WORLD BANK GROUP

Research & Policy Briefs
From the World Bank Malaysia Hub

No. 36

July 16, 2020

Fiscal Rules in Times of Crisis

Mahama Samir Bandaogo

As governments around the world struggle to piece together the most effective fiscal response to counter the economic and social impact of the COVID-19 outbreak, some are facing constraints imposed by fiscal rules enacted in the past to ensure fiscal discipline. The outbreak has revealed the weaknesses and inappropriateness of many existing fiscal rules, and authorities should take the opportunity to strengthen their fiscal rules by adopting features that make them more flexible, operational, and enforceable. Research shows that the de facto strength and credibility of the fiscal rule is what matters for fiscal discipline—not the mere de jure existence of one. As important as it is that fiscal rules include contingencies to accommodate large and effective fiscal responses to severe and unprecedented crises, it is also as important that fiscal rules provide clear guidance for building up savings in times of positive shocks.

Fiscal Rules and their Design

Fiscal Rules are institutional mechanisms that impose numerical limits on budgetary aggregates to ensure fiscal discipline and credibility. They can help to correct inefficiencies in fiscal policy such as procyclicality, improve revenue collection efforts and curve overspending. However, the ongoing severe economic downturn due to the unprecedented COVID-19 outbreak is putting many governments' fiscal rules to the test and revealing their weaknesses. As governments around the world struggle to piece together the most effective fiscal response to counter the economic and social impact of the outbreak, some are facing constraints imposed by fiscal rules enacted in the past to ensure fiscal discipline. This has shed some light on the effectiveness and design of fiscal rules.

As of 2015, 96 countries had at least one of the following four types of fiscal rules, according to the IMF Fiscal Rule Dataset (IMF 2017): a debt rule; an expenditure rule; a revenue rule; and/or a balanced budget rule. Beyond the numerical limits and targets imposed by these rules, certain features also vary across countries, such as the coverage—whether the rule pertains to the central, state, and local (general) government or only to the central government; the legal basis; the existence of an independent monitoring authority and/or a formal enforcement mechanism; an escape clause; and formal sanctions for violation.

Mitigating the impact of a large shock like the COVID-19 outbreak requires a certain level of flexibility that many existing fiscal rules lack. Accordingly, the crisis will likely lead to some changes in existing fiscal frameworks. The experience with the global financial crisis is instructive in this regard. That crisis was the ultimate test for the fiscal rules that existed at the time and led to significant amendments and changes in those rules in about one-third of countries with fiscal rules (Caselli et al. 2018). The fiscal rules that emerged in the aftermath of the global financial crisis have been referred to as "second-generation" fiscal rules, and tend to be much more flexible, operational, and enforceable, compared to the first generation. Specifically, they have features such as automatic correction of deviations; more operational guidance (specific limits on expenditure growth, for example); a combination of fiscal sustainability and business cycle stabilization objectives; and escape clauses and monitoring guidelines (Daban 2011; Schaechter et al. 2010; Schick 2010). Although some first-generation fiscal rules had some of these features, such as escape clauses, most failed to specify the circumstances to trigger the escape clause or how to do so (whether requiring a vote from the legislature) and did not specify a path of return to compliance. Second-generation fiscal rules tend to specify all these different steps and mechanisms. Such specificity is very important not only to improve the effectiveness of the fiscal response, but also to decrease policy uncertainty by providing operational guidance and a roadmap in times of crisis.

The Impact and Effectiveness of Fiscal Rules

As of 2015, the longest lasting fiscal rules in the world were those of Japan (69 years), Malaysia (57 years), Singapore (51 years), Indonesia (49 years), and Germany (42 years). In contrast, the median duration of national rules among all other countries is 9 years, and the duration for supranational rules, such as those of the European Union, is about 11 years (Caselli et al. 2018). These durations are as of 2015, when the IMF Fiscal Rule Dataset stops, and are not affected by certain amendments of the original rule, such as changing a numerical limit or adding new characteristics like formal enforcement mechanisms.

