions: if the state gains excessive power in the competition, this can lead to economic displacement from the "narrow corridor" and potentially even foster despotism. Conversely, when the state is too weak to meet societal demands, it transforms into a subjugated state. As a result, any advantage gained by one of the players in this dynamic interaction can cause the economy to deviate from the narrow corridor.

Scully (1988) was among the first to establish a connection between the institutional framework and economic growth, concluding that the choice of institutions significantly impacts economic efficiency. Economies characterised by political openness of society, the rule of law, dominant private property, and market-based resource allocation experience three times faster growth compared to countries lacking freedom or ones who impose excessive restrictions. Mauro (1995) indicated that higher levels of corruption in an economy lead to reduced investment and lower economic growth. Similarly, Keefer and Knack (1995) found that well-defined property rights might have a positive effect on both investment and economic growth. Aron (2000) also supported the idea that improved institutions correlate with higher rates of economic growth. This influence can be both direct, by creating incentives for activities, and indirect, by facilitating further investments, however the relationship between economic growth and institutions needs careful consideration due to potential endogeneity issues. The study by Vijayaraghavan and Ward (2001), conducted on a sample of 43 countries, confirmed that well-assigned property rights play a significant role in initiating the process of economic growth. The authors also observed that reduced government involvement in the economy benefits the country's economic growth, nevertheless they indicated that their analysis focused on the quantitative dimension of government presence rather than its qualitative effectiveness. The variable does not indicate the efficiency of the government, but only the scale of its operation. Rodrik et al. (2004) also considered geographical factors and the degree of integration; based on the research they concluded that institutions are a key important factor in economic growth.

Another study (Glaeser et al., 2004) suggested that wealthy countries improve their institutions, implying an opposite relationship between institutions and economic growth. According to this view, poor countries may initially experience a level of growth under dictatorial regimes, but only once sustainable growth has been achieved after reaching a certain level of wealth do they attempt to improve their institutions. This perspective is in line with the study by Acemoglu and Robinson (2020), who acknowledged the possibility of initiating economic growth under despotic rulers, but without long-term sustainability.

According to the findings of Nawaz, Iqbal, and Khan (2014), the influence of institutions on economic growth varies depending on the level of the development of economies. Analysing a sample of 35 Asian countries, they observed that institutions had a more significant impact on economic growth in developed countries compared to developing ones. Moreover, in developed countries, the critical areas of impact were related to controlling corruption, effectiveness of management, and the quality of regulations. On the other hand, in the developing countries, the rule of law, people's voice and accountability play more crucial roles. As a result, countries at various stages of development require different combinations of institutions and policies to foster economic growth. Similar conclusions were drawn by Yildirim and Gökalp (2016), who perceived governments in developing countries as stable but assessed the judiciary systems, corruption levels, the assignment of property rights and design of regulations as worse. In another study focusing on 48 African countries, Epaphra and Kombe (2017) found that institutions significantly shaped the process of economic growth. Notably, political stability and the absence of violence and terrorism were identified as having the most significant impact on economic growth. However, different conclusions emerged from a sample of 12 West African countries,

where government effectiveness was deemed the most crucial, while corruption control, the quality of regulatory systems, and the rule of law were statistically insignificant (Iheonu et al., 2017). Siyakiya (2017) also explored similar research subjects, conducting a study on 28 European Union countries and eight candidate countries between 1996 and 2014. The author approached the research in two ways: initially creating a composite measure of institutions using the Worldwide Governance Indicators (voice and accountability, political stability, absence of violence; government effectiveness, regulatory quality, rule of law, corruption control), and then estimating the impact of individual variables on gross value added per capita. The study indicated that improving institutional quality yields more significant results in wealthier countries than in the poorer ones.

An interesting comparison was conducted on a sample of emerging economies, by means of two dependent variables: GDP growth rates and GDP per capita growth rates. Using GDP per capita growth rates as the dependent variable, institutions were found to have a positive impact on economic growth, except when they were accounted for by variables like political stability or the quality of regulation, which rendered them statistically insignificant. Nevertheless, their parameter signs were consistently positive. Conversely, when GDP growth was the dependent variable, all variables related to institutions were statistically insignificant. Notably, the parameter sign for corruption control was negative (Nguyen et al., 2018). Vianna and Mollick (2018) considered the average of six WGI measures in assessing the impact of institutions on economic growth rates. Their findings indicated a positive and statistically significant influence of the institutional framework on economic growth, with all variables describing the institutions having positive parameters. However, the study struggled with diagnosing the model correctly, as the Hansen test indicated the use of incorrect instruments. These results were further supported by a study of 14 East African economies (Abera et al., 2019), which demonstrated a positive and statistically significant relation between institutional quality and economic performance. Corruption control and government efficiency were particularly crucial for African countries, whereas a sample of ASEAN economies confirmed the examined dependency, with voice and accountability, the quality of regulation, and the rule of law being the most important factors (Sari, & Prastyani, 2021). The analysis by Tran, Le, and Nguyen (2021) of 48 Asian countries between 2005 and 2018 revealed that improving institutions yielded greater benefits in poorer countries compared to the richer ones, suggesting a non-linear relationship. After surpassing a certain level of institutional quality, its impact on economic growth became negative.

