Commentary

Fiscal Policy for Stability in Oil-Exporting Countries: From the Old Problems to the Challenges of COVID-19

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1. Introduction

Since the Great Recession of 2008, oil-exporting countries have had to adjust their fiscal policies to respond to larger oil price variations and increased unpredictability. This commentary provides insights into the relationship between oil prices and fiscal policies in emerging and developing (ED) oil-exporting countries. It also gives an overview of how fiscal rules and sovereign wealth funds (SWFs) can contribute to mitigating fluctuations in oil revenues and stabilizing economies. Last, it discusses the fiscal responses of oil-exporting countries to the COVID-19 crisis.

2. Cyclicality of fiscal policies in oil-exporting countries: Theory and practice

Oil and gas fiscal revenues are large in oil-exporting countries, particularly those in the Middle East and Northern Africa (MENA) and Central Asia regions (see Figure 1 panel A). For most oil exporters, oil is an essential source of financing the government budget, as non-oil revenue remains limited. Oil revenue is also crucial in countries where the non-oil tax base is weak and which have difficulties financing their development needs, such as those in sub-Saharan Africa. However, oil revenue is very volatile (see Figure 1 panel B), directly reflecting oil price booms and busts. Flexible exchange rates can help stabilize revenue in national currencies, but they create other financial risks and require credible monetary policy to anchor inflation expectations. Financial hedging of revenue against oil price risk using derivatives remains limited to Mexico and is not used in ED oil-exporting countries. Therefore, fiscal policies are essential for stabilization and economic growth.

Essentially, fiscal policy determines how much oil revenue is used to stimulate the economy. Fiscal policy is procyclical with respect to oil prices: governments tend to do fiscal expansion when oil prices are increasing, and fiscal contraction when oil prices are falling. Procyclical policies transmit oil price variations to business cycle fluctuations, causing overheating economies when oil prices rise and recessions when oil prices drop.

Procyclical fiscal policies have adverse consequences. Firstly, they increase the variability of household income, which reduces welfare (Barro 1979, Chari and Kehoe 1999) and induces large precautionary savings, impeding economic growth (Borensztein et al. 2013). They also exert upward pressure on the real exchange rate and erode trade competitiveness through the so-called ‘Dutch disease’ (Corden and Neary 1982). The inflow of oil revenue triggers inflation in the non-tradable sector, which propagates to the tradable sector and induces a loss in its price competitiveness. Moreover, procyclicality may increase the unpredictability of macroeconomic policies and deteriorate business and household confidence, harming investment and consumption. Last, long-term development plans and responsibility for future generations would require increasing savings and not spending the revenues obtained in times of higher commodity prices. Therefore, the usual prescription is that macroeconomic policies should be neutral or countercyclical with respect to commodity prices (see for instance Pieschacón 2012).
Figure 1. Oil is a large and volatile source of fiscal revenue in oil-exporting countries.

Panel A: Oil and non-oil fiscal revenue in selected oil-exporting economies, 2017

Panel B: Variations in oil price and oil revenue in the two largest oil exporters

Sources: Authors’ calculations based on (IMF 2012, 2018a, 2019c, f, h, g, e, b, a, d, 2020d, j, h, i, a, 2018c, 2020e, FCSA 2020, Ministry of Finance of Russia 2020, SAMA 2020, Statistics Norway 2021).

Note: Oil revenue includes natural gas and liquefied natural gas (LNG) revenue. In panel A, data for Angola are as projected in 2018 (IMF 2018b). For Kuwait, data correspond to the fiscal year April 1, 2017 – March 31, 2018 (IMF 2020d). The indexes in panel B are based on the Brent oil price and fiscal oil revenue (both in current US$).

