

The Elusive Quest for Growth in Latin America and the Caribbean:

The Role of Trust

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Abstract*

Interpersonal trust and trust in institutions have been falling steadily over the last couple of decades all over the world. This is particularly problematic because previous research has found strong positive links between trust and economic growth. However, that correlation has yet to be thoroughly explored for Latin America and the Caribbean. This document aims to evaluate that relationship because the recent Covid-19 pandemic and its associated economic crisis has made identifying ways to increase economic development more pressing than ever. Trust could play a key role in addressing the pandemic and related difficulties, and this document identifies some ways in which it could do so.

JEL classifications: E02, D70, D91, O11, O12

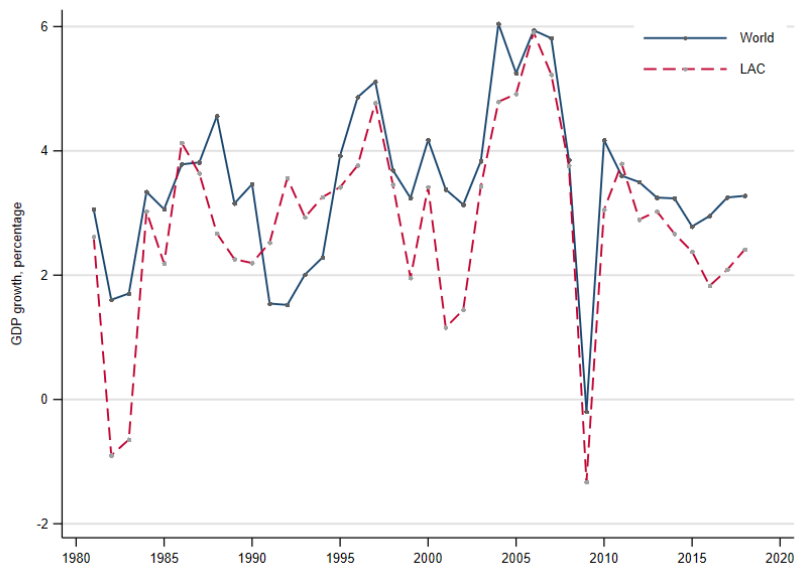
Keywords: Trust, Growth, Productivity, Latin America and the Caribbean, Public policy

* This document expands the work published by the authors in the report “Inclusion in Times of Covid-19.” As such, it shares some common material, and it has greatly benefited from comments on that chapter by Victoria Nuguer and Andrew Powell. This document has also benefited from countless conversations with Phil Keefer and material we have developed together.

1. Growth and Trust in Latin America and the Caribbean

Latin America and the Caribbean (LAC) continues to be one of the slowest growing regions in the world. Between 1960 and 2017, the average per capita growth rate of real GDP in LAC was below the world average (Figure 1). As such, while other regions have been making inroads compared to the United States—for example, the typical country in emerging Asia caught up substantially with the income per capita of the United States, from 11 percent of the United States’ per capita income in 1960 to 58 percent in the year 2017—a country in Latin America and the Caribbean gained, on average, only 4 percent of the per capita income of the United States (Cavallo and Powell, 2018).

Figure 1. Economic Growth Rate in World and LAC.



Source: Authors’ calculations based on data from World Development Indicators, World Bank.

Notes: Percentage of GDP Growth comes from the World Bank Indicators (1981 – 2018). The total sample has 212 countries and territories including the following LAC countries Antigua and Barbuda, Argentina, The Bahamas, Barbados, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominica, Dominican Republic, Ecuador, El Salvador, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, St. Kitts and Nevis, St. Vincent and the Grenadines, St. Lucia, Suriname, Trinidad and Tobago, Uruguay and Venezuela.

Boosting income is a high priority, and higher growth on a sustained basis is required to raise the living standards of the population. For economies to grow, they must expand the accumulation of factors of production (capital and labor), and they have to use those inputs more

efficiently (to increase total factor productivity). Historically, the region has suffered from low inputs accumulation, but most acutely from low productivity (Pagés, 2010).

Capital accumulation expands the productive capacity of an economy. However, individuals and firms will only increase their capability if they think that doing so will be profitable, and if they do not have fears of expropriation, whether that of their investments or their profits. To expand, moreover, they also need access to financial markets. Credit can only develop when banks can recover their loans and individuals can have unencumbered to their savings. An increase in the labor share works in the same way as capital. It expands the productive capacity of the economy, but it only takes place if investors and firms can predict that employees will not take advantage of them. In one phrase, growth can only happen if there is TRUST.

Trust facilitates transactions between individuals, firms, and governments.¹ Unfortunately, trust has been on the decline in the world and the region (Figure 2), increasing transaction costs, preventing resources flowing to their most efficient use, and reducing economic activity. In the world, generalized trust (interpersonal) went from 39 percent in the 1981-1985 period to 23 percent in 2010-2014; in the same downwards trend, trust levels in the LAC region decreased from 22 percent to 10 percent on average in the same periods. Meanwhile, the most advanced economies—OECD countries—have maintained more stable trust levels on average, 50 percent in the 1981-1985 period vis-à-vis 35 percent in 2010-2014, but still presenting a decline.

¹ In this document, trust is defined as the belief that people, firms, and institutions will not: i) make promises they know they cannot keep, ii) renege on promises that they have made, and iii) violate norms to take advantage of people who adhere to them.

Figure 2. Trust Has Been Fallen Steadily in the World and LAC



Source: Authors' calculations based on data from the six waves of the World Values Survey (1981 – 2014)

Notes: Generalized trust is calculated from answers to the question “*Generally speaking, would you say that most people can be trusted, or that you need to be very careful in dealing with people?*” Trust is equal to 1 if the respondent answers “*Most people can be trusted*” and 0 otherwise. The trust variable was aggregated at the country level as a weighted average from individual observations, and after that averaged in five-year brackets.

OECD countries per year are included when a country acquired its membership.

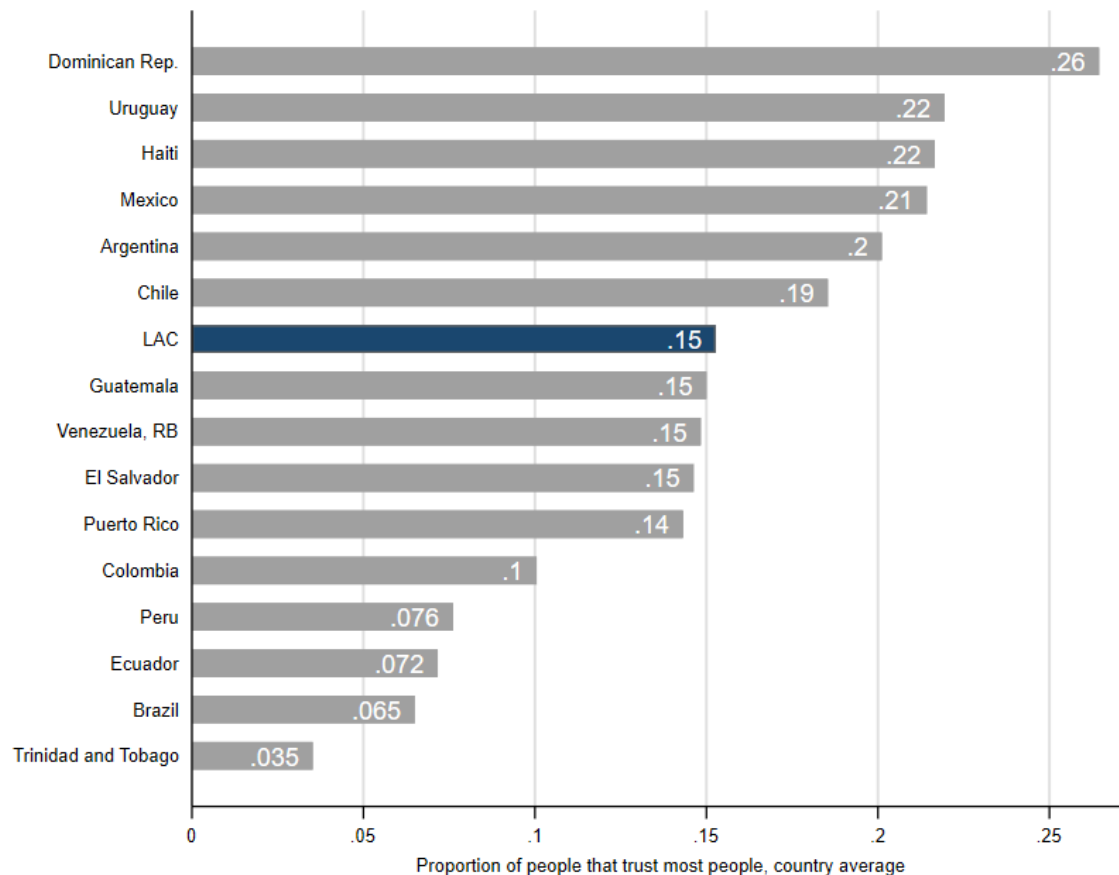
Haiti was excluded from the present sample, since the data collection for the sixth wave lasted after the expected time frame, until 2016.

The total sample is 98 countries. The 13 countries in LAC included in the sample are Argentina, Brazil, Chile, Colombia, Dominican Republic, Ecuador, El Salvador, Guatemala, Mexico, Peru, Trinidad and Tobago, Uruguay, and Venezuela.

Over the same period, according to the WVS as well, Dominican Republic is the country showing the highest levels of generalized trust on average, with almost 3 out of 10 people saying that most people can be trusted. Conversely, countries like Brazil and Trinidad and Tobago have the lowest levels of trust in the region. (Figure 3). Latinobarometer and the Latin American Public

Opinion Project (LAPOP) have also included questions about trust in their surveys, with similar results. We explore those surveys in the Annex.²

Figure 3. Trust Levels in LAC by Country, 1981 – 2016



Source: Authors' calculations based on data from the six waves of the World Values Survey (1981 – 2016).

Notes: Generalized Trust is calculated from answers to the question “Generally speaking, would you say that most people can be trusted, or that you need to be very careful in dealing with people?” Trust is equal to 1 if the respondent answers “Most people can be trusted” and 0 otherwise. The trust variable was aggregated at the country level as a weighted average from individual observations.

Mistrust among individuals, firms, and government makes each unwilling to rely on the assurances of the other. Individuals are less willing to believe that firms have their best interests at heart; they are skeptical of product quality, that their data are secure and that banks will return

² Rankings per country for generalized trust, according to the different countries available, can be found in the Annex.

their deposits. If firms mistrust individuals, they may be reluctant to hire new workers and more likely to invest in precautionary measures that prevent theft. If individuals and firms mistrust government, then public policies may become less effective and restricting private investment. Boosting levels of trust would enhance growth, may help reduce inequality, and would make people feel more satisfied.

