



Culture, democracy and regulation

Claudia R. Williamson¹

Accepted: 6 October 2020 / Published online: 15 October 2020
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Abstract

This paper examines how culture influences business regulation across countries. Empirical analysis reveals that individualistic countries adopt fewer regulations than collectivist countries. This result is independent of political institutions, suggesting that culture directly affects regulation by shaping preferences over economic policy. Individualism's influence is magnified in democratic countries. These results support a public choice interpretation of regulation where culture may provide an additional check on government's ability to rent seek via inefficient regulation.

Keywords Culture · Individualism · Regulation · Democracy

JEL Classification F55 · K22 · L51 · O17 · Z10

1 Introduction

The regulation of business varies tremendously across countries. For example, in 2019 it takes 1 day to open a new business in Georgia compared to 230 days in Venezuela. To obtain the necessary legal permits to construct a warehouse, it takes 27.5 days in South Korea, but over 650 days in Cambodia. The costs to resolve insolvency varies from 1% in Norway to 76% of the estate in Central African Republic. In Haiti, it takes 319 days to register property compared to 1 day in Qatar. The cost to enforce a contract in a government court is 9% of the claim's value in Iceland but 163% in Timor-Leste. Belgium has zero monetary border and documentary compliance costs to import and export goods, whereas the import border compliance cost is \$3039 in Democratic Republic of Congo, and in Iraq it costs \$1800 in export documentary compliance (World Bank's *Doing Business 2020*).

✉ Claudia R. Williamson
Claudia-williamson@utc.edu

¹ Scott L. Probasco, Jr. Distinguished Chair of Free Enterprise, Gary W. Rollins College of Business, University of Tennessee at Chattanooga, 434-D Fletcher Hall, 615 McCallie Ave, Chattanooga, TN 37403, USA

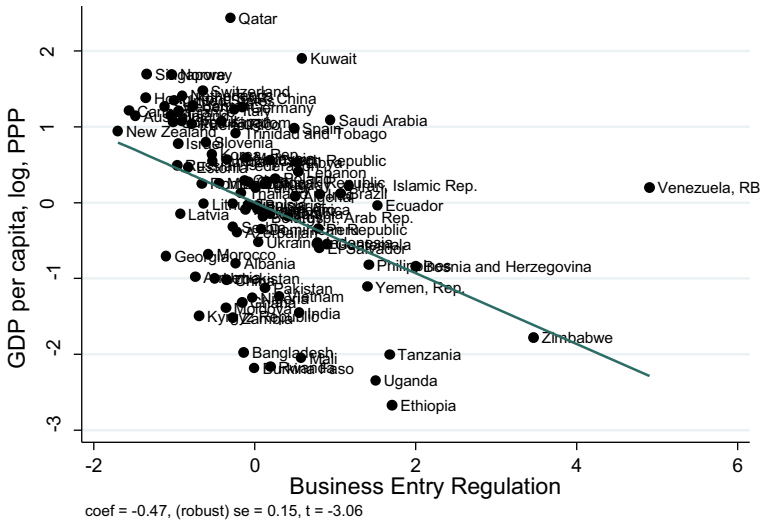


Fig. 1 Business Entry Regulation and GDP per capita. *Note:* This plot shows partial correlation between business entry regulation and GDP per capita (log, PPP, constant international \$), controlling for common law. GDP per capita is collected from World Development Indicators (2018). Data descriptions are provided in Table 1

These regulatory costs have economic consequences. For example, over 200 published articles document that lighter business entry regulation increases entrepreneurship, firm development, productivity, and cuts corruption (Djankov et al. 2002; Djankov 2009). These consequences are summarized in Fig. 1. As shown, GDP per capita and business entry regulation, including time, procedures, and cost to open a new business, are negatively correlated. Countries with fewer regulatory entry costs have higher levels of income per capita.

A similar trend emerges when examining other types of regulation. For example efficient contract enforcement improves the business climate (Lu and Tao 2009), reduces the informal sector (Dabla-Norris et al. 2008), fosters innovation (Cooley et al. 2004; Cumming and Knill 2012), and promotes trade (Nunn 2007). Resolving debt quicker increases liquidity (Djankov et al. 2008). Higher cost of electricity connection leads to greater incidence of bribe payments, lower quality of electricity, and decreased firm performance (Geginat and Ramalho 2018). Similarly, labor, contracting, and entry regulation decreases economic efficiency and overall market performance (Djankov et al. 2003; Besley and Burgess 2004; Botero et al. 2004; Cline and Williamson 2016, 2017).

These economic and social costs are well documented, but less work is done on understanding cross-country determinants of business regulation. The dominant approach in explaining regulation gives formal political institutions a central role. For example, in a seminal paper, Djankov et al. (2002) illustrate that democratic countries regulate business entry less intensively. This finding broadly supports public choice theory where politicians and bureaucrats, when less constrained, choose regulations in line with private instead of public interest. Higher cost regulation,

from a market efficiency standpoint, is a rent-seeking device used to benefit a restricted group of insiders, such as bureaucrats, politicians, and market incumbents, at the expense of others (Tullock 1967; Stigler 1971; Peltzman 1976).

Drawing on a cultural theory of regulation, this paper extends prior works to understand why some countries regulate business activity more intensively. Transmitted across generations fairly unchanged, culture is a set of beliefs and values individuals hold about the world and how it works, including norms of behavior that stem from these values (Guiso et al. 2006). This analysis focuses on the cultural dimension of individualism versus collectivism.¹ Gorodnichenko and Roland (2012) discuss that the main difference between individualistic and collectivist cultures lies in the understanding of the “self”. Individualistic cultures emphasize personal autonomy and achievements while collectivistic cultures focus on social obligations.

This fundamental discrepancy can manifest in varying preferences for regulating economic life. I focus on the association between individualism and a specific component of a country’s economic framework, the level of business regulation, in order to understand how culture influences preferences to regulate entrepreneurs and business activity, and how those preferences map into policy outcomes.²

This paper builds on a small but growing literature illustrating that culture affects regulation. For example, Davis and Williamson (2016, 2018) document a negative association between individualism and the regulation of entry of new firms and the regulation of foreign businesses. Similarly, Cline and Williamson (2017) find that individualism decreases court regulation to enforce a contract. In addition, individualism is negatively associated with accounting regulation (Guan and Pourjalali 2010), pension fund regulation (Rivera-Rozo et al. 2018), and labor regulation (Ang and Fredriksson 2018).

I explore three mechanisms through which culture may influence regulation. First, culture can directly affect regulation by shaping preferences over economic policy. In particular, if people in more individualistic countries perceive commercial market activity as an avenue for opportunity and personal achievement, individualistic countries will place a higher value on ease of doing business and demand fewer business regulations. This argument is supported by Nikolaev and Salahodjaev (2017) who find that individualism underpins market competition and economic freedom broadly defined.

Recent evidence finds that culture is causally linked to democracy (Licht et al. 2007; Tabellini 2008; Klasing 2013; Gorodnichenko and Roland 2015). Therefore, culture can indirectly affect regulation by influencing political institutions, which in turn determines regulation. Under this scenario, individualism affects regulation only through its impact on democracy.