Counter cyclical or neutral policies are difficult to implement in practice. Oil-exporting countries lean toward procyclicality for various reasons. Increased fiscal revenue gives more fiscal space for spending, and less revenue incentivizes spending cuts. Oil-exporting countries facing financial constraints use commodity revenue inflows to finance public spending and consolidate their budgets in times of low oil prices because they cannot finance their budget deficits via foreign borrowing. Therefore, these countries will tend to be more procyclical (Gavin and Perotti 1997). There are also political economy reasons for procyclicality. In periods of high oil prices, fiscal restraints are less acceptable. In addition, various public entities increase their efforts to obtain additional funding, and this ‘voracity effect’ gives way to more procyclicality (Tornell and Lane 1999). Last, increasing the deficit or tapping into reserves to finance fiscal expansion in times of low oil prices may contradict a country’s objective to save non-renewable resource revenue for future generations.
3. Are fiscal policies getting more or less procyclical in emerging and developing oil-exporting countries?

How can one assess the procyclicality of fiscal policies to oil prices? A fiscal policy is procyclical if the ‘fiscal stance’ is more expansionary when the oil price increases and less expansionary when the oil price decreases. The fiscal stance is the change in the budget surplus (or deficit) that is directly due to policymakers’ decisions. In oil-exporting countries, the fiscal stance can be measured by the structural non-oil primary balance. This is the fiscal balance excluding oil revenue and interest payments, and corrected for the effects of the business cycle (for example, changes in the tax base or the number of households eligible for social benefits). To represent the size of a country’s fiscal expansion or contraction, the fiscal stance should ideally be measured by the ratio of structural primary non-oil deficit to potential non-oil gross domestic product (GDP), i.e., non-oil GDP corrected for the business cycle. However, given the unavailability of time series data for the components of this ratio, especially for ED economies, we need to rely on more simple indicators. Finally, the fiscal stance is often proxied by government expenditure or non-oil deficit to non-oil GDP. A positive correlation between the expenditure to non-oil GDP ratio and oil prices or a negative correlation between the non-oil deficit and oil prices are indicators of fiscal procyclicality. If the non-oil GDP time series are not available, the positive correlation between the expenditure to GDP ratio and oil prices can serve as an indicator of procyclicality.

Figure 2. Expenditure and non-oil deficit tend to increase with oil prices.

Sources: Authors’ calculations based on (IMF 2012, 2018b, 2020g, c; World Bank 2020; Ministry of Finance of Russia 2020; Rosstat 2020).

Notes: a as % of GDP, b non-oil primary for Angola, non-oil balance otherwise.
Anecdotal evidence shows that the fiscal policies of oil-exporting ED economies are generally procyclical. The average public expenditure to GDP ratio of 31 oil-exporting ED economies (listed in the appendix) follows the variation in oil prices closely (see Figure 2 panel A). The share of public expenditure in GDP varies by more than a third between the lows and highs of the oil prices. Note that the investment component of public expenditure (not reported here) is even more procyclical, varying by a factor of three between the rises and falls in the oil price. This is not surprising if one considers that investment is the first adjustment variable in public expenditure during decreasing oil revenues.

The non-oil deficit to non-oil GDP ratio, which is a better marker of a country’s fiscal stance than the public expenditure to GDP ratio (but which is available for fewer countries), has generally increased during phases of higher oil prices (see Figure 2 panel B). This therefore also indicates that fiscal policies are procyclical.

The empirical studies also reveal that fiscal policies are procyclical, but some of them suggest this tendency attenuated in the 2000s. Villafuerte and Lopez-Murphy (2010) conclude that fiscal policies were procyclical with respect to oil prices in the oil-exporting countries during the 2003-2008 commodity price booms, with increasing expenditure and widening non-oil primary deficit, which then contracted in 2009. Kaminsky (2010) finds similar results for the pre-2008 crisis periods. She shows that the fiscal policies in lower middle-income countries and commodity-abundant countries have been procyclical with respect to their terms of trade. Céspedes and Velasco (2014) find that the fiscal responses in commodity-exporting countries were more countercyclical during the price booms of the 2000s than during earlier price booms. They explain that this change is due to the wider adoption of fiscal rules. Richaud et al. (2019) find a reduction of procyclicality prior to 2008 in commodity-exporting countries, particularly for oil exporters, which they explain is due to the wider adoption of fiscal rules. They also find an increase of procyclicality after 2012 that they link to falling commodity prices and the normalization (i.e., tightening) of United States (U.S.) monetary policy, which started in 2015 and drained liquidity from emerging markets. Arezki and Ismail (2013) find that fiscal rules have mostly led to increased procyclicality of capital spending in times of oil price falls, because capital spending is easier to adjust downward than current spending.

