



Structural Budget Frameworks and the Resource Curse

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Abstract

One of the principal symptoms of the Resource Curse that has plagued commodity-exporters is a pro-cyclical fiscal policy—overspending in booms and austerity in recessions. In this paper, I explore the Resource Curse phenomena and highlight structural budget frameworks (“SBF”) as a means to counter pro-cyclicality. I show evidence of Chile’s success in using an SBF to reduce pro-cyclical spending and present a political economy rationale explaining why SBFs are effective. I argue that SBFs can be implemented successfully in much of the developing world, and contend that SBFs can avoid the contemporary faltering of other commonly-employed fiscal rules.

Keywords: Resource Curse; Fiscal Rules; Structural Budget Frameworks; Pro-cyclical Spending; Emerging Markets

In this essay, I explain the resource curse and evaluate the role of structural budget frameworks (“SBF”) in countering pro-cyclical fiscal policy. I begin by (i) defining the Resource Curse phenomenon. I then (ii) highlight my focus area—the curse’s effect on fiscal management—and overview the curse’s causal pathways. I subsequently (iii) propose Chile’s SBF as a solution to pro-cyclical policy. I then argue that Chilean-style rules have a (iv) wide use-case across the developing world, and offer some ways to reinforce SBFs in nations with weak institutions. Finally, (v) I discuss the empirical underperformance of fiscal rules and argue that the flexibility entailed in an SBF avoids such failures.

(i) The Resource Curse is a phenomenon motivated by the paradox that resource-rich nations in the developing world have consistently underperformed their resource-poor peers in a range of political and economic domains (Weinthal and Loung 2006: 36; Badeeb *et. al.* 2017: 128). Empirical evidence of the association of natural resource wealth and stunted economic growth is plentiful. Controlling for income, the more heavily reliant a country on natural resource exports (measured as a % of GDP), the lower its economic growth (Sachs and Warner 1999). “Cursed” states are also associated with lower performance on human development metrics such as poverty rates (Apergis and Katsaiti 2018). In the political sphere, natural resource-reliant states are conducive for the continuance of authoritarian regimes and extractive political institutions more generally (Jensen and Wantchekon 2004). Extractive political institutions refer to institutions that center power with the ruling elite

without restrictions, checks and balances, or the rule of law (Daron and Acemogulu 2012: 80).

(ii) Scholars investigating the causal pathways of the Resource Curse emphasize two principal channels of the curse (Weinthal and Loung 2006: 37-38; Badeeb *et. al.* 2017: 125-127):

- (a) How resource windfalls and a commodity market-driven boom-bust cycle weigh on long-run growth outcomes.
- (b) How dependence on resource wealth promotes extractive political institutions.

In this essay, I focus on (a), namely, the challenge of resource-rich states in avoiding a pro-cyclical fiscal policy that amplifies boom-bust cycles and stifles long-run growth. For completeness in explaining the curse, I outline channels (a) and (b) below.

(a) Particularly in emerging markets, natural resource wealth is often associated with a process of overproduction and deindustrialization termed “Dutch Disease”. As resource extraction booms, economic activity tends to suffer in non-resource sectors because of currency appreciation and changes in competitiveness wrought by the rising value of resource exports (Frankel 2010: 19-20). These short-term macro-economic adjustments have damaging consequences for long-run growth. Nigeria and Russia are illustrative examples. Nigeria saw a veritable collapse in agricultural exports after oil discovery—from 1970-1982, Nigeria lost 97 percent of its agricultural exports in nominal terms (Daramola *et. al.* 2007: 3). Russia—which in the 2000s injected US\$1.5trn into its economy from an oil windfall—has fewer small and medium enterprises than most other emerging market nations (Sharma 2016: 59). Windfalls also cause sluggish growth by skewing incentives toward unproductive investment. The ease of concentrating windfall rents encourages rent-seeking and corruption as politicians and businesses engage in a “feeding frenzy” over these resource rents, distracting them from creative destruction and productive investments in technology (Lane and Tornell 1999).

Commodity Market-Driven Boom-Bust Cycles

Resource-reliant nations tend to suffer from violent boom-bust cycles engendered by the volatility of commodity prices and pro-cyclical fiscal policy. “Cursed” governments often spend unsustainably when commodity markets are booming, borrowing on the strength of their booms and then pushed into austerity when commodity markets turn. This pro-cyclicality is driven by the *underlying difficulty in forecasting* long-run government revenue and *adverse political incentives*.