Table 1. Taxonomy of Trust: Examples of the Effects of Distrust

		Distrust In:		
		Individuals	Businesses	Government / Institutions
Distrusted By:	Individuals	<i>No collective action</i>	<i>Lower transactions</i>	<i>Lower participation/turnout</i>
	Businesses	<i>Lower credit, smaller firms, higher investment on security</i>	<i>More integration, more family-operated firms</i>	<i>Lower reliance on public goods, lower compliance with law and regulations, lower foreign direct investment (FDI)</i>
	Government / Institutions	<i>Higher cost of participation, higher penalties</i>	<i>More stringent regulations</i>	<i>Lack of international agreements and global public goods</i>

Source: Authors' compilation.

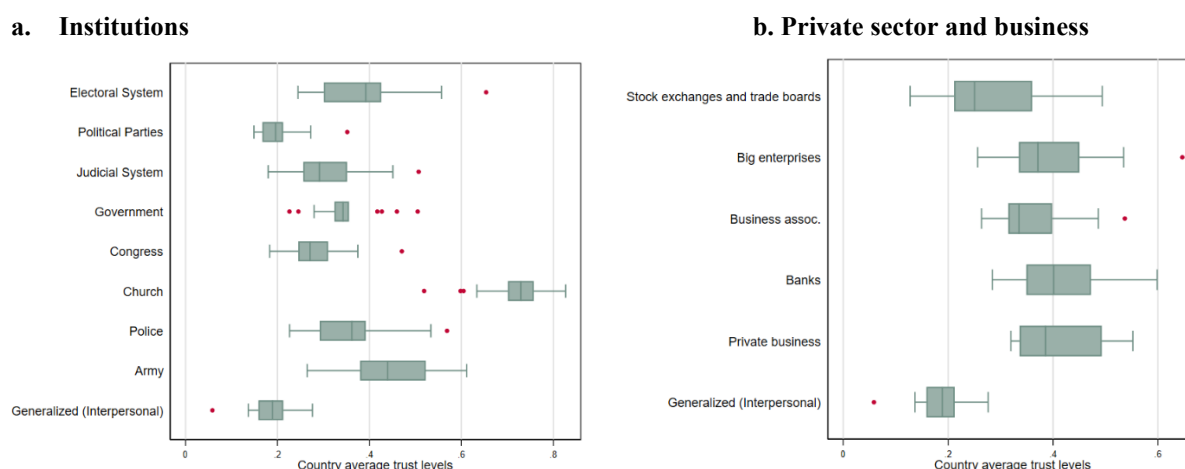
While this document focuses on interpersonal trust, it is relevant to note that trust in government and other types of institutions is also low. On average, over the entire period, according to the Latinobarometer survey, fewer than 4 in 10 Latin American and Caribbean citizens trust their government. All the institutions of democracy fare similarly, scoring on the lower band of trust on average—including congress, the judicial system, and political parties (see Figure 4.a).

As expected, this low level of trust in institutions, including political parties and politicians, is correlated with the low levels of interpersonal trust in the region, given that collective action among individuals is essential for their ability to trust institutions. Political participation and thriving political parties can only exist in societies whose members trust each other and engage in joint ventures. Low trust in government and congress goes hand in hand with low participation and low trust levels in political parties. Individuals only trust institutions, particularly governmental ones, when accountability mechanisms are in place. However, since in low-trust societies enforcement of the law is a weak concept, it is not surprising that even institutions in

charge of overseeing social and political accountability, like the judiciary system or the police, also present low levels of trust on average.

Trust in the private sector is in turn associated with trust in government and institutions (Figure 4.b). If people do not trust each other, it is unlikely that they will rely on those who manage businesses, and even more so when they do not trust the governmental institutions that should keep companies in check. Additionally, if private capital does not trust that governments can provide a set of rules for fair competition and back up contracts, they will be less willing to invest and take risks.

Figure 4. Trust Levels by Type of Institutions and Business



Source: Authors' calculations based on data from the Latinobarometer Survey (1996 – 2018).

Notes: Interpersonal Trust is calculated from the answers to the question “Generally speaking would you say that do you can trust most people, or that you can never be too careful in dealing with others?” Trust is equal to 1 if the respondent answers “One can trust most people” and 0 otherwise. The variables related to trust in other institutions are computed from the question: “How much trust you have in each of the following groups/institutions?” Trust is equal to 1 if the respondent answers “A lot” or “Some” and 0 when the answer is “A little” or “No trust.” The weighted average per country is computed from the individual-level data. The sample includes 18 countries from the region: Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay, and Venezuela.

2. Trust and Growth

Sustained economic growth has tended to be elusive, particularly for LAC countries. The basic model of growth, which still informs most research in this area, states that long-run economic growth is a function of capital accumulation (K), labor (L), and changes in productivity (A). Trust—both in institutions and in other people—is a fundamental component of factor

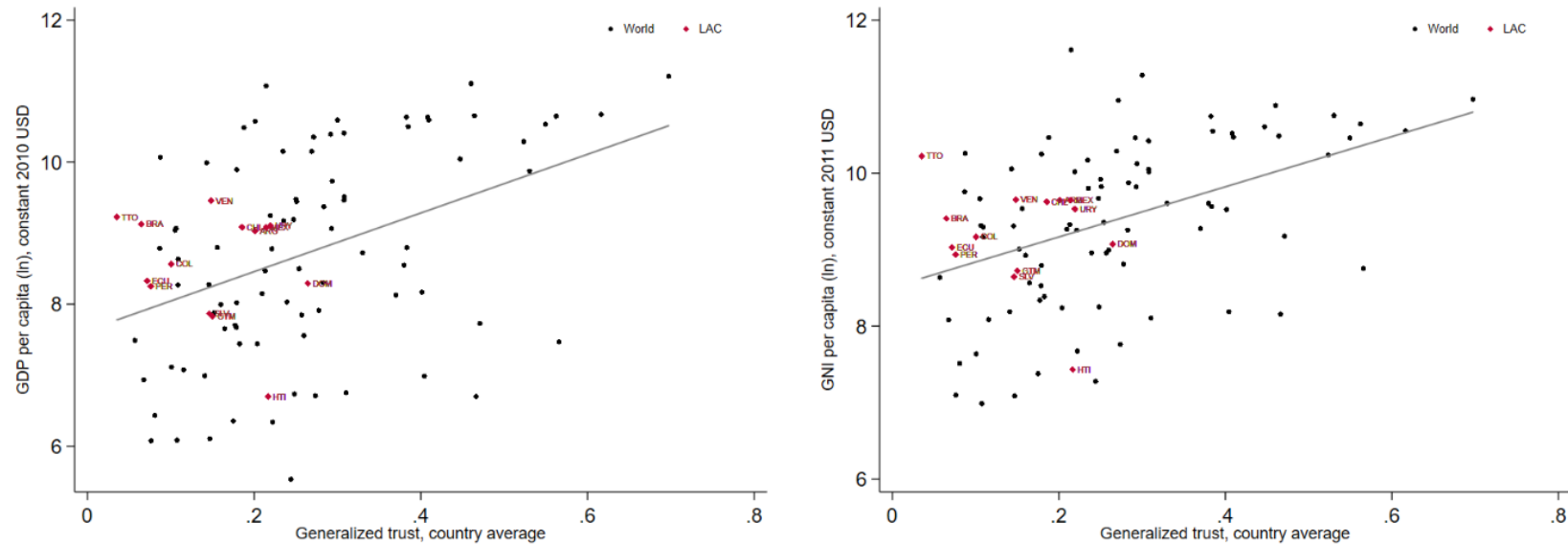
accumulation and productivity (Algan and Cahuc, 2014; Algan et al., 2017). The correlation between trust and growth has been part of the discussions for a long time. For example, Arrow (1972) and Fukuyama (1995) stated that trust in a society strongly predicts economic prosperity. Knack and Keefer (1997), using attitudinal country-level data from surveys as a measure of trust, showed that an increase of one standard deviation of trust leads to the economic growth of more than one-half of a standard deviation.

Most of these studies use worldwide data, but just a few explore whether those assumptions hold for LAC or focus on where countries in the region stand in the link between trust and income, investment, innovation, and other outcomes. This document aims precisely to contribute to that end and to take a closer look at how trust potentially affects those variables involved in the economic growth formula. The document additionally seeks to explore and analyze the performance of the countries in the region.

To perform the analysis, the six waves of the World Values Survey (WVS) provide a comprehensive set of trust variables regarding generalized or interpersonal trust, trust in institutions, and also in the private sector. The data set is representative at the national level, and the period available extends from 1981 to 2014, with a total sample of 98 countries.³ Considering GDP per capita as the most common measurement of national economic outcome, when plotting it versus aggregated generalized trust data at the country level, on average, it shows a positive and strong correlation (Figure 5). The same happens when using as a measurement of income GNI per capita; the positive relationship between trust and income holds. In both cases, countries from LAC occupy positions in the quadrant of the lowest levels of trust for the world and also display relatively low levels of income per capita, particularly compared to European and other developed countries. These results complement the original work on the topic developed by Knack and Keefer (1997).

³ For detailed information about the countries included per wave, refer to Table B in the Annex.