We assess the procyclicality of government expenditure for 31 ED oil-exporting countries from 2000 to 2018 using annual data. Our cross-section model, inspired by Céspedes and Velasco (2014), assesses the sign of the response of the governments’ expenditure to changes in hydrocarbon revenues. A series of linear regressions are run for each year separately using the equation below:

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\Delta \left( \frac{Gvt. \text{ Exp}_{i}}{\text{non oil & gas GDP}_{i}} \right) = \alpha + \beta \text{Cyclical component} \left( \frac{\text{oil & gas rent}_{i}}{\text{non oil & gas GDP}_{i}} \right) + u_{i} \tag{1}
\]
The dependent variable is the annual variation of the ratio of public expenditure to non-oil and gas GDP. The explanatory variable is the cyclical part of the ratio of oil and gas rent to non-oil and gas GDP. The coefficient $\beta$ measures the extent to which public expenditure responds to variations in resource revenue. In other words, if a fiscal policy is procyclical, then a positive $\beta$ should be expected, indicating that the expenditure increases with a rise in resource revenue and decreases with a fall in resource revenue. Government expenditure, GDP and oil and gas rents\(^1\) are taken from World Bank (2020). Our non-oil and gas GDP is given by GDP minus the non-oil and gas rents.\(^2\) We first extract the cyclical component of the rent-to-GDP ratio. Hamilton (2018) indicates that if a time series follows a random walk process, the commonly used Hodrick-Prescott filter tends to generate spurious cycles. To address this issue, he proposes an alternative approach to detrending, which consists of computing the residuals of a linear regression of a series at time $t+h$ on a constant and its four most recent values as of time $t$. For the majority of the countries in our panel, the ratio of oil and gas rent to non-oil and gas GDP can be characterized by a random walk that is difference-stationary.\(^3\) Therefore cyclical components in Eq. (1) are obtained using the Hamilton (2018) filter. Given the frequency and length of our data, we use $h=2$. Figure 3 depicts the estimated $\beta$ coefficient in Eq. (1). The regression analysis does not allow us to study cross-country differences in fiscal policies, as the estimated coefficient of cyclicality in a given year is assumed to be the same for all countries. However, it reveals a general evolution of the cyclicality of fiscal policies in oil-exporting countries during oil price booms and busts.

The estimated coefficient of cyclicality, which can also be interpreted as the elasticity of government expenditure to oil and gas revenues (Céspedes and Velasco 2014), never becomes significantly negative. In other words, fiscal policies have been procyclical or neutral since 2000. Further, we find no reduction in procyclicality. Procyclicality during periods of large changes in oil prices may have increased the pass-through of the commodity cycle to the business cycle. We find procyclicality in the years preceding the pre-2009 oil price boom. The bust of 2009 was accompanied by procyclical policies with budgetary contractions, which may have aggravated the contraction in domestic demand. The oil price recovery of 2011 gave way to a new wave of fiscal expansion. Fiscal policies were procyclical during the period of low oil prices in 2015 and 2016, with a tendency for budget consolidation, thus generating more contraction in economic activity. The magnitude of the oil price drop, and the perception that low oil prices were not transitory but could be long lasting (IEA 2015), may have encouraged fiscal consolidation. This episode of consolidation may also have been linked to the gradual tightening of U.S. monetary policy, as Richaud et al. (2019) suggest.

Fiscal policies have been procyclical or neutral since 2000.
Figure 3. Fiscal policies remain mostly procyclical in oil-exporting emerging and developing economies.

