

# **Regulatory Reforms After Covid**

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**SPECIAL PAPER 259**

**LSE FINANCIAL MARKETS GROUP PAPER SERIES**

**May 2020**

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## **Regulatory Reforms After Covid<sup>1</sup>**

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*Fiscal crises, particularly following a pandemic of the magnitude of Covid-19, spur regulatory reform, for example in registering property, trading across borders, protecting investors and resolving bankruptcy. Such reforms display systematic patterns: countries reform when their neighbors have reformed too. Regulatory reforms span political regimes: political change and democratic accountability have little effect on the incidence of regulatory reform.*

Governments resort to regulatory reform in difficult times, when their fiscal balances deteriorate (Agnello et al. 2015). Ranciere and Tornell (2015), for example, show that trade reforms tend to follow periods of severe economic crises. Other studies show reform trending: a clear neighborhood effect of regulatory reform. Buera et al. (2011), for example, develop a learning model to argue that neighbors' experience influences domestic policy actions though their effect on policymakers' beliefs. Finally, reforms are hypothesised to occur when a new government comes to power (Alesina and Drazen, 1991). In addition, previous research suggests that reforms are driven by political factors, for example, when governments with a reformist ideology take power (Alesina and Cukierman 1990).

The Covid-19 crisis has already resulted in large fiscal deficits for 2020, in advanced economies and developing countries alike. These deficits are likely to worsen by the end of the year as social distancing rules stay into effect for a further period. Few firms can survive a protracted lockdown or collapsed revenues due to the uncertainty in demand that Covid-19 has brought (Bosio et al 2020). Governments have been called to the rescue of small, as well as large businesses (Balloch et al 2020). Social transfers have also ballooned, in an attempt to reserve the livelihood for large parts of the population (Djankov and Georgieva 2020). All these actions mean one thing: large and persistent deficits in the years to come.

There is a silver lining: while this fiscal trend is troubling for governments now, it may bring about regulatory reform. We test this hypothesis with global data, while also testing two adjacent hypotheses. We find that the post-Covid-19 period is indeed a propitious time to improve the regulatory environment for doing business.

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## The Data

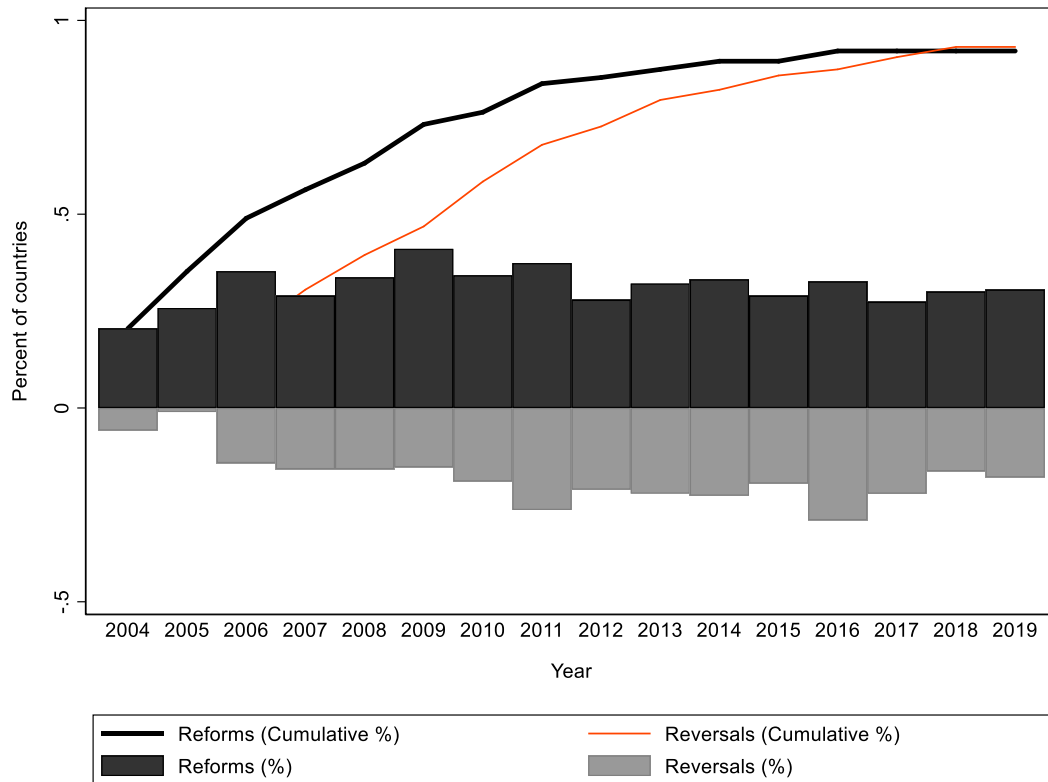
This paper presents uses a dataset of business regulatory reforms, based on the World Bank's Doing Business project. The data span sixteen year, 2004 to 2019, covering 190 economies.

