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Sustained Debt Reduction: The Jamaica Exception

ABSTRACT Reducing high public debt is key for countries seeking to restore fiscal capacity and resilience in the wake of recent crises. But large debt reductions are rare. Jamaica stands out for reducing its debt from 144 percent of GDP to 72 percent over the last decade, a record achieved by running large, persistent primary budget surpluses. Well-designed fiscal rules combined with social partnership agreements making for fiscal ownership are at the root of its achievement.

Sharp, sustained reductions in public debt are exceptional, especially recently. We know this because public debt-to-GDP ratios have been trending up in advanced countries, emerging markets, and developing countries alike. Governments have borrowed in response to financial crises, pandemics, wars, and other emergencies, resulting in higher debt ratios. But only

Conflict of Interest Disclosure: Peter Blair Henry is on the board of Citigroup. The communications department of the International Monetary Fund (IMF) had the right to review this work prior to publication but did not inform the findings. The authors did not receive financial support from any firm or person for this paper or from any firm or person with a financial or political interest in this paper. Other than the aforementioned, the authors are not currently an officer, director, or board member of any organization with a financial or political interest in this paper. The discussant, Laura Alfaro served as a consultant for the IMF Evaluation Office and a visiting scholar at the Bank for International Settlements from 2023 to 2024. Views are the authors' and do not necessarily represent those of the IMF, its executive board, or the IMF management.

Brookings Papers on Economic Activity, Spring 2024: 133–181 © 2024 The Brookings Institution.

rarely have they succeeded in bringing those higher debt ratios back down once the emergency has passed.

Both economic and political factors underlie this inability to reduce debt ratios. Slowing GDP growth and rising real interest rates (an unfavorable $r - g$ differential in the economist's parlance) make for adverse debt dynamics. Ideological polarization and government turnover make it hard to stay the course. Turnover creates an opportunity for a new administration to repudiate the policies of its predecessor, disrupting efforts to sustain substantial primary budget surpluses. Polarization makes it hard to agree on how to share the burden of fiscal adjustment, fraying the coalition favoring debt reduction.[1]

These economics and politics leave one pessimistic about the prospects for sustained debt reduction. Against this gloomy backdrop, it is uplifting to consider countries that have succeeded in reducing their debt ratios. In addition to their morale-building effect, such cases may help to illuminate the economic and political conditions facilitating debt consolidation.

Jamaica is such a case. The government reduced its debt from 144 percent of GDP at the end of 2012 to 72 percent in 2023. Jamaica cut its debt ratio in half despite averaging annual real growth of less than 0.75 percent over the period.[2] It did so despite vulnerability to hurricanes, floods, droughts, earthquakes, storm surges, and landslides and despite a COVID-19 pandemic that disrupted tourism and mandated exceptional increases in public spending.[3] Yet the International Monetary Fund, in its Article IV report released in 2023, forecasts a further fall in debt-to-GDP ratio to less than 60 percent over the next four years (IMF 2023).

Figure 1 shows Jamaica's achievement. It suggests that 2013 was the breakpoint when the debt ratio began its decline. Table 1 underscores the exceptional nature of the experience. Using a broad group of emerging markets and developing economies, it tabulates cases since 2000 where debt ratios fell by as much as 20, 30, or 40 percent of GDP over a five-year period. Jamaica, evidently, has few peers.

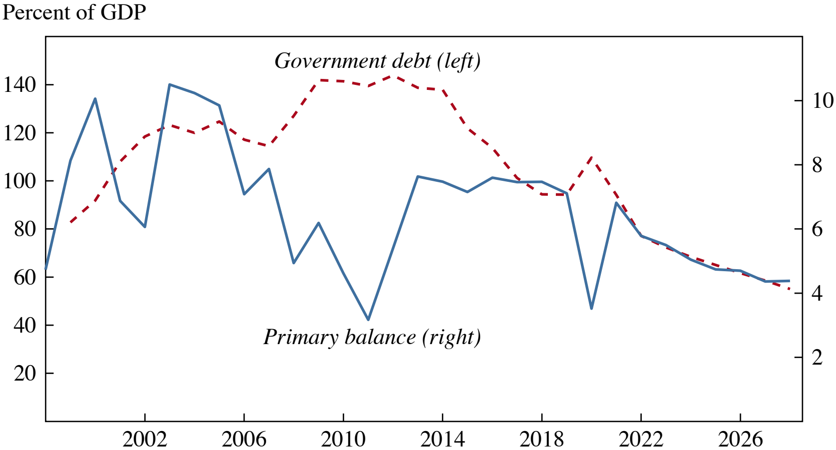
Figure 1 also points to the central economic mechanism responsible for the reduction in the debt ratio. The government ran large, sustained primary budget surpluses. Table 1 shows how unusual this is: of the debt reduction

1. Alesina and Tabellini (1990) provide a formal framework where polarization leads to overspending and debt increases, consistent with our presumption.

2. See World Economic Outlook Database (October 2023). All figures for Jamaica are for fiscal years, which run from April 1 to March 31.

3. Jamaica is ranked as the third most disaster-prone country in the world according to the Global Facility for Disaster Reduction and Recovery.

Figure 1. Jamaica: Government Debt and Fiscal Balance, 1998–2028



Source: IMF World Economic Outlook Database (October 2023).
Note: In fiscal years, which run from April 1 to March 31. Figures for 2023–2028 are projections.

episodes we identify since the turn of the century, just five relied principally on primary surpluses.[4]

The question is how Jamaica accomplished this. Our answer consists of two parts. First, Jamaica adopted fiscal rules that highlighted the debt problem, encouraged formulation of a medium-term plan, and limited fiscal slippage. The Fiscal Responsibility Framework introduced in 2010 required the minister of finance to take measures to reduce, by the end of fiscal year 2016, the fiscal balance to nil, the debt-to-GDP ratio to 100 percent, and public sector wages as a share of GDP to 9 percent (Jamaica House of Parliament 2010). The framework was augmented in 2014 to require the minister, by the end of fiscal year 2018, to specify a multiyear fiscal trajectory to bring the debt-to-GDP ratio down to 60 percent by 2026 (Jamaica House of Parliament 2014). The framework included an escape clause to be invoked in the event of large shocks. This prevented the rule from being so

4. Our paper is obviously related to the literature on fiscal consolidation, including, for example, Alesina, Perotti, and Tavares (1998); fiscal consolidation connotes episodes where governments move from large budget deficits to smaller deficits or surpluses. A difference is that in Jamaica the primary surplus already was substantial before the process of debt reduction began. We are not primarily concerned with the change in the stance of fiscal policy starting in 2013; we are focused instead on understanding a decade and more of debt reduction sustained by large, persistent primary surpluses.

Table 1. Emerging Markets and Developing Economies: Large Sustained (Five-Year) Government Debt Reductions, 2000–2022

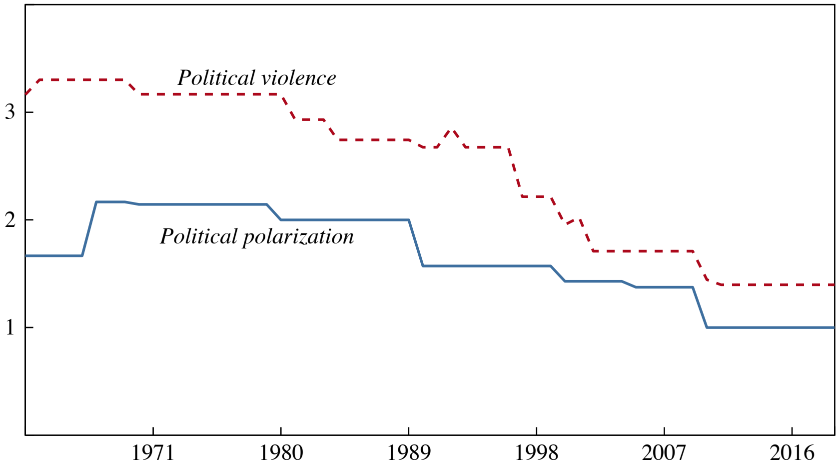
20 percent of GDP or more		*30 percent of GDP or more*		*40 percent of GDP or more*	
PAN 2005–2010	**21.2 (14.3)**	EGY 2003–2008	30.3 (–9.3)	BUL 2000–2005	42.5 (12.2)
MUS 2003–2008	21.4 (–0.4)	PRY 2002–2007	30.9 (10.9)	GEO 2002–2007	42.6 (14.9)
PHL 2003–2008	**21.4 (16.7)**	**TUR 2002–2007**	**33.7 (19.8)**	**JAM 2013–2018**	**44.4 (37.2)**
PER 2003–2008	**22.3 (15.7)**	JOR 2003–2008	34.5 (–7.3)	IDN 2000–2005	44.8 (13.7)
ARM 2002–2007	24.0 (–7.6)	BUL 2000–2005	42.5 (12.2)	LBN 2006–2011	48.9 (12.2)
EGY 2003–2008	30.3 (–9.3)	GEO 2002–2007	42.6 (14.9)		
PRY 2002–2007	30.9 (10.9)	**JAM 2013–2018**	**44.4 (37.2)**		
TUR 2002–2007	**33.7 (19.8)**	IDN 2000–2005	44.8 (13.7)		
JOR 2003–2008	34.5 (–7.3)	LBN 2006–2011	48.9 (12.2)		
BUL 2000–2005	42.5 (12.2)				
GEO 2002–2007	42.6 (14.9)				
JAM 2013–2018	**44.4 (37.2)**				
IDN 2000–2005	44.8 (13.7)				
LBN 2006–2011	48.9 (12.2)				
Average	33.1 (10.2)		39.2 (11.6)		44.6 (18.0)
N episodes	14		9		5

Source: IMF Global Debt Database.

Note: Excludes episodes associated with an external debt restructuring and major oil-exporters. The columns represent rising thresholds of debt reductions (i.e., more than 20 percent, 30 percent, and 40 percent) and the amount of debt reduction (with corresponding cumulative primary balances shown in parentheses). The countries in bold are those that reduced their debt the "old-fashioned" way (i.e., with primary balances contributing to most of the reduction). ARM = Armenia, BUL = Bulgaria, EGY = Egypt, GEO = Georgia, IDN = Indonesia, JAM = Jamaica, JOR = Jordan, LBN = Lebanon, MUS = Mauritius, PAN = Panama, PER = Peru, PHL = Philippines, PRY = Paraguay, TUR = Türkiye.

Figure 2. Jamaica: Political Polarization and Political Violence

Average rating (0-4); lower figure indicates less polarization/violence



Source: V-Dem Database (version 13).

rigid as to lack credibility. At the same time, it included clear criteria and independent oversight to prevent opportunistic use.[5]

Fiscal rules and targets do not always achieve their intended results. A quick look at the Stability and Growth Pact of the European Union (EU), which similarly targets a 60 percent debt-to-GDP ratio, is a stark reminder of this fact.[6] This brings us to the second part of our answer: elected officials leveraged Jamaica's hard-won tradition of consensus building—of constructing over the course of thirty years social partnerships aimed at facilitating dialogue, limiting political instability, and reducing political polarization and violence (see figure 2). In 2013, a series of ongoing discussions in the National Partnership Council (NPC), a social dialogue collaboration involving the government, parliamentary opposition, and social partners, culminated in the Partnership for Jamaica Agreement on consensus policies in four areas, first of which was fiscal reform and consolidation. The Partnership for Jamaica Agreement fostered a common belief that the burden of adjustment would

5. Jamaica is unusual in this regard; it is one of only two Caribbean Community (CARICOM) countries, along with Grenada, to have adopted an explicit national fiscal rule. Grenada's national budget balance, debt, and expenditure rules date from 2015—that is, they postdate Jamaica's fiscal rule.

6. European Commission, "Stability and Growth Pact," https://economy-finance.ec.europa.eu/economic-and-fiscal-governance/stability-and-growth-pact_en.

be widely and fairly shared. It supported the creation of the Economic Programme Oversight Committee (EPOC) to monitor and report on fiscal policies and outcomes, providing independent verification that all parties kept to the terms of their agreement.

EPOC and the Partnership for Jamaica Agreement solidified the sharp decline in political polarization that began four years earlier, coincident with creation of the NPC.[7] Less polarization made for policy continuity when a different political party took power in 2016. For the first time in decades, a new government did not reverse the fiscal policies of its predecessor. By creating a sense of fair burden sharing, Jamaica's organized process of consultation sustained public support for the country's fiscal rules, culminating in March 2023 with the establishment of a permanent, independent fiscal commission.

As always, the full story is more complex. Jamaica managed its financial system well. It adeptly managed the term structure of the debt. But the two elements highlighted above—a well-designed fiscal rule and a partnership agreement creating confidence that the burden of adjustment would be widely and fairly shared—were key. Neither element would have worked in the absence of the other. Both were needed.

An important question is whether the lessons from Jamaica generalize. We discuss two other countries that achieved significant debt reduction by adopting fiscal rules and consensus-building arrangements: Ireland in the late 1980s and Barbados for a decade starting in the early 1990s. These cases differ in their particulars. But they have in common that Ireland and Barbados—like Jamaica—are small, open economies. These economies are highly structured, in that trade unions and employers' associations are cohesive and powerful. In both cases, agreements were reached and institutions were created to initiate and maintain the momentum of debt reduction, leveraging earlier historical experience with institution-based consensus building.

These similarities are consistent with the literature suggesting that democratic corporatism, a process of policy formulation involving extensive consultation and consensus building, is the easiest where interest groups are well-organized and the number of agents is limited.[8] They are consistent

7. Cause and effect are admittedly difficult to disentangle in this context. It is reasonable to believe that causality ran both ways. We return to this issue in section III.D below.

8. Peter Katzenstein, who popularized the concept of democratic corporatism, defines it as a political system characterized by "an ideology of social partnership, a centralized and concentrated system of economic interest groups, and an uninterrupted process of bargaining

with the view that such arrangements are imperative in small, open economies exposed to external shocks. And they are consistent with the view that so-called neo-corporatist arrangements, when and where they emerge, build on earlier historical experience.

I. Historical Background

Jamaica's recent experience of debt reduction is exceptional, but the country's earlier history was also marked by exceptional fiscal developments, some positive, others not. The 1962 constitution included a provision prohibiting the government from borrowing without parliamentary approval. It prioritized servicing the debt as an obligation senior to other government expenses (Langrin 2013). Accordingly, Jamaica has never had an outright default on its sovereign debt, although it has conducted domestic debt exchanges (described below). Fiscal restraint was designed to attract the foreign direct investment (FDI) needed for development of the capital-intensive bauxite industry. True to form, FDI financed 30 percent of all capital formation in the 1960s and virtually all investment was in the bauxite sector.

Public debt remained modest in the first post-independence decade, reflecting the consensus around these priorities. The ruling Jamaica Labour Party (JLP) eschewed activist fiscal and monetary policies, relying on tax breaks and free profit repatriation to attract foreign investment.[9] Jamaica successfully grew the denominator of the debt-to-GDP ratio: real GDP rose by roughly 6 percent per annum in what Stone and Wellisz (1993, 140)

among all of the major political actors across different sectors of policy" (Katzenstein 1985, 80). We are not arguing that democratic corporatism is the only setting in which significant debt reduction can occur. One can think of authoritarian settings where high debts were dramatically reduced; Romania under Nicolae Ceaușescu springs to mind (not that this turned out well for the Ceaușescus). Two of the fourteen cases in table 1 have a rating of 0.4 or below on the polity scale, situating them on the autocratic side of the autocracy-democracy continuum. Others have relatively high levels of political polarization but were able to reduce debt through other means (high inflation, financial repression, or faster economic growth). But to reiterate, our goal here is not to determine whether democracy or autocracy is "better" for debt reduction. It is to understand how Jamaica did it.

9. Thus, fiscal deficits averaged a relatively modest 2.3 percent of GDP from 1962 through 1972 (Henry and Miller 2009), while the currency was pegged to the pound sterling under a quasi-currency board system. Jamaica switched from a sterling peg to a dollar peg in 1973, following the change in government (which reinforced the peg with capital controls—more on which below), the United States by this time having become the country's leading trade partner.

called "one of the best growth records in the world." Mining was relatively unimportant in the 1950s, and tourism had contributed only modestly to economic activity; this meant that there was low-hanging fruit to be picked. King (2001, 7) describes growth in this period as built on "natural endowments of bauxite and beaches."

