HIGHLIGHTS from Chapter 4:
Fiscal Policy in Commodity Exporters: An Enduring Challenge

Key Points
- *In commodity-exporting emerging market and developing economies (EMDEs), commodity price movements often induce more procyclical and volatile fiscal policy, which can intensify boom-bust cycles and hinder growth. Fiscal policy has been about 30 percent more procyclical and about 40 percent more volatile in these economies than in other EMDEs.*
- *Policy interventions, including exchange-rate flexibility and the easing of restrictions on international financial transactions, can help reduce both fiscal procyclicality and volatility.*
- *By adopting average advanced-economy policies regarding exchange rate regimes, restrictions on cross-border financial flows, and the use of fiscal rules, commodity-exporting EMDEs could add about 1 percentage point in per capita growth every four to five years, on average.*
- *Such policies need to be supported by sustainable, well-designed, and stability-oriented fiscal frameworks—which can help build buffers during commodity price booms to prepare for any subsequent price slumps.*

Fiscal policy tends to be both more procyclical and more volatile in commodity-exporting EMDEs than in commodity importers. Commodities are important sources of export and fiscal revenues for almost two-thirds of EMDEs, including three-fourths of low-income countries. Over the past few decades, the average correlation between GDP and government spending was 30 percent higher in commodity exporters than in commodity importers while the volatility of government spending was about 40 percent higher (figure 1.A and 1.B). In the years ahead, the challenges associated with volatile and procyclical fiscal policies are likely to be compounded by sharp fluctuations in commodity prices as the impact of climate change on commodity markets becomes more pronounced.

Procyclicality and volatility of fiscal policy hurt economic growth because they amplify business cycles. In response to a positive commodity-price shock, commodity-exporting EMDEs tend to react in a procyclical manner by increasing expenditures, while advanced economies tend to react countercyclically, reducing spending. Because of its procyclical nature, fiscal policy in the average EMDE commodity exporter has increased the impact of commodity-price shocks on output by more than one-fifth in the last 30 years. Fiscal policy volatility has also been associated with more volatile business cycles and lower growth.

Policy interventions can help reduce both fiscal procyclicality and volatility. In particular, stronger rule of law, the easing of restrictions on international financial transactions, fiscal rules to constrain government spending, and sovereign wealth funds (SWFs) have all been associated with lower fiscal procyclicality. Likewise, the presence of flexible exchange rates, fewer constraints on international financial transactions, and the use of fiscal rules help lower fiscal policy volatility. If the average commodity-exporting EMDE were to adopt the policies of an average advanced economy in these three areas, it could add about 1 percentage point in per capita growth every four to five years (figure 1.C). Fiscal rules and SWFs have been most effective in addressing volatility and procyclicality when they are well-designed and supported by strong institutions (figure 1.D). Medium-term expenditure frameworks can also help lower the procyclicality and volatility of fiscal policies by improving fiscal discipline.