First, the volatility of commodity prices makes it difficult for governments to correctly estimate revenues and plan expenditure prudently (Weinthal and Loung 2006: 3). The ability to forecast commodity prices, estimate reserves, and incomes is not an easy competency for any government. Without a concerted effort to develop fiscal institutions monitoring the budgetary impact of volatile commodity markets, it is easy to see the difficulty in breaking the vicious circle of fiscal fragility and commodity market cycles.

Political myopia is also a factor in pro-cyclicality as elites tend towards spending windfalls as soon as they are generated in order to achieve short-term political goals or garner eudemonic legitimacy via above-average growth. The risk-reward to saving for “rainy days” versus spending now is often not compelling. Weak institutions in emerging markets governing intergenerational transfers further encourage harmful short-term expenditure. This

normalcy retards long-run economic growth, deterring private investment, and the ability of the government to uphold investment and public goods delivery (Alesina *et. al.* 2008).

(b) The significant political consequences of dependence on resource rents are weaker, more extractive institutions, and skewed state-society relations (Dunning 2008). The ease of financing government spending with resource rents severely weakens the incentives for elites to create inclusive economic and political institutions. Why attempt ambitious state-building and broad-based development to secure political survival when you can use resource wealth to “purchase” a hegemonic political coalition (Doner *et. al.* 2005: 330-331). Decreasingly reliant on taxpayers, “cursed” regimes are less inclined to be accountable and transparent to their citizens, silencing any rumblings with subsidies and a security apparatus (Sharma 2016: 156-158).

(iii) Fiscal rules are long-lasting constraints on fiscal policy via numerical limits on budgetary figures that aim primarily to correct distorted incentives and restrain governments from overspending. In steering public spending in line with a nation’s long-run structural revenue, fiscal rules are useful in reducing the distortions caused by the Resource Curse (Céspedes *et. al.* 2014: 106-107). Chile’s SBF is a widely acclaimed case of the successful application of a fiscal rule in countering pro-cyclicality (Sánchez 2011; Marcel 2011). Under Chile’s rule, annual fiscal spending has a cap approximately equal to the government’s long-term revenue, regardless of the change in revenues brought about by cyclicity, the price of its main commodity export (copper), and other salient variables that affect government revenue. In ascertaining structural income, the rule accounts for the long-term price trend of copper and other key commodity exports as well as the trend growth of GDP—the estimations of these variables are delivered by committees of experts, whose independence and funding is formally mandated in Chilean law, to avoid political bias.

The rule has evidenced success in fortifying Chile’s fiscal position—in 2010, its sovereign debt rating (Standard & Poor’s 2020) climbed to A+, ahead of richer nations like Italy (BBB) and its resource-rich Latin American peers like Mexico (BBB+). And although Chile has recently faced fiscal deterioration in light of the COVID-19 pandemic and increased spending to ease social unrest, the nation’s sovereign debt remains investment grade, is the highest-rated Latin America, and can be considered relatively stable in the international context (Fitch Ratings 2020; Fuentes 2020; Thomson 2019). Moreover, there is also a convincing political economy rationale as to why the Chilean SBF is effective. For one, the delegation of SBF calculations to an independent, expert body can successfully correct the forecasting difficulties governments have (Schmidt-Hebbel 2012). But more importantly, having an *ex-ante* neutrally set ceiling (replete with intuitive justification—saving windfalls for hard times) introduces a level of discipline to fiscal policymaking, as actors understand that outlays cannot be too large because they must be funded with cuts to spending elsewhere. Individual legislators “internalize” the government’s budget constraint when their original preferences would ignore the social costs of spending. How can the rule be a credible commitment mechanism? Arguably, actors need only all agree with the beneficial macro-economic impact of fiscal sustainability. It is reasonable to think that political forces will individually find it in their interest to adhere to an SBF if others are supposed to do so—as observed in the nations with SBFs (Céspedes *et. al.* 2014: 119). An assurance game (Stirling 2012)—where it is mutually advantageous for parties to cooperate but costly if they fail to do so—would likely play out in this conditional context because politicians generally identify themselves with national groups and display preferences accordingly (they are nationalistic, developmentalist). Acquiescence to an SBF is self-reinforcing because politicians know that their peers—like themselves—exhibit team-centered preferences (they desire national prosperity, resilience etc.) and thus have an assurance that others will comply too when SBFs are framed in a national project of fiscal discipline.