Correcting Inefficiencies in Fiscal Policy

While optimally, fiscally policy ought to be countercyclical, the conduct of procyclical fiscal policy, although not as widespread as it was between 1960 and 1999, is common among developing countries. In the run-up and aftermath of the global financial crisis (between 2000 and 2012), fiscal policy became countercyclical or almost countercyclical in over one-third of developing countries due to an improvement in institutional quality characterized by well-designed and well-implemented fiscal rules, leading to enhanced credibility of fiscal policy (World Bank 2013). As a result, some developing countries with better fiscal outcomes and sound fiscal frameworks have benefited because they have been able to enjoy lower sovereign spreads (World Bank 2013).

Affiliation: *Macroeconomics, Trade and Investment Global Practice, World Bank Group. Email address: mbandaogo@worldbank.org*
Acknowledgement: *The author thanks Ndiame Diop, Norman Loayza, Richard Record, Souleymane Coulibaly, Yew Keat Chong, and Shakira Binti Teh Sharifuddin for their valuable insights, comments, and suggestions.*

Public Disclosure Authorized

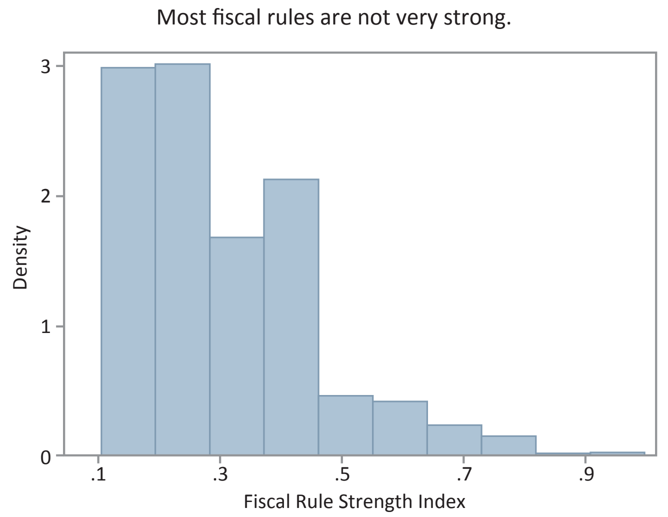
Rule-based fiscal policy is even more important given that the ability of discretionary fiscal spending to stimulate the economy in the short term remains unclear and is still contested in the literature. While some studies find the short-term impact of government spending on GDP to be zero (Ilzetzki, Mendoza, and Végh 2013), others estimate its impact to be rather small, ranging between 0.5 and 0.7 of GDP (Barro and Redlick 2011; Kraay 2012). Furthermore, the stimulative capacity of government spending in the short term depends on many other factors that vary greatly across countries, such as the exchange rate regime; the degree of trade openness; and the level of debt (Ilzetzki, Mendoza, and Végh 2013; Loayza and Pennings 2020).

Effectiveness of Fiscal Rules

Although the de jure presence of a fiscal rule in a country is associated with fiscal discipline, as measured by the fiscal balance, the de facto strength of the rule is the main determining factor—not the mere existence of the rule. The economic literature has extensively documented that the existence of a fiscal rule in a country is associated with more fiscal discipline (Bergman, Hutchison, and Hougaard Jensen 2016; Heinemann, Moessinger, and Yeter 2018; Tapsoba 2012). However, this relationship is plagued by endogeneity issues (more disciplined and prudent governments tend to adopt fiscal rules) or reversal causality issues (many fiscal rules are adopted after a crisis). It is notable that these studies made efforts to correct for the endogeneity and reverse causality issues by employing various estimations techniques such as instrumental variables (IV), generalized methods of moments (GMM), or propensity score matching (treatment effect). After successfully correcting for the endogeneity and reverse causality issues, the statistical significance of the positive relationship between the presence of a fiscal rule and fiscal discipline dissipates. However, more refined analysis, using the strength of the fiscal rule (instead of a dummy variable for the existence of a fiscal rule)—and correcting the endogeneity issues—reveals that only well-designed fiscal rules lead to more fiscal discipline (Caselli and Reynaud 2020).

Figure 1. Fiscal Rule Strength Index

Most fiscal rules are not very strong.