To sum up, the presented research suggests that enhancing the institutional quality should have a positive impact on economic growth, with countries possessing stronger institutions being generally more prosperous than those with weaker ones. However, it is important to note that only one of the cited studies pertains to Latin American countries, making the analysis of the situation in this region a priority. The literature predominantly focuses on African countries due to their high poverty levels and Asian countries which have experienced rapid economic growth recently.

3. Method

Empirical studies of the influence of institutional quality on economic growth have encountered several challenges. The first issue pertains to selecting an appropriate measure of institutional quality, as economists have not yet established a singular set of variables that accurately represent institutions (Glaeser et al., 2004). While several measures describing institutional quality have been proposed, they are not without flaws, and are primarily criticised for their focus on outcomes rather than the institutions themselves. Despite these limitations, economists continue to conduct the research, often using property rights as a proxy for institutions, acknowledging its significance but recognizing it as just a one dimension of a broader institutional framework (Keefer, & Knack, 1995; Vijayaraghavan, & Ward, 2001). In this study, the measures proposed by Kaufmann and Kraay (2011) were employed, averaging all six dimensions of WGI institutions to encompass various institutional aspects, including the rule of law, regulatory quality, government effectiveness, political stability, control of corruption, and voice

and accountability (Vianna, & Mollick, 2018), as guaranteeing property rights alone is not a sufficient incentive to start the process of economic growth.

Another challenge related to the research methodology. Studies on this topic emerged in the late 1980s and early 1990s, employing various methods such as time series analysis, spatial data analysis, and panel data analysis. In this study, the focus was on panel data analysis. Initially, the ordinary least squares (OLS) method (Scully, 1988; Mauro, 1995; Rodrik et al., 2004) was used, followed by static panel models (Nawaz et al., 2014; Yildirim, & Gökalp, 2016; Iheonu et al., 2017; Epaphra, & Kombe, 2017; Sari, & Prastyani, 2021). However, Aron (2000) highlighted the endogeneity issue related to the studied variables, indicating that none of the aforementioned methods fully addressed this type of a dependency. Therefore, dynamic panel models became the method of choice as they enable accounting for such dependencies. (Siyakiya, 2017; Nguyen et al., 2018; Vianna, & Mollick, 2018; Abera et al., 2019). The very estimation of dynamic panel models differs from the static approach. Incorporating the lagged dependent variable results in the formation of a correlation with a random component. The equation for the dynamic panel model can be written as follows:

$$Y_{it} = \alpha_i + \beta_1 Y_{i,t-1} + \beta_2 Z_{it} + \beta_3 X_{it} + \delta_t + \varepsilon_{it}, \quad (1)$$

where i denotes the country and t the year; Z_{it} – variable, needed to check influence on the dependent variable; X_{it} – control variables in country i and year t ; α_i – individual effects; δ_t – time specific-effects; ε_{it} – error term.

A different type of estimator should be employed due to the establishment of the aforementioned correlation, the commonly used estimators in dynamic panel models include the first difference estimator (Arellano, & Bond, 1991) and the system estimator (Arellano, & Bover, 1995; Blundell, & Bond, 1998). For the first difference estimator, correlation is avoided by calculating first differences, while the system estimator employs both increment and level equations. Delayed first differences can be utilised as instruments to effectively estimate the equation across levels (Baltagi, 2005).

Data for this study were obtained from the World Bank and United Nations Development Programme. The analysed data included GDP per employee (expressed in constant prices) as the dependent variable, with control variables comprising investment as a percentage of GDP and mean years of schooling. The study's time frame spanned the period 1996 to 2021, but 5-year averages were incorporated into the model. The geographical scope included 21 Latin American economies¹. It is crucial to note that the variables describing institutions and investments were considered endogenous. Stata 13 software was used to estimate the models.