Sources: Authors’ calculations based on (World Bank 2020, IMF 2020c).
Notes: Shaded area denotes 90% confidence intervals. Brent oil prices per barrel are in 2019 US$.

4. What makes fiscal policy cyclicality different among oil-exporting countries?

In this section, we highlight factors that potentially influence the cyclicality of fiscal policies. We try to find similarities that could be explained by country characteristics. In the framework of this commentary, our approach is exploratory. It serves to highlight common features and to assess the complexity of some effects. More statistical work would be required for the findings to be fully conclusive. We compute the correlation coefficients between (i) the variation of the ratio of government expenditure to non-oil and gas GDP and (ii) the cyclical component of the ratio of oil and gas rent to non-oil GDP. A positive coefficient indicates fiscal procyclicality and a negative coefficient indicates countercyclicality. A coefficient close to zero indicates that the policy was neutral.

To assess how changes in the oil price regime may have influenced fiscal policy, we compute our correlation coefficients over two subperiods: 2000-2012 and 2013-2018. The first period is characterized by increasing oil prices, briefly interrupted by a drop during the Great Recession. The second period corresponds with a drop, followed by a modest recovery. The oil price trajectory (as in Figure 3) provides clear visual support for
When oil prices fall, these countries need to absorb greater fiscal shocks than countries without large resource rents, and they therefore have more incentives to adjust expenditure.

It follows from Figure 4 that most large oil producers were procyclical in the first subperiod and procyclical during the second. The countries with large resource rents tend to be more procyclical (for instance, Saudi Arabia, the United Arab Emirates [UAE] after 2013, Azerbaijan, and to a lesser extent, Angola, the Republic of Congo and Gabon). When oil prices fall, these countries need to absorb greater fiscal shocks than countries without large resource rents, and they therefore have more incentives to adjust expenditure. At the same time, some countries with large resource rents are somewhat neutral or countercyclical, especially since 2012 (Kazakhstan, Russia, Qatar, Iraq, Algeria), suggesting that factors other than oil revenue impact their fiscal response.

Figure 4. Most of the largest oil-producing countries remain procyclical.

The countries with large resource rents tend to be more procyclical.

Sources: Authors’ calculations based on (World Bank 2020, IMF 2020c).
Notes: GDP per capita (in constant 2010 US$) is the average value for the period 2000-2018. Bubble sizes indicate the ratios of oil and gas rents to GDP averaged from 2000 to 2018.
The countries with lower income per capita, particularly those of sub-Saharan Africa, are generally slightly procyclical. Most of these countries face financial constraints because they have no or limited access to external borrowing. Therefore they need to rely on current revenues to finance expenditure, which makes them procyclical. However, these countries also receive financial support, not least through International Monetary Fund (IMF) lending programs. For instance, Angola, Cameroon, Chad, Gabon, Ghana, the Republic of Congo and Ecuador had recourse to such programs at least once between 2008 and 2018 (IMF 2021). These programs can help countries to avoid large expenditure cuts in times of financial stress, and hence reduce procyclicality when oil prices decline. However, they are conditional on structural adjustment measures that imply budget consolidation, thus reducing procyclicality when oil prices increase.

**Figure 5.** Countries with larger sovereign wealth funds are not more countercyclical.

Panel A: Assets of SWFs (% GDP), 2017

Panel B: Accumulation in SWFs (billion US$)

Notes: Only SWFs of ED oil-exporting countries for which recent public data or estimates are available are presented. SWFs assets are: for Kuwait, the net government financial assets as reported in IMF (2020d); for Qatar, the net worth of the general government as in IMF (2019e); for Saudi Arabia, the assets of the Public Investment Fund (PIF 2020) plus the government deposits at the Saudi Central Bank (SAMA), as reported in IMF (2019h); for Azerbaijan, the assets of the Sovereign Oil Fund of Azerbaijan (SOFAZ 2012, 2019); for Kazakhstan, the assets of the National Reserve Fund of Kazakhstan as reported in ADB (2020); for Russia, the assets of the National Wealth Fund (Ministry of Finance of Russia 2020); for Algeria, the assets from the Revenue Regulation Fund, as reported in Chekouri et al. (2018). Data for the UAE and Angola correspond to 2016 and are drawn from NRGI (2020).