Figure 1. Fiscal policy procyclicality and volatility in commodity exporters

Fiscal policy in commodity-exporting emerging market and developing economies (EMDEs) tends to be more procyclical and more volatile than in other EMDEs. By adopting the average advanced-economy policies in three areas—exchange-rate flexibility, capital account openness, and use of fiscal rules—the average commodity-exporting EMDE could have added about 1 percentage point in per capita growth every four to five years. Country case studies suggest that fiscal frameworks, such as fiscal rules and sovereign wealth funds, are most effective in mitigating fiscal procyclicality and volatility when they are well-designed and supported by strong institutions.
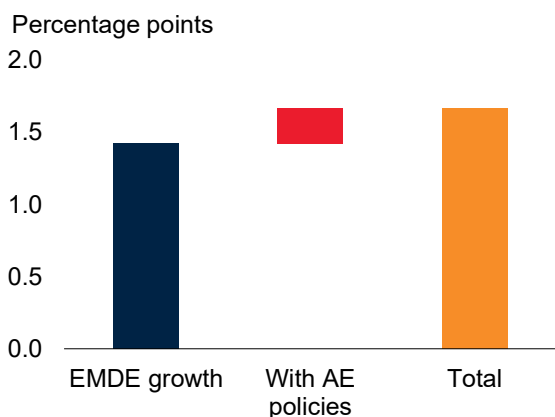
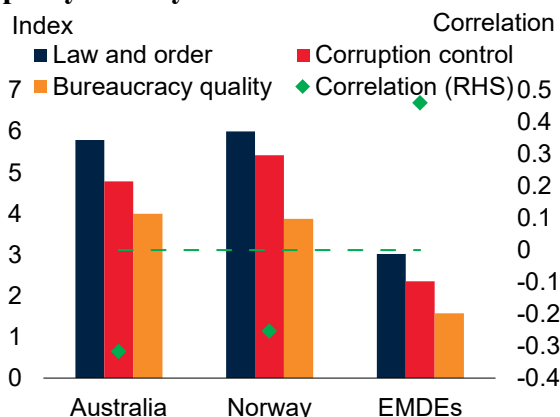**A. Fiscal procyclicality: EMDE commodity exporters vs importers**
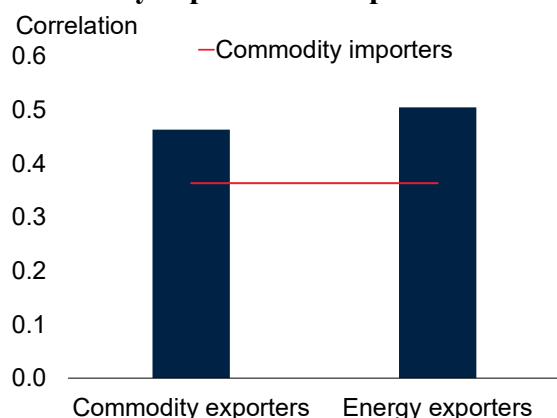
B. Fiscal volatility: EMDE commodity exporters vs importers
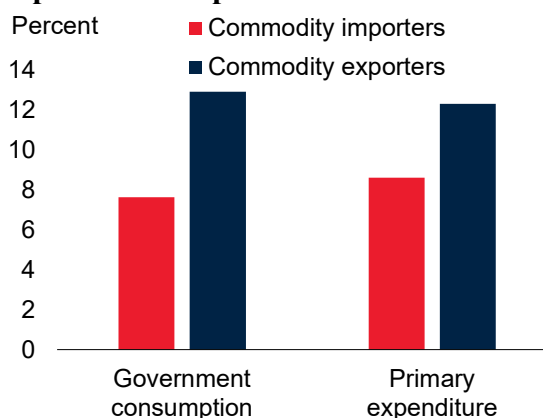
C. EMDE per capita annual growth

D. Institutional quality and fiscal procyclicality

Sources: Arroyo Marioli and Végh (2023); Arroyo Marioli, Fatás, and Vasishtha (2023); PRS Group (database); International Monetary Fund; World Bank.
Note: AE = advanced economy; EMDEs = emerging market and developing economies.
A. Bars show average correlation between the (Hodrick-Prescott-filtered) cyclical components of real GDP and real government spending within groups. The sample period is 1980–2020. EMDE commodity exporters include 38 agricultural, 31 energy, and 21 metal exporters. EMDE commodity importers include 59 countries. The

differences between the average correlation for commodity exporters, energy exporters and commodity importers are statistically significant at the 10 percent level or better.

B. Simple averages, by country group, of the standard deviations of the residuals obtained from regressing two dependent variables—log differences of real government consumption and real primary expenditures—on real GDP growth. Annual data for 148 EMDEs over 1990–2021.

C. The middle column in the panel illustrates how applying the average advanced-economy (AE) policies along three dimensions (exchange rate regimes, capital account openness, and fiscal rules) impacts GDP per capita growth in the average commodity-exporting EMDE. The last column shows the total commodity-exporting EMDE growth with these advanced-economy policies.

D. The institutional quality indexes give higher scores to countries with better metrics. "EMDEs" shows the simple average of 68 commodity-exporting countries across the three indicators from 1990-2019. The correlation is calculated between the GDP and the real government expenditure of a country after using the Hodrick-Prescott filter to remove the trend component of the time series.