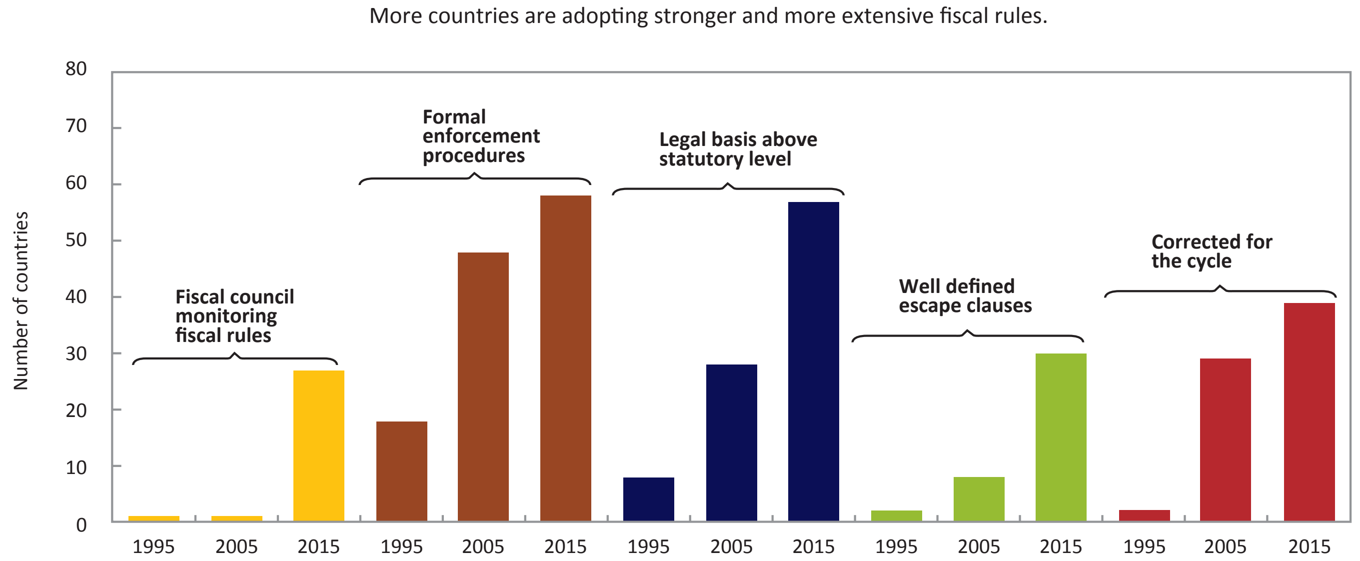


Source: Caselli and Reynaud 2020.
Note: The various features of the fiscal rule and the associated scores (in parentheses) are as follows. *Coverage:* central government (1); general government (central, state and local government) or wider (2). *Legal Strength:* political commitment (1); coalition agreement (2); statutory (3); international treaty (4); constitutional (5). *Independent Monitoring and Enforcement Body:* No (0); Yes (1). *Flexibility to Respond to Shocks:* No (0); Yes (1). *Correction Mechanisms and Sanctions:* No (0); Yes (1). The sum of the scores for each feature included in the fiscal rule is then scaled by 10.
The density shows the distribution of the fiscal strength index.

The strength and quality of a fiscal rule is assessed by the International Monetary Fund (IMF) Fiscal Rule Index, which evaluates them on five dimensions: institutional coverage; independence of the monitoring and enforcing entity; legal basis; flexibility to respond to shocks; and correction mechanisms and sanctions. Caselli and Reynaud (2020) then

Figure 2. Evolution of the Design of Fiscal Rules, 1995, 2005, 2015

More countries are adopting stronger and more extensive fiscal rules.



Source: Caselli et al. 2018.

construct a fiscal rule strength index by assigning a score (out of 10) to each fiscal rule reflecting the characteristics of the rule. The score is then scaled by 10 and each fiscal rule gets a strength index between 0 and 1. As depicted in figure 1, the measured strength index of the majority of existing fiscal rules is below 0.5, while the average is around 0.3.