¹ Hofstede (2001) finds individualism-collectivism to be the most important dimension in explaining cross-country variation in cultural values, and Gorodnichenko and Roland (2011) empirically show that individualism is the only dimension of culture that is robustly related to economic development. Gorodnichenko and Roland (2017) demonstrate how individualism leads to innovation, which explains cross-country income differences. Ang (2019) finds that individualism underpins financial development.

² The findings are consistent if I replace business regulation as the dependent variable with a measure of economic freedom (Gwartney et al. 2019). Results are not tabulated but available upon request.

Lastly, interactions between individualism and democracy are explored. If democracy aggregates public opinion (Caplan 2007), the interaction between democracy and individualism should magnify individualism's influence on regulation.

A measure of individualism-collectivism is created from five survey questions in World Values Survey (WVS) from 1981 to 2014 (Hofstede 1980, 2003; Beugelsdijk et al. 2015; Davis 2016; Davis and Williamson 2016, 2019). To measure business regulation, data from *Doing Business* are aggregated into seven regulation indices capturing legal obstacles to start a business, enforce a contract, register property, trade across borders, acquire construction permits, obtain electricity, and resolve debt. I analyze multiple measures of business regulation to understand if there is a systematic relation between individualism, democracy and regulation and avoid anomalies that may occur by only examining one particular regulation.

The results suggest that individualistic countries regulate business less intensively. Individualism is significant and negatively associated with all seven business regulatory indices. For example, a one standard deviation increase in individualism, the difference between the United States and Albania, reduces new entry regulation by 45% of a standard deviation, which represents the difference between Norway and Mexico.

Individualism's effect on regulation remains negative and significant when controlling for democracy. Interaction effects suggest that democracy and culture are complements. Apart from trade regulation, the impact of individualism is magnified in countries that are more democratic.

Please note that this analysis is not intended as a comprehensive representation of all potential causal links between culture, democracy and regulation. For example, it omits potential feedback loops related to the endogeneity of culture. Instead, the analysis highlights several channels through which individualism may influence regulation and illustrates how culture affects economic development more broadly.

Overall, the results suggest that the relation between individualism and regulation is not dependent on a particular measure of business regulation. Individualism directly decreases business regulation, improving the efficiency of doing business, by altering preferences over social policy. Individualism's influence does not depend on political institutions, but democracy serves as a mechanism for aggregating cultural preferences into economic policy.

2 Hypotheses development

2.1 Direct effect hypothesis

The first hypothesis that individualism-collectivism directly effects individual preferences over business regulation stems from work in cultural sociology and psychology (Hofstede 1980). Gorodnichenko and Roland (2012) contend that the major distinction between individualistic and collectivistic values is grounded in the fundamental understanding of different views of the self. In individualistic societies, people view the self as an independent entity, value personal freedom, award individual achievement, and emphasize individual autonomy. In collectivistic

societies, however, the self is interdependent, connected through a web of relationships and obligations to other individuals and to society as a whole. Collectivistic societies value conformity, loyalty, and respect for superiors, with emphasis on group dependence.

This fundamental difference underlies a variety of attitudes, beliefs and behaviors, which emphasize either individual autonomy or the importance of larger social units. By emphasizing personal achievements, individualistic cultures also emphasize market activity and commercial exchange. For example, Gorodnichenko and Roland (2017) show that individualistic cultures award social status to entrepreneurial discovery, leading to innovation and growth.

Since most business regulations impair entrepreneurship, market exchange and competition, individualistic cultures may demand a loosely regulated market, namely fewer restrictions and more commercial freedom. If individuals perceive regulation as a monitoring device over commercial transactions, individual preferences toward commercial activity will directly influence regulation and the costs associated with enforcing those rules. Commercial activity may be viewed as an avenue for personal success; thus, individualistic countries are more likely to regulate commercial activity less intensively. In order to foster greater commercial activity, individualistic countries choose policies in favor of more efficient business transactions, specifically fewer steps, procedures, and lower overall regulation costs.

Collectivist societies, on the other hand, prefer regulation to constrain individual behavior in favor of establishing social order. Concerns of potential market exploitation and failure as a source of social disorder may dominate policy. If collectivist cultures view business development as a trade-off to social stability, they will prefer more regulation to limit commercial activity. From this perspective, regulatory oversight mitigates the costs of social disorder (Djankov et al. 2003). In particular, collectivist societies will prefer business regulation in order to monitor and limit potential social costs from commercial exchange. This results in more country-level regulatory procedures, increasing the time and costs to legally operate a business.

2.2 Indirect effects hypothesis

In addition to influencing the preferred level of regulation, individualism-collectivism may influence regulation indirectly through an effect on formal institutions. This idea stems from a large body of work that posits a hierarchy of institutions, organized in a series of layers from fundamental to proximate. North (1990) and Williamson (2000), for example, outline a framework where culture provides the foundation for the development of formal institutions, including political institutions. Likewise, Roland (2004) argues that because informal institutions change relatively slowly, the dominant direction of influence is from culture to formal institutions, a conclusion supported by Licht et al. (2005) and Stulz and Williamson (2003).

Recent evidence finds that culture has a causal relation to democracy, providing empirical support to this understanding of institutional structure (Tabellini 2008, Klasing 2013). For example, Licht et al. (2007) argue that individualistic cultures value individual rights and freedoms that democracies tend to support. Alternatively,

collectivist cultures base norms of just conduct on social ties, obligations, and tradition rather than overarching rules. Collectivism emphasizes circumscribing individual freedoms in the name of protecting wider interests of the social group. Thus, collectivism is more likely to support autocratic rule over democratic rights. More recently, Gorodnichenko and Roland (2015) show a causal association between individualism and average levels and length of democracy.

Collectively, this indicates that culture bears a causal relation to formal political institutions, which in turn influences the development of economic policy. This hypothesis claims that individualism only influences regulation indirectly through its impact on political institutions.

2.3 Interactive effects hypothesis

Beyond direct and indirect effects, it is possible that individualism and democracy interact to determine business regulation. For example, Davis and Williamson (2016) find that democratic political institutions and individualism are complements in restraining the regulation of entry, and Cline and Williamson (2017) provide empirical evidence showing that individualism's impact on contract enforcement is magnified in a democracy. Alesina and Giuliano (2015) believe that exploring such interactions between culture and formal institutions is a promising avenue for research since it stresses a two-way effect and does not rely on identifying causality.

Conceptually, a given set of formal political institutions may have varying implications for regulation, depending on a society's cultural values (Hayek 1960; North 1990; Greif 2006). Culture can directly shape an individual's predilection for economic regulation, but it is political institutions that provide a channel through which preferences are translated into policy. Democracy is a mechanism for communicating and aggregating policy preferences (Caplan 2007), particularly for the median voter (Downs 1957).

For example, Tarabar (2017) argues that democracy is the conduit for which culture influences policy over time by incentivizing those in political power to care about voters' cultural preferences. He finds that individualism promotes market reform adoption via democratization. Politicians in a democracy are more constrained by cultural preferences and are more likely to consider voter interest over self-interest when formulating policy. Otherwise, they risk being voted out of office. This argument is largely in line with public choice theory (Tullock 1967; Stigler 1971; Peltzman 1976).