4. Results

The study aimed to investigate the impact of institutions on economic growth, employing the dynamic panel models, and explain the variations in gross domestic product per employee based on the institutional framework, investment, and human capital factors, which can be written as follows:

$$GDPpw_{it} = f(INST_{it}, INV_{it}, SCHOOL_{it}) \quad (2)$$

where: $GDPpw_{it}$ – real gross domestic product per worker; $INST_{it}$ – institutions; INV_{it} – investment; $SCHOOL_{it}$ – mean years of schooling.

The next step involved the examination of the correlation coefficient between the variables (Table 1). Based on this analysis, the institution measure showed an average level of correlation with the

¹ List of countries: Argentina, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Ecuador, El Salvador, Guatemala, Guyana, Honduras, Jamaica, Mexico, Nicaragua, Paraguay, Peru, Suriname, Trinidad and Tobago, Uruguay.

dependent variable, while the independent variables displayed no correlation with each other, except for the relationship between institutions and average learning time, which exhibited a medium level of correlation. Following the correlation study, the integration level of the variables was assessed by means of the Fischer type test (Table 2) due to data gaps limiting the selection of available tests. The results indicated that the logarithms of all variables were stationary, leading to the rejection of the null hypothesis in favour of the alternative hypothesis in each case.

Table 1. Correlation matrix

| | <i>lnGDPpw</i> | <i>lnINST</i> | <i>lnINV</i> | <i>lnSCHOOL</i> |
|-----------------|----------------|---------------|--------------|-----------------|
| <i>lnGDPpw</i> | 1.00 | | | |
| <i>lnINST</i> | 0.4491 | 1.00 | | |
| <i>lnINV</i> | -0.0455 | -0.0228 | 1.00 | |
| <i>lnSCHOOL</i> | 0.2232 | 0.408 | -0.0242 | 1.00 |

Source: own elaboration.

Table 2. Panel Unit Root Tests

| Variable | Statistic | <i>p</i> -value |
|-----------------|-----------|-----------------|
| <i>lnGDPpw</i> | -3.1395 | 0.0008 |
| <i>lnINST</i> | -2.7802 | 0.0027 |
| <i>lnINV</i> | -5.0516 | 0.0000 |
| <i>lnSCHOOL</i> | -4.2574 | 0.0000 |

Source: own elaboration.

Table 3 shows the model estimation results. For comparison, the estimates were prepared both using Arellano and Bond, as well as the Blundell and Bond estimators, therefore it was necessary to test the stationarity of the logarithms of the variables. It should be explained that initially the models were estimated using the OLS estimator and a fixed effects estimator. This activity made it possible to determine the range of estimation of the parameters of the lagged dependent variable for the first differences estimator. In this way, it was determined that the value of the parameter for the lagged dependent variable should be in the range of 0.879-1.002. In the next step, the parameters were estimated using the first differences estimator, including a one-stage and two-stage estimator. To diagnose the one-stage model, the Arellano and Bond test and the Hansen test were used. There was no autocorrelation of the random component ($p = 0.418$) and the instruments used were considered valid. However, the value of the parameter with the lagged dependent variable did not fall within the established range (-0.476). Similar conclusions were drawn based on the two-stage first differences estimator, hence the parameters were estimated using the system estimator. The author carried out estimation diagnostics again, and those using the Blundell and Bond one-step estimator met all the requirements. Thus, there was no autocorrelation of the random component (AR(2): $p = 0.739$), and according to the Hansen test, the instruments used were appropriate ($p = 0.141$). In the case of the system estimator, the Difference-in-Hansen test should also be used, which also gave the correct result ($p = 0.556$). The value of the parameter for the lagged dependent variable was within the established range ($0.879 < 0.963 < 1.002$). For comparison, a model was estimated using a two-stage estimator which gave correct results, except for the value of the parameter for the lagged dependent variable, which turned out to be overestimated ($1.017 > 1.002$). Finally, the inference was made based on estimation using the one-stage Blundell and Bond estimator. For differential equations, lagged variable levels or lagged variable differences were used as instruments, depending on the nature of the variable. For level equations, lagged first differences were used as instruments. Hence, it can be concluded that

institutions have a positive impact on economic growth. Interestingly, the remaining parameters for investments and human capital were statistically insignificant, indicating that they do not significantly affect the economic growth rate, leading to the conclusion that institutions serve as the primary driver of economic growth.