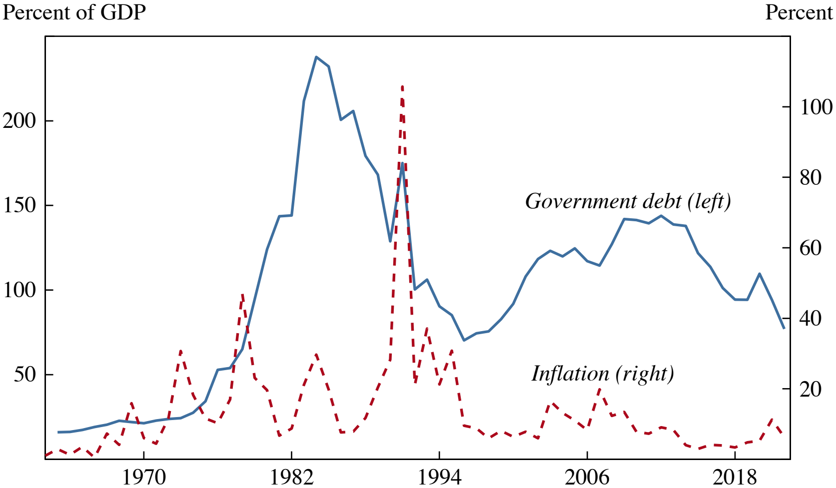
Capital-intensive mining created little employment, however, while Dutch disease pressures led to declines in the relative importance of agriculture, forestry, and fishing. Small-scale manufacturing and services had limited capacity to absorb surplus labor released by the rural sector, given the floor placed on wages by strong unions and insider-outsider dynamics.

By the time of the 1972 election, unemployment, mostly urban, had risen to more than 20 percent, and dissatisfaction with education and health care services was rife. These grievances led to a backlash against the JLP's cautious policies, culminating in the electoral victory of the People's National Party (PNP) led by the charismatic Michael Manley. The approach of the new PNP government was variously labeled "state populism" and "democratic socialism."[10] The PNP nationalized companies, raised import barriers, and imposed exchange controls; spending on schooling, food subsidies, and public housing exploded (Henry 2013). Public employment rose by two-thirds between 1972 and 1977, while public spending as a share of GDP doubled from 23 percent to 45 percent. The budget deficit averaged 15 percent of GDP. The government financed what it could by borrowing, and the Bank of Jamaica financed the rest. The debt-to-GDP ratio soared from 24 percent at the time of the 1972 election to 124 percent in 1980 (figure 3). Inflation, having averaged 4 percent in the first post-independence decade, reached 27 percent in 1980.

The PNP's focus on social justice notwithstanding, its policies were economically disastrous. Dirigiste rhetoric and policies of nationalization discouraged investment. Labor productivity and real wages plummeted, and unemployment rose to 27 percent in 1980 (Henry 2023). As standards of living continued to fall, the implications for survival of the zero-sum patronage gained or lost with each election rose higher, and political violence spiked (figure 2). This economic and political chaos led, predictably, to the PNP's defeat in the 1980 election, the return of the JLP, and a swing back toward more market-oriented policies.

10. The party used the latter term in its election manifestos, as do Stephens and Stephens (1986) in their analysis of Jamaican political economy.

Figure 3. Jamaica: Government Debt and Inflation, 1962–2022

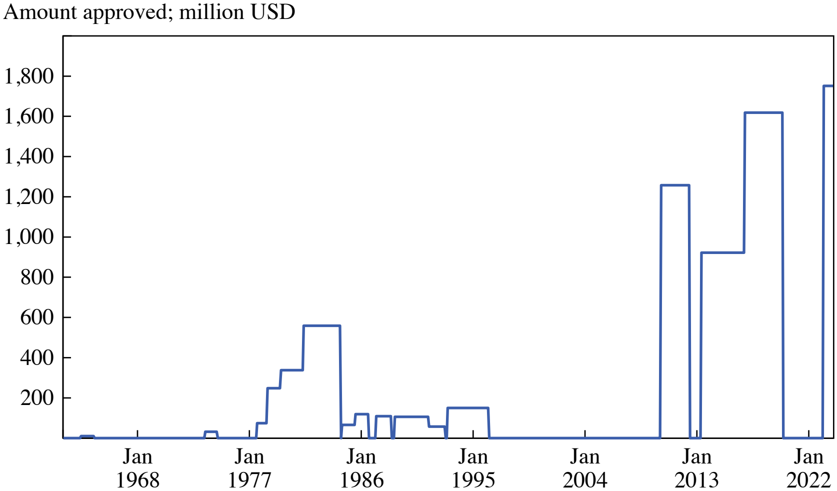


Source: IMF data from the Global Debt Database, International Financial Statistics, and the World Economic Outlook Database (October 2023).
Note: In fiscal years, which run from April 1 to March 31. Inflation is as of end of period.

When the decline in foreign investment and macroeconomic stimulus created balance of payments problems in 1977–1978, the PNP was forced to negotiate agreements with the IMF. Both programs were then suspended when the government failed to meet performance targets. (Figure 4 shows a timeline of the country's agreements with the IMF.) The JLP government tried again in 1980: it devalued to improve export competitiveness, cut government spending, eliminated price controls, and negotiated new loans with the IMF and World Bank (Kirton and Ferguson 1992). Its policies were contractionary in the short run, provoking violent demonstrations, but by the mid-1980s, productivity and GDP began rising again.

Jamaica's first episode of debt reduction then began in the second half of the 1980s. Debt had risen to an extraordinarily high 240 percent of GDP, requiring urgent action. The JLP imposed spending cuts, moving the primary balance into surplus. Progress was interrupted in 1988–1989 by Hurricane Gilbert, which destroyed more than 100,000 homes, but even this did not throw the process off course. Importantly, when the PNP returned to power in 1989, it maintained the same basic economic stance. Chastened by its earlier experience of deficits and negative growth, it restrained public spending, raised taxes, and restricted credit, allowing primary surpluses to be

Figure 4. Jamaica: Financial Arrangements with the IMF



Source: IMF.

maintained. There was now more dialogue between the parties as their policy differences grew less pronounced. Figure 2 shows the measure of political polarization from the Varieties of Democracy (V-Dem) Database; this is based on responses to a survey of country experts conducted each year.[11] The figure documents a fall in polarization at the beginning of the 1990s, the largest fall since independence, exceeding even the sharp fall in polarization two decades later. This was then followed by a steep decline in political violence from the mid-1990s to early 2000s (also shown in figure 2). This experience thus shows how cross-party agreement on basic economic priorities is important for debt reduction.

This is the positive part of the story. The negative part is inflation, which was the single most important contributor to debt reduction in the decade ending in 1995. End of fiscal year inflation accelerated to 28 percent in 1990,

11. V-Dem (https://www.v-dem.net) takes input from at least five experts for each country and year, drawing on 3,700 experts worldwide. For political polarization, it asks: "Is society polarized into antagonistic, political camps?" Responses range from: 0 (Not at all. Supporters of opposing political camps generally interact in a friendly manner); to 4 (Yes, to a large extent. Supporters of opposing political camps generally interact in a hostile manner). For political violence, it asks: "How often have non-state actors used political violence against persons this year?" Responses range from: 0 (Not at all. Non-state actors did not use political violence); to 4 (Often. Non-state actors often used political violence).

106 percent in 1991, and 21 percent again in 1992. Given that some 60 percent of local government debt was held in medium- to long-term securities, this brought the debt ratio down very sharply, from 175 percent of GDP at the end of 1990 to 100 percent at the end of 1991, for example (IMF 2000).

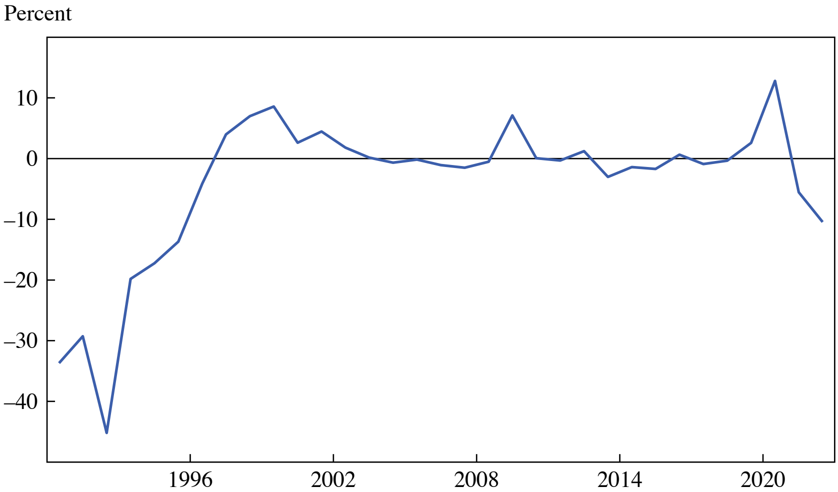
But this route to debt reduction was unsustainable because it undermined the foundations of the financial system. Inflation reflected measures taken by the Jamaican authorities to liberalize the financial system, without at the same time strengthening financial supervision. In the run-up to the crisis, they removed ceilings on credit provided by banks, deregulated deposit rates, encouraging banks to compete for funding, and permitted banks to make US dollar denominated loans (Kirkpatrick and Tennant 2002).[12] Unfortunately, even while Jamaica began easing restrictions on capital account transactions, it retained a patchwork of financial regulators and regulations, creating scope for regulatory arbitrage given the weak supervisory capacity of the central bank. The authorities liberalized the capital account in the hope that this would lead to capital inflows, reduce depreciation pressure on the exchange rate, and mitigate inflation. This was also when the IMF was advising its emerging market members to liberalize the capital account, and Jamaica, continuously under IMF programs, acted accordingly.

The result was a very large capital inflow as exchange controls were relaxed, funding additional domestic lending as investors repatriated offshore dollars. The removal of quantitative credit ceilings permitted the development of an enormous credit boom; bank credit to the private sector grew at double-digit rates, always a warning sign, hence the surge of inflation. The credit boom was characterized by deteriorating asset quality, declining bank profits, and a growing currency mismatch as banks extended US dollar loans to firms in the nontraded goods sector where revenues accrued in local currency.

Initially, the implications for the debt-to-GDP ratio were favorable, as the credit-fueled burst of inflation led to a negative real interest rate/real growth rate differential (figure 5). But those favorable dynamics did not last. In mid-1995, the Bank of Jamaica finally got serious about inflation and tightened monetary policy. Higher interest rates led to weakness in the real estate

12. There had in fact been an earlier attempt to liberalize the banking system in the mid- to late 1980s as a condition of the country's World Bank program, but this was reversed in 1989 when Hurricane Gilbert prompted sharp increases in government spending, which the fiscal authorities enlisted the banks to finance. Another factor prompting reregulation was a massive inflow of reinsurance funds, leading to increased bank liquidity and what was perceived as an unsustainable surge in lending.

Figure 5. Jamaica: $r - g$ Differential, 1990–2022



Source: IMF Global Debt Database and World Economic Outlook Database (October 2023).
Note: r is calculated as the effective interest rate on government debt deflated by the GDP deflator. g is the real GDP growth rate.

sector, to which financial institutions were predictably committed. This raised questions about bank solvency, precipitating withdrawals by panicked depositors.[13] A massive financial crisis engulfed commercial banks, investment banks, building societies, insurance companies, and security brokers in the mid-1990s. Laeven and Valencia (2020) rank this as the third most costly banking crisis anywhere in the world in the five decades after 1970.

Starting in 1996, GDP fell for three consecutive years.[14] With nonperforming loans as a share of total loans rising to nearly 30 percent, the financial system had to be recapitalized by a special purpose vehicle, the Financial Sector Adjustment Company, whose liabilities were ultimately transferred to the government's balance sheet. Effectively, the government replaced nonperforming loans with government debt in an effort to reassure depositors.

13. Newly deregulated life insurance companies aggressively marketed short-term products offering high rates of return and invested these short-term funds in long-term, illiquid assets, mainly real estate. Scenting an opportunity, banks for their part extended high interest rate loans to insurance companies with which they were connected, causing the banking system to be implicated. This is a clear instance of the regulatory arbitrage noted above.

14. See IMF Global Debt Database and World Economic Outlook Database.

Given a fiscal cost of 44 percent of GDP and falling revenues owing to the crisis-induced recession, it is no surprise that this mega-financial crisis threw debt reduction off course. After falling steadily for more than a decade, the debt ratio now rose sharply. This episode is a reminder that financial stability is essential for sustained debt reduction, and that a burst of inflation, even if helpful for debt reduction in the short run, is not compatible with such stability.

The debt ratio continued rising through the first decade of the new century, approaching 150 percent of GDP in 2010. It did so even once the central government resumed running primary surpluses. About half the increase in the debt ratio in the 2006–2011 period was due to currency depreciation that raised the real burden of foreign currency debt and an unfavorable real interest rate/real growth rate differential, reflecting anemic growth together with stubbornly high nominal interest rates in the range of 15 percent.[15] The other half was due to the deficits of public bodies, such as the Urban Development Corporation and Bauxite and Alumina Trading Company, of which there were more than two hundred in number, and debt to the Venezuelan state-owned oil company Petróleos de Venezuela (PDVSA), which was incurred by Petrojam, a limited liability company, but guaranteed by the Jamaican government.[16]

II. What Jamaica Did

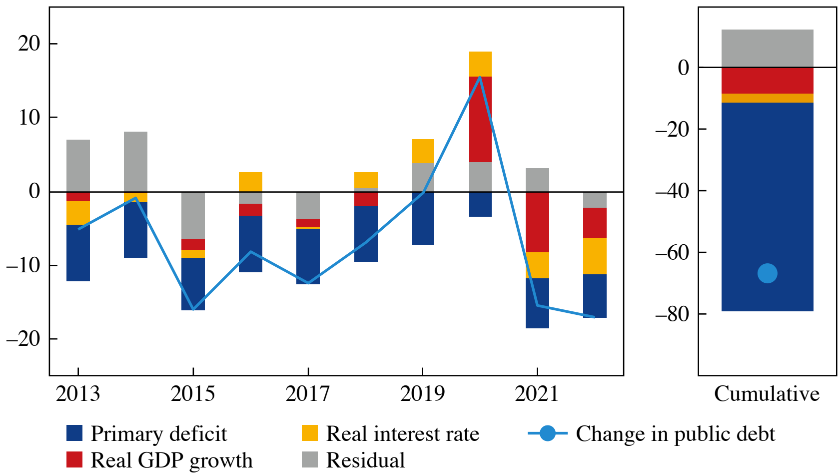
This unpropitious backdrop renders what happened next all the more remarkable. As shown in figure 1, the debt-to-GDP ratio stopped rising in 2010 and, after a few years of relative stability, began falling precipitously, from 144 percent in 2012 to just 72 percent in 2023.[17] This achievement is

15. The root causes of this slow growth were several. Jamaica lacked affordable energy to refine bauxite into aluminum and inexpensive labor to compete with low-cost Caribbean and Central American neighbors. Infrastructure, education, and training were deficient. High real interest rates for their part reflected chronic doubts about the government's willingness and ability to control inflation and service its debts.

16. At the time, Petrojam was owned jointly by the Petroleum Corporation of Jamaica, an entity of the Jamaican government, and PDVSA. Conventional debt accounting, as in equations (1) and (2) below, includes these two items in the residual contributing to changes in the debt ratio rather than subtracting them from the primary balance. If one instead subtracts them from the primary balance, primary surpluses in the 2006–2011 period become less impressive (they fall from an average of 5.6 percent of GDP to 1.9 percent of GDP). But this does not change the fact that the primary balance was already in surplus. We return to this below.

17. The IMF expects that debt ratio to decline still further, to below 60 percent four years from now.

Figure 6. Jamaica: Drivers of Debt-GDP Dynamics, 2013–2022



Source: Authors' calculations.
Note: In fiscal years, which run from April 1 to March 31.

exceptional (in several senses of the word). We first analyze how this debt reduction was achieved in an accounting sense, before asking how it was achieved in an economic and political sense.

To this end, figure 6 shows the standard debt decomposition:

$$\Delta b = d + \frac{(r-g)}{1+g} b_{t-1} + sfa, \tag{1}$$

where b is debt as a share of GDP and Δb is its change. The right-hand side is made up of the primary budget deficit (net of interest payments) relative to GDP, denoted d; $r-$ g interacted with the inherited debt ratio; and the residual, which captures defaults, restructurings, conversions, assumption by the public sector of private debt, other off-budget spending, and exchange rate effects, collectively denoted *sfa* (stock-flow adjustment).