Figure 5. Relation between Trust and Income



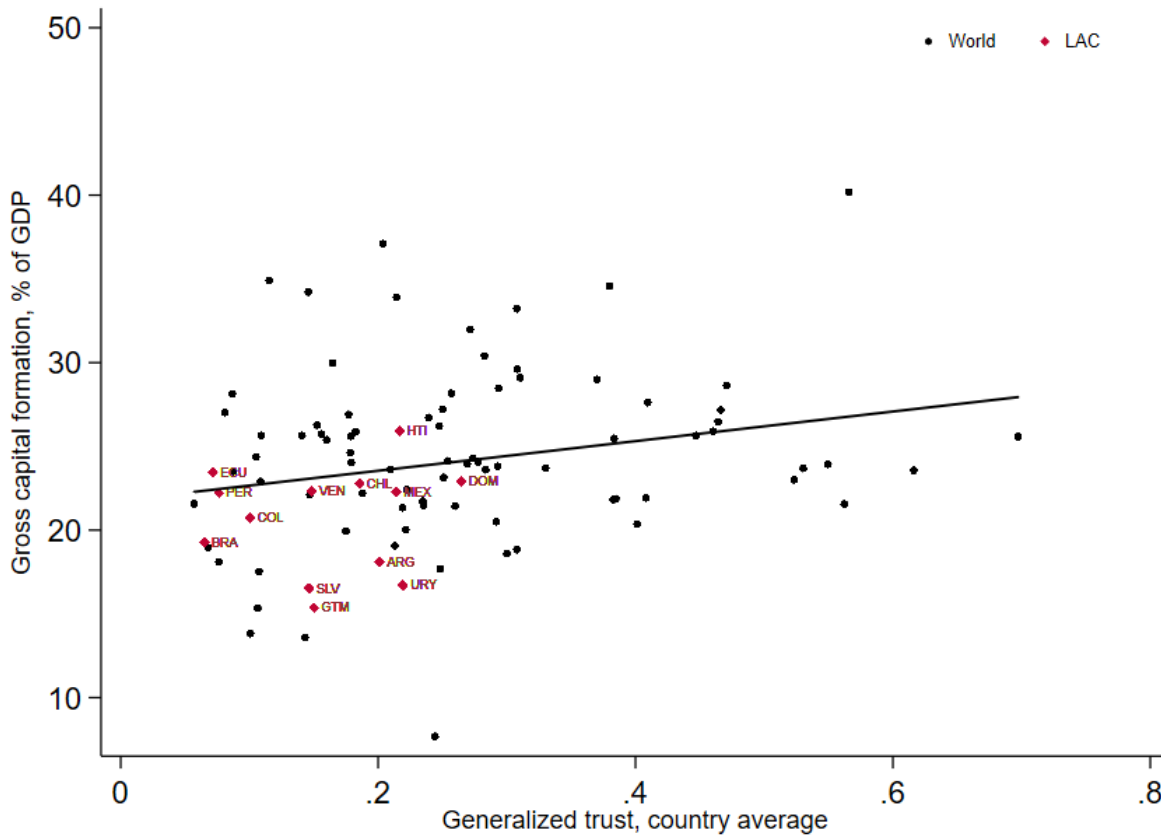
Source: Authors' calculations based on data from the World Value Survey and World Development Indicators, The World Bank.

Notes: The trust data comes from the six waves of the World Value Survey (1981 – 2016). GDP and GNI per-capita come from the World Bank Indicators (1981 – 2018). The total sample has 97 countries, including Argentina, Brazil, Chile, Colombia, Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Mexico, Peru, Trinidad and Tobago, Uruguay, and Venezuela.

Furthermore, taking previous literature as reference (Algan, 2014), Table A in the Annex shows the regression of income per capita (ln) on generalized trust. This regression analysis provides an updated version of the original work using current data from WVS sample, and it includes a set of regressions with a larger LAC countries sample using Latinobarometer data, unlike other previous exercises in the literature that have been more focused on Europe. Column 1 shows that one standard deviation increase in trust, for the WVS sample only, which is about 0.14, increases (ln) income per capita by 0.58, or 6.7 percent of the sample mean; results similar to those found in the previous literature. When including Latinobarometer data, the strong and positive correlations still holds. A one standard deviation increase in trust (0.13) increases (ln) income per capita by 0.56, or 6.5 percent of the sample mean. In both cases, this correlation is statistically significant, and trust seems to account for almost one-fifth of the cross-country variation. Interestingly, when controlling for education, ethnic segmentation, population, and political institutions, the correlation holds greater for the combined sample (column 8) in comparison to the sample restricted to WVS only (column 4). In this case, one standard deviation increase in trust (0.13) means an increase in income per capita by 0.27, or 3.1 percent of the sample mean.

Capital accumulation, as one main element for economic growth, is also not orthogonal to needing a trusted environment to flourish. According to Arrow (1972), virtually any commercial transaction in itself implies an element of trust. Trust not only fosters input accumulation but also increases the efficiency of other inputs. For example, trust provides a positive impact on physical capital accumulation through significant interaction with human capital (Dearmon and Grier, 2009). Capital accumulation and investment are binding by trust-sensitive transactions, in which individuals trust that payments will be in exchange for promised goods and services. Also, when trust is high between private entities, and between private and public institutions, the cost of transactions is less. When plotting gross capital formation, as a percentage of GDP, against the interpersonal trust measurement, the positive correlation holds, along with LAC countries again being in the lower quadrant of the picture for both variables. (Figure 6)

Figure 6. Relation between Trust and Capital



Source: Authors' calculations based on data from the World Value Survey and World Development Indicators, World Bank.

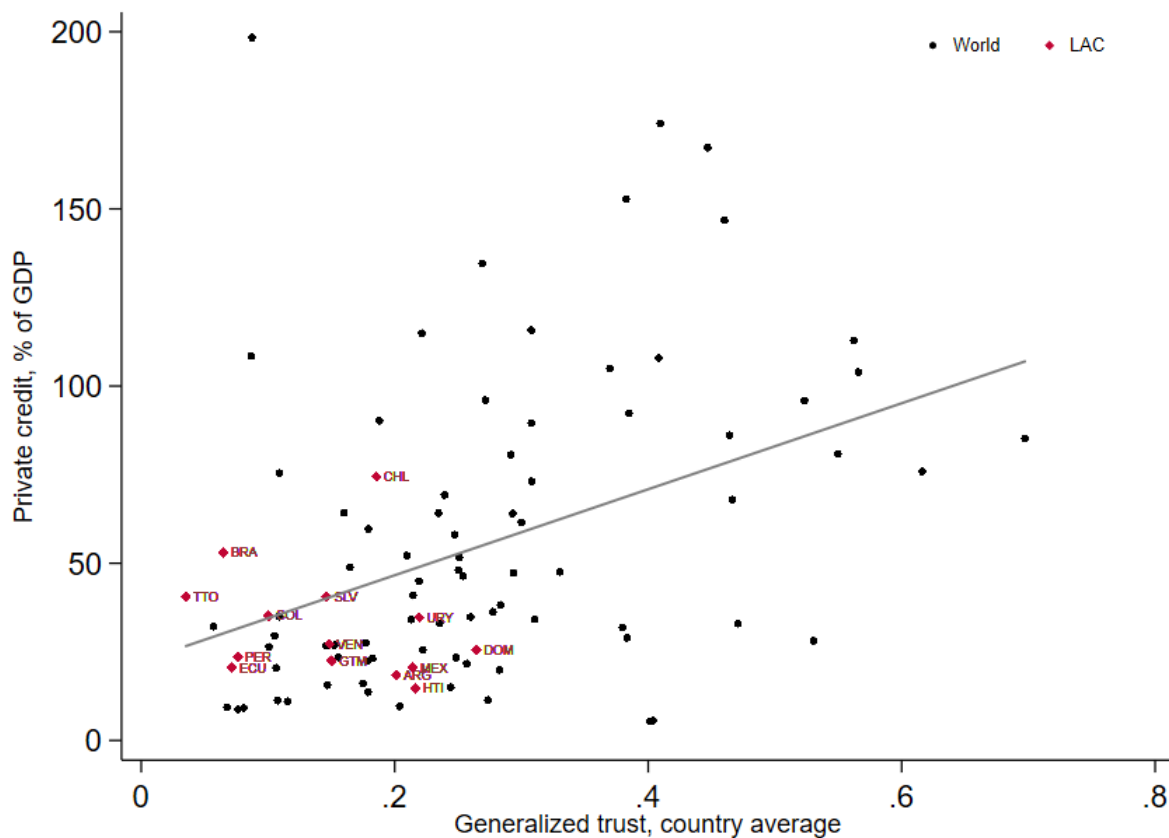
Notes: The trust data come from the six waves of the World Value Survey (1981 – 2016). Gross capital formation comes from the World Bank Indicators (1981 – 2018). The total sample has 94 countries including Argentina, Brazil, Chile, Colombia, Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Mexico, Peru, Uruguay, and Venezuela.

Similar correlations are found for trust and investment, not surprising as trust is critical for financial intermediation, and financing in general, in which transactions frequently require inter-temporal exchange rather than instantaneous barter. Trust accelerates economic growth in part by facilitating credit transactions (Kiyotaki and Moore, 2001). Guiso, Sapienza, and Zingales (2004) show that financial institutions in high-trust areas lend more. Households and firms located in high trust-areas also demonstrate a higher likelihood of obtaining credit when they need it. Moreover, trust seems to work both ways, not only encouraging banks to lend but also households to save. In high-trust areas, households may invest more in equity and personal checks because they trust that financial institutions will not seize their assets. Aggregating to the level of countries, Calderón,

Chong, and Galindo (2002) find that countries with a higher level of trust tend to have larger financial sectors.

Figure 7 shows a positive and strong correlation between country private credit data, as a percentage of GDP, and generalized interpersonal trust. Once again, LAC countries are the ones showing in the lower left part of the graph, with the lowest levels of trust and private credit among the sample.

Figure 7. Relation between Trust and Credit



Source: Authors' calculations based on data from the World Value Survey and World Development Indicators, World Bank.