Despite the importance of regulation for the functioning of business, a single dataset exists to analyze its effects. The OECD regulatory dataset is based on a survey of economy-wide and industry-specific regulation (Egert 2016). The regulatory indicators are updated every five years for the years 1998, 2003, 2008, 2013 and 2018. However, as the methodology evolved in 2018, past vintages of data are not fully comparable to the 2018 data. The latest benchmark covers 45 economies: OECD members plus Argentina, Brazil, Bulgaria, Colombia, Croatia, Cyprus, Kazakhstan, Malta, Romania and South Africa.

The data are based on a consistent methodology over time. A reform is defined as a regulatory change that reduces the cost of doing business, by making it faster, easier, cheaper to conduct business. The overall reform variable is a composite of ten regulatory indicators: starting a business, dealing with licenses, registering property, getting credit, protecting minority investors, paying taxes, trading across borders, enforcing contracts, resolving insolvency, and employing workers. The methodology for each of the ten regulatory topics in Doing Business employs several assumptions, described in Djankov (2016). Three topics: employing workers, resolving insolvency and registering property – have a balanced panel of 190 countries. For the remaining seven topics countries were added progressively to the original sample of 133 countries until 2006, to come to the final sample of 190.

Nearly 60% of countries in our sample register one or more reforms a year. About 30 percent of countries in our sample implemented two or more reforms in a given year. Figure 1 maps out reform activity over time. Regulatory reforms intensified over the sample period. With Rwanda and Georgia leading the reform effort with a total of 62 and 51 reforms recorded since the inception of the study in 2004. India and Kazakhstan share the third spot - with 48 reforms each. Only four economies globally (Kiribati, Libya, Somalia, South Sudan) have not implemented any reform. The incidence of reforms peaks in 2009, when the global financial crisis had gathered speed. That year a total number of 298 reforms were recorded, or about 1.5 reforms per country.

**Figure 1: Reforms by Year, 2004-2019**



Source: World Bank’s [Doing Business project](#).

Note: The figure shows the shares of countries in the sample that have implemented at least two regulatory positive reforms and reversals (displayed as negative) together with their cumulative percentage between 2004 and 2019. Reforms are defined as negative (reversal) if a country implements reforms that make more difficult for businesses to operate.

There have also been changes in regulation that make it more difficult for businesses to operate (Figure 1). For example, in 2008, Bolivia suspended voluntary restructuring of firms in financial distress, leaving as the only option an unwieldy bankruptcy procedure that typically takes six years. In the area of minority investor protection, in 2015 Qatar reduced the rights of shareholders in major corporate decisions. Reform reversals constitute 18 percent of the observations in our panel data.

A group of countries have reformed consistently since 2004, for a minimum of 10 out of the total 16 years. Rwanda provides an example, implementing reforms in 14 of the 16 years.<sup>2</sup> At the opposite end, we identify a set of countries which have barely reformed. Most Latin American economies fall into this group. To give an example, Bolivia implemented only four regulatory reforms in the past 16 years.