Figure 6 shows that debt reduction was driven mainly by primary budget surpluses, which are large throughout the period (excepting only 2020, the first year of COVID-19). Existing primary surpluses were raised by an additional 2 percentage points of GDP in fiscal years 2012 and 2013, mainly through expenditure cuts as a share of GDP (see table 2).[18] Subsequently, the government maintained these primary surpluses despite strongly increasing noninterest spending, from 19 percent of GDP in 2014 to 24 percent of GDP in 2019, on the eve of the COVID-19 crisis.[19] Following the initial spending adjustment, in other words, surpluses were sustained by strongly increasing tax revenues as a share of GDP.[20] Most of these gains in revenue resulted from broadening the tax base (removing exemptions), although in addition, there were an increase in the personal income tax rate for high earners and improvements in tax administration.

There was also a modest contribution from GDP growth, mainly toward the end of the period, modest because growth remained anemic. This is a reminder that sound debt management is no guarantee of positive growth performance—and, conversely, that strong growth is not always and everywhere a prerequisite for successful debt reduction.[21]

Might the large primary surpluses needed for debt reduction have themselves slowed growth? Hypothetically, by pushing back the deadline for reaching a 60 percent debt-to-GDP ratio or raising that target, the government might have undertaken more social spending, boosting aggregate demand. Of course, to infer the impact on growth one would need a fully specified model of the Jamaican economy, robust to policy regime. In any case, such growth of output as occurred reflected strong increases in employment, not increases in productivity, consistent with the idea that problems of

18. The decline in spending was spread across capital projects, central government purchases of goods and services, and (to a much smaller extent) the public sector wage bill. The concurrent increase in revenues reflected transfers from the National Housing Trust (which makes low interest rate loans to housing developers) and renewal of licenses by two telecom companies. These were one-off receipts rather than structural revenue measures, in other words. Details are given in Government of Jamaica (2013).

19. In addition, there was a trend decline in interest spending as a share of GDP, as table 2 also shows, reflecting the falling debt ratio and a trend decline in sovereign spreads as Jamaica's fiscal position strengthened.

20. Thus, Jamaica does not fall neatly into either the spending-reduction or tax-increase categories distinguished by Alesina, Perotti, and Tavares (1998). From the long-run perspective of concern to us here (since we are focused on how primary surpluses were sustained over a decade and more), this was a revenue-driven consolidation, a member of the category that Alesina, Perotti, and Tavares (1998) question can be sustained. Thus, our conclusions here contrast with theirs.

21. There is also a contribution to debt reduction from the negative real interest rate, reflecting high inflation in the immediate post-COVID-19 period. Otherwise, real interest rates are modestly positive on average (figure 5), roughly offsetting the contribution of real GDP growth (figure 6). There is a sharp fall in both inflation and nominal interest rates on government debt in 2014, leaving the real interest rate essentially unchanged.

Table 2. Jamaica: Summary of Government Operations (Percent of GDP)

	FY09	*FY10*	*FY11*	*FY12*	*FY13*	*FY14*	*FY15*	*FY16*	*FY17*	*FY18*	*FY19*	*FY20*	*FY21*	*FY22*
Overall balance	–11.1	–6.3	–6.4	–4.1	0.1	–0.5	–0.3	–0.2	0.5	1.2	0.9	–3.1	0.9	0.3
Revenues	27.5	26.8	25.6	25.7	27.1	26.2	27.0	28.0	29.1	30.6	30.6	29.5	31.0	30.1
Expenditures	38.7	33.2	32.0	29.8	27.0	26.7	27.3	28.2	28.6	29.4	29.7	32.6	30.1	29.8
ow/Interest expense	17.3	11.0	9.6	9.5	7.5	8.0	7.4	7.8	7.0	6.3	6.2	6.6	5.9	5.5
Primary balance	6.2	4.6	3.2	5.4	7.6	7.5	7.2	7.6	7.5	7.5	7.1	3.5	6.8	5.8
(Change from previous year in percentage points of GDP)														
Overall balance	—	4.8	–0.1	2.3	4.2	–0.6	0.2	0.1	0.6	0.7	–0.3	–4.0	4.0	–0.6
Revenues	—	–0.7	–1.3	0.2	1.4	–0.9	0.7	1.0	1.1	1.5	0.0	–1.1	1.5	–0.9
Expenditures	—	–5.5	–1.2	–2.2	–2.8	–0.3	0.5	0.9	0.5	0.8	0.3	2.9	–2.5	–0.3
ow/Interest expense	—	–6.4	–1.4	–0.1	–2.0	0.5	–0.5	0.4	–0.8	–0.7	–0.1	0.4	–0.7	–0.4
Primary balance	—	–1.6	–1.5	2.2	2.2	–0.2	–0.3	0.4	–0.1	0.0	–0.4	–3.6	3.3	–1.0

Source: IMF World Economic Outlook Database (October 2023).

education and training, and not inadequate demand, are at the root of slow growth.[22] In addition, the government's debt reduction strategy also reduced the volatility of growth; prior to COVID-19, Jamaica had nineteen consecutive quarters of growth, where the longest earlier span was nine quarters.[23]

Figure 6 highlights several years early in the period in which there were increases in the debt burden due to factors not otherwise explained. These increases reflect the materialization of contingent liabilities stemming from unexpected losses by public enterprises such as Clarendon Alumina Production (CAP) and Jamaica Urban Transit Company. In fiscal year 2012, for example, the government was forced to assume 70 percent of the liabilities of CAP (IMF 2018). The prevalence of such problems was then reduced in the period's second half by strengthened governance of public enterprises (as we explain in section III.A below). Meanwhile, stronger financial supervision and regulation helped to avoid losses from the kind of banking crisis that had thrown 1990s debt-reduction efforts off course.

Figure 7 sheds more light on what lies behind the debt decomposition. Here we further decompose the change in the debt-to-GDP ratio as follows:

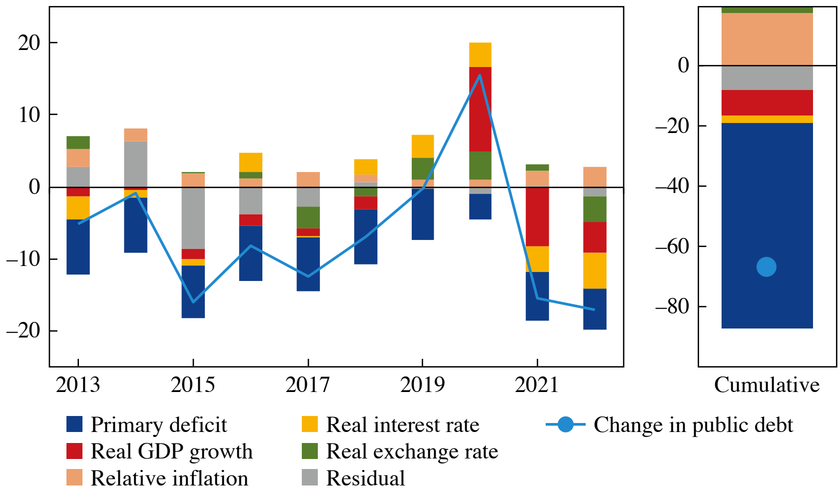
$$\Delta b = d + \frac{(r-g)}{1+g} b_{t-1} + \frac{z\,a}{(1+g)(1+p^*)} b_{t-1} + \frac{(p-p^*)a}{(1+g)(1+p)(1+p^*)} b_{t-1} + sfa \tag{2}$$

where r = the real interest rate; p = growth rate of GDP deflator; p^* = growth rate of US GDP deflator; g = real GDP growth rate; a = share of foreign currency denominated debt; z = real exchange rate depreciation (measured as $[(e_t/e_{t-1})(1 + p^*)/(1 + p)] - 1$); and e = nominal exchange rate (measured by the local currency value of the US dollar). The exchange rate matters because more than a quarter of debt at the beginning of the debt reduction period was denominated in or indexed to dollars. Comparing figures 6 and 7, we can see how ongoing depreciation of the Jamaican dollar increased the domestic currency value of external debt.

22. See also footnote 15 on these problems. Kandil and others (2014) noted prior to the debt-reduction episode that Jamaica had the highest elasticity of employment with respect to output in the Caribbean.

23. Statistical Institute of Jamaica, "National Accounts," https://statinja.gov.jm/NationalAccounting/nationalaccountsnotes.aspx.

Figure 7. Jamaica: Drivers of Debt-GDP Dynamics Accounting for Real Exchange Rate and Relative Inflation Effects, 2013–2022



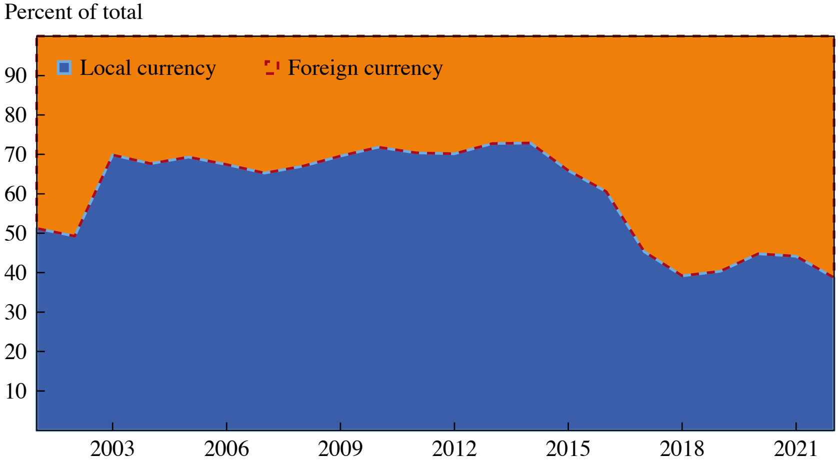
Source: Authors' calculations.
Note: In fiscal years, which run from April 1 to March 31.

Relatedly, figure 8 shows how the foreign currency share of the debt rose as debt reduction allowed Jamaica to resume tapping international financial markets in 2014. It didn't hurt that this was a period of low interest rates in advanced countries, encouraging international investors to search for yield in emerging markets. While a limited number of relatively large middle-income countries were able to place domestic currency debt with international investors over this period (freeing themselves of the "original sin" of foreign currency denominated external debt), Jamaica was not one of these.[24]

The country's increasing reliance on foreign currency debt was not overly detrimental. Figure 7 shows why: although there was a contribution to the debt from exchange rate depreciation, the real exchange rate was reasonably stable against the US dollar (that is, the nominal exchange rate moved

24. Arslanalp and Eichengreen (2023) show how success at placing domestic currency denominated securities with international investors has been largely limited to a handful of relatively large emerging market economies. In November 2023, Jamaica issued its first-ever Jamaican dollar-linked bond in international capital markets, with "the [Government of Jamaica's] objective of opening local currency debt issues to international investors" (Ministry of Finance and the Public Service 2023, par. 2). Jamaica used the proceeds to buy back outstanding US dollar denominated bonds, which Moody's commented would reduce "the government's exposure to foreign exchange risk, which is a credit positive" (ibid., par. 4).

Figure 8. Jamaica: Currency Composition of Government Debt



Source: IMF.
Note: In fiscal years, which run from April 1 to March 31.

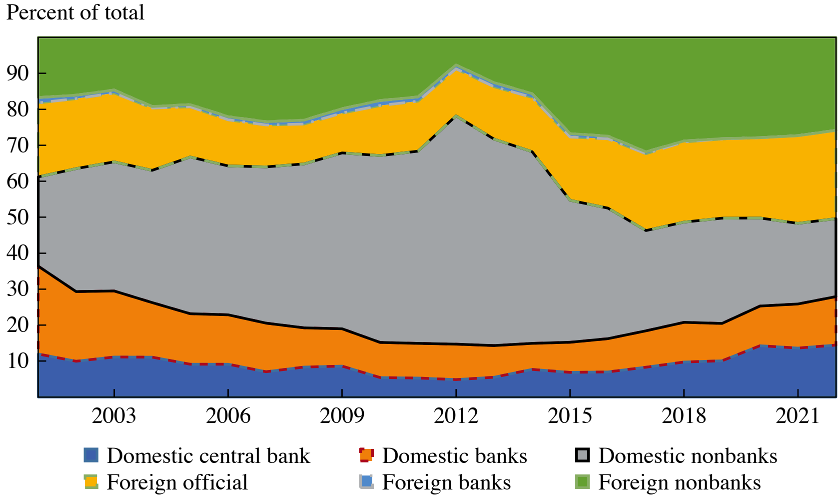
broadly in line with the inflation differential vis-à-vis the United States). This is a reminder of the value of a relatively stable real exchange rate for debt reduction, especially when a portion of that debt is denominated in foreign currency.[25]

Comparing figures 6 and 7, we see that separating out the impact of exchange rate depreciation on the value of external debt turns the overall contribution of the *sfa* from positive (adding to the debt burden) to negative (subtracting from the debt burden).[26] This makes it tempting to look to the

25. This is not to recommend issuing debt in foreign currency to take advantage of relatively low international interest rates. The risks are well known. The strategy worked in Jamaica because the authorities limited real depreciation of their currency. The credibility of Jamaica's policies, discussed further below, may help to explain the stability of the currency in the face of global shocks. So too may an element of luck.

26. Figures 6 and 7 show that at least as important as the 2013 debt exchange were financial operations undertaken in 2015 and 2016. The 2015 residual reflects a buyback at substantial discount of the government's Petrocaribe debt. In 2015 the government bought back this debt from cash-strapped Venezuela, raising cash by issuing a thirteen-year Eurodollar bond. The buyback replaced debt to Venezuela with new external debt bearing a lower face value but a higher interest rate. The net effect was to push a portion of the financial burden out into the future, creating a 10 percent of GDP reduction in measured debt in 2015 (Okwuokei and van Selm 2017). The 2016 residual reflects an accounting adjustment implemented in conjunction with the new fiscal responsibility law, described below, that excluded intragovernmental debt holdings and the Bank of Jamaica's external debt (offset by the central bank's external reserves), in line with international statistical standards.

Figure 9. Jamaica: Holders of Government Debt, 2001–2022



Source: Updated from Arslanalp and Tsuda (2014).

pair of domestic debt restructurings conducted in 2010 and 2013. In fact, these operations had a limited impact on the debt burden. Neither entailed nominal haircuts reducing the face value of the debt, partly because a non-negligible fraction of that debt was held by domestic financial institutions (figure 9) whose stability would have been jeopardized (Schmid 2016). External debt was excluded because Jamaica's global bonds lacked majority action clauses, threatening litigation and inconclusive negotiations with holdout creditors.[27]

Still, these exchanges helped on the budgetary front, despite the absence of face-value haircuts, by reducing coupons and extending maturities. In both cases, the government succeeded in achieving very close to 100 percent investor participation (Langrin 2013). Here the same factor that prevented face-value haircuts—that domestic debt was held mainly by a handful of

27. Such clauses allow a qualified majority of creditors to cram down restructuring terms on a dissenting minority. The exclusion of external debt from restructuring was a factor in the government's ability to tap the Eurodollar market in 2014 and 2015 and buy back the Petrocaribe bonds, as described in the preceding footnote. In addition, the constitutional priority attached to servicing external debt put in place in the 1960s to help attract FDI may have contributed to the difficulty of restructuring.

financial institutions—helped by attenuating free-rider problems.[28] This observation has implications for whether the lessons from Jamaica carry over to other countries, since in quite a few other countries debt securities are not in the hands of domestic banks but are widely held by heterogeneous creditors whose coordination is difficult to achieve.

In sum, the Jamaican authorities mainly reduced their debt "the old-fashioned way," by running substantial primary surpluses for an extended period. To be sure, they also grew the economy, if modestly, while eschewing excessive currency depreciation that might have elevated the domestic currency value of external debt. They avoided financial instability that had caused the materialization of contingent liabilities and derailed earlier efforts at debt reduction. They engaged in some clever financial management. But budget surpluses were key.

This strategy of running substantial primary budget surpluses for extended periods is not commonplace; other emerging markets, developing countries, and advanced economies would be envious. The question is how Jamaica did it.

III. How Jamaica Did It

Our explanation of how Jamaica did it consists of two parts. First, Parliament passed a set of rules known as the Fiscal Responsibility Framework. These rules highlighted the debt problem, legislated formulation of a medium-term plan, and made it easier to define and detect fiscal slippage.