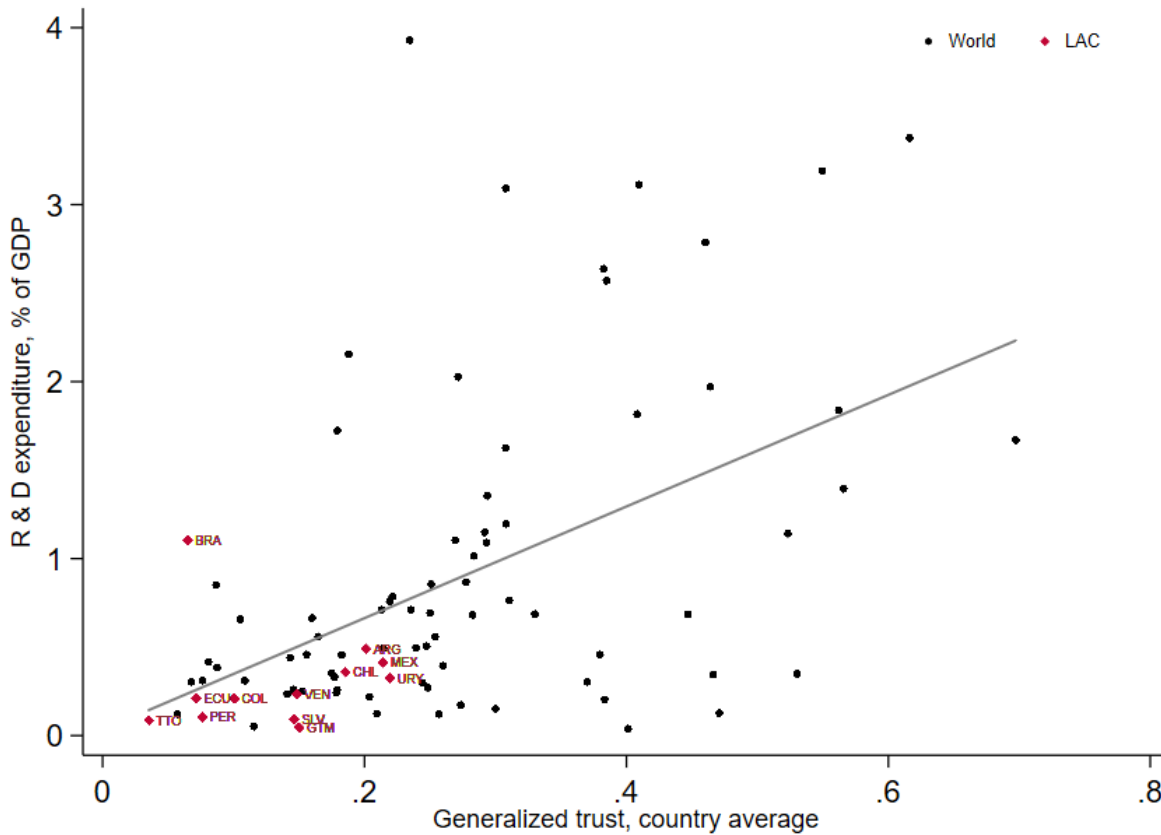
Notes: The trust data come from the six waves of the World Value Survey (1981 – 2016). Private credit comes from the World Bank Indicators (1981 – 2018). The total sample has 94 countries including Argentina, Brazil, Chile, Colombia, Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Mexico, Peru, Trinidad and Tobago, Uruguay, and Venezuela.

Trust also affects firms' sources of financing. If outside investors lack trust in firms' owners or managers, then firms will have to rely on retained earnings. If outside (minority) equity holders dearth trust, then external finance will only be available from banks that have managed to establish a longer-term relationship. Trust affects investment decisions in the stock market (Guiso, Sapienza and Zingales, 2008) and the decisions of venture capitalists (Bottazzi, et al. 2016). Again these dynamics can also be explained by how trust affects the interaction among economic agents; for example, Zak and Knack (2001) elaborate on how investment increases when trust is also high by focusing on the role of investment brokers as intermediaries between investors and firms. As the lack of trust increases transaction costs, particularly in regard to the need for supervision or even potential disputes regarding contracts, investors anticipate lower profit margins. This in turn tends to hold down investment rates.

Trust is highest in countries with elevated R&D and explains more than a third (37 percent) of the dispersion of rates of expenditure on R&D across countries (Algan, 2014). Evidence from Knack and Keefer (1995) and a variety of subsequent research (e.g., Knack and Keefer, 1997; La Porta et al., 1997; Dasgupta and Sergaldin, 2001; Glaeser et al., 2000; Zak and Knack, 2001; Beugelsdijk, De Groot and Van Schaik, 2004; and Bloom et al., 2012) demonstrates that if entrepreneurs worry that the government will act opportunistically (e.g., changing regulations or even expropriating assets), they will invest and innovate less and growth will then slow.

Following the literature, the correlation between R & D expenditure and trust is as expected. Countries with higher levels of interpersonal trust are the ones with a higher percentage of GDP allocated to research and development, as a measurement for innovation expansion. (Figure 8)

Figure 8. Relation between Trust and Innovation



Source: Authors' calculations based on data from the World Value Survey and World Development Indicators, World Bank.

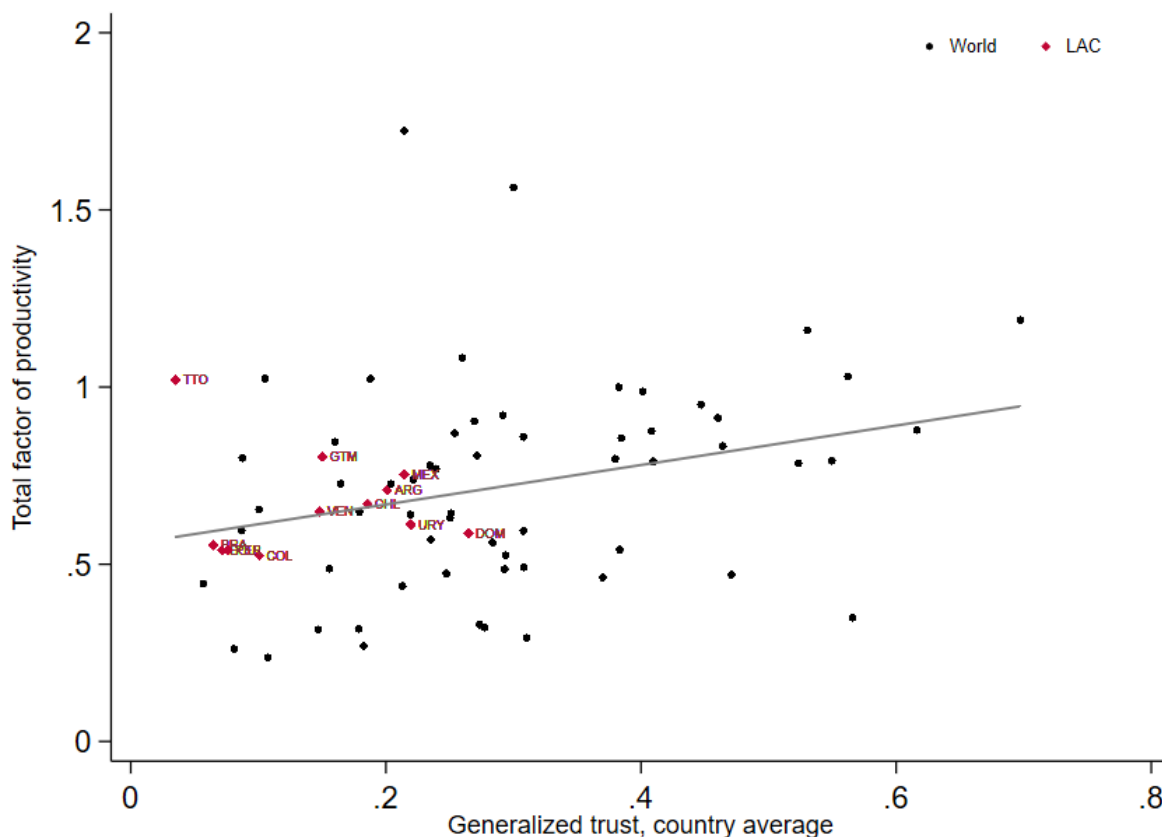
Notes: The trust data come from the six waves of the World Value Survey (1981 – 2016). Research and development (R&D) expenditure data comes from World Development Indicators, The World Bank (1996 – 2017). The total sample has 88 countries, including Argentina, Brazil, Chile, Colombia, Ecuador, Guatemala, Mexico, Peru, Puerto Rico, El Salvador, Trinidad and Tobago, Uruguay, and Venezuela.

In general, countries in the region score very low on expenditure towards innovation, with less than 1 percent of their GDP assigned to those purposes. The only exception in this sample is Brazil, showing an average country spending on R&D slightly above 1 percent of the country's GDP from 1996 to 2017.

Trust also shows a positive correlation with the total factor of productivity (TFP) in country-level data (Figure 9). Bjørnskov and Méon (2015) found evidence that trust is correlated not only with level of TFP level but also with its growth rate, mainly through the channel of economic-judicial institutions. Institutions are relevant to overcome the effects that distrust can create in a society and its ability to generate economic prosperity. Distrust creates public demand

for regulation. However, the proper design and implementation of guidelines and rules is crucial, since (over) regulation could also harm social capital accumulation (Aghion et al., 2009).

Figure 9. Relation between Trust and Productivity



Source: Authors' calculations based on data from the World Value Survey and Penn World Table 9.0.

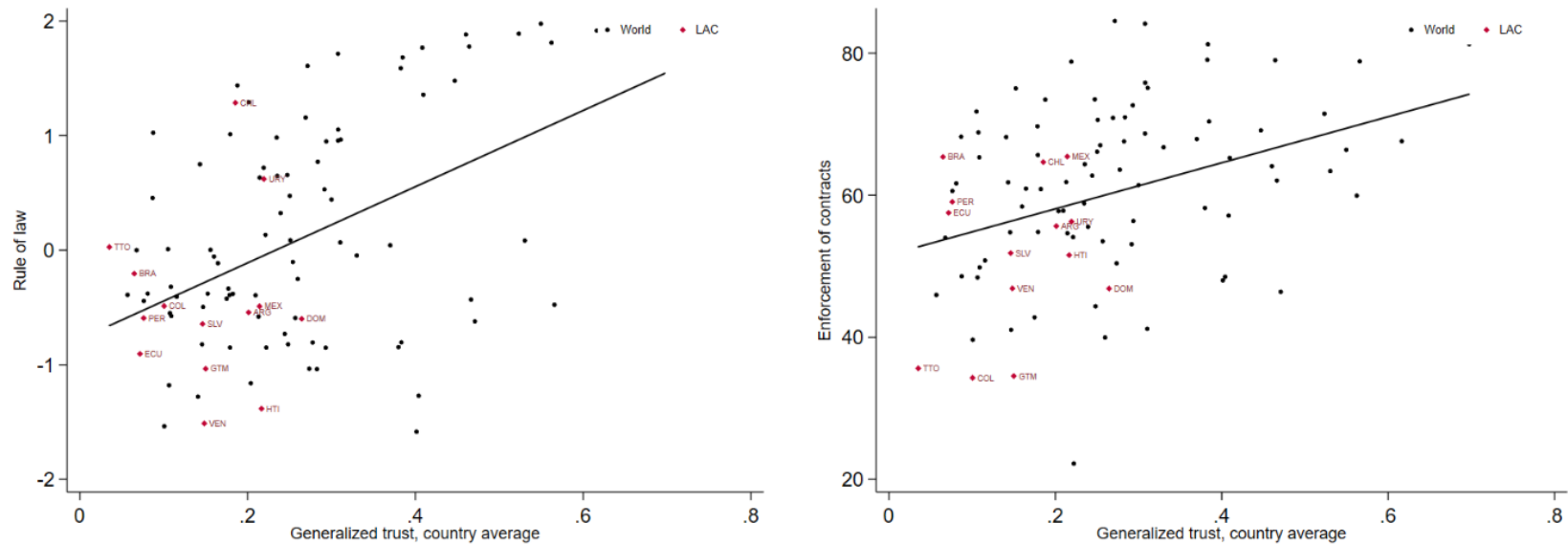
Notes: The trust data come from the six waves of the World Value Survey (1981 – 2016). Total factor productivity is an index for each country based on PPP exchange rates and normalized such that the United States is equal to 1.0. Data come from Penn World Table 9.0 (1981 – 2014). The total sample has 72 countries including Argentina, Brazil, Chile, Colombia, Dominican Republic, Ecuador, Guatemala, Mexico, Peru, Trinidad and Tobago, Uruguay, and Venezuela.