In oligarchic societies, however, policies are often selected to benefit economic and political elites without opposing pressure from the general populace. In autocratic countries, even if the majority prefers less regulation, their preferences might be ignored since individuals have no influence over the policy-making process. Since autocrats and elites are more likely to prefer regulation for personal enrichment, less democratic societies may select higher cost regulations, such as more bureaucratic steps and procedures, to operate businesses (Acemoglu 2008).

Thus, political theory predicts that democratic institutions will magnify the role of individualism-collectivism in the selection of economic policy. Democracy

amplifies the influence of individualism on regulation if democracy provides a mechanism through which individuals can express cultural preferences. If individualistic cultures prefer less regulation, and democracies reflect the majority of public opinion, then the interaction between individualism and democracy will increase the ability of individualism to promote loosely regulated markets. If so, interactions and marginal effects between democracy and individualism will be negative and significant. Alternatively, democracies, like autocracies, may select policies inconsistent with cultural preferences, and instead choose policies in line with political self-interest. If so, the interaction and marginal effects will be insignificant, suggesting that democracy has no conditional effect.

3 Data

To test the associations between individualism, democracy and regulation, a cross sectional dataset using multiple sources is created.

Hofstede (2001) explains that individualism-collectivism stresses differences in the expected scope of individual responsibility, contrasting an individualistic society in which everyone looks after him or herself, with a collectivist society in which individuals form strong, cohesive groups as a form of social insurance. Although Hofstede's measure has recognition in the literature, one criticism is that he uses survey data conducted 45 years ago, and a country's cultural environment likely has evolved (Shenkar 2001).

Thus, I follow methodologies established by Beugelsdijk et al. (2015), Davis (2016), and Davis and Williamson (2016, 2019) to update Hofstede's (1980) cultural values with World Values Survey (WVS) questions (Inglehart et al. 2014). The surveys are conducted in over 100 countries across six waves from 1981–1984, 1990–1994, 1995–1998, 1999–2004, 2005–2009, and 2010–2014.

Specifically, five questions are used to measure individualism: (1) private versus government ownership of business, (2) one of the main goals in life is to make parents proud, (3) justifiability of abortion, (4) justifiability of homosexuality, and (5) individual versus government responsibility. Individualistic values favor private ownership, justifiability of abortion and homosexuality, individual responsibility, and discount making parents proud.

All five questions are correlated and consistent with Hofstede's description, meaning, and implication of individualism-collectivism. For example, individualism captures self-autonomy, the right to a private life, weak family ties, less conformity, capitalism, and market competition. Thus, each question is an indirect way of capturing attitudes that relate to individualistic values. For example, an individual who finds abortion or homosexuality justifiable is expressing tolerance and the belief in a private life. In this sample, the WVS constructed measure of individualism and Hofstede's original measure has a correlation of 0.77. By utilizing the WVS measure, the sample size increases from 52 to 93 countries.

Individual level questions are aggregated at the country level then averaged across all six waves to maximize sample size. To create an individualism-collectivism index, principal component analysis is used to extract the first principal from

the country-level averages from the five questions. The index is standardized with a mean of 0 and standard deviation of 1. A higher score indicates greater levels of individualistic values compared to countries with a lower score.

Business regulation data are collected and averaged from the World Bank's *Doing Business* (2020) from 2016 to 2020.³ *Doing Business* collects objective measures and enforcement of business regulations across countries. Seven measures of regulation are collected that capture a comprehensive view of the legal obstacles to operate a business. This includes starting a business, enforcing contracts, registering property, trading across borders, dealing with construction permits, acquiring access to electricity, and resolving debt. Within each regulatory category, the cost, time, and procedures involved to legally comply with each regulation is measured.

For example, business entry regulation includes procedures, time and cost for an entrepreneur to start and formally operate a business. Number of procedures are the official and in-practice interactions required to start and operate a local limited liability company. Time is the number of days to complete all procedures. Cost measures all official fees, including legal and professional fees, to complete the procedures to incorporate and operate a business.

Similarly, court regulation traces the procedures, time and cost incurred from the time a plaintiff files a lawsuit until payment is received. Procedures, required by law and common practice, are the necessary interactions between the parties and a court officer to settle a dispute. Time is the number of days to enforce a contract from the day the plaintiff files until payment is received. Cost is the combined costs, including court fees, enforcement expenses and attorney fees, calculated as a percent of the claim.

Each regulatory category has similar data available. To construct an aggregate regulation index for each respective regulation category, principal component analysis is utilized to extract the common variation in procedures, time, and cost to comply. For example, regulation indices for business entry, court enforcement, registering property, obtaining construction permits, and gaining utility access is constructed in this manner. The two exceptions are for trading across borders and resolving debt. Neither regulation category has data on number of procedures; thus, only cost and time to comply is included for trade and debt regulation.⁴ Each index is standardized (mean equal to 0; standard deviation of 1) with a higher score representing a higher regulatory burden. Seven regulatory indices are created, which capture the explicit monetary and opportunity costs to legally operate a business.

The level of democracy in a country is included and measured by polity2. Polity2 represents competitiveness of political participation, open and fair competition in selecting political leaders, and constraints on executive power (Polity IV, Jaggers

³ Given a change in *Doing Business* methodology, recent data are collected and averaged from 2016 to 2020 to maintain consistency across years and to maximize sample size. One exception is for court regulation. Number of procedures is collected in 2015 since no data is available from 2016 onwards.

⁴ The trade regulation index includes time (calculated in hours) and cost of document and border compliance to import and export goods. The debt regulation index includes time (calculated in days) and cost of insolvency proceedings.

and Marshall 2000). The index is standardized with a higher score representing stronger democracy.

The literature on legal origins finds that common law nations have less hierarchical regulations relative to civil law nations (La Porta et al. 2008). As Djankov et al. (2003) and La Porta et al. (2008) show, the laws on the books are heavily influenced by a country's legal origin. Common law countries tend to regulate markets less than civil law countries where governments have a higher proclivity to intervene in the economy, including creating higher levels of regulations. All empirical specifications control for common law, using an indicator variable equal to one for a country with an English legal origin, and zero otherwise.⁵

Table 1 details summary statistics and data description. The combined dataset includes up to 93 countries. All indices are standardized with a mean of 0 and standard deviation of 1. Sweden, Netherlands and Germany are the most individualistic countries, and Egypt, India, and Jordan are the most collectivist. Examples of countries at the extremes of regulatory burden include New Zealand and Canada with the fewest regulations to open a new business, while Zimbabwe and Venezuela have the most legal obstacles. To register property, New Zealand, Norway, and Georgia have the fewest regulations; Pakistan, Nigeria and Bangladesh have the highest burden. The countries with fewer court regulations to enforce a contract include Singapore, Norway, and Hong Kong, while Guatemala, Columbia, and Bangladesh have the highest cost to legally enforce a contract.

Qatar, Bahrain, and Saudi Arabia are the least democratic with the United States, Finland, and Spain as the most democratic countries in the sample. Over one-fourth of the countries are common law countries, including Canada, New Zealand and Australia.

4 Empirical results

4.1 Direct effect of individualism

Before examining the main model specifications, “Appendix 1” presents results from regressing individualism on each regulation index's subcomponents, controlling for common law. For example, Panel A, columns (1)-(6), reports the results for procedures, time and cost for both men and women to legally open a business. As shown, individualism significantly reduces all three types of regulation regardless of gender. This suggests that countries with individualistic cultures have lower entry costs, take less days, and use fewer procedures for an entrepreneur to legally open a business. For example, a one standard deviation increase in individualism reduces the monetary cost for new business entry by approximately 13.5 percentage points for both men and women (columns (3) and (6)).