All too often, however, rules are honored in the breach. This brings us to the second element: Jamaica leveraged its hard-won tradition of forging social partnerships to establish consultative bodies with the legitimacy, independence, and stature needed to build and sustain a social consensus for fiscal adjustment, while credibly monitoring and reporting on the government's adherence to its fiscal rules and the progress of the overall economic

28. Thus, the government could coordinate its negotiations with this limited number of financial institutions over which it had regulatory oversight. As an inducement, financial institutions that participated received preferential access to a Financial Sector Support Fund administered by the central bank. Participants in the 2010 debt exchange had the option of new series that were CPI indexed and noncallable, features not included in the old bonds. In the 2013 exchange, large institutional investors that initially held out were subjected to political pressure (they were criticized as "unpatriotic"), while small retail investors who might have held out from a second restructuring that further lengthened maturities were offered special one-year bonds.

reform program. In 2009, government, the opposition, business, trade unions, and civil society groups formed a consultative body called the National Partnership Council (NPC) to address the effects of the global financial crisis as well as long-standing economic and social issues. Deliberations of this council enabled stakeholders to exchange views, provide input, reach consensus about the societal importance of debt reduction, and assure all partners that the burden of adjustment would be broadly and fairly shared. In ongoing meetings, its members discussed the conformity of policies with their shared priorities and suggested changes to align policies and priorities more closely. The Fiscal Responsibility Framework we discuss in the next subsection can be seen as a legislative response to the broad societal consensus for fiscal restraint built by the NPC. It then became possible to move from vision to reality when EPOC was created in 2013. EPOC consists of representatives of the private and public sectors, unions, and civil society but with disproportionate representation of the financial sector. It is tasked specifically with monitoring the government's progress and benchmarking this against the performance targets of the Fiscal Responsibility Framework.

This monitoring, dialogue, and consensus building were pivotal for holding government accountable for its budgetary actions and for maintaining the consensus needed to get the process on track and keep it there.

III.A. Fiscal Rules

Prior to 2010, when the Fiscal Responsibility Framework was put in place, Jamaica's best-laid fiscal plans repeatedly went off course. Recorded deficits exceeded those in the budget passed by Parliament in every year between 2003 and 2009.[29] Growth forecasts were excessively rosy. Tax revenues regularly fell short of projections. Expenditure overshot what was budgeted; in particular, public sector wage settlements regularly exceeded what was assumed by the Ministry of Finance. Public entities did not regularly report to the Ministry of Finance. For its part, the ministry did not update cash flow forecasts and performance for these entities in-year, unlike for the central government. Lack of updating permitted chronic overspending and the accumulation of arrears by these public bodies. (We described in section II how the deficits of public entities such as CAP and Jamaica Urban Transit contributed to the growth of debt.) The central government conducted budgeting on a year-by-year basis; "the future implications of expenditure

29. Ministry of Finance and the Public Service, Government of Jamaica, "Ministry Papers," https://www.mof.gov.jm/ministry-papers/.

decisions [were] not elaborated on in the budget documents . . . consideration is not always given for the medium/long-term implications of decisions made in the short-term" (Leon and Smith 2012, 14). Though the Ministry of Finance was responsible for describing its debt management strategy in broad terms, it was not required to formulate and present a debt sustainability analysis.

The 2010 Fiscal Responsibility Framework, formally an amendment to existing financial administration and audit regulations, addressed most of these shortcomings.[30] It anchored budgeting by requiring the minister of finance to take appropriate measures to reduce, by the end of fiscal year 2016: (a) the fiscal balance to nil; (b) the ratio of debt to GDP to 100 percent; and (c) public sector wages as a share of GDP to 9 percent (Jamaica House of Parliament 2010). The framework was tightened in 2014 to require the minister, by the end of fiscal year 2018, to specify a multiyear fiscal trajectory bringing the debt-to-GDP ratio down to no more than 60 percent by fiscal year 2026 (Jamaica House of Parliament 2014).[31]

Importantly, these numerical targets for debts and deficits came with an escape clause to be invoked in exceptional circumstances. Rigid targets would have lacked credibility in an environment prone to hurricanes, floods, and other natural disasters; the government's assertion that under no circumstances would it respond to such events with a revised budget would not have been taken at face value. At the same time, an escape clause not limited to events beyond control of the government, lacking explicit thresholds for activation and with no provision for independent verification, would have been destabilizing; it would have given the government free rein to disregard its targets. As Valencia, Ulloa-Suárez, and Guerra (2024) describe, a well-designed escape clause must be accompanied by clear triggers and conditions, clear assignment of responsibility for activation and deactivation, and a clear communication strategy.

30. The IMF and World Bank made adoption of the Fiscal Responsibility Framework a condition of their 2010 lending programs but were unhappy with the incomplete rules adopted that year; no immediate changes were made, since the IMF agreement went offtrack almost immediately, and disbursements were halted. The IMF then required strengthening of the framework as a condition for its 2013 arrangement, and the amendments followed in 2014.

31. The 2026 deadline was pushed back to 2028 due to the pandemic, in an example of the operation of the escape clause mechanism described below. The rationale for the separate public sector wage target was that wage compensation was a principal driver of the fiscal balance. Subsequent experience showed that even when the wage target was missed it still could be possible to meet the debt and deficit targets; correspondingly, the separate wage target was eliminated in 2023.

Jamaica's escape clause satisfies these prerequisites. It can be activated only in response to a natural disaster, a public health or other emergency, or a severe economic downturn (of 2 percent of GDP in a quarter). It can be invoked only after verification by the auditor general, whose independence from other government agencies is guaranteed by the constitution, that the fiscal impact exceeds a minimum threshold of 1.5 percent of GDP. The auditor general must submit its assessment to Parliament, along with supportive documentation from the Ministry of Finance, and suspension of the fiscal rule must be approved by both Houses. Valencia, Ulloa-Suárez, and Guerra (2024) rate escape clause clarity on six dimensions and give Jamaica's escape clause a rating well above the Latin American and Caribbean average.

The government was thus able to invoke this escape clause in response to COVID-19, reducing the VAT rate and increasing spending on health and social protection. It deactivated the clause only after one year; the short duration of the suspension speaks to the credibility of the arrangement, given the severity of the COVID-19 crisis. In contrast, Hurricane Matthew caused widespread damage in 2016 but was deemed not to meet the fiscal threshold and hence did not precipitate suspension of the rule.

The framework corrects specific institutional weaknesses that had led to deficit overshooting in the past. The minister of finance is obliged to submit to Parliament a fiscal responsibility statement describing the overall strategy. The minister is also required to submit a fiscal management strategy that reports and explains deviations between fiscal targets and outcomes over the preceding year and projects the government's finances over the coming three fiscal years, together with a macroeconomic framework outlining the assumptions behind these revenue and spending estimates. The independent auditor general is then tasked with examining the ministry's reports and providing an assessment to Parliament within six weeks of the ministry's submission.[32]

This framework addressed the problem of excessive public sector wage growth by requiring the Ministry of Finance to describe a specific trajectory for bringing public sector wages down to 9 percent of GDP by the end of fiscal year 2016. Together with concurrent amendments to the Public Bodies Management and Accountability Act, it required public bodies to prepare and submit information on their financial performance in the current and preceding years, together with explanations for deviations from budget, to be used as input for the fiscal responsibility statement. The framework

32. An important observation that bears on the question, asked below, of whether lessons from Jamaica generalize is that the auditor general is a strong institution and office, given this constitutional guarantee.

enforces a time limit for these submissions and subjects them to independent assessment by the auditor general. This rigorous and transparent framework allowed the deficits of these public entities to be brought down from an average of 2 percent of GDP in the 2006–2011 period to about 0.5 percent of GDP in 2013–2022.[33]

In sum, the Fiscal Responsibility Framework provided concrete numerical targets for debts and deficits, along with associated deadlines and a well-defined escape clause; required the minister of finance to provide multiyear plans for how the targets will be achieved; mandated the transparency of assumptions and forecasts, together with independent assessments by the auditor general; and held the central government and public bodies accountable for revenue shortfalls and expenditure overruns.

III.B. Institutionalized Partnership and Monitoring

The failure of fiscal adjustment efforts in 2010–2012 indicates that the rules adopted in 2010 by themselves were not enough. There remained a significant danger of the process being derailed until EPOC was created in 2013 and until EPOC was supported by the signing of a meaningful national partnership agreement—the Partnership for Jamaica Agreement (NPC 2013) that same year. The Partnership for Jamaica Agreement affirmed that the government, political opposition, and social partners had reached a consensus on policy priorities; it committed the parties to monitoring the conformity of public policies with those priorities. EPOC meanwhile enabled financial stakeholders to track fiscal policies and hold the government accountable for its budgetary actions. We think of the NPC, which produced the Partnership for Jamaica Agreement, as a consultative and consensus-building institution designed to create confidence that the burden of fiscal adjustment was equitably shared—as an example of the approach to consensus building known in the literature as "democratic corporatism." We think of EPOC primarily as a monitoring and information dissemination technology focused on the budget.[34]

The NPC in fact drafted a series of partnership agreements, some of which were more substantive than others. The first such agreement in 2011

33. See IMF Article IV reports. In addition, the government agreed to privatize CAP as a condition of its programs with the IMF and in 2020 merged its holdings with those of General Alumina Jamaica, which is owned and operated by the Hong Kong-based Noble Group; 55 percent of the merged entity was owned by Noble Group, 45 percent by the government of Jamaica. Jamaica Urban Transit, in contrast, remains government owned and operated (see https://www.jamalco.com/about-us.html).

34. In practice there was overlap between the objectives and deliberations of the two entities, as we make clear below.

was a mere "code of conduct" including no specific commitments.[35] The political opposition consequently boycotted its signing, indicative of a lingering lack of trust. The 2013 Partnership for Jamaica Agreement, which coincided with the inauguration of sustained debt reduction, was very much more detailed. It was the outcome of an extended round of consultations on specific issues, including debt. The document started by acknowledging the sense of crisis created by "inter alia, an unsustainable debt-to-GDP ratio" (NPC 2013, 3). It spoke of the need for social dialogue and participatory decision making to engender "trust and confidence among the Partners" (ibid., 3). It provided commitments by both the government and the opposition to the principles of transparency, accountability, and consultation and to the pursuit of "long-term national goals rather than short-term political imperatives" (ibid., 5); by business to limit profit margins; from trade unions to address problems of low productivity; and by representatives of civil society to help "stabilise and transform the economy" (ibid., 6). It then presented four specific policies requiring monitoring and accountability, of which "Fiscal Consolidation (with Social Protection and Inclusion)" (ibid., 6) had priority of place.

The NPC agreed to monitor the compliance of parties to the terms of this agreement in a manner complementary to the other newly created oversight body, EPOC, which focused more closely on fiscal functions. EPOC was established specifically to reassure domestic holders of sovereign bonds that the government would keep to its fiscal commitments, including the rules set out under the fiscal Responsibility Framework. The government had completed a first domestic debt exchange in 2010, as noted above, as a precondition for the 2010 IMF Stand-by Arrangement. But that arrangement was offtrack already in early 2011, due to an overrun of the 9 percent public sector wage/GDP target. The prime minister resigned in October, and his party was immediately voted out of office, raising questions about its successor's intentions. The new government then tabled a second domestic debt exchange, also described above, with an eye toward securing a new IMF agreement.[36] This time, however, debt holders refused to participate absent assurances that any additional maturity extensions and coupon reductions would be the last. Hence the creation of EPOC to monitor implementation

35. It had simply listed a set of "key guiding principles" such as sensitivity, courage, patience, and understanding.

36. This involved tapping the IMF's Extended Fund Facility (EFF), which provides assistance to countries with medium-term as opposed to short-term balance of payments problems because of structural issues or slow growth. Jamaica's 2013 EFF arrangement was for four years.

of the government's economic reform measures and specifically its compliance with IMF targets and conditions.

EPOC has eleven members representing the public sector, trade unions, business, and finance, with relatively heavy representation of this last category. This difference in composition compared to the NPC—specifically, greater representation of financial interests—reflects EPOC's focus on fiscal questions.[37] EPOC issues reports, typically quarterly, on fiscal policy conduct and outcomes, comparing realized tax revenues and expenditures with those budgeted and analyzing their determinants. It has continued to do so since the country's ongoing arrangement with the IMF concluded in 2019. This is a key observation: monitoring was shared with the IMF virtually from the start, and it has continued long since the IMF exited the scene.

EPOC's assessments are posted on its website, together with communiqués and video recordings by its chair. In addition, EPOC started a program called "On the Corner" that involved going from town to town with reports in hand, explaining what the debt reduction program was designed to achieve. These consensus-building efforts were followed by a visible improvement in public opinion: survey data from the Latin American Public Opinion Project show little change between 2006 and 2014 in the share of the public thinking that the economic situation was improving and then a steady increase after 2014.[38]

Recently, the government and Parliament agreed to provide a proper legal basis and full independence for its proceedings by creating a fiscal commission to "provide an informed second opinion on fiscal developments and . . . play a constructive role in informing the public and, in so doing, incentivizing adherence to Jamaica's fiscal rules" (Clarke 2023, 17). EPOC will stop meeting once the fiscal commission is fully staffed and operational in fiscal year 2024.

III.C. Ownership

Jamaica was under IMF programs in 2010–2011 and earlier, but those programs went offtrack. They did not result in sustained debt reduction.

37. At the same time, EPOC has sufficiently broad nonfinancial sector representation to effectively supplement the dialogue and consensus-building efforts of the NPC. Members engage in dialogue and consensus building that allows the principal stakeholders to monitor and express their views regarding the conformity of fiscal policies with shared public priorities of fiscal accountability and equitable burden sharing.

38. The precise question asked is, "Do you think the country's current economic situation is better than, the same as or worse than it was 12 months ago?" See https://www.vanderbilt.edu/lapop/.

This earlier experience and the experiences of myriad other countries are reminders that IMF involvement is no guarantee of success.

The difference in Jamaica starting in 2013 involves that oft-mentioned but rarely explained, or even defined, concept of ownership. By ownership we mean that country authorities and, importantly, stakeholders to whom those authorities are accountable develop and maintain a broad and credible commitment to the agreed program of policies.[39] In Jamaica, the commitment was broad because it was based on an encompassing partnership agreement that the burden of adjustment would be widely and fairly shared. It was credible because policies and outcomes could be benchmarked against concrete rules and thresholds and because there existed institutionalized monitoring mechanisms to verify the compliance of stakeholders with their commitments.

Well-defined rules and robust partnerships made for ownership of the country's fiscal adjustment and IMF programs. Jamaican officials successfully completed the first ten quarterly reviews under the 2013–2017 Extended Fund Facility (EFF) arrangement. Even when there was a change of government from the PNP to the JLP in March 2016, debt reduction continued. The new JLP administration successfully completed the eleventh, twelfth, and thirteenth quarterly reviews with the IMF and then surprised all concerned by announcing the early ending of the EFF and immediately entering a precautionary Stand-by Arrangement.[40] When the IMF and Jamaican authorities held the High-Level Caribbean Forum in Kingston in November 2017, leaders of both political parties endorsed institutionalizing EPOC. The following April the cabinet embraced the concept of an independent fiscal institution. One month later, the minister of finance delivered a speech, "Enhancing Jamaica's Fiscal Responsibility Framework" (Clarke 2018), initiating another consultative process designed to transfer responsibility for budgetary monitoring from the ad hoc body EPOC to a permanent, independent fiscal commission.

III.D. Origins

The question is how Jamaica was able to reduce political polarization and achieve a broad social consensus in favor of debt reduction. And how

39. Boughton (2003) is one of the rare sources providing an actual definition along these lines.

40. Precautionary arrangements are for cases when countries do not intend to draw on the IMF facility but retain the option of doing so.

and why did it create the institutionalized partnerships that were central to this process?

Here again, our answer has two parts. The first element is Jamaica's historical journey: its troubled history as an independent nation and the lessons drawn from that early experience by political leaders and the public. Over time, that experience and those lessons translated into a visible decline in political polarization and political violence. The second element is the construction of institutions for monitoring, consensus building, and cohesion, first in the electoral realm, where the need was most pressing, but then in the areas of economics, finance, and finally fiscal policy, where policymakers could build on earlier precedents and achievements.