Given that fiscal rules are intended to ensure fiscal discipline and that the strength of the rule is what matters for fiscal discipline, these results suggest that many countries need to reassess and improve the quality of their fiscal rules. Although the strength of fiscal rules has improved over time in many countries (figure 2), the mean (0.3) of the fiscal strength index indicates that the vast majority of existing rules are still missing crucial characteristics and features that would make them more effective at ensuring fiscal discipline.

Policy Implications

Fiscal Rules in a Time of Crisis

The recommended policy responses that have emerged in the COVID-19 literature include public health measures, income support for households, and liquidity support for small and medium enterprises (SMEs) (Loayza and Pennings 2020). Experts have advised countries to increase health spending to offer free health care to COVID-19 patients, increase hospitals' capacity, and provide adequate medical and protective equipment. Furthermore, measures to contain the spread of the virus have led to a deterioration in household income, making immediate and sufficient income support to vulnerable households paramount to ensuring their welfare (Özler 2020). It is also crucial to maintain the structure of the economy, which would help accelerate the recovery process, by providing SMEs with access to liquidity to allow them to survive the crisis. These measures will undoubtedly widen the budget deficit in many countries and lead to more borrowing, especially in developing countries (Hausmann 2020). The aforementioned policy responses are aimed at managing the crisis and mitigating its health and economic impact; recovery efforts will likely include more fiscal spending. Moreover, if a treatment or vaccine is not found and approved soon enough, more waves of the infection, and consequently more fiscal spending, may follow (Ferguson et al. 2020).

Rigid numeral targets dictated by fiscal rules can make it difficult for the government to mount an effective fiscal response in times of severe crises. During the global financial crisis, for instance, some governments constrained by rigid fiscal rules were compelled to shift public spending away from social protection and investment, and others resorted to less transparent accounting methods in public finance (Fatás and Mihov 2010; World Bank 2013). In Malaysia, for example, the "golden rule" stipulates that the government can only borrow to fund development projects. However, in the current COVID-19 environment, many of the support measures needed would not qualify as development projects. Such constraints exacerbate policy uncertainty in this crisis environment and will especially continue to do so if the outbreak lasts longer and requires more fiscal spending to support households and SMEs.

The Importance of a Well-Designed Escape Clause

As the outbreak increases budget deficits, many countries will likely breach their fiscal rules or suspend or abandon them altogether. For instance, the government of Indonesia has decided to suspend its balance budget target of 3 percent for the next three years. Many other countries that have included escape clauses in their fiscal rules have either activated them or plan to do so. Escape clauses, when they exist, are an integral component of the fiscal rule and are simply provisions for exceptionally severe or unprecedented crises that allow the government to temporary exceed certain limits, such as a fiscal deficit limit or a debt limit, set by the fiscal rule. As documented in a report in the IMF's Special Series on Fiscal Policies to Respond to COVID-19 (IMF 2020a), the European Union has activated its general escape clause, which allows members states to temporarily stop any measures they had to implement to meet their targets. In Brazil, the executive branch has submitted a request to Congress asking for the declaration of a state of "public calamity." If declared, this would permit the Brazilian government to exceed the fiscal deficit target set out in the country's fiscal responsibility law. As required by law, the Brazilian executive branch provided a motivation and specified a timeline for the suspension (the end of 2020).

To establish strong fiscal credibility in times of crisis, it is crucial for governments to include certain contingencies in their fiscal rules that establish a clear plan on how to proceed in the event of an unexpected severe crisis. These contingencies or escape clauses allow the government to not only commit in advance to exceeding certain fiscal limits only in very specific and unprecedented cases, but also provide the government with an opportunity to lay out a credible plan to return to compliance after the shock.

Fiscal Rules in Good Times

As important as it is that fiscal rules include contingencies to accommodate large and effective fiscal responses to severe and unprecedented crises, it is also as important that fiscal rules provide clear guidance for building up savings in times of exceptional positive shocks. Because crises like the COVID-19 outbreak lead to wider deficits and higher sovereign debt, it is imperative that fiscal rules ensure that governments save more in the period after crises (that is, in better times) and pay down excess debt accumulated during crises. For instance, for resource-rich countries, fiscal rules could ensure that governments save more in times of commodity price booms. Many countries have already set up sovereign funds that channel windfalls during commodity booms and accumulate national savings. Governments can draw down these funds in times of crisis and limit the pressure on the fiscal deficit.