⁵ An exogenous determinant of institutional quality is included instead of direct measures of institutional quality, such as corruption, as these measures suffer from endogeneity with the main variable of interest, individualism. Thus, direct measures are omitted to avoid misspecification.

Table 1 Summary statistics and data description

Variable	Observations	Mean	Std. Dev.	Min	Max	Description	Source
Business entry	93	0	1	- 1.61	5.00	Standardized index created by extracting the first principal component of procedures, time and cost to open a new business	Doing Business (2020)
Court	93	0	1	- 1.69	3.90	Standardized index created by extracting the first principal component of procedures, time and cost to enforce a contract in a court	Doing Business (2020)
Register property	92	0	1	- 1.94	3.08	Standardized index created by extracting the first principal component of procedures, time and cost to register property	Doing Business (2020)
Trade	91	0	1	- 1.08	4.04	Standardized index created by extracting the first principal component of time (in hours) and cost of document and border compliance to import and export goods	Doing Business (2020)
Construction	92	0	1	- 1.79	2.42	Standardized index created by extracting the first principal component of procedures, time and cost to build a warehouse	Doing Business (2020)
Utility	92	0	1	- 1.78	3.63	Standardized index created by extracting the first principal component of procedures, time and cost to obtain a permanent electricity connection for a new warehouse	Doing Business (2020)
Debt	90	0	1	- 1.80	2.60	Standardized index created by extracting the first principal component of time and cost of insolvency proceedings involving domestic legal entities	Doing Business (2020)

Table 1 (continued)

Variable	Observations	Mean	Std. Dev.	Min	Max	Description	Source
Individualism	93	0	1	-1.50	3.04	Standardized index created by extracting the first principal component of five WVS questions: Five questions are used to measure individualism: (1) private versus government ownership of business, (2) one of the main goals in life is to make parents proud, (3) justifiability of abortion, (4) justifiability of homosexuality, and (5) individual versus government responsibility. Averaged over first six waves, 1981–2014	World Values Survey (Inglehart et al. 2014)
Common law	93	0.26	0.44	0	1	Indicator variable equal to one for a country with an English legal origin, and zero otherwise	La Porta et al. (2008)
Muslim	88	0.26	0.36	0	0.99	Share of population that is Muslim in 2000	McCleary and Barro, (2006)
Regional controls	88	-	-	-	-	Dummy variables reflecting a country's location in the following regions: Africa, Europe, Asia, and the Americas. Oceania is excluded	WDI, 2018
Log GDP pc	88	0	1	-2.51	2.25	Log GDP per capita, PPP, constant international \$. Averaged 1980–2014. Data is standardized	WDI, 2018
Log pop	88	0	1	-3.17	2.61	Log of total population. Averaged 1980–2014. Data is standardized	WDI, 2018
Uncertainty Avoidance	50	0	1	-2.72	1.64	The degree to which members of society are comfortable in unstructured situations. Highly uncertainty avoidant cultures are characterized by a strong need for predictability and control over the environment. Index is standardized	Hofstede (2001)
Trust	93	0	1	-1.58	3.19	Percentage of respondents answering 'yes' most people can be trusted. Averaged over first six waves, 1981–2014. Data is standardized	World Values Survey (Inglehart et al. 2014)

Table 1 (continued)

Variable	Observations	Mean	Std. Dev.	Min	Max	Description	Source
Democracy	89	0	1	-2.41	0.96	Standardized index of Polity2, where a higher score represents stronger democracy	Polity IV, Jaggers and Marshall (2000)

Individualism also significantly reduces all import and export regulation, including time and costs associated with both document and border compliance (Panel B, columns (4)–(11)). This result also holds for debt regulation, where individualism significantly reduces time and cost associated with resolving insolvency (Panel C, columns (7)–(8)).

Across all seven measures of regulation, individualism is negative and significant when examining the number of procedures and associated compliance costs. It also reduces time to open a business, trade across borders and resolve debt. Individualism, however, does not significantly reduce time in the other four regulation categories. Recall, time is calculated as number of days to comply with the number of regulatory procedures. In each area, individualism significantly reduces the number of bureaucratic steps; however, time to comply is less sensitive to culture. Although individualism's effect on time to comply is not significant for all business regulation, I continue to include it in each index to provide a comprehensive and consistent measure of the regulatory environment. The remainder of the analysis utilizes the constructed regulation indices.

The specifications in Table 2 capture the direct effect individualism has on the seven measures of business regulation. These direct effect estimations exclude democracy and include individualism and an exogenous proxy for legal institutional quality, English legal origin.

As shown in Panel A, in all seven specifications individualism significantly reduces business regulation. For example, a one standard deviation increase in individualism, the difference between the United States and Albania, reduces new business entry regulation by 45% of a standard deviation, which represents the difference between Norway and Mexico. Figure 2 visualizes individualism's negative association with business entry regulation. This result supports the findings in Davis and Williamson (2016).

Column (2) reports that a one standard deviation increase in individualism decreases court regulation to enforce a business contract by 42% of a standard deviation. This suggests that individualism increase contract enforcement efficiency, supporting the previous conclusion in Cline and Williamson (2017).

Individualism also decreases regulations that are not previously examined in the literature, including registering property, trade, obtaining construction permits, access to electricity, and resolving debt. This suggests that prior works were not anomalies, but that individualism affects the overall business regulatory environment. For example, individualism's effect is largest on decreasing trade regulation, including compliance costs to import and export. A one standard deviation increase in individualism reduces trade regulation by 61% of its standard deviation.⁶

The smallest coefficients for individualism are for obtaining construction permits and electricity; however, the size of the effects remain economically significant, 27 and 28% of their respective standard deviations. The adjusted R-squareds

⁶ Sobel (2017) documents that reductions in trade regulation tend to be the first mover in broader free market economic reforms. Combined, this finding could indicate that individualism promotes reductions in trade regulation, which subsequently encourages greater economic freedom more generally.

Table 2 Individualism and regulation, OLS regressions

Dep. Var:	Business entry	Court	Register property	Trade	Construction	Utility	Debt
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
<i>Panel A</i>							
Individualism	- 0.45*** (0.07)	- 0.42*** (0.09)	- 0.34*** (0.10)	- 0.61*** (0.09)	- 0.27** (0.09)	- 0.28*** (0.08)	- 0.44*** (0.10)
Common law	0.11 (0.29)	- 0.09 (0.24)	0.32 (0.24)	0.53** (0.20)	- 0.18 (0.22)	0.23 (0.27)	- 0.30 (0.21)
Constant	- 0.02 (0.08)	0.02 (0.10)	- 0.11 (0.11)	- 0.13 (0.09)	0.06 (0.12)	- 0.05 (0.11)	0.08 (0.12)
# obs	93	93	92	91	92	92	90
Adj. R ²	18%	15%	12%	41%	5%	7%	17%
Dep. Var:	Business entry	Court	Register property	Trade	Construction	Utility	Debt
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
<i>Panel B</i>							
Individualism	- 0.55*** (0.12)	- 0.45*** (0.11)	- 0.30** (0.11)	- 0.49*** (0.08)	- 0.35** (0.10)	- 0.32*** (0.09)	- 0.63*** (0.13)
Common law	0.12 (0.28)	- 0.03 (0.26)	0.39 (0.26)	0.56** (0.20)	- 0.08 (0.22)	0.29 (0.28)	- 0.31 (0.20)
Muslim	- 0.49 (0.35)	- 0.14 (0.37)	0.20 (0.37)	0.53 (0.32)	- 0.25 (0.32)	- 0.21 (0.35)	- 1.00** (0.33)
Constant	0.13 (0.13)	0.04 (0.16)	- 0.21 (0.14)	- 0.24** (0.09)	0.05 (0.14)	- 0.01 (0.15)	0.33** (0.16)
# obs	88	88	87	86	87	87	85
Adj. R ²	19%	14%	12%	42%	6%	7%	24%

Dependent variables as listed in column. See Table 1 and the body of the paper for variable description and sources. OLS regressions with clustered standard errors in parentheses, *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

suggest the models explain between 5% (construction) and 41% (trade) of the variation in business regulation.