Flexible exchange rates may have reduced the procyclicality of fiscal policies. Between 2012 and 2018, countries with flexible exchange rates, such as Russia (since 2014) and Kazakhstan (since 2015), have been countercyclical or neutral. With flexible exchange rates, the domestic currency tends to depreciate when oil prices decrease and appreciate when oil prices increase. Fiscal revenue collected in the domestic...
currency is inflated by the currency’s depreciation and deflated by its appreciation. Therefore, a flexible exchange rate can offset some of the effects of oil price variations on fiscal revenue. However, flexible rates have numerous side effects. For example, if the share of imported goods in domestic consumption is large, a depreciation of the exchange rate can create inflation. Monetary and fiscal policies may then need to be procyclical to mitigate the inflationary effects unless the monetary policy is sufficiently credible to anchor inflation expectations. Moreover, the exchange rate volatility may also increase the spread between domestic interest rates and international benchmark rates, which would weigh on the country’s stability and growth, particularly in developing countries. In any case, further investigation would be needed to conclude the nature of the link between procyclicality and exchange rate regimes. Country-specific factors may better explain why some countries with flexible exchange rates seem less procyclical. For instance, the depletion of the sovereign wealth fund reserves in Russia, owing to international sanctions and geopolitical tensions, has put fiscal consolidation at the top of the agenda, despite oil prices increase during 2017-2018.

Large oil exporters often have SWFs that they use for stabilization and for saving non-renewable resource revenue. More details on the purpose of sovereign wealth funds can be found in Al-Hassan et al. (2013), and optimal rules for the management of stabilization funds can be found in Al-Kathiri et al. (2020). The same fund may have both stabilization and saving purposes (e.g., Kazakhstan). Therefore not all assets under SWFs can be categorized as stabilization funds. With the example of the countries given in Figure 5, Panel A, we see that larger assets under SWFs are not necessarily associated with less procyclicality, meaning that they have a limited stabilization role. As shown above, while some countries with large oil funds (Saudi Arabia, the UAE and Azerbaijan) are procyclical, others (Qatar, Russia and Kazakhstan) are neutral or countercyclical. In countries with very large oil revenues, SWF management that prioritizes asset accumulation (as in Azerbaijan in Figure 5 panel B) is associated with more procyclical policies. When SWF strategies are more geared toward stabilization, or when the resource revenue is not sufficient to pursue the accumulation objective simultaneously, SWFs absorb the oil price shocks. For instance, Russia, Algeria and Kazakhstan tapped their SWFs during the 2014-2016 oil price decline (for fiscal stabilization and to slow the depreciation of their currencies). This created an incentive for fiscal consolidation during 2017-2018 when oil prices increased, making their fiscal policies less procyclical during 2013-2018.

The management of SWFs and their relationship to fiscal policy depend on institutional arrangements. Particular arrangements (fiscal rules) emerged in various countries in the 2000s. Fiscal rules are “institutional mechanisms that are intended to permanently shape fiscal policy design and implementation” (Ossowski et al. 2008). Fiscal rules, as opposed to discretionary fiscal policy choices, intend to improve fiscal predictability. They are decision rules for government budgets and transfers between government budgets and SWFs. The decisions are based on short- and medium-term targets such as budget deficits and non-oil budget deficit targets, or longer-term targets such as debt or the accumulation of funds in SWFs. These rules can use a reference oil price as a cutoff for tapping or

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Larger assets under sovereign wealth funds are not necessarily associated with less procyclicality
accumulating funds in the SWF, and therefore weaken the procyclical link between oil prices and fiscal policy. The choice of the decision rule and the parametrization of the anchor can make fiscal rules or the SFW arrangement procyclical, neutral or countercyclical.