Jamaica was not always a cohesive society. Shortly after independence, Yale sociologist Wendell Bell observed of the country: "The white upper classes, the brown middle classes, and the black lower classes are grossly unequal, with economic and social advantages accruing most to the upper and least to the lower classes" (1964, 38). This sense of inequality fueled the PNP's 1972 electoral victory and its subsequent populist rhetoric and policies. One year before the 1976 election in which PNP Prime Minister Michael Manley won a second term, he declared: "Jamaica has no room for millionaires." For those who wanted to be millionaires, he suggested, "we have five flights a day to Miami" (Levi 1990, 157). In response to the PNP's rhetoric and policies, the opposition JLP moved farther to the right. Accusations of electoral intimidation, malfeasance, and fraud were widespread (Electoral Commission of Jamaica 2014). Political violence soared: election season saw rampant shootings in Kingston's "garrisons" of those thought to favor the political opposition. Estimates are of more than a hundred politically motivated murders in 1976 and more than 800 in 1980.

This ghastly situation created a groundswell for reducing political polarization and violence. Prominent public figures took the lead: during the One Love Peace Concert, before an audience of more than 30,000, the country's leading artist, Bob Marley, joined hands onstage with the prime minister and the leader of the opposition. Following their defeat in the 1980 election, Manley and the PNP moderated their rhetoric and policies. On retaking office in 1989, the PNP embraced the JLP's previously implemented economic reforms, as noted in section II. Manley himself articulated the party's new more collaborative, centrist approach to economic policy:

> [The PNP], like many other people in the broad social democratic movement, placed greater reliance at that time on the capacity of the state to be a direct factor in production. Experience showed us that the state is not necessarily a reliable

> intervener in production. You stretch your managerial capacity and create tensions with the private sector that can be counterproductive. So the second great lesson that we learned is not really to depend on the government as a factor in production but rather to use government as an enabling factor for the private sector. (Massaquoi 1990, 112)

Given Manley's personal popularity, his party's endorsement of this newfound economic policy consensus played an important role in creating a less polarized political environment, more conducive to constructive engagement. This is evident in figure 2, where we see discrete steps down in political polarization after 1980 and again after 1989.

The second element was institution building. To address problems of electoral intimidation and fraud, leaders of both parties agreed that oversight of elections should be removed from the direct ministerial control of the government. Following the recommendations of a bipartisan commission, Parliament voted in 1979 to create an independent, nonpartisan institution with representation of both political parties and civil society to monitor and validate electoral results. This electoral advisory committee (EAC) consisted of eight members: the director of elections, three members of civil society, and four nominated members (two each from the JLP and PNP).[41] The EAC was "not answerable to any minister of government" (Electoral Commission of Jamaica 2014, 21). It was a venue for dialogue between the parties and other stakeholders and had independent authority to invalidate any election result tainted by violence or malfeasance.[42]

The EAC was a first step on Jamaica's journey toward social partnership. It was the precedent for creating, over the next three decades, other independent, multistakeholder consultative bodies that addressed not electoral intimidation and fraud but other issues, notably including economic growth and debt reduction. These subsequent bodies are listed in table 3.

The National Planning Council in 1989 was the next significant institutional innovation: its twenty-two members brought together government officials with business, trade union, and other private sector members (representing academic, professional, and consumer interests) in monthly

41. Civil society representatives were selected by the governor-general. The governor-general, a legacy of the British Commonwealth, represents the monarch on ceremonial occasions and has various powers, sporadically exercised, under the constitution. The EAC was unlike other standing commissions, such as the public service commission and police commission, in that the director-general took advice directly from both the prime minister and the leader of the opposition and not just from the prime minister.

42. For a detailed discussion of the workings of the EAC and the process by which it was created, see Electoral Commission of Jamaica (2014, 20–40).

Table 3. History of Partnership Agreements

1979	**Electoral Advisory Committee (EAC)** Nonpartisan body established to monitor elections, consisting of representatives of the Electoral Office of Jamaica, each of the two major political parties and civil society.
1989	**National Planning Council** Multisector body established to advise government on issues related to national planning.
1997	**ACORN** Social dialogue group led by members of civil society.
2003	**Partnership for Progress** Initiated by the Private Sector Organization of Jamaica
2008	**National Social Partnership Consultative Committee** Creation of National Social Partnership Consultative Committee including representatives of government, parliamentary opposition, private sector, trade unions and civil society groups
2009	**National Partnership Council (NPC)** Creation of National Partnership Council consisting of representatives of the government, parliamentary opposition, and other stakeholder groups. NPC engages in respectful, constructive, and sustained dialogue and collaborates on critical national economic and social issues. Established under the operating rubric of **Partnership for Transformation**, the NPC, has operated across successive administrations. It led further to the creation of the following partnerships.
2011	**Partnership Code of Conduct**
2013	**Partnership for Jamaica**
2016	**Partnership for a Prosperous Jamaica**
2022	**Partnership for Jamaica's Strong and Sustainable Recovery**

Source: Jamaica Office of the Prime Minister (2024).

meetings intended to "contribute to the formulation of economic policies and programmes, to assess economic performance and to identify measures designed to achieve broad-based development and growth in productivity, employment and the national product" (Government of Jamaica 1989, 1).

The National Planning Council was followed in 1997 by ACORN, a venue for social dialogue "in which leaders of the Country's labour unions, private sector and academia have met together continuously over the last twenty-one years, focusing on building social capital and trust among actors in key sectors of the Jamaican society in pursuit of national growth and competitiveness" (Wint 2018). The launch of ACORN again coincided with a visible drop in political violence and a drop in political polarization centered on 1999. ACORN is widely viewed as a progenitor of the partnership committees and councils culminating in creation of the National Partnership Council in 2009, as described in section III.B. Creation of the NPC was followed by one of Jamaica's largest post-independence declines in political polarization and political violence (see figure 2). This became the vehicle

Table 4. Events Surrounding Creation and Operation of the Economic Programme Oversight Committee

2010	Jamaica Debt Exchange (January 14–February 3)
	Stand-by Agreement with IMF begins (February 4)
	Fiscal Responsibility Framework introduced (February 22)
2011	Stand-by Agreement with IMF goes offtrack and is ended
	Prime Minister Bruce Golding of JLP steps down (October)
	Golding is succeeded by Andrew Holness of JLP
2012	PNP wins general election in January
	Debt-to-GDP ratio peaks at 144 percent
2013	Economic Programme Oversight Committee (EPOC) created
	National Debt Exchange (February 12)
	IMF Extended Fund Facility agreement begins (May 1)
2014	Fiscal Responsibility Framework augmented (April 1)
2016	JLP wins election (February), continues with EPOC etc.
	IMF Extended Fund Facility successfully completed (November 10)
	Precautionary Stand-by Agreement with IMF begins (November 11)
2017	IMF managing director hosts high-level IMF Caribbean forum in Kingston
2018	Independent Fiscal Commission Consultative Body announced
2019	Precautionary Stand-by Agreement with IMF completed (no money drawn); Lagarde praises Jamaica's successful conclusion of program across two administrations and reducing debt-to-GDP ratio by 50 percentage points: https://jis.gov.jm/former-imf-boss-praises-jamaica/
2020	COVID-19: Timeline for reducing debt-to-GDP ratio to 60 percent extended from 2026 to 2028
2023	Independent Fiscal Commission established to succeed EPOC (March 7)
	Jamaica's debt rating upgraded by S&P to BB- (September)
	Jamaica issues first international bond in local currency (November)

Source: Authors' compilation.

for the landmark Partnership for Jamaica Agreement in 2013 and its sequel, the Partnership for a Prosperous Jamaica, when the government changed hands in 2016.

Building on this foundation, Jamaican leaders used this same approach of building encompassing institutions with independent powers starting in 2010 when the issue became fiscal adjustment and debt sustainability. Table 4 shows the sequence of institutional steps, starting with introduction of the Fiscal Responsibility Framework in 2010 and continuing with creation of EPOC in 2013. A sense of crisis informed the decision to create EPOC in 2013, just as a sense of crisis informed the decision to create the electoral advisory commission in 1979. In 1979, political violence had threatened Jamaica's survival as a political democracy. In 2013, normalizing the finances was "essentially a matter of survival of the Jamaican nation as a viable nation state," as Peter Phillips, the minister of finance, put it (Wigglesworth 2020, par. 15) .

The generous representation of financial interests in EPOC was important for disciplining and creating confidence in fiscal and financial policies, as argued above. Jamaica's specific approach to debt restructuring had a lot to do with the development of this particular institutional configuration. Governments are typically more inclined to restructure external than domestic debts.[43] Historically, domestic debt has been held by residents, who are also citizens and voters. Incumbent governments prefer to avoid subjecting them to financial pain, knowing that those voters can retaliate by inflicting electoral pain. In addition, where domestic debt is held by local financial institutions, there can be fear that restructuring it could destabilize the financial system. In Jamaica, unusually, a combination of practicalities and legal restrictions made it more expedient to restructure domestic debt. This meant that local financial institutions, which held this debt, became highly attentive to fiscal developments. Because the painful 2010 restructuring was unsuccessful, in that it did not help to put the country on the path to sustained debt reduction, local financial institutions refused to participate in the deeper 2013 restructuring without further reassurance. They viewed the creation of EPOC, their ample representation, and the efficient operation of its monitoring and consultation functions as a nonnegotiable precondition for their participation in this second round.

While EPOC had relatively heavy representation of financial interests and focused on monitoring fiscal policies and outcomes, including those associated with the IMF's EFF, it did not do so to the exclusion of other issues, such as collective bargaining. The unions had agreed to a two-year public sector wage freeze as part of the failed 2010 Stand-by Agreement. Just as investors were now willing to accept further maturity extensions and coupon reductions only as part of a successful program, unions were prepared to extend the wage freeze only if they were confident that the broader stabilization program had a reasonable chance of success. Their representation on EPOC was important for creating this confidence. In the words of Phillips, the monitoring and deliberations of EPOC "did much to build public support across class lines, and I dare say, across political lines for the necessity of the fiscal consolidation and pro-growth efforts at public sector reform and legislative reforms" (Phillips 2017, 2). As further explained by Clarke (2018, 11),

> the consensus building mechanisms of non-governmental bodies had, and continue to have, an indispensable role to play. It was against this background that the previous administration approached members of the financial community with a second debt exchange and the unions with a multi-year wage freeze as prior actions for entry into the Extended Fund Facility. Both groups correctly insisted

43. Though not always: see Reinhart and Rogoff (2011).

> on the right to monitor Jamaica's economic program in return for such sacrifices, in order to ensure that Jamaica maintained its commitments to the reforms embedded in the agreement with the IMF. And so EPOC was born.

This passage makes clear that while the focus of EPOC monitoring was fiscal policy and Jamaica's commitments to the IMF, the committee entailed a broader social partnership in the manner of the other multipartner consultative bodies that preceded it. And while EPOC's establishment coincided with the country's entry into the EFF, the impetus for its creation came from Jamaica. As IMF managing director Christine Lagarde noted in 2014, monitoring of an IMF reform program by an "outside group . . . is something that I have never heard of [and] that none of my staff had heard of" (Wigglesworth 2020, par. 19).

IV. Do the Lessons Generalize?

Does the Jamaican case generalize? Can other economies similarly shed heavy debt burdens by strengthening fiscal rules and backing them with consensus-building institutions? The IMF evidently thinks so: its current managing director has pointed to Jamaica as a model to be followed (Georgieva 2019).[44] At the same time, the fact that Jamaica's case is widely seen as exceptional raises questions about whether the lessons generalize. Insofar as the relevant agreements and institutions were products of Jamaica's distinctive history, shouldn't they be treated as sui generis?

We address these questions through a discussion of two countries, Ireland and Barbados, that bear a strong resemblance to Jamaica in their success at putting in place consensus-building arrangements accompanied by fiscal rules.

IV.A. Ireland

Ireland already had strong fiscal institutions, but these were further strengthened in 1987. The budgetary process was centralized and disciplined. The government first debated the minister of finance's budget proposal in a series of meetings. When the taoiseach (prime minister) exercised strong discipline over his spending ministers, free-riding was contained. To

44. Similarly, her predecessor, Lagarde, in the interview just quoted, went on to suggest that "this is surely a role model that should be emulated elsewhere. With everybody inside the tent, all voices are heard, and everyone has a stake in success" (Wigglesworth 2020, par. 19).

this end, in May 1987 the Fianna Fáil government led by Taoiseach Charles Haughey set up an Expenditure Review Group, a kind of "star chamber" made up of two finance department officials and an independent economist. Finance department staff first drew up a list of schemes that were candidates for termination or funding cuts. The department secretary then was called before the review group, where he was expected to agree to the finance department's list or offer his own proposals for abolishing schemes and saving money. Ministers failing to find the necessary cuts were subject to ruthless discipline by the taoiseach, who threatened them with political consequences.[45]

Under the constitution, only the government could propose spending and tax plans, and there could be no amendments in parliamentary debates; this limited the logrolling characteristic of other legislatures. The government's tax proposals might be voted down by coalition partners or when it was a minority relying on independents. But in 1987 the leader of the opposition agreed not to oppose budgets that promised to address the country's now pressing debt and deficit problems, so adoption of the government's austerity budget was assured.

Despite these institutional arrangements, previous governments' budget-balancing efforts had proved unavailing. Uncoordinated strikes by the country's myriad craft unions first secured substantial pay increases, to which public sector unions then responded with aggressive wage demands of their own (Sexton and O'Connell 1997). Budgets made provision for limited public sector pay increases but were then blown off course by demands for substantial increases from public sector unions, requiring additional expenditure during the year.[46] The 1984 Building on Reality plan had the modest goal of reducing the primary deficit sufficiently to just stabilize the debt at its then high level but was upended in 1986 by a teachers' strike to which the government capitulated. Governments sometimes responded with additional steps to balance the budget, but weak growth undermined the fiscal accounts.

By 1987 a deeply unfavorable interest rate/growth rate differential had contributed to an alarming rise in the public debt ratio to 110 percent of

45. As Haughey put it in a letter to ministers, "any Minister who came to the Cabinet with proposals for expenditure should bring his seal of office with him [i.e., be prepared to resign] and any Department Secretary who proposed expenditure would be sacked" (quoted in Cromien 2011, par. 3).

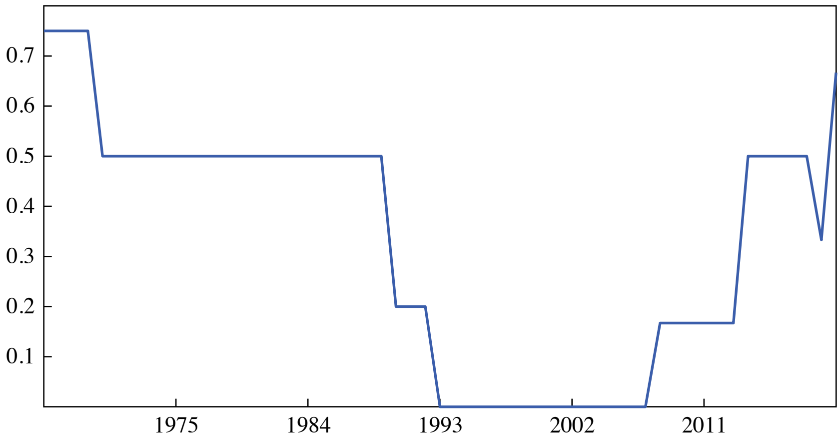
46. As also happened in Jamaica after 2010.

GDP.[47] This led the new Fianna Fáil government to take a different tack, seeking to forge a consensus with trade unions and employers' associations. As the political party historically associated with centralized bargaining, it started by negotiating a common agenda with the unions, whose leaders agreed to pay restraint in return for cuts in taxes on labor income, increased say in decision making, and initiatives to foster job creation. Coordination was facilitated by the fact that all but a few unions were affiliated with the Irish Congress of Trade Unions, their umbrella organization (Hogan 2010). Employers' organizations reluctantly came on board, attracted by the prospect of pay moderation but worried that agreement with public sector unions to reduce the length of the workweek might spread to the private sector. Consultations on the details were conducted with farmers, community representatives, and NGOs. The resulting Programme for National Recovery, covering 1988–1990, entailed agreement to limit annual pay increases to 2.5 percent, reduce taxes on employers and employees, and curtail public sector employment through attrition while preserving the overall value of social welfare benefits and essential public services. It encouraged the belief that the sacrifices required for debt reduction would be widely and equitably shared.