3. Trust and Institutional Performance

Economic development depends on the workings of institutions, and economists have long recognized the role of rule of law and contract enforcement. Formal institutions can also enhance trust (Knack and Keefer, 1997). Figure 10 shows the positive correlation between interpersonal trust and the rule of law indicator from the Worldwide Governance Indicators (WGI) data set. The WGI index captures peoples' perceptions of the confidence level in which rules in society are binding, particularly the quality of contract enforcement. Perceptions in LAC countries vary greatly. Some countries in the region score better on average like Chile and Uruguay, while Venezuela, Guatemala, and Haiti score the lowest among the sample. The same positive correlation happens when plotting trust against the score for enforcing contracts given by the Doing Business data from the World Bank for the last year available (2019). Again, in a similar scattered pattern, the countries in the region show significant variation in capacity to enforce contracts and their efficiency in doing so.

However, the relationship between institutions' quality and trust is complex; low-trust societies struggle with how to implement social contracts and engage in transactions. Even for some scholars, like Algan and Cahuc (2010), the structure of institutions and civic attitudes goes beyond a country's current economic environment, and inherited institutional structures could partially explain those attitudes. Societies with high levels of distrust will naturally demand more regulation to overcome the risk of making transactions when cheating and breaking contracts is more frequent. But this aim for supervision and regulation comes with a price in discouraging social capital accumulation, an element that is vital for economic growth as previously discussed (Aghion et al., 2009).

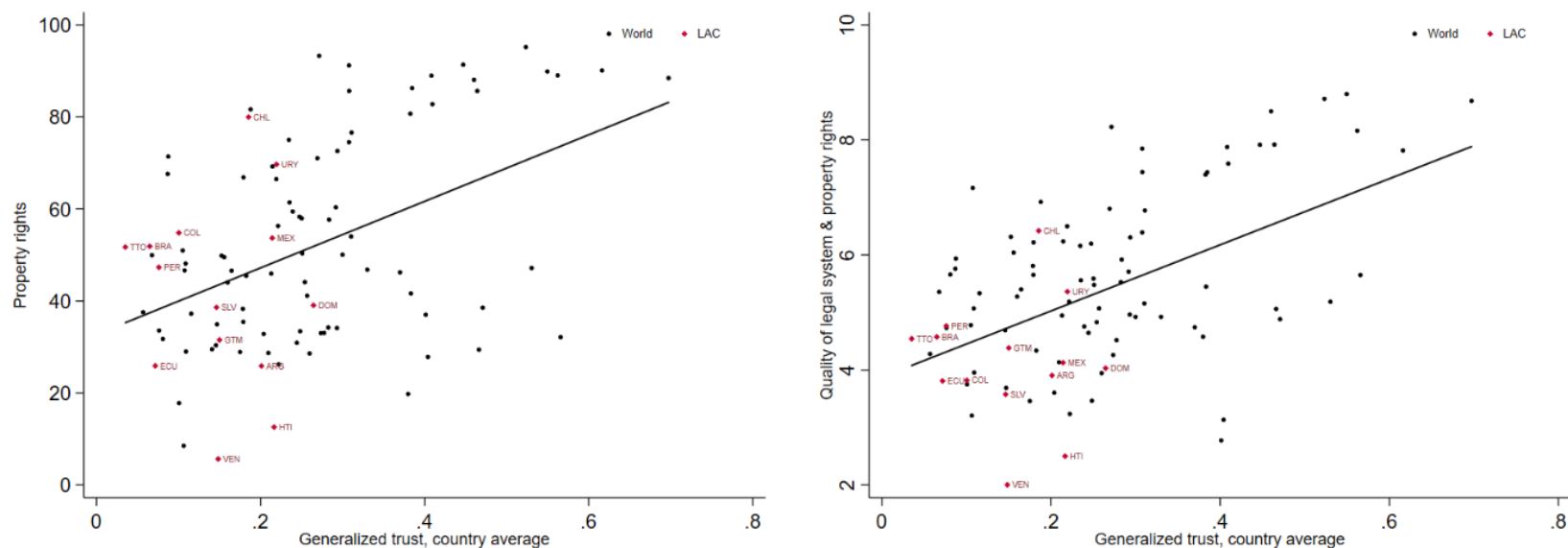
Figure 10. Relation between Trust and Rule of Law and Contract Enforcement



Source: Authors' calculations based on data from the World Value Survey and the Worldwide Governance Indicators.

Notes: The trust data come from the six waves of the World Value Survey (1981 – 2016). The Rule of Law index captures peoples' perceptions on the confidence level in which rules in society are abiding, in particular quality of contract enforcement, and comes from the Worldwide Governance Indicators (1996 – 2017). Enforcement of contracts comes from the 2019 Doing Business Report of the World Bank. The total sample has 98 countries, including Argentina, Brazil, Chile, Colombia, Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Mexico, Peru, Trinidad and Tobago, Uruguay, and Venezuela.

Figure 11. Relation between Trust and Property Rights and Legal System



Source: Authors' calculations based on data from the World Value Survey and the Worldwide Governance Indicators.

Notes: The trust data come from the six waves of the World Value Survey (1981 – 2016). The Property rights component is an assessment of the ability of individuals to accumulate private property, secured by clear laws that are fully enforced by the state, where 100 means that private property is guaranteed by the government and 0 is when private property is outlawed, and all property belongs to the state; and the data come from the Index of Economic Freedom (2013 – 2019). Quality of legal system is an index that goes from 0 to 10 and measures judicial independence, impartial courts, protection of property rights, military interference in rule of law and politics, integrity of the legal system, legal enforcement of contracts, regulatory costs of the sales of real property, reliability of police and business cost of crime and comes from the Economic Freedom of the World (EFW) data for the last year available, 2016. The total sample has 95 countries, including Argentina, Brazil, Chile, Colombia, Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Mexico, Peru, Trinidad and Tobago, Uruguay, and Venezuela.

4. Increasing Trust in LAC

Trust in others and trust in government have significant effects on economic development. There is little doubt that low trust levels in LAC represent a major impediment to better public policies and sustained growth.

Trust among individuals, firms, and the government may have a significant impact on economic development and how individuals and governments act during a pandemic. Before the recent “*Big lockdown*” due to Covid-19, growth projections for the region were somewhat enthusiastic, with expected annual economic growth of 2 percent for the LAC region in January 2019. However, the pandemic reduced those numbers to virtually zero and has placed new challenges and intensified some other previous social and economic issues facing governments. Capacity to react and propose some solutions to reactivate the economy, and mitigate the effects of the crisis, is now more pressing than ever.

However, low levels of trust in LAC may represent a significant impediment to improving public policies, innovation, investment, and growth. A lack of trust also likely impacts inequality, and those living in low-trust environments appear to be less satisfied. Low trust levels may even affect how political systems function and how much transfer of power individuals are willing to accept. A taxonomy of trust is a useful device to categorize the relevant dimensions and consider policy interventions that might help to boost cooperative solutions in particular areas. Interventions to improve information show considerable promise. They tend to be relatively low cost but may have significant impacts. In the case of governments, providing better information to citizens on intentions and outcomes seems an obvious route to improve trust in public institutions. The response to the pandemic, as shown with other disasters, will determine whether trust increases or falls. There is much research yet to be done in this area, particularly in regarding to finding ways to increase trust among individuals, to enhance trust in governments and other public actors, and to consider methods to improve trust between firms and investors and between firms and their customers.

Interpersonal trust is a fundamental characteristic of individuals and the societies in which they live, affecting their ability to interact with others (Table 2). At this point, however, the gathering of evidence on how to increase interpersonal trust has barely begun.

Although trust is deeply rooted in the way human beings interact with each other, information interventions show considerable promise. They are tractable and within the power of

governments to implement rapidly and at a low cost. Moreover, these interventions are likely politically benign and not afflicted by the types of controversy that can often derail reforms to improve the quality of government.

Table 2. Increasing Trust: Some Examples

		Trust In:		
		Individuals	Businesses	Government/ Institutions
Trusted By:	Individuals	<i>Bonding and bridging initiatives. Social participation</i>	<i>Ratings by other individuals. Compliance with standards and regulations</i>	<i>Transparency on promises and results</i>
	Businesses	<i>Credit rating</i>	<i>Reputation</i>	<i>Stable rules of the games</i>
	Government/Institutions	<i>Compliance with rules and regulations</i>	<i>Compliance with rules and regulations</i>	<i>Reducing barriers; mutual disarmament</i>

Source: Authors' compilation.

Societies could increase social cohesion and trust by encouraging more interaction among their members (Putman, 2000). One set of interventions consists of sports programs that try to create bridging and bonding across individuals by bringing together people with different backgrounds. These types of interventions have demonstrated some success (Jaitman and Scartascini, 2017; Martínez and Sayago, 2020). In other areas, such as music and building citizenship, the implementation of similar programs has been attempted (Mateo Díaz and Rucci, 2019).

Strategies to reduce the social distance between individuals and groups also involve the provision of information that pushes back against unfortunate myths. Some evidence suggests an association between immigration and mistrust, founded on incorrect stereotypes regarding immigrant behavior (da Silva Rebelo, Fernández, and Anchotegui, 2018). Campaigns that provide information about the (low) likelihood that immigrants will commit a crime are therefore becoming more popular, though their efficacy is not yet known.

There are many ways in which businesses can increase trust. Stability and reputation have always been at the forefront. In online commerce, firms have relied on ratings and consumer reviews, though it remains unclear whether these measures can establish or change firms' reputations over the long term. Government regulations and institutional arrangements also

increase trust between actors in the private sector. Credit ratings let borrowers build reputations, allowing businesses to discriminate among individuals and creating markets that otherwise could not exist. This source of accountability creates incentives for individuals to maintain favorable ratings. In some countries, public credit registries track the performance of both individuals and firms concerning loan repayments, and these records sometimes even include other performance data that could serve to boost trust.