To illustrate the above, let us consider some examples of countries that have implemented fiscal rules. Norway’s fiscal rule is countercyclical (as illustrated in Figure 4). Its oil revenue is saved into a fund whose return serves to finance the non-oil structural (i.e., cyclically adjusted) deficit. This deficit cannot exceed the return on the fund, calculated based on a 3% rate of interest. Using only the interest revenue of the SWF to finance the non-oil structural deficit guarantees that the fund is preserved for future generations. At the same time, putting fiscal constraints on the non-oil structural deficit allows for more fiscal deficit during the low point of the business cycle.

Neutral fiscal rules have been set up or updated in other countries to manage the fluctuations in oil revenue and preserve savings. Russia updated its fiscal rule in 2017. Its target for primary budget balance (the budget balance net of interest payments) for the next three years is based on a benchmark oil price of 40 US$ per barrel (in 2017 US$). If the oil price exceeds the benchmark, the excess oil revenue is saved in the SWF. When the price is below the benchmark, drawdowns from the SWF finance the budget deficit. The Russian fiscal rule also includes forex market interventions by the central bank on behalf of the Ministry of Finance to reduce the pass-through of oil prices to the ruble exchange rate. Despite small adjustments from initial commitments, in particular a slight increase in the primary deficit target, compliance with the rule has been strong. The rule has helped reduce the country’s non-oil deficit in periods of higher oil prices and has increased the predictability of its fiscal policies.

Managing SWFs without fiscal rules can make fiscal policies procyclical. In Kuwait, for instance, a fiscal arrangement defines a mandatory saving of 10% of total revenue. At the same time, it has a public debt ceiling. These arrangements may cause procyclicality. In times of low oil prices, saving continues, but the government budget needs to be funded by liquid assets or to increase debt to finance the country's deficit. The debt ceiling requires some spending procyclicality to preserve its buffers. In times of higher oil prices, the relaxation of financing constraints and the absence of spending rules tend to make fiscal policies procyclical.

5. Fiscal measures in response to the COVID-19 pandemic

Our analysis in the previous section focused on the differences in countries’ fiscal policy responses to variations in oil prices and oil revenues. While these variations pose particular challenges for oil-exporting countries, there might also be exogenous shocks that could affect all countries simultaneously. One interesting question is whether there is a sizeable difference between the fiscal measures taken in oil-exporting countries and non oil-exporting countries in response to the COVID-19 pandemic.

As will be illustrated below, fiscal measures have been less substantial in oil-exporting countries than in non oil-exporting countries. In the early stages of COVID-19, the restrictions aimed at curbing the outbreak led to unprecedented demand destruction globally. Consequently, crude oil prices
collapsed to below two-decade lows (the price of Brent fell from US$67 in December 2019 to US$18 in April 2020). Oil-exporting countries have faced a combination of shocks arising from a health crisis, lockdowns, and falling oil revenues.

Countries have used fiscal measures to support their economic activity and income in the face of the COVID-19 pandemic. Figure 6 presents the aggregated cost of ‘above-the-line’ fiscal measures taken in oil-exporting and selected advanced economies. These above-the-line measures, drawn from the IMF (2020b), refer to increases in government spending in all sectors, along with tax cuts and deferred payments.

It is clear from Figure 6 that the fiscal measures oil-exporting countries took fell behind those taken in advanced economies. For most oil-exporting countries, fiscal measures represent less than 5% of their GDP, whereas the unweighted average level of fiscal measures (as a share of GDP) in advanced economies is about 7.5%.

One may think that these disparities in fiscal measures would result from differences in governments’ management of the pandemic. It is possible that more stringent government policies have been compensated by larger fiscal measures. However, Figure 6 demonstrates that this has not been the case. The Government Response Stringency Index (Hale et al. 2020), which provides a composite measure based on several response indicators, including school closures, workplace closures, and travel bans, is not correlated with the size of fiscal packages implemented by governments. It is thus more likely that the disparities in fiscal support measures are the result of fiscal capacity constraints that reduce the ability of governments to provide income replacement programs and make additional spending to households and sectors most affected (Alon et al. 2020).