(iv) A significant critique of the SBF proposal is that it presupposes political will and institutional capacity not found in many “cursed” nations and thus has a limited use case in the emerging world—where the Resource Curse most powerfully strikes. Dealing with the supposed absence of political will first. It is true that in predatory states where thoroughly absolutist institutions (Acemogulu and Robinson 2012: 80) prevail (e.g., Equatorial Guinea) and political leaders are richly incentivized to immediately expropriate resource rents and state capacity is abysmal, any fiscal rule is unlikely to be complied nor supported. Nevertheless, I would argue this type of state is an extreme in the contemporary emerging world. Across a significant share of resource-rich emerging nations, political elites—even the hegemonic and corrupt—need to avoid pro-cyclicality through the boom-bust of commodity markets, lest their eudemonic legitimacy, access to financial markets and grip on power is threatened. The prevalence of central bank independence across developing countries (Garriga and Rodriguez 2020: 96; Bodea *et. al.* 2019: 601-606) with apparently weak institutions and semi-authoritarian leaders, evidences the capacity and political will of emerging countries across the board to tie governments to sustainable macroeconomic policy.

The argument around institutional capacity presents a more significant challenge. For one, the fiscal reporting, statistical, and asset management challenges in running an SBF may surpass the capabilities of some developing nations. In the case of institutionally incapable states, we could easily see the role of institutions like the IMF and World Bank—richly incentivized to promote fiscal sustainability—in supporting the technical requirements to create and maintain SBFs (Abbott *et. al.* 2010). Weak institutions make SBFs liable to a greater risk of abuse. Institutionally incapable states can confront this is through formalizing the details of a Chile-style rule into law and granting expert panels legal independence, with laws protecting them from arbitrary dismissal—akin to those for governors of central banks (Frankel 2011: 31). That institutional backwardness will necessarily derail an SBF’s implementation is questionable. After all, Botswana—formerly one of the poorest economies in the world—after discovering diamonds in the 1960s, managed to deploy institutional innovation to use its resource revenues to diversify its economy and steadily raise per capita income (Acemogulu and Robinson 2012: 411).

(v) The underperformance of fiscal rules (in compliance rates and reducing pro-cyclicality) has led to skepticism about the SBF’s merits. Controlling for similar characteristics, the presence of a fiscal rule is not significantly associated with greater fiscal discipline, and fiscal rules have failed to prevent pro-cyclical spending in oil-rich nations (Heinemann *et. al.* 2018). Nevertheless, I argue that these failings are because “conventional” fiscal rules have *actively contributed* to pro-cyclicality. Conventional fiscal rules refer to the three most prevalent models (only five nations have structural budget rules versus close to 90 with conventional rules) (Mihalyi and Fernández 2018: 9):

- (1) Balanced budget rules: a commitment to a targeted fiscal balance.
- (2) Debt rules: limits on public debt as a percentage of GDP.
- (3) Expenditure rules: ceilings on total government spending or caps on the growth rates of spending.

(1) Is pro-cyclical because it allows expenditures to trend with revenue, directly transmitting commodity market volatility into fiscal policy. For example, Nigeria’s easily achieved 3 percent deficit target buoyed pro-cyclical spending in the 2000s only to leave the nation without significant savings during the 2014 oil price crash. (2) Is pro-cyclical because it limits borrowing in a commodity bear market when GDP concurrently falls whilst encouraging leverage in times of rising GDP. (3) Is pro-cyclical because ceilings hinder a government’s

ability to respond counter-cyclically to commodity market shocks. The common failure in these rules is that they do not dynamically adjust to the vicissitudes of markets. Explaining why they are impotent in booms and quickly discarded in downturns. By contrast, SBFs allow above-target deficits when: (A) there is a recession (B) commodity prices are depressed below their medium-term equilibrium (Frankel 2010: 7). The essential “institutional innovation” of SBFs is that panels of experts are regularly assessing the parameters of the commodity cycles and the cycle of the domestic economy, providing a countervailing force to the political desire to spend in the ‘good times’ and fiscal latitude for policy-makers in times of economic distress (Mihalyi and Fernández 2018: 9-11).

In conclusion, I have (i)(ii) explained the Resource Curse and outlined the (iii) role of SBFs in helping “cursed” nations enjoy more sustainable development, arguing that although their application is limited in predatory states, SBFs can be applied effectively (iv) in much of the resource-rich emerging world. Finally, I have argued (v) that SBFs sidestep the failings of conventional fiscal rules.

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