These consensus-building arrangements were buttressed by encompassing discussions, by independent analysis to confirm the accuracy of assumptions, and by mechanisms providing ex post verification that everyone was keeping their word. The National Economic and Social Council (NESC), an independent body whose members included business representatives, union leaders, and academics, was enlisted to analyze the realism of the proposed agreement. A Central Review Committee (CRC) with representation of government and the social partners was established to monitor implementation, enabling the parties to verify that everyone was adhering to the agreement. As MacSharry and White (2000) observe, the regular meetings of the CRC enabled the social partners to have continuing input into government decision making. They allowed union representatives to connect concessions on pay restraint to the provision of public services. And they provided "valuable political and economic education" (MacSharry

47. See Kenny (2016). Figures here for Ireland use gross domestic product to scale debt (for consistency with other countries). The alternative would be to use gross national income, given the importance of profits booked in Ireland by multinational corporations. Another alternative is modified gross national income, which subtracts depreciation of intellectual property and leased aircraft as well as the net factor income of redomiciled publicly listed companies. This however would complicate international comparisons and does not change the narrative.

Figure 10. Ireland: Measure of Political Polarization



Source: V-Dem Database (version 13).
Note: Average of survey responses between zero and 4; lower figure indicates less polarization.

and White 2000, 130). These arrangements were not unlike consultation and consensus-building institutions adopted in Jamaica and were accompanied by a decline in measured political polarization (figure 10).

As in Jamaica, this cooperative burden-sharing agreement did not come out of nowhere. It did not reflect a sudden realization that the country faced a fiscal crisis; the backdrop of fiscal problems was well known. Rather, it built on earlier proposals. In 1982, a national economic plan, The Way Forward, had proposed a collaborative approach to eliminate the budget deficit within four years, but governments were unable to implement it, as described above. In 1986 the NESC then issued a report recommending shared fiscal adjustment, but the unions again refused to participate, and the coalition was again unable to implement it.

What then was different in 1987? First, the Thatcher reforms in the United Kingdom were a wake-up call for the unions, which were forced to recognize the need to balance pay and productivity. With Margaret Thatcher's defeat of the miners' union, confrontation with employers and the government no longer appeared to be a successful way forward. Second, earlier agreements had focused on the need for wage restraint to the exclusion of other factors; incorporating tax and workplace considerations into the 1987 agreement brought labor on board. Third, at this point, finally, "all the parties, through their earlier involvement with the NESC, were familiar with the scale of the problems facing the economy" (MacSharry and White

2000, 129). This answer to the question of why 1987 was different is a reminder that, as in Jamaica, history and experience matter.

Almost immediately, deficits narrowed, and the debt ratio began falling. Real net borrowing by the public authorities fell by half between 1987 and 1988; it again fell by half between 1988 and 1989 (Honohan 1992). The success of the Programme for National Recovery led to a series of subsequent agreements, each covering three years. The government was able to sustain large primary budget surpluses for an extended period. Despite the fact that it took time for growth to pick up and for the interest rate/growth rate differential to become favorable, the public debt ratio fell from its peak of 110 percent in 1987 to barely 60 percent a decade later, and then to a scant 20 percent a decade after that.[48]

Success has many fathers. Other observers will point to rapid catch-up growth, aid from the EU's structural funds, and Ireland's success at attracting foreign investment. While not disagreeing, we would emphasize solid fiscal institutions and consensus-building arrangements.

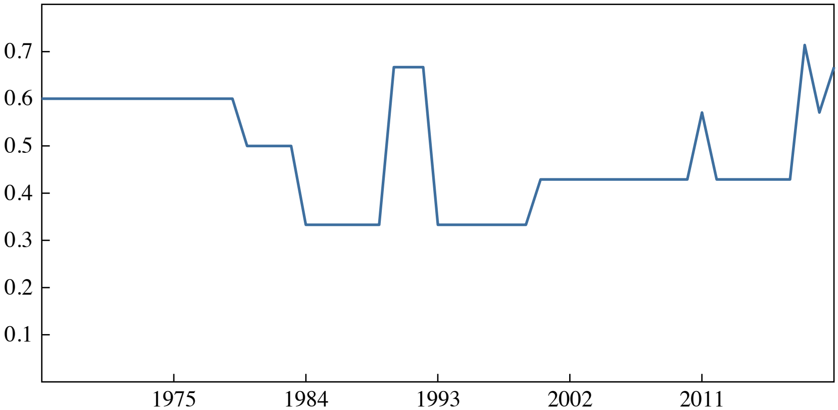
IV.B. Barbados

A last case painting a more mixed picture is Barbados. In July 1991, Prime Minister Erskine Sandiford faced dwindling reserves and a rapidly rising debt-to-GDP ratio. Rather than accepting the IMF's recommendation to devalue the currency, he proposed an 8 percent cut in public sector wages. The Congress of Trade Union and Staff Associations of Barbados responded with a plan exploring other options. However, talks broke down when the prime minister disregarded the congress's proposal and presented public sector workers with a plebiscite that gave them a choice between a wage cut and the IMF-recommended devaluation. Reflecting the national attachment to the currency peg (in operation since 1975) as a nominal anchor—especially given the evidence of the inflation spike following Jamaica's 1991 exchange rate liberalization—workers opted, somewhat remarkably, for the wage cut.

The government implemented these reductions on October 1, 1991 (IMF 2021). On October 24 and again on November 4–5, some 30,000 congress protesters, the proportional equivalent of 36 million Americans, marched through the streets of Bridgetown calling for the prime minister's resignation. The congress challenged the wage cut in court, arguing that the

48. Kenny (2016) shows that $r - g$ contributed negatively to debt reduction until the mid-1990s, after which Ireland's growth accelerated to the high single digits, inaugurating the "miracle" period. Ireland in its earlier years thus resembled Jamaica in that the success of debt reduction did not hinge on rapid growth and a favorable interest rate/growth rate differential.

Figure 11. Barbados: Measure of Political Polarization



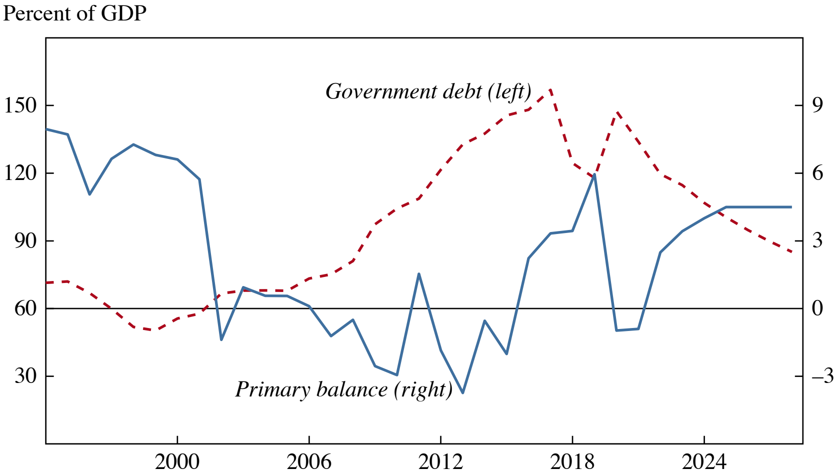
Source: V-Dem Database (version 13).
Note: The largest increase in political polarization occurs around the 1991 public sector wage cut. Average of survey responses between zero and 4; lower figure indicates less polarization.

government had negotiated in bad faith and violated the constitution. The case was escalated to the Privy Council of Barbados.

Simultaneously, Barbados experienced its first post-independence increase in political polarization (figure 11). The deterioration in political conditions was not lost on IMF staff. The minutes of the IMF's July 1992 executive board meeting make clear staff's approval of the government's willingness to cut wages but express concerns about its ability to sustain the wage agreement given societal tensions. The minutes also note staff's strongly held view of the need for the private sector to accept wage restraint for the stabilization plan to succeed.

From the time of the wage cut through the signing of the Stand-by Arrangement, only the government and public sector unions engaged in meaningful discussions; the private sector was notably absent. Meanwhile, the debt-to-GDP ratio continued to rise. Finally, in August 1993, a three-party agreement known as "Protocol for the Implementation of a Prices and Incomes Policy" (Government of Barbados 1995) was brokered with help from the Anglican Church. Employers agreed to limit price increases, accept lower profits, and share their financial accounts with the unions. In return, private sector unions assented to a two-year wage freeze (retroactive to April 1993) and agreed to keep demands for future pay raises in line with increases in productivity. The government committed not to devalue, and all parties agreed to create a national productivity board to provide data on which to

Figure 12. Barbados: Government Debt and Fiscal Balance, 1994–2028



Source: IMF staff projections and the World Economic Outlook Database (October 2023).
Note: In fiscal years, which run from April 1 to March 31. Figures for 2023–2028 are projections from the 2023 Article IV report (December 2023). Government debt on a net basis.

base future negotiations (Henry and Miller 2009). There followed a marked decline in political polarization between 1993 and 1994 (figure 11). Barbados ran a primary budget surplus of 8 percent of GDP in 1994 and a primary surplus in excess of 5 percent of GDP in each of the next five years. As a result, the net debt-to-GDP ratio came down from 71 percent in 1994 to 50 percent by 1999 (figure 12).

Beyond that, however, the process did not last. At the turn of the century the debt ratio began rising again, rapidly with the onset of the global financial crisis when growth stagnated and the interest rate/growth rate differential turned especially unfavorable. The debt-to-GDP ratio rose from 61 percent of GDP in 2000 to as high as 157 percent in 2017.

Part of the problem was that the consensus-building measures of the mid-1990s were not buttressed by significant reforms of fiscal institutions (increased fiscal transparency, independent institutions for monitoring the realism of budgeting assumptions, explicit fiscal rules). The government continued to make unbudgeted transfers to loss-making state-owned enterprises (SOEs) providing water, transportation, electricity, waste disposal, and health services. These transfers averaged 7.5 percent of GDP per annum in the decade following the 2008 global financial crisis (IMF 2021). They culminated in an IMF program and debt restructuring in 2018.

At this point, Barbados finally put in place an explicit debt-to-GDP target and measures enhancing the transparency and facilitating outside monitoring of the fiscal accounts, including the operations of SOEs. The Financial Management and Audit Act was amended to give expenditure ceilings to line ministries. The amendment enhanced monitoring and supervision of SOEs by adding internal audit and reporting requirements. The government committed to a target for its debt of 60 percent of GDP and a path for the primary balance consistent with getting there by 2034 (delayed for two years by COVID-19-related financial disruptions). These fiscal rules complemented and reinforced the existing social partnership agreement.

Barbados appears to be emulating the Jamaican model by forming a committee, with the participation of private sector business associations and labor unions, to monitor implementation of its 2018 Barbados Economic Reform and Transformation Plan and by establishing an independent fiscal council to monitor and advise on fiscal policy implementation.[49]

A difference between Barbados and Jamaica is that Barbados undertook a comprehensive debt restructuring in 2018–2019 that entailed significant present-value reductions and encompassed external as well as internal debt. A new government initiated the restructuring in its first week in office, immediately ahead of a large external payment and leveraging its ability to blame its predecessor for the need for exceptional measures. The authorities were anxious to reach a loan agreement with the IMF, and the IMF, not allowed to lend to a government with an unsustainable debt, required the restructuring as a condition.

Barbados had the advantage that its global bonds contained collective action clauses (unlike Jamaica's some years earlier), the global campaign to encourage their inclusion having gained traction over time. Compared to Jamaica, its external debt thus could be restructured more quickly, given less scope for free-riding and litigation. Domestic debt was far and away the most important component of the government's obligations, however, and domestic debt securities did not include collective action clauses. But because the bonds were governed by domestic law, these provisions could be retrofitted by an act of Parliament.

The resulting net present value loss for the creditors was as much as 44 percent on external debt and 43 percent on domestic debt (Anthony, Impavido, and van Selm 2020). Recall how in Jamaica there had been a

49. This makes Barbados and Jamaica the only two Caribbean countries with independent fiscal councils. Like its Jamaican counterpart, the BERT Monitoring Committee continues to issue regular public reports.

reluctance to impose restructuring-related losses on the banks for fear of causing financial instability. In Barbados, more than 40 percent of domestic debt was again held by the banks.[50] But all five Barbadian banks were foreign owned.[51] All five banks were strongly capitalized, had healthy parents, and could absorb losses. Again, the message—which emanates also from Jamaica's contrasting experiences in the 1990s and after 2009—is that a sound financial system is important for successful debt reduction.

Ireland and Barbados, like Jamaica, are small economies, consistent with the idea that consensus building is easier where there is a limited number of agents. They are sectorally specialized, open economies highly exposed to exogenous shocks, consistent with the argument that achieving this kind of adjustment-facilitating consensus is especially urgent in a shock-prone environment. Ireland is more ethnically and socioeconomically homogeneous than Jamaica, consistent with the literature suggesting that a neo-corporatist approach to consensus building is easier when cooperation is not complicated by ethnic divisions (Katzenstein 1985; Gavrilets, Auerbach, and van Vugt 2016). Jamaica, as a society with more income and wealth inequality, and more racially and ethnically diverse historical roots, had to work for decades to construct an economic and social consensus in favor of debt reduction.

It is not clear that large countries can easily follow the small country strategy of partnership and engagement to reduce political polarization and build consensus. But neither is it clear that they will be able to reduce their debts without it.

V. Conclusion

There is no questioning the desirability of bringing down high public debt-to-GDP ratios. Heavy debts prevent governments from increasing expenditure and cutting taxes in recessions and emergencies (Romer and Romer 2019). Debt-service burdens limit the scope for productive public spending (Jalles and Medas 2022). Especially when they are short in term or denominated in foreign currency, large debts are a source of financial fragility.

Given the magnitude of inherited debts, meaningful debt reduction can be achieved only by running substantial budget surpluses for extended periods. At present, $r - g$ differentials have turned less favorable, given

50. Excluded from this calculation is debt held by the public sector itself (principally the National Insurance Scheme and the central bank).

51. Three big ones were owned by AAA-rated Canadian financial institutions, the two smaller ones by banks headquartered in oil-rich Trinidad and Tobago.

upward pressure on real interest rates—reflecting investors' higher required return to hold additional government securities—and the troubled outlook for global growth.[52] Debt restructuring, never a panacea, has grown more fraught and complex with the substitution of market finance for official finance and the emergence of nontraditional creditors.[53]

Yet only a small handful of countries have succeeded in running the requisite large primary surpluses for extended periods. Jamaica, having cut its debt-to-GDP ratio from 144 percent of GDP in 2012 to 72 percent in 2023, is a prime case in point. This makes it important to understand the Jamaica exception.

Meaningful debt reduction was accomplished only when Jamaica put in place two prerequisites: (1) a set of rules anchoring fiscal policy, which allowed investors and others to monitor government policies and assess their conformance with projections; and (2) a partnership agreement creating confidence that the burden of adjustment would be widely and fairly shared. Both elements were needed. Jamaica had experimented previously with partnership agreements, but these alone did not prevent debt from exploding. Jamaica adopted fiscal rules three years before the start of its debt reduction process, but these rules did not prevent debt from continuing to rise.[54] Together, however, the two elements launched Jamaica on a debt reduction course whose success few countries have been able to match.

The lessons from Jamaica's experience with fiscal rules, we suggest, generalize to other countries. Jamaican officials adopted simple numerical targets for the debt-to-GDP ratio, with dates attached. The finance minister was tasked with formulating a multiyear budget detailing how the debt ratio would get from here to there. Parliament strengthened the governance of state-owned enterprises and public bodies to avoid cost overruns. The fiscal rules included a state-of-the-art escape clause that balanced flexibility with credibility. And an auditor general whose independence was constitutionally guaranteed provided outside verification of the government's claims. These lessons can be adopted elsewhere.

The other element of the recipe, encompassing partnership agreements, is more difficult to replicate. EPOC and the Partnership for Jamaica Agreement

52. Kose and Ohnsorge (2024) forecast a further slowdown in trend growth in emerging markets and developing economies over the next five years. There is of course no agreement on how much growth will slow and real interest rates will rise. These issues are discussed in Arslanalp and Eichengreen (2023).

53. The failure of more than a small handful of governments to reach restructuring agreements under the G20's Common Framework for Debt Treatments illustrates the point.

54. And even before that the country had been subject to IMF-negotiated fiscal targets.

that launched and kept Jamaica on the path of debt reduction were products of a distinctive national learning process that began a third of a century earlier with the Electoral Advisory Commission, whose structures and processes were transferred to other domains, including, eventually, the budgetary. The decision to start down this road reflected the country's history of race and class division and political violence, away from which leaders and society turned at the end of the 1970s when the country reached the political brink. Other heavily indebted countries have different political histories. They do not all face the same dire political circumstances. Nor is there any guarantee that their leaders and publics will respond in the same way.