An effective legal system and efficient and impartial courts can likewise enhance trust. If the perception is that untrustworthy behavior will be sanctioned, then individuals will think that others will act in a more trustworthy manner. Citizen trust in government is a function of the fundamental organizing principles of a society. Mistrust in government emerges when politicians are not intrinsically motivated to act in the collective interests of citizens, and when citizens cannot restrain opportunistic behavior by politicians. Hence, any intervention or institutional innovation that inhibits opportunistic manners by politicians should also increase trust in government.

The menu of such interventions is so far not long or well-tested, but reforms could reduce the obstacles to collective action that preventing individuals from jointly acting to hold governments accountable for their actions. While this environment is naturally challenging, information interventions that are thriving around the world as well as in the LAC region are one promising response. Information is key to collective action. If citizens do not know what governments are doing or if they believe that other citizens are ignorant about government activities and their impact, individuals cannot expect successful collective action to punish opportunistic behavior by governments. Information about government intentions and its performance should allow citizens to update their beliefs about how reliable, responsive to needs, and efficient their government is. It can also allow citizens to evaluate government integrity, openness, and fairness (OECD, 2017). The disclosure of information on government intentions and performance, also known as transparency, has been found to work in increasing knowledge and, in consequence, citizens' trust in institutions.⁴

For example, Alessandro et al. (2019) exploit a series of commitments made by the mayor of the City of Buenos Aires at the start of his tenure. These commitments were clear and measurable goals across many government areas based on community priorities. These promises

⁴ See, for example, Downs, 1957; Brennan and Lomasky, 1997; Congleton, 2001; Martinelli, 2007; Lopez de Leon and Rizzi, 2014; Grimmelikhuijsen, 2012; Alessandro et al., 2019.

were public, and their compliance tracked weekly. The authors evaluate whether the provision/disclosure of informational changes affects trust in government. Their results show that providing information increases the perception about how transparent the government is by about eight percentage points (that is, providing information matters for people). More importantly, the authors illustrate that showing better performance increases people's trust in the government significantly more than when the government cannot demonstrate a performance that close meets expectations and promises. These results provide evidence that making promises, providing information about those promises, and fulfilling those promises may work to increase trust.

For a country, investing in increasing and reinforcing trust seems to have a substantial return on investment. In other words, high levels of trust between people and institutions play a significant role in the economic growth success of a country. In a trusting environment, business and financial markets can flourish, and governments and incumbents can redirect resources and efforts into productive activities that otherwise would have been assigned to supervision. The efficient use of resources, such as capital and labor, is vital for economic growth. Given the current challenging times that the world and the LAC region are facing, policies that help to build trust will become vital in the near future.

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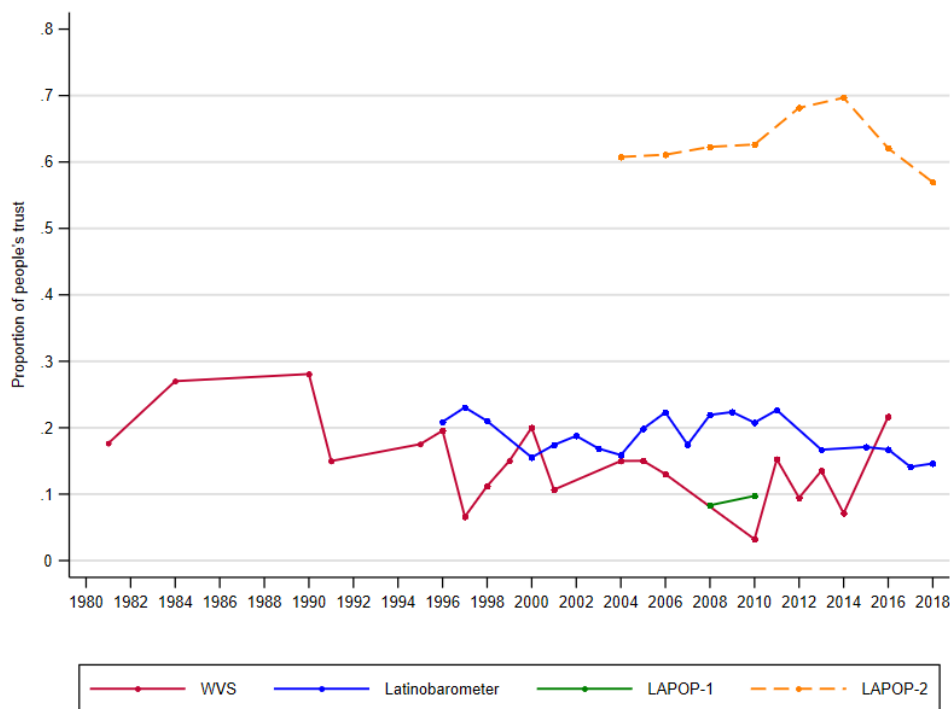
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Annex

Figure A. Evolution of Trust in LAC: Survey Comparison



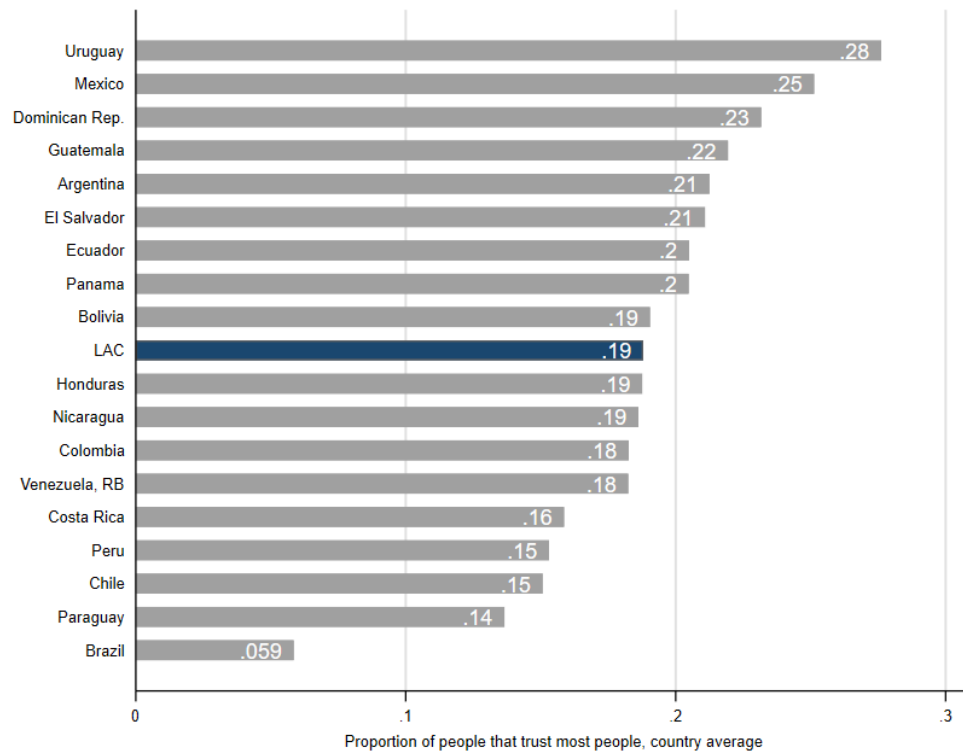
Source: Authors' calculations based on data from the six waves of the World Values Survey (1981 – 2016), Latinobarometer (1996 – 2018) and LAPOP (2004 – 2019).

Notes: For the cases of WVS, Latinobarometer and LAPOP-1 Generalized Trust is calculated from answers to the question “Generally speaking would you say that most people can be trusted, or that you need to be very careful in dealing with people?” Trust is equal to 1 if the respondent answers “Most people can be trusted” and 0 otherwise.

For the trust variable LAPOP-2, the question used is: “And speaking of the people from around here, would you say that people in this community are very trustworthy, somewhat trustworthy, not very trustworthy or untrustworthy...?” The original scale from 1 to 4 was modified so that trust is equal to 1 if the respondent answers “Very trustworthy” or “Somewhat Trustworthy” and 0 otherwise.

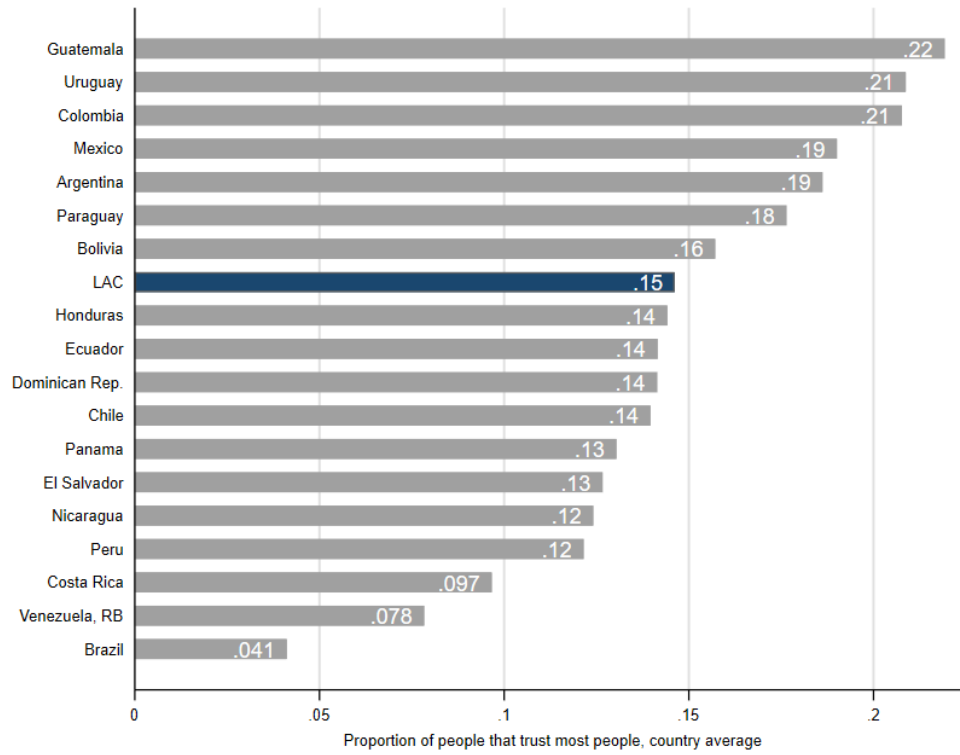
The number of countries in the sample may vary year to year. The total sample for LAC is 32 countries. [1] WVS: 15 countries; [2] Latinobarometer: 18 countries; [3] LAPOP-1: 23 countries and [4] LAPOP-2: 31 countries.