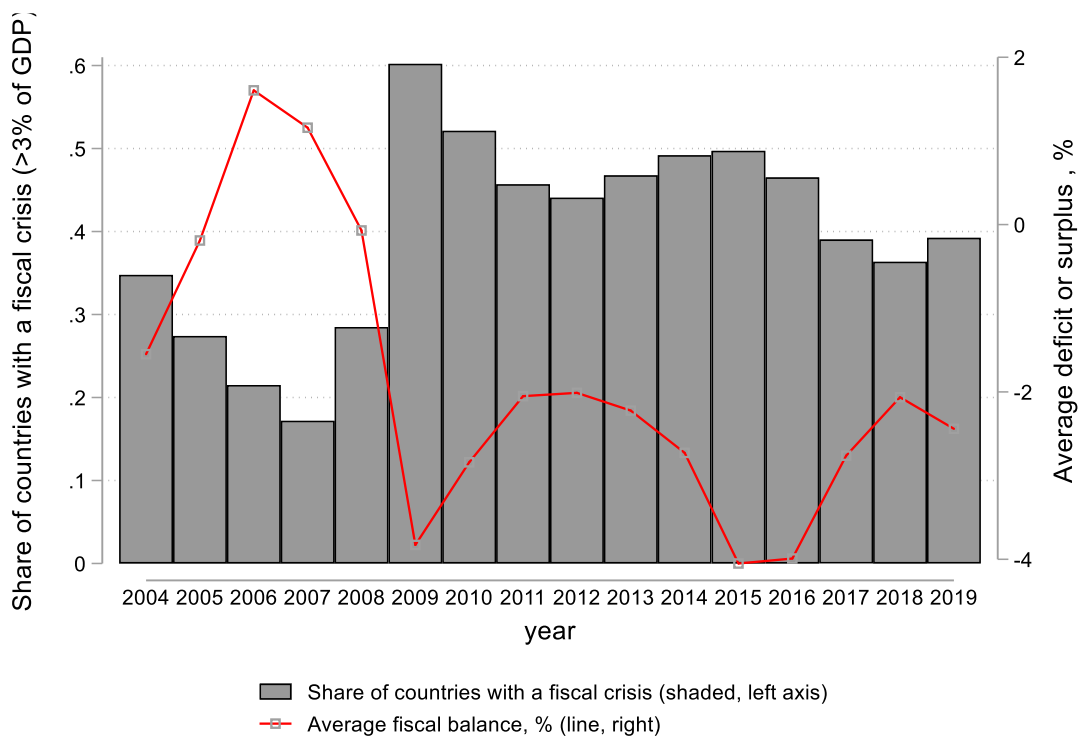
<sup>2</sup> This group includes Armenia, Azerbaijan, Belarus, China, Georgia, Indonesia, Kazakhstan, Madagascar, Morocco, North Macedonia, Portugal, Ukraine, United Arab Emirates, Uzbekistan, and Vietnam.

## Fiscal Crises Spur Regulatory Reform

To test this hypothesis, we regress the incidence of regulatory reforms on lagged fiscal crisis variable controlling for country fixed effects, which capture any time-invariant unobserved heterogeneity across countries. The regressions also control for year fixed effects which control for global reform trends, and region-specific time trends to account for the possible trends in reform across regions.

We construct a fiscal crisis indicator that equals one if a country experiences fiscal imbalance more than 3 percent in year  $t-1$ , and 0 otherwise. The distribution of fiscal imbalances is highly skewed, ranging from a deficit of 18% of GDP in Greece in 2009 and 32% of GDP in Ireland in 2010, to a surplus of 125% of GDP in São Tomé and Príncipe in 2007. The global economy is running a deficit during most of the sample period, reaching 3.6% of GDP in 2009, the trough year of the 2008-2013 financial crisis. The year 2020 promises to yield an even larger global deficit, given the aforementioned extensive measures to ameliorate the effects of the health crisis on households and businesses.

**Figure 2: Budget Deficit to GDP ratio, 2004-2019**



Source: World Bank's [World Development Indicators](#).

The coefficient on the lagged fiscal crisis variable is positive and often statistically significant. When we further distinguish across by type of reform, fiscal crises beget statistically significant reforms in protecting investors, resolving bankruptcy, registering property and trading across

borders. The result suggests that fiscal crisis appear to spur certain types of reforms, which is weakly supportive of the crisis-begets-reform hypothesis.

### **Neighbors Incite Neighbors to Reform**

Anecdotal examples abound: the president of Tajikistan took interest in regulatory reform after observing the economic transformation in neighboring Uzbekistan, the president of Togo sent his reform team to Rwanda for know-how on legislative and administrative improvements (World Bank, 2020).

To test this hypothesis, we regress the incidence of domestic reforms on reforms implemented in other countries in the previous year controlling for country and year fixed effects and region-specific time trends.