Our analysis and the literature on democratic corporatism suggest that encompassing partnership agreements such as Jamaica's are most prevalent in smaller countries, where it is easiest to get the stakeholders around a table. They are most prevalent in small, open, sectorally specialized economies where vulnerability to external shocks is high and cooperation on adjustment is urgent. They are most prevalent where interest group negotiations are relatively structured and centralized. They are easiest to reach in relatively homogeneous societies not riven by class or racial divisions.

These observations leave us relatively pessimistic about the efficacy of fiscal rules in countries such as Germany, whose provisions lack flexibility. They leave us skeptical about the enforceability of the EU's revised fiscal rules, which lack simplicity to accompany flexibility, and where their imposition from outside raises questions about ownership and enforceability (Eyraud and others 2018). And they leave us concerned about the scope for sustained debt reduction in large countries like the United States with high levels of political polarization.

At the same time, Jamaica's experience suggests that societal divisions are endogenous. They can be modified over time, not least through the creation and operation of encompassing institutional partnerships. And these partnerships can be deployed to create fiscal rules with the simplicity, flexibility, and acceptance needed to be enforceable and effective.

What it takes to modify societal divisions and to usefully deploy, during crises, the increase in social capital that flows from a more cohesive society brings us to the final lesson from Jamaica's experience: the importance of leadership. Our discussion of the earlier period emphasized the critical role of Prime Minister Manley's intellectual shift in favor of economic and fiscal pragmatism. In terms of more recent experience, one could similarly point to the strong leadership of Finance Minister Peter Phillips before 2016 and Finance Minister Nigel Clarke thereafter. Economists prefer to ground their arguments in institutions and market forces rather than personalities. But such institutions presuppose leaders with the vision and character to use them for the good of the country. Without leadership, there is no broad acceptance to accompany credibility and solidify ownership. The World Bank's Growth Commission (Brady and Spence 2010) identified leadership as one of the five common traits of countries with sustained high growth in the post-World War II period. The same might be said of public debt reduction for small and large countries alike.

ACKNOWLEDGMENTS We thank Laura Alfaro, Eleanor Brown, Patrick Honohan, Tracy Robinson, Jón Steinsson, Emil Verner, DeLisle Worrell, and Karina Garcia, Thomas Pihl Gade, Vitor Gaspar, Jan Kees Martijn, Pablo Morra, Constant Lonkeng Ngouana, Uma Ramakrishnan, Bert van Selm, and Esteban Vesperoni (all IMF) for helpful discussions.

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Comments and Discussion

COMMENT BY

LAURA ALFARO Arslanalp, Eichengreen, and Henry advance two empirical regularities: “Sharp, sustained reductions in public debt are exceptional, especially recently” and “only rarely have [governments] succeeded in bringing those higher debt ratios back down once the emergency passed.”

The paper then analyzes Jamaica’s fascinating case to draw lessons in managing sustained primary fiscal surpluses. As Reinhart, Reinhart, and Rogoff (2015) describe, sustained debt reduction can involve: orthodox measures—economic growth (relation $g - r$), primary surplus (fiscal adjustment/austerity); and heterodox measures—surprise inflation tax (implicit default of a sudden surprise burst in inflation if debt in local currency is not indexed), explicit default or restructuring, and financial repression (also for domestic-issued debt). As the authors note, Jamaica reduced its debt-to-GDP burden from 144 percent to 72 percent with modestly favorable $r - g$ and more than its fair share of external shocks. Jamaica stands out because it succeeded the “old-fashioned way” through primary surpluses. As the authors show, only a handful have succeeded via fiscal surplus. This rarity makes understanding these exceptions essential.

The authors then answer the *how* and *why* of the sustained debt reduction beyond crisis, that is, even after the emergency had passed. The case of Jamaica highlights two features: (1) fiscal rules that are transparent and clear (with numerical debt, fiscal balance, and public sector wages targets) and flexible budgetary rules within the Fiscal Responsibility Framework introduced in 2010 and augmented in 2014 with monitoring, reporting, and independent verification; and (2) ownership that debt reduction was

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anchored in Jamaica's tradition of consensus building and social partnerships, which allowed for a sense of transparency and fairness in burden sharing, dialogue, ownership, and continuity. Despite changes in government parties, Jamaica could sustain the benefits beyond the crisis.

The paper then generalizes the lessons with additional cases that have succeeded via fiscal rules and institution-based consensus building also anchored in earlier historical experience, such as Ireland (1980s) and Barbados (1990s).[1] Figure 1 plots the countries listed in table 1 in the paper—Emerging Markets and Developing Economies (EMDEs) with the largest five-year debt reductions—against a polarization measure (level corresponding to the initial year of each country's largest five-year debt reduction). Additionally, figure 2 illustrates the relationship between fiscal surplus (corresponding to the initial year of each country's largest five-year debt reduction) and the polarization measure. The vertical lines highlighting distribution quartiles underscore the rarity of Jamaica's success and also that of Ireland and Barbados.[2]

The paper starts with historical background, then discusses what Jamaica did and how, addressing fiscal rules, institutionalized partnership and monitoring, ownership, and origins (history and institution building). It ends with the question of whether the lessons can be generalized and compares Jamaica's case with that of Ireland and Barbados.

This is an excellent and comprehensive paper, rich in details and footnotes. The paper uncovers the role of the intricacies of societal norms, political legacies, shared mental models, and formal rules that shape political, economic, and social interactions (North 1990), which are crucial for understanding fiscal policy over time and the complexity of debt management. These systems' internal logic, consistency, and timing are highly complex. Congratulations to the authors for this outstanding work. My comments will center around fiscal rules, the key role of ownership, and reduced polarization. I will end with thoughts on the implications for international financial architecture in the current world of high debt, particularly among poorer countries.

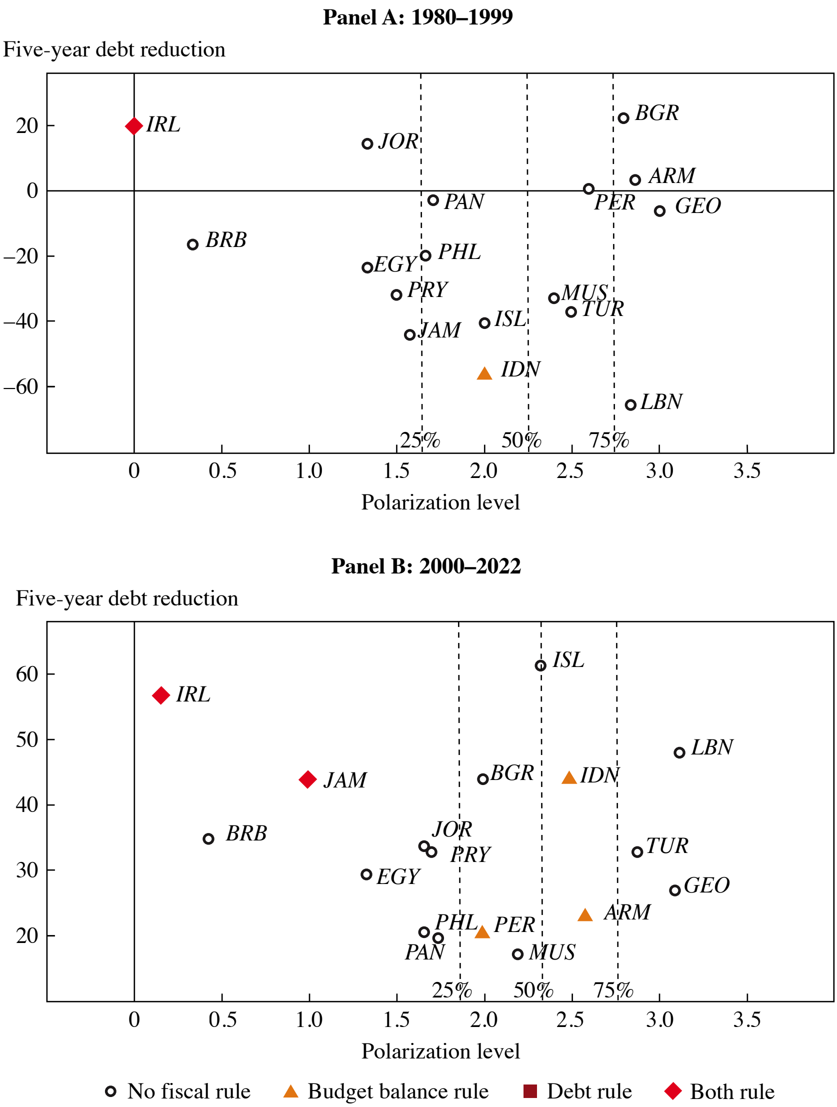
CONTROLLING THE GOVERNMENT: FISCAL RULES "In framing a government which is to be administered by men over men, the great difficulty lies in this: you must first enable the government to control the governed; and in the next place oblige it to control itself."[3]

1. Iceland, after the global financial crisis, is another case.

2. Additionally, markers provide insights into fiscal rules: a diamond indicates countries with both budget balance and debt rule, while a triangle corresponds to the budget balance rule.

3. Bill of Rights Institute, "Federalist 51," par. 1, https://billofrightsinstitute.org/primary-sources/federalist-no-51.

Figure 1. **EMDEs with the Largest Five-Year Debt Reductions: 20 Percent Threshold and Polarization**



Source: Author's calculations using the IMF general government gross debt (per GDP) to calculate the debt reductions and the IMF government primary balance data for the fiscal surplus; polarization (v2cacamps_mean) is from the V-Dem data set; indicators of budget balance rule and debt rules are from the IMF Fiscal Rule data set from 1985 to 2021.

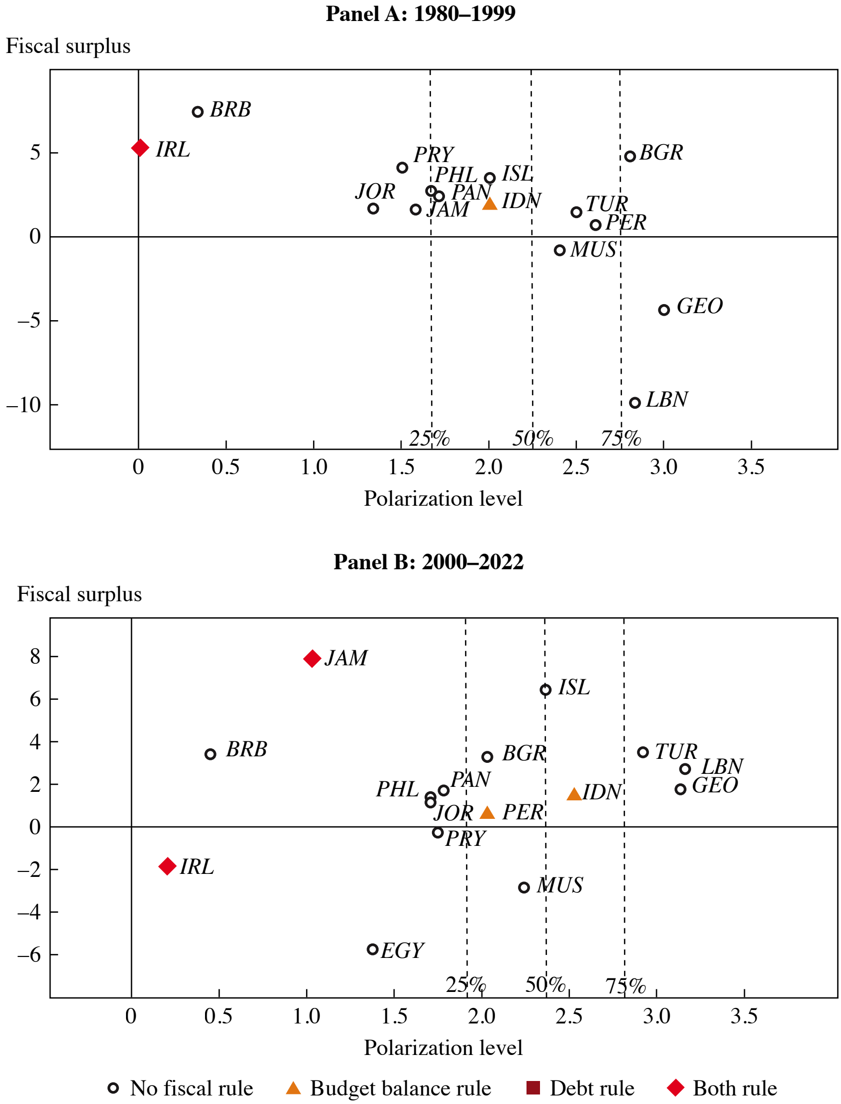
Note: The list of countries is in table 1 of the authors' paper for EMDEs, excluding episodes of external debt restructuring and major oil exporters. The plot includes Ireland, Iceland, and Barbados as well. The plot shows the 25th, 50th, and 75th percentiles of the corresponding V-Dem indicator for all EMDEs as defined by the IMF. https://www.imf.org/en/Publications/WEO/weo-database/2023/April/groups-and-aggregates.

Table 1. Countries in the Data Set (IMF, World Bank, and V-Dem)

ABW	AFG	AGO	ALB	AND	ARE	ARG	ARM	ATG	AUS
AUT	AZE	BDI	BEL	BEN	BFA	BGD	BGR	BHR	BHS
BIH	BLR	BLZ	BOL	BRA	BRB	BRN	BTN	BWA	CAF
CAN	CHE	CHL	CHN	CIV	CMR	COD	COG	COL	COM
CPV	CRI	CUB	CYP	CZE	DDR	DEU	DJI	DMA	DNK
DOM	DZA	ECU	EGY	ERI	ESP	EST	ETH	FIN	FJI
FRA	FSM	GAB	GBR	GEO	GHA	GIN	GMB	GNB	GNQ
GRC	GRD	GTM	GUY	HKG	HND	HRV	HTI	HUN	IDN
IND	IRL	IRN	IRQ	ISL	ISR	ITA	JAM	JOR	JPN
KAZ	KEN	KGZ	KHM	KIR	KNA	KOR	KWT	LAO	LBN
LBR	LBY	LCA	LKA	LSO	LTU	LUX	LVA	MAC	MAR
MDA	MDG	MDV	MEX	MHL	MKD	MLI	MLT	MMR	MNE
MNG	MOZ	MRT	MUS	MWI	MYS	NAM	NER	NGA	NIC
NLD	NOR	NPL	NRU	NZL	OMN	PAK	PAN	PER	PHL
PLW	PNG	POL	PRI	PRK	PRT	PRY	PSE	PSG	QAT
ROU	RUS	RWA	SAU	SDN	SEN	SGP	SLB	SLE	SLV
SML	SMR	SOM	SRB	SSD	STP	SUR	SVK	SVN	SWE
SWZ	SYC	SYR	TCD	TGO	THA	TJK	TKM	TLS	TON
TTO	TUN	TUR	TUV	TWN	TZA	UGA	UKR	URY	USA
UVK	UZB	VCT	VEN	VNM	VUT	WBG	WSM	XKX	YEM
ZAF	ZMB	ZWE	ZZB						

Note: The table lists all the countries included in the data set for figure 3.

Figure 2. EMDEs with the Largest Five-Year Fiscal Surplus and Polarization



Source: Author's calculations using the IMF general government gross debt (per GDP) to calculate the debt reductions and the IMF government primary balance data for the fiscal surplus; polarization (v2cacamps_mean) is from the V-Dem data set; indicators of budget balance rule and debt rules are from the IMF Fiscal Rule data set from 1985 to 2021.

Note: Each point corresponds to the first year of the largest five-year government debt reductions. The countries plotted are those in table 1 of the authors' paper and Ireland, Iceland, and Barbados. The plot shows the 25th, 50th, and 75th percentiles of the corresponding V-Dem indicator for all EMDEs as defined by the IMF. https://www.imf.org/en/Publications/WEO/weo-database/2023/April/groups-and-aggregates.

Lowering high public debt-to-GDP ratios offers significant benefits associated with the costs of fiscal dominance, debt overhang, and crowding out. The literature has also documented the negative effects of costly default (Alfaro and Kanczuk 2005; Mendoza and Yue 2012; Reinhart and Rogoff 2009).