For most specifications, common law does not significantly correlate with business regulation. The one exception is trade regulation, column (4). This result

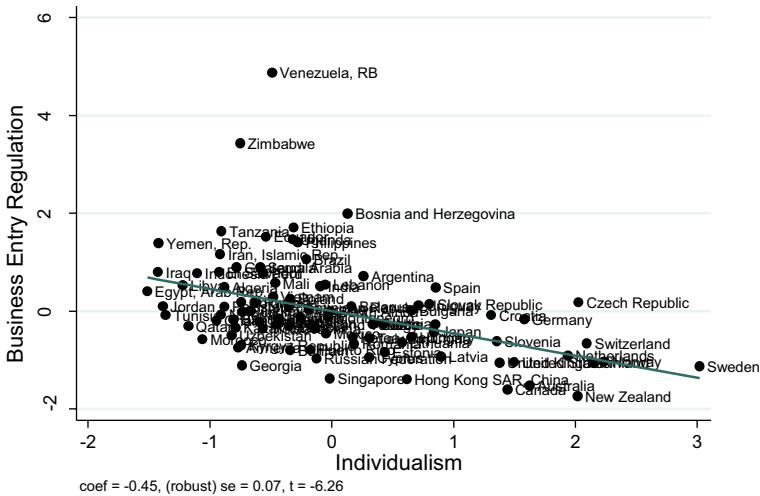


Fig. 2 Individualism and Business Entry Regulation. *Note:* This plot shows partial correlation based on the specification in Table 2, Panel A, Column 1. Data descriptions are provided in Table 1

indicates that countries with English legal origin regulate trade more intensely than those with civil legal origins.⁷

Table 2, Panel B provides robustness to Panel A by including share of the population that is Muslim (McCleary and Barro 2006). Islamic law tends to stifle business development and is critical of corporations; thus, a higher Muslim population may lead to stronger preferences for business regulation (Kuran 2004; Potrafke 2012). As shown, individualism is robust to this inclusion. Individualism remains negative and significant in all specification with similar sized coefficients. Muslim population does not significantly correlate with regulation with one exception, debt regulation. A country with a higher share of the population that is Muslim tends to regulate debt collection less intensely. In addition, the adjusted R-squared increases from 17 to 24% in this specification; otherwise, the inclusion of Muslim population does not increase the explanatory power of the models.

To provide additional robustness, Table 3 includes regional controls, log GDP per capita, and log population. Regional controls minimize concerns that variation in regulation is driven by regional variation in factors such as culture and legal institutions. Log population is included to control for the size of the country since the regulatory environment involves fixed costs and is limited by the size of the market (Demsetz 1967). In addition, log GDP per capita is included to control for the level of economic development (Aghion et al. 2010; Pinotti 2012). Both log GDP per capita and log population is collected from World Development Indicators (WDI 2018).

⁷ For a more detailed discussion of how common law affects business entry regulation, see Davis and Williamson (2016).

Table 3 Individualism and regulation, OLS regressions, additional controls

Dep. Var:	Business entry	Court	Register property	Trade	Construction	Utility	Debt
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Individualism	- 0.34** (0.14)	- 0.27** (0.14)	- 0.20 (0.14)	- 0.34** (0.14)	- 0.26** (0.13)	- 0.38** (0.14)	- 0.37** (0.17)
Common law	0.23 (0.32)	0.07 (0.26)	0.41 (0.25)	0.21 (0.21)	0.25 (0.22)	0.54** (0.26)	- 0.10 (0.23)
Regional controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Log GDP pc	- 0.28** (0.10)	- 0.41** (0.15)	- 0.24* (0.14)	- 0.05 (0.10)	- 0.51*** (0.12)	- 0.50*** (0.14)	- 0.41** (0.15)
Log pop	0.14* (0.08)	0.10 (0.09)	0.19* (0.11)	0.18** (0.06)	0.06 (0.10)	0.05 (0.09)	- 0.05 (0.11)
Constant	- 0.81** (0.30)	- 0.48* (0.27)	- 1.07** (0.49)	0.37 (0.31)	- 0.73** (0.26)	0.19 (0.32)	- 0.19 (0.30)
# obs	88	88	87	86	87	87	85
Adj. R ²	28%	30%	25%	50%	28%	29%	28%

Dependent variables as listed in column. See Table 1 and the body of the paper for variable description and sources. OLS regressions with clustered standard errors in parentheses, *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

In six of seven specifications, individualism remains negative and significant, although with somewhat smaller coefficients. Individualism is negative but statistically insignificant in column (3), where the dependent variable is the regulation to register property. The reduced coefficient sizes and loss of significance in one specification is not surprising given the high correlation between individualism and income (correlation=0.53), and the well-documented finding that individualism leads to innovation, growth, and higher levels of economic development (Gorodnichenko and Roland, 2017). Thus, these specifications likely results in over-controlling, but provide support that individualism directly relates to the regulatory environment.

Next, potential concerns regarding the measure of individualism is addressed. In “Appendix 2”, results are presented replacing the WVS constructed measure of individualism with Hofstede’s (2001) original measure. As reported, individualism is negative and significant at the 5% level or greater in six of seven estimations, and its effect is economically meaningful. For example, a one standard deviation increase in individualism reduces regulation of entry by 56% of its standard deviation. Individualism is not significantly associated with utility regulation. However, our sample size is significantly reduced from 93 countries to 52 countries when using Hofstede’s measure of individualism.

Lastly, Table 4 includes two alternative culture measures as additional controls, uncertainty avoidance and trust. Uncertainty avoidance (Hofstede 2001) measures the degree to which members of society are comfortable in unstructured situations.