Refining the Design of Fiscal Rules after the COVID-19 Pandemic

Not only do poorly designed fiscal rules fail to ensure fiscal discipline, but their lack of flexibility and clarity, such as clearly specifying contingencies for times of crises, exacerbates policy uncertainty in times of severe crises like the COVID-19 outbreak. Just as the global financial crisis induced many changes to existing fiscal rules, the COVID-19 outbreak, by exposing the weaknesses of many existing fiscal rules, will also undoubtably lead to many amendments. As such it is crucial for governments to adopt some of the characteristics and features associated with the second-generation fiscal rules, given that these features are paramount to effectively managing unexpected large shocks. To strengthen their fiscal framework, authorities should consider the following components of effective fiscal rules (IMF 2009).

1. A clear and well-established link between any numerical target or limit and the fiscal objective. For example, a fiscal balance rule is an appropriate target to achieve an objective of debt sustainability.
2. Flexibility to respond to shocks. It is crucial for macroeconomic stability to leave room to respond to severe shocks like the COVID-19 outbreak. This is why a well-defined escape clause as part of the fiscal rule is important.
3. A transparent, well-established, underlying institutional mechanism. For instance, a well-defined escape clause should clearly specify circumstances under which deviations from fiscal targets are allowed and how the clause is triggered. In addition, it should establish a path back to compliance by specifying a timeframe and the magnitude of the correction (whether or not to offset the deviation or just return to compliance). An institutional mechanism should also be underpinned by an enforcement method, as well as an independent monitoring and compliance entity.

Conclusion

Fiscal rules are an integral part of a well-designed and effective fiscal framework, but not all fiscal rules are created equal. While poorly designed fiscal rules most likely fail to ensure fiscal discipline, well designed fiscal rules that are transparent and flexible, and have an underlying (clearly defined) institutional mechanism, are crucial to ensure fiscal discipline. As the COVID-19 outbreak reveals the weaknesses and inappropriateness of existing fiscal rules, authorities should strengthen their fiscal framework by designing and enacting rules that establish a link between any numerical limit and the fiscal objective, are flexible, and are anchored in a robust institutional mechanism.

Looking ahead, the aftermath of the outbreak will undoubtedly be characterized by debt overhang. The IMF's April 2020 Fiscal Monitor (IMF 2020b) projects that global debt will rise by about 13 percent of world GDP. Although the impact of high debt on long-term growth remains a contested issue in the literature—while some have documented a negative impact (Kumar and Woo 2010; Reinhart and Rogoff 2010), others find no evidence (Pescatori, Sandri, and Simon 2014)—it is important for governments, especially those of developing countries, to be diligent and deliberate about reducing their debt levels to create more fiscal space and to free up resources for investment in human and physical capital.

References

Barro, Robert, and Charles Redlick. 2011. "Macroeconomic Effects from Government Purchases and Taxes." *Quarterly Journal of Economics* 126 (1): 51–102.

Bergman, Michael, Michael. M. Hutchison, and Svend E. Hougaard Jensen. 2016. "Promoting Sustainable Public Finances in the European Union: The Role of Fiscal Rules and Government Efficiency." *European Journal of Political Economy* 44: 1–19.

Caselli, Francesca , Luc Eyraud, Andrew Hodge, Federico Diaz Kalan, Young Kim, Victor Lledó, Samba Mbaye, Adina Popescu, Wolf Heinrich Reuter, Julien Reynaud, Elif Ture, and Philippe Wingender. 2018. "Second-Generation Fiscal Rules: Balancing Simplicity, Flexibility, and Enforceability." Technical Background Paper to IMF Staff Discussion Note SDN 18/04, International Monetary Fund, Washington, DC.

Caselli, Francesca, and Julien Reynaud. 2020. "Do Fiscal Rules Cause Better Fiscal Balances? A New Instrumental Variable Strategy." *European Journal of Political Economy* 63 (June): 101873.