We construct several proximity measures based on the geographical, social and economic distance of neighboring countries. we construct two alternative measures of geographical proximity. The first uses average reform implemented by all countries sharing a common border. For example, the Tajikistan's immediate neighbors implemented the following reforms in 2017: Afghanistan (0), China (2), Kyrgyzstan (1), and Uzbekistan (3). Since two out of the four neighbors implemented at least two reforms in 2017, we record an average of 0.5. This measure assigns equal weights to all contiguous neighbors, i.e., reforms in Afghanistan and Uzbekistan are equally likely to influence the demand for reform in Tajikistan. All noncontiguous countries are assigned a zero weight: e.g., reforms in Pakistan and Chile have no influence on the decision of the Tajik government.

We construct a second measure of geographical proximity using reforms in other countries weighted by the inverse geographic distance. This measure assigns different weights to each country based on the geographical distance between capital cities of the two respective countries. To continue with our example, the demand for reform in Tajikistan is more affected by reforms in Pakistan (which is 673 kilometers) than reforms in Chile (which is 16,377 kilometers). The weights are normalized so that the sum equals 1 for each country in the sample.

Countries can also learn from reformers in the same trade or currency bloc. We compute the average regulatory reforms of all countries in the same regional trade agreement (RTA partner) or currency union (Common currency), excluding the country in question. To give one example, Vietnam's RTA partners implemented the following regulatory reforms in 2015: Brunei Darussalam (2), Cambodia (1), Indonesia (3), Lao PDR (2), Malaysia (1), Myanmar (0), Philippines (1), Singapore (0), and Thailand (0). The average of Vietnam's RTA partners is calculated as 0.33, which means that one-third of the RTA partners implemented two or more reforms in 2015. In the Robustness section, we also calculated these measures based on the total number of reforms, which is 1.22 in the example. RTA and currency unions are defined based on the agreements in the initial sample year, 2004.

It is also possible that countries learn about the benefits of regulatory reform from trading partners. To capture this effect, we compute trade-share-weighted reforms in other countries. We assign a

time-invariant weight by taking bilateral trade flows in 2004. The weight of each trading partners is equal to its share of the total bilateral trade. For example, Uganda accounted for 8 percent of Kenya's bilateral trade in 2004 whereas Ethiopia's share was less than 1 percent. Hence, the weights are assigned based on the trade share of the respective countries. All non-trading partners are assigned a zero weight.

Genetic proximity is an effective facilitator of technology diffusion across countries. To assess whether genetic proximity also facilitates the transmission of reforms across countries, we construct a measure by taking the inverse genetic-distance-weighted average of other countries' reforms, using the measure of genetic distance between countries constructed by Spolaore and Wacziarg (2018). For example, Afghanistan tends to learn more from its genetically close country, Pakistan, than the most genetically distant country, Solomon Islands.

We successively test each proximity hypothesis. We begin with a simple measure of proximity defined as share of contiguous neighbors that had reforms in the previous year. The estimated coefficient is positive and significant, suggesting that domestic reforms are affected by reforms by contiguous neighbors. In economic terms, reforms by all contiguous neighbors in the previous year increases the likelihood of domestic reform by roughly 10 percentage points.

We next provide the estimates using inverse distance-weighted average of reforms in other countries (Distance). The coefficient is positive and significant, which offers further evidence that geographical proximity facilitates the transmission of reforms across countries. We further show estimates for Genetic Distance when reforms in other countries are weighted using the inverse genetic distance. The coefficient on genetic distance is positive but insignificant, implying that reforms are not transmitted across genetically close countries. Finally, we report the results using the share of countries in the same regional trade agreement (RTA) or currency union. We find that a country is more likely to implement reforms when other countries in the same RTA implemented reforms in the previous year. We find strong evidence that reforms in major trading partners increase the likelihood of domestic reforms.

### **Reform Takes Place in Countries Irrespective of Political Regime**

To test this claim, we regress the incidence of regulatory reforms a political change variable and alternatively a democratic accountability variable controlling for country and year fixed effects as well as region-specific time trends. As a proxy for change in domestic political power, we construct a variable equal to 1 when there is a change of control over parliament from one party or coalition of parties to another 12 months prior to the start of the regulatory reforms, and 0 otherwise, based on information from the Inter-Parliamentary Union (IPU) PARLINE database. 261 changes of power took place during the 2004-2019 period.