Figure B1. Generalized Trust Rankings Latinobarometer (1996 – 2018)



Source: Authors' calculations based on data from the Latinobarometer (1996 – 2018).
Notes: Generalized Trust is calculated from answers to the question “Generally speaking, would you say that most people can be trusted, or that you need to be very careful in dealing with people?” Trust is equal to 1 if the respondent answers “Most people can be trusted” and 0 otherwise. The trust variable was aggregated at the country level as a weighted average from individual observations.

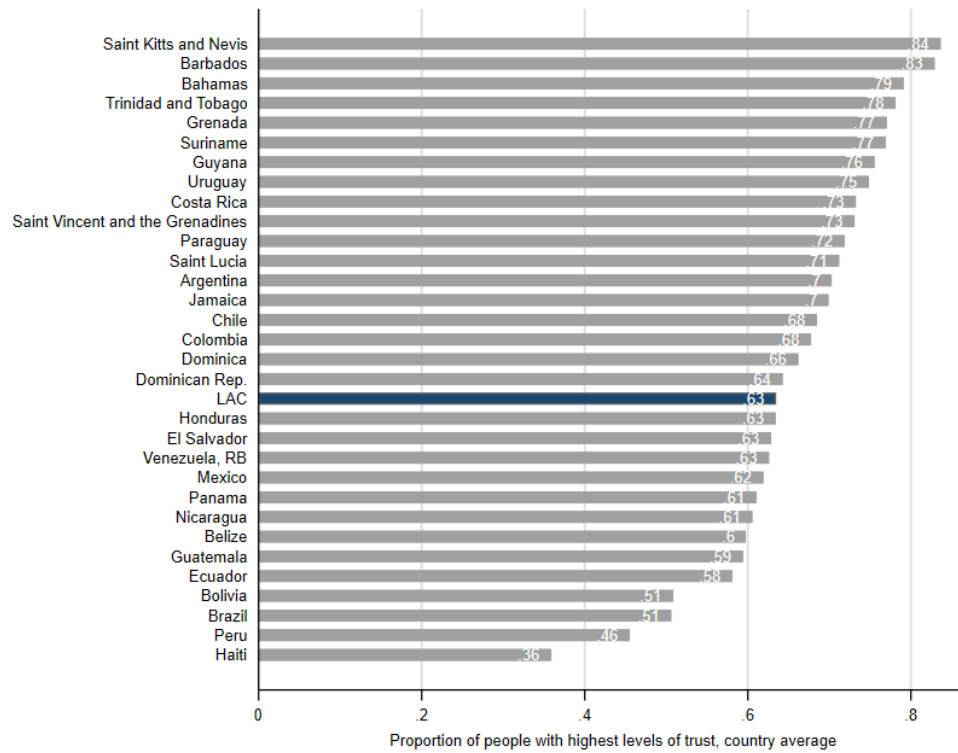
Figure B2. Generalized Trust Rankings Latinobarometer, 2018



Source: Authors' calculations based on data from the Latinobarometer (2018).

Notes: Generalized Trust is calculated from answers to the question 'Generally speaking, would you say that most people can be trusted, or that you need to be very careful in dealing with people?' Trust is equal to 1 if the respondent answers "Most people can be trusted" and 0 otherwise. The trust variable was aggregated at the country level as a weighted average from individual observations.

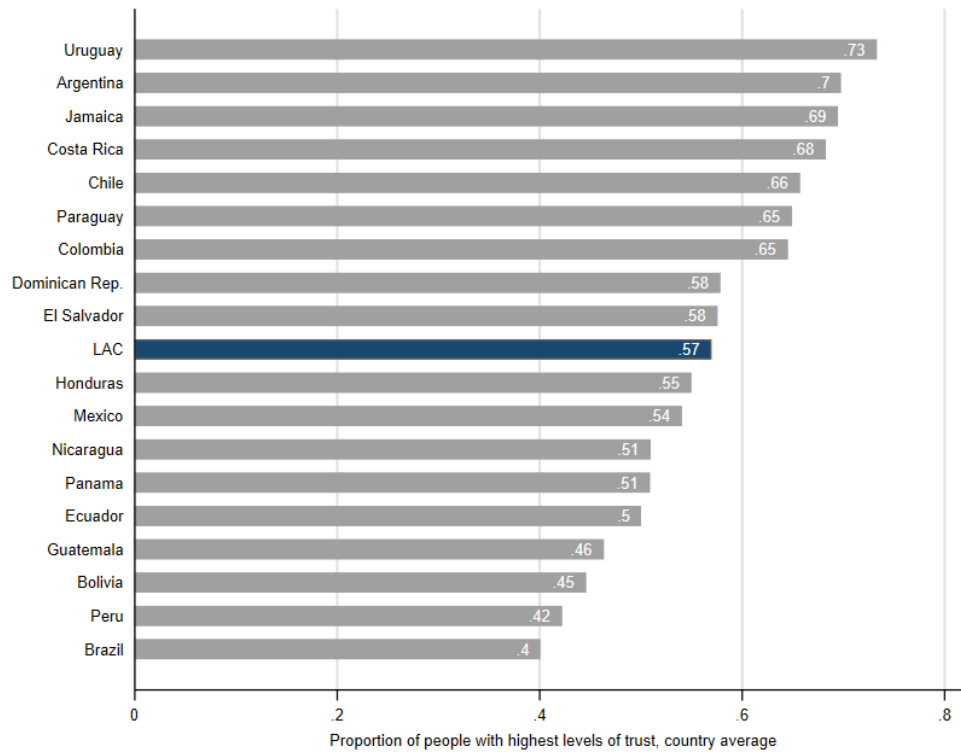
Figure C1. Interpersonal Trust Rankings LAPOP (2004 – 2018/2019)



Source: Authors' calculations based on data from LAPOP Survey (2004 – 2018/2019).

Notes: Interpersonal Trust is calculated from answers to the question “And speaking of the people from around here, would you say that people in this community are very trustworthy, somewhat trustworthy, not very trustworthy or untrustworthy...?” The original scale from 1 to 4 was modified so that trust is equal to 1 if the respondent answers “Very trustworthy” or “Somewhat Trustworthy” and 0 otherwise. The trust variable was aggregated at the country level as a weighted average from individual observations.

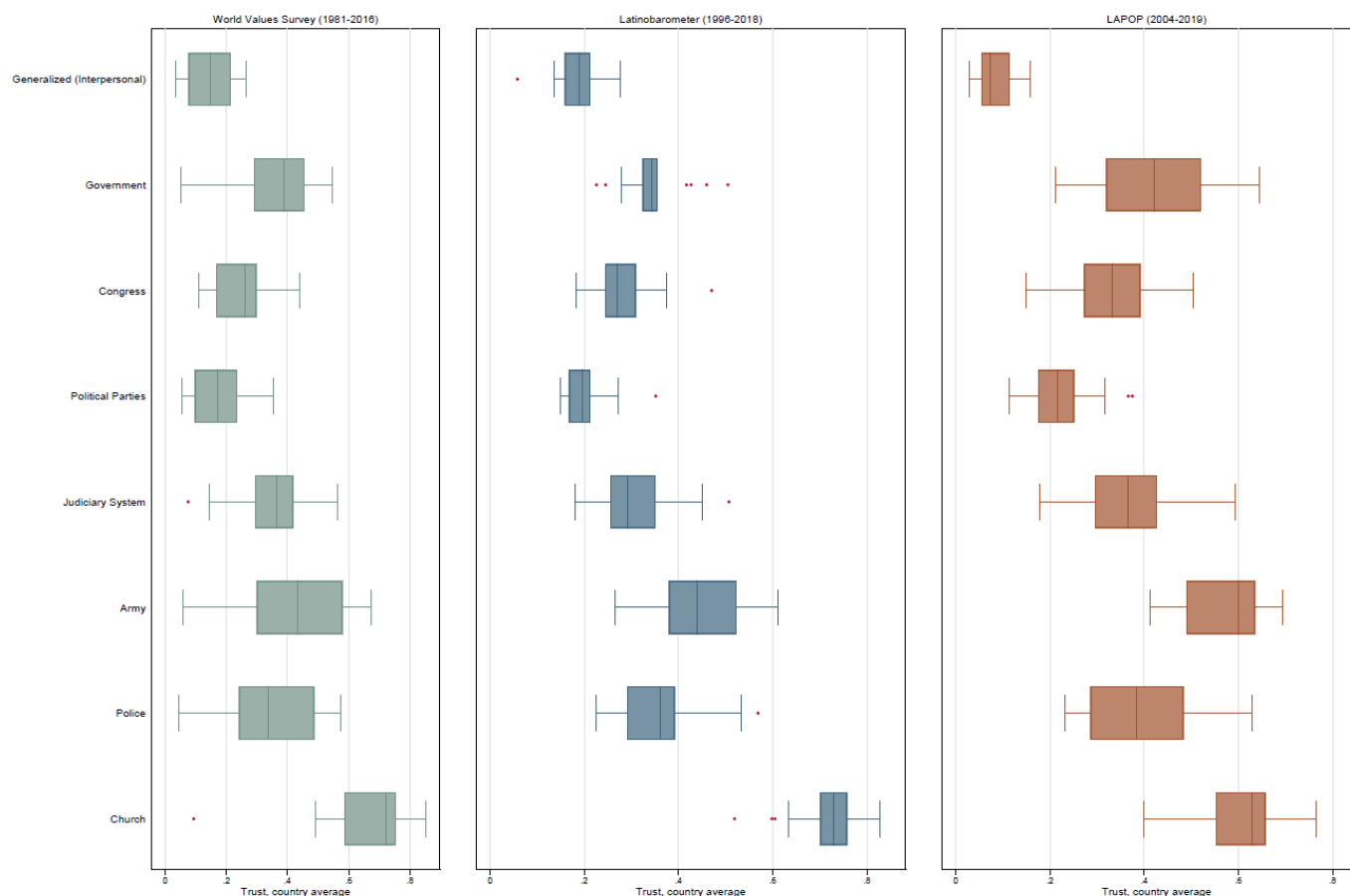
Figure C2. Interpersonal Trust Rankings LAPOP, Wave 2018/2019



Source: Authors' calculations based on data from LAPOP Survey, wave 2018/2019.

Notes: Interpersonal Trust is calculated from answers to the question “And speaking of the people from around here, would you say that people in this community are very trustworthy, somewhat trustworthy, not very trustworthy or untrustworthy...?” The original scale from 1 to 4 was modified so that trust is equal to 1 if the respondent answers “Very trustworthy” or “Somewhat Trustworthy” and 0 otherwise. The trust variable was aggregated at the country level as a weighted average from individual observations.