Daban, T. 2011. "A Second Generation of Fiscal Rules for Latin America." IMF Public Financial Management Blog, International Monetary Fund, November 30. https://blog-pfm.imf.org/pfmblog/2011/11/a-second-generation-of-fiscal-rules-for-latin-america-.html

Fatás, Antonio, and Ilian Mihov. 2010. "The Euro and Fiscal Policy." In Europe and the Euro, edited by Alberto Alesina and Francesco Giavazzi, 287–324. Chicago: University of Chicago Press.

Ferguson, Neil M., et al. 2020. "Impact of Non-Pharmaceutical Interventions (NPIs) to Reduce Covid-19 Mortality and Healthcare Demand." Report 19 of the Imperial College COVID-19 Response Team. https://www.imperial.ac.uk/mrc-global-infectious-disease-analysis/covid-19/report-9-impact-of-npis-on-covid-19/

Hausmann. 2020. "Flattening the COVID-19 Curve in Developing Countries." Project Syndicate. March 24. https://www.project-syndicate.org/commentary/flattening-covid19-curve-in-developing-countries-by-ricardo-hausmann-2020-03?barrier=accesspaylog

Heinemann, Friedrich, Marc-Daniel Moessinger, and Mustafa Yeter. 2018. "Do Fiscal Rules Constrain Fiscal Policy? A Meta-Regression Analysis." *European Journal of Political Economy* 51 (January): 69–92.

Ilzetzki, Ethan, Enrique G. Mendoza, and Carlos A. Végh. 2013. "How Big (Small?) Are Fiscal Multipliers?" *Journal of Monetary Economics* 60 (2013): 239–54.

IMF (International Monetary Fund). 2009. "Fiscal Rules–Anchoring Expectations for Sustainable Public Finances." IMF Policy Paper, International Monetary Fund, Washington, DC.

———. 2017. "Fiscal Rule Dataset." https://www.imf.org/external/datamapper/fiscalrules/reference.htm

———. 2020a. "Fiscal Rules, Escape Clauses, and Large Shocks." Special Series on Fiscal Policies to Respond to COVID-19, International Monetary Fund, Washington, DC.

———. 2020b. *"Fiscal Monitor. Policies to Support People during the COVID-19 Pandemic."* April. Washington, DC: International Monetary Fund.

Kraay, Aart. 2012. "How Large is the Government Multiplier? Evidence from Lending by Official Creditors." *Quarterly Journal of Economics* 127 (2): 829–87.

Kumar, Manmohan S., and Jaejoon Woo. 2010. "Public Debt and Growth." IMF Working Paper WP/10/174, International Monetary Fund, Washington, DC.

Loayza, Norman, and Steven Pennings. 2020. "Macroeconomic Policy in the Time of COVID-19: A Primer for Developing Countries." Research & Policy Briefs No. 28, World Bank Group.

Özler, B. 2020. "What Can Low-income Countries Do to Provide Relief for the Poor and the Vulnerable during the Covi19 Pandemic?" World Bank Development Impact Blog.

Pescatori, Andrea, Damiano Sandri, and John Simon. 2014. "Debt and Growth: Is There a Magic Threshold?" IMF Working Paper 14/34, International Monetary Fund, Washington, DC.

Reinhart, Carmen M., and Kenneth S. Rogoff. 2010. "Growth in a Time of Debt." *American Economic Review* 100 (2): 573–78.

Schaechter, Andrea, Tidiane Kinda, Nina Budina, and Anke Weber. 2012. "Fiscal Rules in Response to the Crisis—Toward the 'Next-Generation' Rules. A New Dataset." IMF Working Paper 12/187, International Monetary Fund, Washington, DC.

Schick, Allen. 2010. "Post-Crisis Fiscal Rules: Stabilizing Public Finance while Responding to Economic Aftershocks." *OECD Journal on Budgeting* 10 (2): 1–17.

Tapsoba, René. 2012. "Do National Numerical Fiscal Rules Really Shape Fiscal Behaviors in Developing Countries? A Treatment Effect Evaluation." *Economic Modelling* 29 (4): 1356–69.

World Bank. 2013. *World Development Report 2014: Risk and Opportunity—Managing Risk for Development*. World Bank. https://openknowledge.worldbank.org/handle/10986/16092.