Table 4 Individualism and Regulation, OLS Regressions, Additional Culture Variables

Dep. Var:	Business entry (1)	Court (2)	Register property (3)	Trade (4)	Construction (5)	Utility (6)	Debt (7)
<i>Panel A</i>							
Individualism	- 0.49*** (0.09)	- 0.52*** (0.14)	- 0.45*** (0.10)	- 0.40*** (0.07)	- 0.35** (0.11)	- 0.22* (0.11)	- 0.53*** (0.15)
Common law	- 0.01 (0.52)	0.19 (0.36)	0.66** (0.30)	0.34 (0.23)	0.05 (0.30)	0.64 (0.39)	- 0.45 (0.40)
Uncertainty avoidance	0.15 (0.18)	0.17 (0.16)	0.19* (0.10)	- 0.03 (0.11)	0.09 (0.17)	0.31** (0.15)	- 0.07 (0.20)
Constant	0.09 (0.13)	0.07 (0.16)	- 0.22* (0.11)	- 0.18* (0.10)	- 0.23 (0.16)	- 0.26* (0.14)	0.15 (0.19)
# obs	50	50	50	49	50	50	50
Adj. R ²	25%	24%	37%	33%	15%	11%	22%
Dep. Var:	Business entry (1)	Court (2)	Register property (3)	Trade (4)	Construction (5)	Utility (6)	Debt (7)
<i>Panel B</i>							
Individualism	- 0.36*** (0.08)	- 0.28** (0.10)	- 0.12 (0.11)	- 0.68*** (0.13)	- 0.08 (0.11)	- 0.20** (0.10)	- 0.24** (0.12)
Common law	0.11 (0.29)	- 0.08 (0.24)	0.33 (0.22)	0.52*** (0.20)	- 0.18 (0.21)	0.23 (0.26)	- 0.32 (0.20)
Trust	- 0.17* (0.09)	- 0.25*** (0.09)	- 0.40*** (0.08)	0.13 (0.11)	- 0.35** (0.11)	- 0.14 (0.09)	- 0.33** (0.11)
Constant	- 0.02 (0.08)	0.03 (0.10)	- 0.10 (0.10)	- 0.13 (0.09)	0.07 (0.12)	- 0.05 (0.11)	0.08 (0.11)
# obs	93	93	92	91	92	92	90
Adj. R ²	20%	18%	23%	41%	14%	7%	23%

Dependent variables as listed in column. See Table 1 and the body of the paper for variable description and sources. OLS regressions with clustered standard errors in parentheses, *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Highly uncertainty avoidant cultures are characterized by a strong need for predictability and control over the environment, and thus may prefer greater levels of regulation. In Panel A, Table 4, the results indicate that the association between individualism and regulation is robust to the inclusion of uncertainty avoidance. Uncertainty avoidance is positive and significant in two specifications.

In Panel B, Table 4, trust is included in the estimations. An emerging literature shows that higher levels of trust significantly decrease business regulation as individuals living in a trusting community do not expect opportunistic behavior. Therefore, they do not desire a high degree of social control via government regulation (Aghion et al. 2010; Pinotti 2012; Cline and Williamson 2020). Trust is measured by the percentage of respondents who answered yes to the WVS question: Do you think most people can be trusted?

When trust is included in the specifications, individualism loses significance in two estimations, property and construction regulation. It remains negative and significant at the 5% level or greater in the other five specifications. Trust is negative and significant in five specifications, supporting prior works. It should be noted that trust and individualism have a high correlation of 0.50, suggesting potential bias.

Overall, the results suggest that individualism decreases regulation governing business activity. The relation between individualism and regulation is not dependent on a particular measure of business regulation, although some areas are more sensitive to model specification. Collectively, the findings indicate that individualism robustly decreases regulation of entry, courts, trade, utility access, and debt collection.

4.2 Indirect effect of individualism

The above findings suggest that individualism directly decreases business regulation, improving the efficiency of doing business, by altering preferences over social policy. However, as theorized above, the association between individualism and regulation could be driven exclusively through individualism's impact on formal political institutions. In this case, the coefficient on individualism should be insignificant when controlling for democracy.

Table 5 adds democracy to the estimations in Table 2, Panel A. Individualism remains negative and significant (5% level or better) in all seven regressions. In some specifications, the coefficients on individualism are larger once democracy is included. For example, a one standard deviation increase in individualism decreases court regulation by 61% of a standard deviation.

Interestingly, it is only in the court regulation regression, column (2), that democracy is significant. However, it is *positive* and significant, suggesting that democracy increases court regulation to enforce a contract. In all other specifications, democracy is insignificant. Combined, these results reject the argument that individualism's effect is indirect; instead, individualism has an economically significant, direct

effect on business regulation. As such, individualism appears to influence regulation independent of its influence on formal political institutions.⁸

Figures 3 and 4 further illustrate this point. Figure 3 shows the partial correlation between individualism and business entry regulation, controlling for democracy, from Table 5, column (1). Here, individualism has a significant negative association. Individualistic countries adopt fewer costly regulations to legally open a new business. Comparing Figs. 2 and 3 is also insightful. The main difference between the two figures is that Fig. 3 controls for democracy; however, the figures look virtually identical, suggesting that individualism's effect is direct and unaltered by political institutions. Comparing the adjusted R-squareds across Tables 2 and 5 provides additional support since the models gain very little, if any, explanatory power by including democracy.

Figure 4 shows the partial correlation between democracy and entry regulation, controlling for individualism. As shown, there is basically no association, rejecting the argument that democracy is the main conduit for individualism's influence on regulation.

4.3 Interactive effects

If democracy, however, provides a mechanism through which individuals express their preferences, democracy can magnify individualism's influence on regulation. If so, interactions and marginal effects between democracy and individualism will be positive and significant. Alternatively, democracies may select policies inconsistent with cultural preferences, and instead, choose policies in line with political self-interest. If so, the interaction terms will be insignificant. To test these claims, an interaction term with individualism and democracy is included.

Results are presented in Table 6. Panel A reports the estimations including the interaction term. As shown, the interaction term is negative and significant in two specifications, suggesting democracy and individualism are complements in restraining regulation; however, it is positive and significant in the trade specification, suggesting substitution. To provide additional insight, marginal effects are reported in Panel B.

Panel B presents marginal effects of individualism's effect conditional on different levels of democracy. In six of seven specifications, democracy amplifies the negative effect of individualism, indicating that individualism and democracy are complements. In other words, democracies channel cultural preferences into regulation outcomes, thus amplifying individualism's influence on business regulation. This suggests that culture influences democratic policymakers to regulate in a manner that is in line with public preferences, not political self-interest.

For example, as shown in Panel B, column (1), the coefficient on individualism is negative and significant, decreasing business entry regulation, starting at low levels of democracy (25th percentile). This trend is observed in Fig. 5, which

⁸ The failure to examine the role of cultural values may have led previous research to identify a spurious relation between political institutions and the regulation of entry (Djankov et al. 2002).