Figure D. Trust in Institutions, Survey Comparisons



Source: World Values Survey (1981-2016), Latinobarometer (1996-2018) and LAPOP (2004-2019).

Notes: Generalized (Interpersonal) trust is calculated from the answers to the question “Generally speaking would you say that you can trust most people, or that you can never be too careful in dealing with others?” Trust is equal to 1 if the respondent answers “One can trust most people” and 0 otherwise. The variables related to trust on institutions are computed from the question: “How much trust do you have in each of the following groups/institutions?” For WVS data trust is equal to 1 if the respondent answers “A great deal” or “Quite a lot,” and 0 when the answer is “Not very much” or “None at all.” For Latinobarometer trust is equal to 1 if the respondent answers “A lot” or “Some,” and 0 when the answer is “A little” or “No trust.” Finally, for LAPOP, the answer has a scale from 1 to 7; trust equals 1 if the respondent answers 5, 6 or 7. After that the weighted average per country is computed from the individual level data.

Total sample for LAC is 32 countries. [1] WVS: 14 countries; [2] Latinobarometer: 18 countries and [3] LAPOP: 31 countries.

**Table A. Trust and Income, Cross-Country Correlation: OLS Estimation
Ln GDP per capita (1981-2019)**

	Only WVS				WVS + Latinobarometer			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Generalized Trust	4.130*** (0.912)	1.954** (0.788)	1.634 (1.010)	1.984*** (0.724)	4.321*** (0.921)	2.098** (0.802)	1.783* (1.040)	2.042*** (0.739)
Education		0.337*** (0.040)	0.368*** (0.053)	0.333*** (0.050)		0.342*** (0.039)	0.367*** (0.051)	0.348*** (0.048)
Ethnic Segmentation		-0.149 (0.514)	-0.075 (0.570)	-0.143 (0.497)		-0.209 (0.481)	-0.170 (0.532)	-0.221 (0.461)
Population (ln)		-0.114 (0.090)	-0.092 (0.097)	-0.116 (0.083)		-0.101 (0.087)	-0.079 (0.095)	-0.099 (0.082)
French LO			0.214 (0.289)				0.130 (0.272)	
German LO			-0.133 (0.266)				-0.156 (0.262)	
Scandinavian LO			0.516 (0.511)				0.441 (0.522)	
Political institutions				0.002 (0.032)				-0.005 (0.032)
Constant	7.630*** (0.254)	6.593*** (0.409)	6.293*** (0.556)	6.596*** (0.397)	7.548*** (0.251)	6.473*** (0.358)	6.269*** (0.523)	6.473*** (0.360)
N	97.00	79.00	78.00	79.00	103.00	85.00	84.00	85.00
R ²	0.17	0.57	0.59	0.57	0.18	0.58	0.59	0.58

Sources: The trust data come from the six waves of the World Values Survey (1981{2014) and from the Latinobarometer (1996 – 2018). Education measures average years of schooling between 1950 and 2010 and is taken from Barro and Lee (2010). Ethnic fractionalization measures the degree of ethnic fractionalization and is taken from Alesina et al. (2003). Population is the average population (ln) between 1980 and 2016, taken from the Penn World Tables 9.0. Legal Origins are taken from La Porta et al. (2007). Political Institutions are measured by the Polity2 index averaged over 2000{2018, taken from the Polity IV database (2018).

Notes: The dependent variable is income per capita (ln), averaged over the years 1981-2019, taken from the World Bank Indicators. Generalized Trust is calculated from answers to the question "Generally speaking would you say that most people can be trusted, or that you need to be very careful in dealing with people?" Trust is equal to 1 if the respondent answers "Most people can be trusted" and 0 otherwise. The total sample is 103 countries: Albania, Algeria, Andorra, Argentina*, Armenia, Australia, Azerbaijan, Bangladesh, Belarus, Bolivia, Bosnia and Herzegovina, Botswana, Brazil*, Bulgaria, Burkina Faso, Canada, Chile*, China, Colombia*, Costa Rica, Croatia, Cyprus, Czech Republic, Dominican Republic*, Ecuador*, Egypt, El Salvador*, Estonia, Ethiopia, Finland, France, Georgia, Germany, Ghana, Guatemala*, Haiti, Honduras, Hong Kong, Hungary, India, Indonesia, Iran, Iraq, Ireland, Israel, Italy, Japan, Jordan, Kazakhstan, Kuwait, Kyrgyzstan, Latvia, Lebanon, Libya, Lithuania, Macedonia, Malaysia, Mali, Mexico*, Moldova, Montenegro, Morocco, Netherlands, New Zealand, Nicaragua, Nigeria, Norway, Pakistan, Panama, Paraguay, Peru*, Philippines, Poland, Puerto Rico, Qatar, Romania, Russian Federation, Rwanda, Saudi Arabia, Serbia, Singapore, Slovakia, Slovenia, South Africa, South Korea, Spain, Sweden, Switzerland, Tanzania, Thailand, Trinidad and Tobago, Tunisia, Turkey, Uganda, Ukraine, United Kingdom, United States, Uruguay*, Uzbekistan, Venezuela*, Vietnam, West Bank and Gaza, Yemen, Zambia, Zimbabwe.

* When having two different average trust values for the same country coming from WVS and Latinobarometer, the average value of both was used.

OLS regressions with robust standard errors in parenthesis.

* p < 0.10, ** p < 0.05, *** p < 0.01

Table B. Waves of World Values Survey

#	COUNTRY	WAVE 1	WAVE 2	WAVE 3	WAVE 4	WAVE 5	WAVE 6
1	Albania				2002		
2	Algeria				2002		2014
3	Andorra					2005	
4	Argentina	1984	1991	1995	1999	2006	2013
5	Armenia			1997			2011
6	Australia	1981		1995		2005	2012
7	Azerbaijan			1997			2011
8	Bangladesh			1996	2002		
9	Belarus		1990	1996			2011
10	Bosnia and Herzegovina / Srpska Republic			1998			
11	Bosnia and Herzegovina / Bosnia			1998	2001		
12	Brazil		1991	1997		2006	2014
13	Bulgaria			1997		2006	
14	Burkina Faso					2007	
15	Canada	Listed (No data)	1990 (No data)		2000	2006	
16	Chile		1990	1996	2000	2006	2012
17	China		1990	1995	2001	2007	2013
18	Colombia			1997 & 1998		2005	2012
19	Croatia			1996			
20	Czech Republic		1991	1995 (1998)			
21	Cyprus					2006	2011
22	Dominican Republic			1996			
23	Ecuador						2013
24	Egypt				2001	2008	2013 (2012)
25	El Salvador			1999			
26	Estonia			1996			2011
27	Ethiopia					2007	
28	Finland	1981		1996		2005	
29	France					2006	
30	Georgia			1996		2009	2014
31	Germany East			1997			
32	Germany West			1997		2006	2013
33	Ghana					2007	2012
34	Great Britain / United Kingdom			1998		2005	
35	Guatemala					2004	
36	Haiti						2016
37	Hong Kong					2005	2014

#	COUNTRY	WAVE 1	WAVE 2	WAVE 3	WAVE 4	WAVE 5	WAVE 6
38	Hungary	1982		1998		2009	
39	India		1990	1995	2001	2006	2012
40	Indonesia				2001	2006	
41	Iran				2000	2005 (2007)	
42	Iraq				2004	2006	2013
43	Israel				2001		
44	Italy					2005	
45	Japan	1981	1990	1995	2000	2005	2010
46	Jordan				2001	2007	Not listed (2014)
47	Kazakhstan						2011
48	Kuwait						2014
49	Kyrgystan				2003		2011
50	Latvia			1996			
51	Lebanon						2013
52	Libya						2014
53	Lithuania			1997			
54	Macedonia			1998	2001		
55	Malaysia					2006	2012
56	Mali					2007	
57	Mexico	1981	1990	1996	2000	2005	2012
58	Moldova			1996	2002	2006	
59	Montenegro			1996	2001		
60	Morocco				2001	2007	2011
61	Netherlands					2006	2012
62	New Zealand			1998		2004	2011
63	Nigeria		1990	1995	2000		2012
64	Norway			1996		2007	
65	Pakistan			1997	2001		2012
66	Palestine						2013
67	Peru			1996	2001	2006	2012
68	Philippines			1996	2001		2012
69	Poland		1989	1997		2005	2012
70	Puerto Rico			1995	2001		
71	Qatar						2010
72	Romania			1998		2005	2012
73	Russia		1990	1995		2006	2011
74	Rwanda					2007	2012
75	Saudi Arabia				2003		
76	Serbia			1996	2001	2006	
77	Singapore				2002		2012
78	Slovakia		1990	1998			

#	COUNTRY	WAVE 1	WAVE 2	WAVE 3	WAVE 4	WAVE 5	WAVE 6
79	Slovenia			1995		2005	2011
80	South Africa	1982	1990	1996	2001	2006	2013
81	South Korea	1982	1990	1996	2001	2005	2010
82	Spain		1990	1995	2000	2007	2011
83	Sweden	1982 (1981)	Listed (No data)	1996	1999 (No data)	2006	2011
84	Switzerland		1989	1996		2007	
85	Taiwan			1995 (1994)		2006	2012
86	Thailand					2007	2013
87	Trinidad and Tobago					2006	2010
88	Tanzania				2001		
89	Tunisia						2013
90	Turkey		1990	1996	2001	2007	2012
91	Uganda				2001		
92	Ukraine			1996		2006	2011
93	United States	1982 (1981)	Listed (No data)	1995	1999	2006	2011
94	Uruguay			1996		2006	2011
95	Uzbekistan						2011
96	Venezuela			1996	2000		
97	Vietnam				2001	2006	
98	Yemen						2014
99	Zambia					2007	
100	Zimbabwe				2001		2012
	Total Sample	11	21	57	41	58	60

Source: Authors' compilation based on data from the six waves of the World Values Survey (1981 – 2014).

Notes: The table presents the year in which the countries, per wave, were sampled according to the official WVS official documentation (<https://www.worldvaluessurvey.org/WVSContents.jsp>). This information was cross-referenced with the latest version of the longitudinal dataset, version file *WVS_Longitudinal_1981_2016_stata_v20180912*. The note “Listed” means that the country appears in the wave sample list on the wave page, but with no specific year. If the year in the data set is different from the one on the webpage, the year in the data set appears in parenthesis. “No data” means that even though the country was listed on the webpage, the data is not available in the file. The total country sample is 98 countries, since East and West Germany data are being used as one country; as well as the data for Srpska Republic and Bosnia, used as one country (Bosnia and Herzegovina) across the data.