To limit the fiscal deficit resulting from the decline in domestic demand (thus reducing the size of the tax base) and drop in oil revenues, governments have decided to offset part of the cost of the above-the-line measures with cuts to other expenditures. Saudi Arabia, for instance, has announced a cut of capital spending, equivalent to around 3% of its GDP (Reuter 2020), and Algeria has announced spending reductions equivalent to 2.2% of its GDP (IMF 2020f). Governments have started to look for ways to increase their non-oil fiscal revenues. Accordingly, in July 2020, Saudi Arabia increased its value-added tax (VAT) rate from 5% to 15% and suspended cost of living allowances for public sector employees. These measures, in addition to the existing expatriate levy and gradual adjustments in domestic energy prices, will limit the country’s budget deficit. According to the Ministry of Finance of Saudi Arabia’s (2020) projections, the government’s non-oil revenues are expected to increase by 10.3% in 2021 compared with 2020. The budget deficit is also expected to have exceeded 12% in 2020, and is expected to fall to 4.9% of GDP in 2021. Similarly, Oman will introduce a VAT rate of 5%, effective from April 2021. This is expected to reduce the country’s fiscal deficit from 15.8% to 11.5%, according to the Ministry of Finance of Oman (2020) estimates.
Figure 6. Fiscal responses to COVID-19 were smaller in oil-exporting countries than in advanced economies.

Above-the-line fiscal measures (as of October 2020) and stringency index of selected countries

Sources: IMF (2020b); Hale et al. (2020).

Notes: Fiscal measures in percentage of GDP (bars, left axis) are given by the ‘above-the-line’ measures, which include additional spending or foregone revenues in the health sector and other sectors, and accelerated spending or deferred revenue. The stringency index (diamonds, right axis) is calculated as the 2020 average value of the COVID-19 Government Response Stringency Index obtained from the Oxford COVID-19 Government Response Tracker.

6. Conclusion

Our analysis in this commentary suggests that the fiscal policies of emerging and developing oil-exporting countries have remained mostly procyclical since the Great Recession. We also stress that financially constrained countries are more procyclical and that procyclicality depends on the types of fiscal rules and sovereign fund arrangements. Finally, we show that during the COVID-19 pandemic, non oil-exporting countries, which have suffered from both the global economic contraction and falling oil prices, have supported their economies less than non oil-exporting countries. However, some of them have engaged in fiscal reforms to increase their non-oil revenues. Further empirical research is needed to identify the factors that determine procyclicality and those that have driven fiscal responses to the COVID-19 pandemic.
Endnotes

1 “Oil [gas] rents are the difference between the value of crude oil [natural gas] production at world prices and total costs of production” (World Bank 2020).

2 This is a proxy of non-oil GDP.

3 The stationarity properties of the series for each country are tested using the Phillips and Perron (1988) unit root test. The results are available from the authors upon request.

4 This observation does not seem to apply to Chad and Equatorial Guinea. In Chad, grants from multilateral and bilateral partners represent a large portion of government revenue and tend to limit financial constraints and procyclicality. Equatorial Guinea is a small economy with extremely volatile government expenditure. Therefore the sign of the correlation coefficient may not properly reflect its procyclicality.

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Appendix

The 31 emerging and developing oil-exporting countries are Albania, Algeria, Angola, Azerbaijan, Bahrain, Bolivia, Brunei, Cameroon, Chad, Colombia, Republic of the Congo, Ecuador, Equatorial Guinea, Gabon, Ghana, Iraq, Kazakhstan, Kuwait, Malaysia, Myanmar, Nigeria, Oman, Qatar, Russia, Saudi Arabia, South Sudan, Sudan, Timor-Leste, Trinidad and Tobago, Turkmenistan, and the United Arab Emirates.

About the Project

This study is part of an ongoing project titled “Revisiting Fiscal Breakeven Oil Prices.” The project aims to provide a better understanding of how oil-exporting countries adjust their fiscal policies in response to variations in oil prices, and what the short-term and possible long-term consequences are for economic growth.
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