Table 5 Individualism, democracy and regulation, OLS regressions

	Business entry (1)	Court (2)	Register property (3)	Trade (4)	Construction (5)	Utility (6)	Debt (7)
Democracy	0.08 (0.11)	0.38*** (0.10)	0.13 (0.15)	- 0.07 (0.08)	- 0.01 (0.14)	0.04 (0.11)	- 0.04 (0.11)
Individualism	- 0.49*** (0.10)	- 0.61*** (0.12)	- 0.40** (0.13)	- 0.56*** (0.11)	- 0.27** (0.13)	- 0.30** (0.11)	- 0.40** (0.12)
Common law	0.17 (0.30)	- 0.05 (0.22)	0.38 (0.24)	0.55** (0.20)	- 0.11 (0.23)	0.28 (0.27)	- 0.22 (0.22)
Constant	- 0.04 (0.08)	0.03 (0.11)	- 0.16 (0.11)	- 0.11 (0.10)	0.03 (0.12)	- 0.05 (0.11)	0.05 (0.12)
# obs	89	89	88	87	88	88	86
Adj. R ²	19%	24%	13%	41%	4%	6%	15%

Dependent variables as listed in column. See Table 1 and the body of the paper for variable description and sources. OLS regressions with clustered standard errors in parentheses, *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

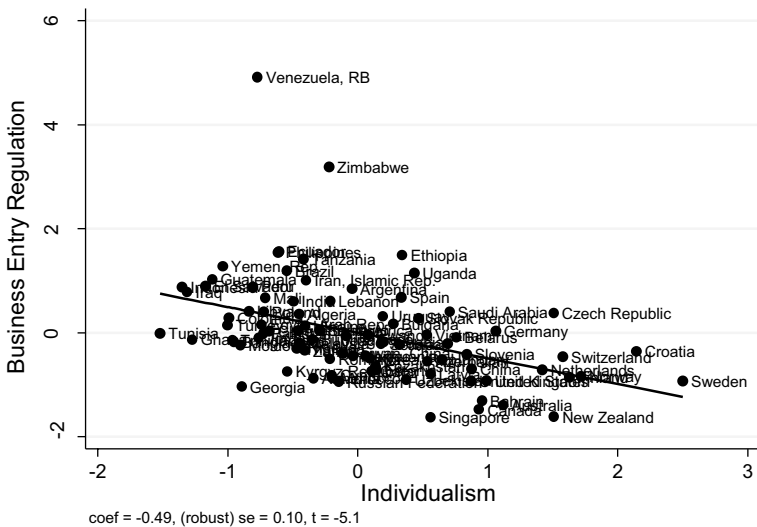


Fig. 3 Individualism and Business Entry Regulation, Controlling for Democracy. *Note:* This plot shows partial correlation based on the specification in Table 5, Column 1. Data descriptions are provided in Table 1

plots the marginal effect of individualism on business entry regulation, conditional on various levels of democracy. The economic significance increases as countries become more democratic. A one standard deviation increase in individualism decreases entry regulation by 36% (25th percentile), 44% (mean), 52% (75th percentile), and 53% (maximum) of a standard deviation.

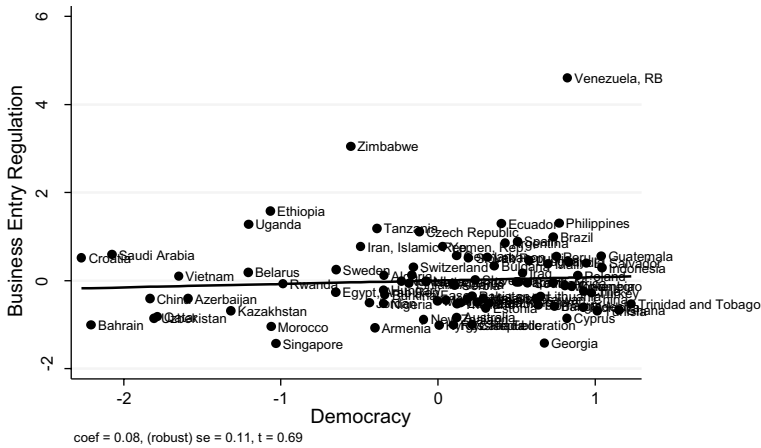


Fig. 4 Democracy and Business Entry Regulation, Controlling for Individualism. *Note:* This plot shows partial correlation based on the specification in Table 5, Column 1. Data descriptions are provided in Table 1

In autocracies, the minimum score, individualism is insignificant in five specifications. With construction regulation, individualism is positive and significant in autocracies, but as democracy increases, individualism's effect becomes negative and significant, supporting an amplification effect.

The one exception is with trade regulation. Individualism's largest effect is in autocracies (minimum score). For example, if individualism increases by one standard deviation in a dictatorship, trade regulation decreases by 1.3 standard deviations. As democracy increases, individualism's effect remains negative but decreases in magnitude, suggesting substitution between democracy and individualism.

Apart from trade regulation, the interaction of individualism and democracy reduces regulation, and the impact of individualism is greater in democratic countries. This is consistent with democratic theory that views it as a mechanism for aggregating social preferences, and it is consistent with public choice theory where culture serves as a constraint on political actors to create regulatory policy in line with social preferences.

5 Conclusion

This paper provides a link between culture and development by illustrating that individualism directly decreases business regulation, and democracy magnifies this effect.

Pinpointing specific policy implications, however, is difficult. Most scholars view culture as slow changing and difficult to manipulate, which implies that policymakers may be limited in their ability to find expedient solutions to

Table 6 Individualism, democracy and regulation, interaction effects, OLS regressions

	Business entry (1)	Court (2)	Register property (3)	Trade (4)	Construction (5)	Utility (6)	Debt (7)
<i>Panel A</i>							
Democracy	0.04 (0.10)	0.36** (0.12)	0.04 (0.17)	0.04 (0.10)	- 0.21* (0.12)	- 0.03 (0.13)	- 0.12 (0.11)
Individualism	- 0.44*** (0.09)	- 0.59*** (0.14)	- 0.28 (0.17)	- 0.71*** (0.14)	- 0.00 (0.12)	- 0.20 (0.13)	- 0.30** (0.11)
Individualism * democracy	- 0.09 (0.09)	- 0.04 (0.13)	- 0.21 (0.17)	0.27** (0.12)	- 0.47*** (0.11)	- 0.16 (0.13)	- 0.19** (0.09)
Common law	0.17 (0.30)	- 0.05 (0.23)	0.39 (0.24)	0.53** (0.20)	- 0.09 (0.23)	0.29 (0.28)	- 0.22 (0.22)
Constant	0.01 (0.09)	0.05 (0.13)	- 0.05 (0.14)	- 0.25*** (0.10)	0.27** (0.13)	0.03 (0.14)	0.14 (0.12)
# obs	89	89	88	87	88	88	86
Adj. R ²	19%	23%	14%	44%	15%	6%	16%
	Business entry	Court	Register property	Trade	Construction	Utility	Debt
<i>Panel B: Marginal effects, Individualism conditional on democracy</i>							
Min	- 0.21	- 0.50	0.23	- 1.35**	1.13**	0.19	0.15
25th	- 0.36**	- 0.56**	- 0.11	- 0.93***	0.38**	- 0.07	- 0.15
Mean	- 0.44***	- 0.59***	- 0.29	- 0.71***	- 0.00	- 0.20	- 0.30**
75th	- 0.52***	- 0.62***	- 0.45***	- 0.50***	- 0.38***	- 0.33**	- 0.44***
Max	- 0.53***	- 0.63***	- 0.49***	- 0.45***	- 0.46***	- 0.36**	- 0.47***

Dependent variables as listed in column. See Table 1 and the body of the paper for variable description and sources. OLS regressions with clustered standard errors in parentheses, *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

macroeconomic concerns. This inference is in line with recent work stressing historical determinants of economic development.