Table 3. Estimation results of GDP per worker using data from 1996-2021

| Dependent variable: $\ln GDP_{pw_{i,t}}$ | | | | |
|---|-------------------|-------------------|---------------------------------|-------------------|
| | <i>FDGMM1</i> | <i>FDGMM2</i> | <i>SGMM1</i> | <i>SGMM2</i> |
| $\ln GDP_{pw_{i,t-1}}$ | -0.476 (0.718) | 0.004 (0.995) | 0.963 (0.000) | 1.017 (0.000) |
| $\ln INST_{i,t}$ | -1.248 (0.404) | -0.781 (0.541) | 0.250 (0.045) | 0.185 (0.444) |
| $\ln INV_{i,t}$ | 0.612 (0.297) | 0.512 (0.318) | 0.148 (0.482) | 0.183 (0.324) |
| $\ln SCHOOL_{i,j}$ | 0.326 (0.667) | 0.492 (0.480) | -0.197 (0.109) | -0.159 (0.345) |
| Number of observations | 68 | 68 | 87 | 87 |
| Number of countries | 19 | 19 | 19 | 19 |
| Arellano-Bond test for AR(2) in differences (<i>p</i> -value) | 0.418 | 0.309 | 0.739 | 0.746 |
| Hansen test of joint validity of instruments (<i>p</i> -value) | 0.271 | 0.271 | 0.141 | 0.141 |
| Difference-in-Hansen test (<i>p</i> -value) | – | – | 0.556 | 0.556 |
| Number of instruments | 14 | 14 | 18 | 18 |

Note: All models content dummy variables of time; *p*-values are in parentheses. *FDGMM1* — one-step difference GMM estimator; *FDGMM2* — two-step difference GMM estimator; *SGMM1* — one-step system GMM estimator; *SGMM2* — two-step system GMM estimator.

Source: own elaboration.

The obtained results were in line with the findings of previous research. Thus, to achieve a high rate of economic growth, it was crucial to establish a suitable institutional framework. In order to address the question posed in the introduction, it was necessary to explore the reasons behind the relatively low level of institutions in Latin American countries. Note that these nations were under Spanish and Portuguese rule for an extended period of time, which resulted in the establishment of hierarchical structures with centralised decision-making and bureaucratic systems primarily focused on raw material exploitation. Despite gaining independence in the 19th century, the situation remained largely unchanged. Independence was not the result of grassroots movements but rather a consequence of the weakened state of the Spanish and Portuguese powers (Acemoglu, & Robinson, 2012). Consequently, the conditions and incentives for private sector development were not fostered, leading to exploitative institutions. The assignment of property rights emerged as a highly significant factor for this group of economies, where the state owned most of the resources, and any private property that surfaced was predominantly controlled by a narrow group of the elite. As a result, these elites were able to shape institutions to serve their own interests, leading to heightened instability as governments were frequently overthrown through forceful means. Such factors were detrimental to initiating the process of economic growth. In their history, several of these countries experienced phases of import being replaced by industrialisation, leading them to limit free trade in favour of

developing their own industries, which then created inequalities, with state-supported sectors evolving differently from those with no such backing. The next phase of development involved the United States' support in the form of the Washington Consensus, comprising recommendations focused on modernisation, deregulation, and opening economies for foreign cooperation (Coatsworth, 2005). While some economies adhered to these recommendations better than others, Uruguay, Chile, and Trinidad and Tobago emerged as the richest countries in Latin America in the early 21st century, with higher-rated institutions. Most of all, these countries prioritised the protection of private property, whereas Nicaragua, Honduras, and Bolivia stood out as the poorest economies, with the lowest-rated institutions.

5. Conclusions

This research paper addressed the issue of development economics and explored the reasons behind the varying pace of development among different economies. The aim was to assess the impact of institutions on economic performance, using Latin American countries in the period of 1996-2021 as a case study. Dynamic panel models were employed, and the results revealed that institutions play a fundamental role in driving economic growth. The establishment of a proper set of institutions is essential for a country to escape from the poverty trap. Despite Latin American countries sharing similarities in terms of language, religion, and historical colonisation by European countries, they demonstrate significant economic disparities. For instance, Chile and Uruguay were able to successfully implement reform measures that set them on a path of economic growth. Therefore, it might be assumed that other countries should either follow a similar path or adapt their formal institutions to align with informal ones. The specific institutions responsible for initiating the process of economic growth were not explicitly identified in this study, but it was confirmed that institutions do matter. As further research is being conducted, it would be valuable to determine which specific institutions are of the utmost significance in fostering economic growth.

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