As a measure of democratic accountability, we employ a dichotomous measure of democracy using the Polity IV database. In particular, we use the variable polity2 (measured from -10 to +10) to create a dummy variable which is equal to 1 if polity2 takes a positive value in a given country-year, and 0 otherwise. In 2004, 64 percent of the countries in our sample were democracies. By the end of our sample, 2019, this share had increased to 73 percent. A handful of countries have

transitioned to and away from democracy during the sample period: a total of 34 democratic transitions and 20 reversals. Most of these transitions happened in Africa. For example, in The Gambia, the polity score jumped from -5 to 4 in 2017 when the longtime President Yahya Jammeh was defeated at the polls.

We find no evidence to suggest change in political power are followed by regulatory reforms, nor do we find evidence that democratic accountability is associated with reform. However, there is evidence for a positive and statistically significant association between democratic accountability and reforms in starting a business and dealing with licenses.

### **Robustness**

We next test the robustness of our findings to a continuous measure of regulatory reform. The results for the neighborhood effect remain robust. The association with fiscal crisis now becomes statistically significant, while political change remains insignificantly associated with reform.

Our emphasis so far has been on positive reforms, reforms that improve the environment for doing business. To investigate whether the results presented above hold for negative reforms, we regress reform reversals on the same set of measures. All the estimated proximity coefficients are small in magnitude and statistically insignificant. The same result obtains for the fiscal crisis measure. The evidence suggests that reform reversals by neighboring countries or fiscal crises do not increase the likelihood of reversals at home.

Political change, however, does increase the likelihood for reversals. In terms of economic significance, political change increases the likelihood of negative reform by 8 percentage points. This is sizable given that reform reversals constitute only 18 percent of the observations in our sample.

### **Conclusions**

It is hard to look beyond the large negative effects from Covid-19 in terms of health outcomes, deterioration of livelihoods, and the struggle for survival of many businesses left without revenue. Once the recovery period starts, other issues highlighted in chapters in this volume will come to the fore – the likely rise in inequality, a reversal in the trend of poverty reduction globally, over-indebtedness of sovereigns and corporates, among others.

Crises create reform opportunities as well. A small silver lining in the aftermath of Covid-19 is the possibility for governments to implement regulatory reform that eases the burden on businesses. We find some evidence to that effect from previous crisis periods, especially in countries whose neighbors reform too. The post-Covid-19 period will challenge politicians to choose among difficult options on how to revive the economy. Regulatory reform is among these options.



## References

- Agnello, Luca, Castro, Vitor, Jalles, Jo˜ao Tovar, Sousa, Ricardo M., (2015), [What determines the likelihood of structural reforms?](#) *European Journal of Political Economy*, Elsevier, 37(C), 129-145.
- Alesina, A., Cukierman, A., (1990), The politics of ambiguity. *The Quarterly Journal of Economics* 105 (4), 829–850.
- Alesina, A. and Drazen, A. (1991). Why Are Stabilizations Delayed? *American Economic Review*, 81 (5), 1170-88.
- Balloch, C, S Djankov, J Gonzalez-Uribe and D Vayanos (2020), “[A Restart Procedure to Deal with Covid-19](#)”, FMG special paper 254, London School of Economics.
- Bosio, E, F Jolevski, J Lemoine, and R Ramalho (2020), “[Survival of firms in developing economies during economic crisis](#)”, FMG special paper 255, London School of Economics.
- Buera, F. J., Monge-Naranjo, A., & Primiceri, G. E. (2011), [Learning the wealth of nations](#). *Econometrica*, 79(1), 1-45.
- Djankov, S (2016), [The Doing Business Project: How It Started: Correspondence](#). *Journal of Economic Perspectives*, 30(1), 247-48.
- Djankov, S and D Georgieva (2020), “[It’s time to expand unemployment protections](#),” *Let’s Talk Development*, April 24.
- Égert, B. (2016), [Regulation, institutions and productivity: new macroeconomic evidence from OECD countries](#), *American Economic Review Papers and Proceedings*, 106 (5), 109-113.
- Ranciere, R and A Tornell (2015), [Why Do Reforms Occur in Crises Times?](#) working paper, Economics Department, University of California at Los Angelis, USA, August.
- Spolaore, E and R Wacziarg (2018), [Ancestry and Development: New Evidence](#), *Journal of Applied Econometrics*, 33 (5), 748-762.