Furthermore, the expected gains from institutional transfer between countries should be met with skepticism. Changes to top-down formal rules may have limited success if local norms are not taken into consideration. The search for

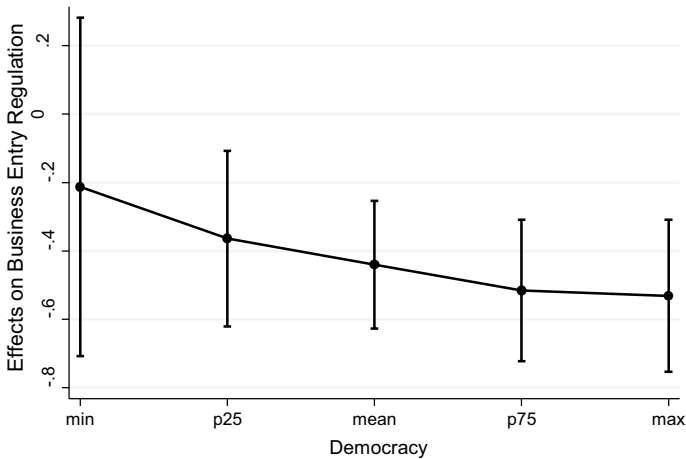


Fig. 5 Marginal Effects of Individualism on Business Entry, Conditional on Democracy. *Note:* This plot shows partial correlation based on the specification in Table 6, Panel B, Column 1. Data descriptions are provided in Table 1

optimal policy may be a misguided exercise since optimal policy is contingent on a country's cultural values.

Finally, culture can place constraints on policymakers, especially in a democracy. Not only do the results suggest that culture ties the hands of policymakers in terms of what policies can be successful in a particular cultural context, it also suggests this is a good thing. In a democracy, culture may be a constraint on political misbehaving. If individualistic cultures want more freedom to engage in commercial activity, democratic politicians are more likely to give voters what they want, or risk being voted out of office. Thus, culture serves as an additional check on policymakers, limiting their range of policy options. Individualism limits the ability for government officials to rent seek via inefficient regulation.

Acknowledgements This paper is based on remarks prepared for a plenary session at the 2020 Public Choice Society Annual Meeting. The author thanks Roger Congleton for the invitation to write this paper. I also thank two anonymous reviewers whose comments improved the paper. There is no funding to report. Data and Stata code are available upon request.

Appendix 1

See Table 7.

Table 7 Individualism and regulation, OLS regressions, components of indices

Dep. Var.	Business entry											
	Proc-men					Court						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)			
<i>Panel A</i>												
Individualism	- 1.48*** (0.23)	- 5.08** (1.59)	- 13.56*** (3.02)	- 1.59*** (0.23)	- 5.19** (1.59)	- 13.56*** (3.02)	- 2.68*** (0.42)	- 40.38 (24.62)	- 3.73** (1.28)			
Common law	- 0.22 (0.75)	1.76 (6.93)	9.69 (10.67)	- 0.15 (0.76)	1.82 (6.93)	9.69 (10.67)	- 0.96 (1.37)	58.99 (75.84)	2.82 (3.22)			
Constant	8.16*** (0.30)	24.44*** (1.93)	20.57*** (3.17)	8.25*** (0.30)	24.53*** (1.93)	20.57*** (3.17)	36.73*** (0.56)	573.68*** (30.17)	27.76*** (1.57)			
# obs	93	93	93	93	93	93	93	93	93			
Adj. R ²	21%	3%	13%	23%	3%	13%	20%	1%	6%			
Dep. Var.	Register Property					Trade						
	Time		Cost		Export		Import		Cost-border			
	Proc	(1)	(2)	(3)	Time-docs	Time-border	cost-docs	Cost-border	Time-docs	Time-border	Cost-docs	Cost-border
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
<i>Panel B</i>												
Individualism	- 0.92*** (0.20)	- 6.48 (5.15)	- 0.50* (0.29)	- 30.09*** (8.29)	- 63.02** (29.06)	- 20.52*** (3.10)	- 92.99*** (23.70)	- 35.92*** (5.47)	- 41.80*** (6.19)	- 80.31*** (16.34)	- 143.43*** (20.30)	
Common law	0.51 (0.52)	5.29 (12.27)	1.33* (0.79)	6.69 (10.83)	16.17 (34.21)	27.11** (8.13)	135.45* (69.72)	12.41 (12.72)	53.99** (17.80)	63.09* (31.98)	177.51** (61.92)	
Constant	5.91*** (0.25)	45.49*** (5.45)	4.07*** (0.39)	35.63*** (7.82)	105.14*** (26.88)	34.43*** (3.72)	262.11*** (27.80)	48.31*** (6.83)	48.11*** (5.67)	112.72*** (17.59)	284.33*** (28.24)	
# obs	92	92	92	91	91	91	91	91	91	91	91	

Table 7 (continued)

Dep. Var.	Register Property			Trade			Import			Debt		
	Proc	Time	Cost	Export			Time-docs			Time		
				Time-docs	Time-border	cost-docs	Cost-border	Time-border	Cost-docs	Time-border	Cost	Cost
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)		
Adj. R ²	0%	4%	20%	35%	8%	15%	29%	41%	26%	31%		
Dep. Var.	Construction			Utility			Debt					
	Proc	Time	Cost	Proc			Time					
				Proc	Time	Cost	Time	Cost	Cost			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)		
<i>Panel C</i>												
Individualism	- 1.20** (0.43)	- 2.48 (7.93)	- 1.57** (0.51)	- 0.36** (0.12)	- 4.57 (4.48)	- 533.05*** (133.18)	- 0.24* (0.13)	- 3.44*** (0.66)				
Common law	- 1.94* (1.03)	12.41 (27.20)	- 0.25 (1.61)	0.11 (0.32)	10.73 (13.20)	390.38 (460.84)	- 0.52** (0.24)	0.01 (1.98)				
Constant	16.70*** (0.54)	185.34*** (8.97)	6.10*** (0.82)	4.98*** (0.15)	94.29*** (6.14)	751.63*** (186.54)	2.51*** (0.14)	14.25*** (0.99)				
# obs	92	92	92	92	93	93	93	90				
Adj. R ²	7%	- 2%	3%	5%	- 1%	8%	6%	13%				

Dependent variables as listed in column. See Table 1 and the body of the paper for variable description and sources. OLS regressions with clustered standard errors in parentheses, *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Appendix 2

See Table 8.

Table 8 Individualism and regulation, OLS regressions, Hofstede's measure

Dep. Var:	Business entry (1)	Court (2)	Register property (3)	Trade (4)	Construction (5)	Utility (6)	Debt (7)
Individualism_Hofstede	- 0.56*** (0.15)	- 0.50** (0.16)	- 0.38** (0.12)	- 0.40*** (0.08)	- 0.32*** (0.09)	- 0.17 (0.15)	- 0.46*** (0.13)
Common law	0.03 (0.39)	0.32 (0.39)	0.64** (0.31)	0.55** (0.23)	0.09 (0.27)	0.38 (0.40)	- 0.09 (0.31)
Constant	- 0.10 (0.11)	- 0.12 (0.15)	- 0.31** (0.13)	- 0.37*** (0.09)	- 0.36** (0.13)	- 0.27* (0.15)	- 0.10 (0.16)
# obs	52	52	52	51	52	52	52
Adj. R ²	25%	16%	19%	30%	10%	1%	16%

Dependent variables as listed in column. Individualism is measured by Hofstede (2001). See Table 1 and the body of the paper for variable description and sources. OLS regressions with clustered standard errors in parentheses, *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

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