Standard economic theory holds that fiscal policy should be countercyclical (Barro 1979). Yet most emerging countries, possibly owing to distorted political incentives (Alesina, Campante, and Tabelini 2008), follow procyclical fiscal policies, which tend to exacerbate already pronounced cycles (Kaminsky, Reinhart, and Végh 2004). There are many political economy motivations for excessive indebtedness, heterogeneity, wars of attrition over the distribution of costs, common pool problem externalities that lead to a deficit bias, and interest groups.[4] The question relates to the broader rules versus discretion debate on whether a commitment should be required (Halac and Yared 2014).

One solution for fiscal problems is the adoption of fiscal rules. Governments may adopt fiscal rules that constrain their behavior to correct distorted incentives to overspend, particularly in good times. This, in turn, would alleviate distress on rainy days. A data set compiled by the Fiscal Affairs Department of the International Monetary Fund (IMF) identifies countries' adoption of fiscal policy restrictions.[5] Only a handful of countries had fiscal rules in place in 1990; twenty years later, more than 100, which includes different types (debt, deficit, revenues, expenditures).

Do fiscal rules improve welfare? In Alfaro and Kanczuk (2019), we examine the welfare implications of fiscal rules in the context of emerging markets' sovereign debt and default. We transform the traditional sovereign debt and default model by assuming governments' preferences are time-inconsistent and correspond to the quasi-hyperbolic consumption model (Laibson 1997). The consequent conflict between today's government and tomorrow's generates an incentive to precommit to a particular fiscal rule.[6]

We calibrate it to the Brazilian economy, a typical emerging economy. Although large and not an island, three features make Brazil particularly interesting. First, President Dilma Rousseff's impeachment in 2016 was

4. See Alesina and Drazen (1991) and Alesina and Passalacqua (2016) for a literature review.

5. See https://www.imf.org/external/datamapper/fiscalrules/matrix/matrix.htm.

6. Jackson and Yariv (2014, 2015) propose that aggregating citizens' time-consistent preferences naturally results in time-inconsistent preferences that display an extra discount parameter that captures the ex post present bias.

due to disobedience of the existing fiscal rule; second, Congress passed additional fiscal restrictions in December 2016 (Bornhorst and Curristine 2017); and third, the rule was eliminated during COVID-19.

The model can reproduce the Brazilian debt level and default frequency even if the household impatience parameter is calibrated to local interest rates. Some findings include the observation that adopting the optimal fiscal rule implies substantive welfare gains relative to the absence of a rule. Moreover, simpler debt rules can also improve welfare as alternatives to more complex optimal rules. However, not all rules improve welfare; for instance, overly restrictive deficit rules may not reduce welfare. As the Jamaica case highlights, building contingencies into the fiscal rule may be associated with higher welfare. One further point highlighted by the Jamaica case is that increasing transparency and ownership, which can be part of the process of designing and monitoring fiscal rules, indeed helps.[7]

Do fiscal rules control the government? As the paper highlights, not all commitments are effective. Fiscal rules and targets do not always achieve their intended results. The paper mentions the case of the European Union's Stability and Growth Pact. As mentioned, Brazil got rid of the rule. Costa Rica, a small economy (but not an island), recently passed a rule, but basically, policymakers have found ways around it (IMF 2023).

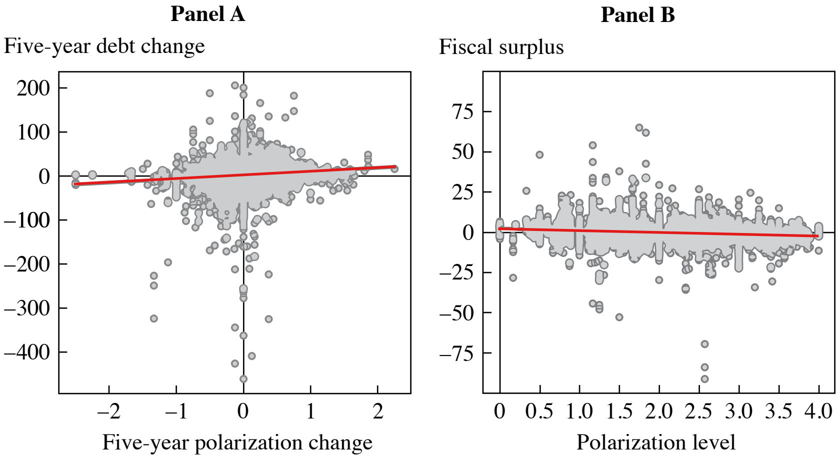
CONTROLLING THE GOVERNMENT: THE SPIRIT OF A PEOPLE "The spirit of a people, its cultural level, its social structure, the deeds its policy may prepare—all this and more is written in its fiscal history" (Schumpeter 1918, 2).

In the case of Jamaica, as noted by the authors, the fiscal rules were adopted already before the start of its debt reduction process, yet they did not prevent debt from continuing to increase. In contrast, the literature tends to see fiscal rules as a way to deal with polarization. As the paper shows, the process is complex and reinforcing, building on the country's history. Factors such as ownership, transparency, reduced polarization, and monitoring of fiscal rules have been crucial in Jamaica's success. In contrast, Brazil's case lacked real buy-in despite the votes.

A strand of the literature studies the effects of polarization and the government's incentives to tax and spend (and how they affect future governments' ability to tax and spend). The literature looks at different forms of polarization, heterogeneity, and conflict of interest (Eslava 2011):

7. The work by Rogoff (1990) and Rogoff and Sibert (1988) shows that fiscal cycles and excess spending can be the outcome of imperfectly informed voters.

Figure 3. All Countries in the Data Set (1980–2022)



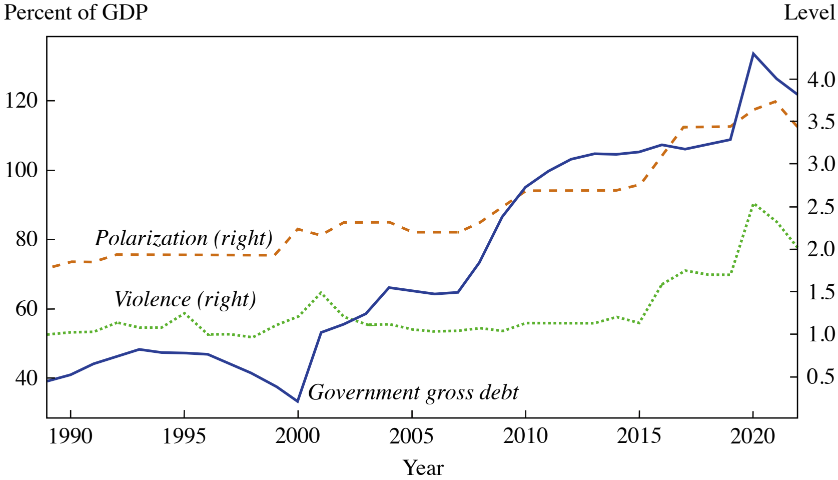
Source: Author's calculations using the IMF general government gross debt (per GDP) to calculate the debt change, the central government debt (per GDP) data from the World Development Indicators (World Bank) to input missing values, and the IMF government primary balance for fiscal surplus; missing fiscal surplus values are filled with net lending (+) / net borrowing (–) (per GDP) of the World Development Indicators (World Bank); polarization (v2cacamps_mean) is from the V-Dem data set.

Note: All countries from IMF and World Bank data sets are utilized for five-year debt change (debt increment, yearly sampled). The polarization change represents the five-year polarization increment prior to the corresponding five-year debt change.

heterogeneity between policymakers and voters, heterogeneity of fiscal preferences across politicians, and heterogeneity of fiscal preferences across social groups or regions. The theoretical work, however, has mixed implications. Although much of the work implies that higher polarization leads to higher deficits, it depends on the assumptions and type of heterogeneity. In Alesina and Tabellini (1990), polarization leads to overspending and deficits; in Persson and Svensson (1989), it depends on the type of incumbent; while Alesina, Baqir, and Easterly (1999) and Azzimonti (2011) state that polarization and disagreement can lead to smaller government and less spending.

As the paper shows, the processes are complex, nonlinear, and unfold over many years. Figure 3, panel A, illustrates the relationship between five-year debt change (debt increment) and polarization change (five-year polarization increment before the corresponding five-year debt change), covering yearly sampled data points from 1980 to 2022. A positive slope suggests that countries experiencing greater decreases in polarization are more likely to reduce their debt levels in the following five years. Similarly,

Figure 4. Polarization in the United States and Debt (1989–2022)



Source: Author's calculations using the IMF general government gross debt (as a percentage of GDP) to calculate the debt change; polarization (v2cacamps_mean) and violence (v2caviol_osp) data are sourced from the V-Dem data set.

Note: The time series plot illustrates changes in the US government gross debt and democracy variables over time. The left *y*-axis indicates the percentage of GDP for government gross debt, while the right *y*-axis shows the levels of polarization and violence for each year.

figure 3, panel B, explores the fiscal surplus and polarization level, providing insights into the tendency of less polarized countries to have higher fiscal surpluses. But again, without an in-depth analysis of the country, one may miss the idiosyncrasies and reinforcing forces.

INTERNATIONAL FINANCIAL ARCHITECTURE: SUSTAINED DEBT REDUCTION BEYOND CRISIS From reading the paper, I walked away somewhat pessimistically, not only of the outlook for the United States (figure 4) but also for other countries, as developing countries face increased debt payments in the coming years in a more complex geopolitical environment. In previous work by Arslanalp and Henry (2006), to HIPC (heavily indebted poor countries), the effects of these interventions to reduce debt were not always encouraging. The authors' arguments have potential implications for how the international financial architecture should handle distressed countries. If relevant institutional steps are almost exclusively taken where there is a sense of crisis, as the Jamaica case highlights, perhaps the IMF's softer stance may affect internal dynamics and create better long-term outcomes. In conclusion, as always with these authors, this paper is a must-read!

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COMMENT BY

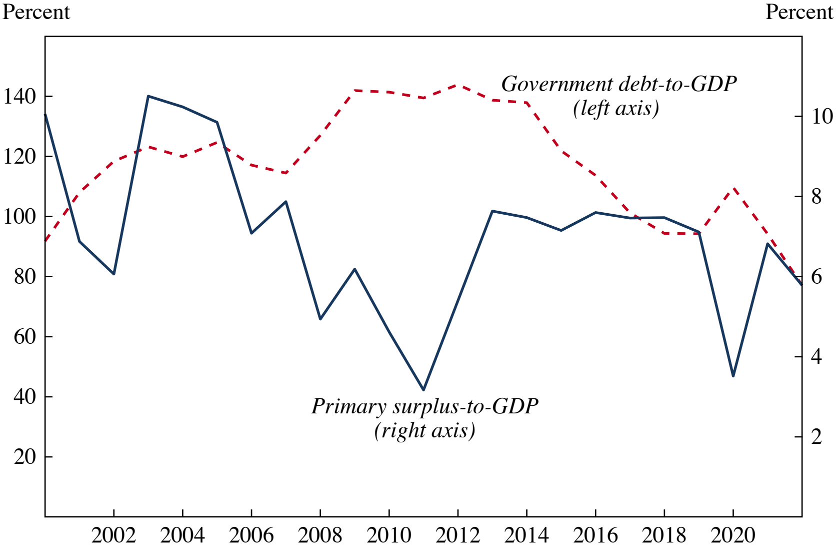
EMIL VERNER The surge in public debt-to-GDP around the world has renewed interest in understanding how countries can bring down public debt ratios. Arslanalp, Eichengreen, and Henry bring our attention to the exceptional case of Jamaica, which slashed its public debt-to-GDP ratio from 144 percent in 2012 to 72 percent in 2023. This case study is especially interesting in the current age of slowing growth and liberalized financial markets, as Jamaica did not "grow its way" out of debt or employ financial repression policies that depressed real interest rates. Instead, debt reduction was achieved the hard way, by running large primary surpluses.

Jamaica's primary surpluses are indeed exceptional. From 2013 to 2019, the primary surplus averaged 7.4 percent of GDP, among the highest in the world.[1] By comparison, Greece's primary surplus averaged 2.2 percent of GDP over the same period, while Germany's was 2.1 percent.[2] Jamaica's feat is even more impressive when one considers that its real GDP only

1. Among countries with a population greater than 1 million inhabitants, Jamaica's primary surplus-to-GDP ratio was only surpassed by Qatar's during this period.

2. Figures are from the International Monetary Fund (IMF) World Economic Outlook Database.

Figure 1. Jamaica's Government Debt-to-GDP and Primary Surplus, 2000–2022



Source: IMF World Economic Outlook Database.

grew by 1 percent per year over the same period. Growth did not serve to reduce the denominator of debt-to-GDP, nor did it facilitate running large primary surpluses.

So how did Jamaica do it? In their valuable account of this fascinating case, Arslanalp, Eichengreen, and Henry provide compelling narrative evidence that Jamaica's primary surpluses were achieved through two factors. The first was fiscal rules that were credible and ambitious, but not overly rigid. The second was consensus building through partnership agreements, which fostered the belief that the burden of adjustment would be fairly distributed in society.

My comments will focus on three points. First, I examine the mechanics of how Jamaica managed to reduce its public debt ratio. Second, I compare Jamaica's experience with other large, sustained debt reductions. Third, I discuss the impact on economic growth. I conclude with some thoughts on the lessons from Jamaica's experience.

UNDERSTANDING THE MECHANICS OF JAMAICA'S DEBT REDUCTION Figure 1 plots Jamaica's government debt-to-GDP ratio and primary surplus-to-GDP ratio. The decline in the debt-to-GDP ratio begins in 2013. The immediate backdrop to the debt reduction was a substantial fiscal consolidation. The primary surplus-to-GDP ratio increased by over 4 percentage points between

2011 and 2013. This was driven by a combination of tax increases and reductions in government spending, especially on public sector wages. These drastic fiscal reforms took place during a period when Jamaica teetered on the edge of a fiscal and financial crisis after Jamaica's earlier International Monetary Fund (IMF) agreement broke down (Johnston 2015). In this respect, I would place more emphasis on the role of fiscal consolidation than do Arslanalp, Eichengreen, and Henry.

Looking at the long-run evolution of the primary surplus-to-GDP ratio in figure 1, one immediately notices that primary surpluses were already large in the decade before the reduction in the debt-to-GDP ratio. Yet these large primary surpluses did not serve to lower the government debt ratio. To understand why, I extend the debt dynamics decomposition in the paper back in time using the following equation:

$$\Delta b_t = d_t + \frac{r_t - g_t}{1 + g_t} b_{t-1} + \frac{z_t a_t}{\left(1 + g_t\right)\left(1 + p_t^*\right)} b_{t-1} + \frac{\left(p_t - p_t^*\right) a_t}{\left(1 + g_t\right)\left(1 + p_t\right)\left(1 + p_t^*\right)} b_{t-1} + residual_t, \tag{1}$$

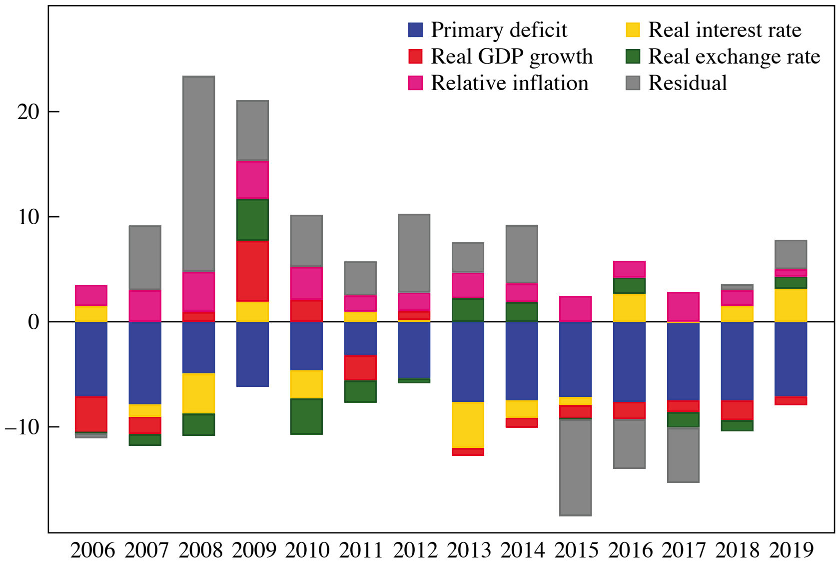
where b_t is the stock of debt, d_t is the primary deficit, r_t is the real interest rate, g_t is the real growth rate, z_t is the real exchange rate depreciation, a_t is the share of foreign currency denominated debt, p_t is the growth rate of the GDP deflator, p_t^* is the growth rate of the US GDP deflator, and $residual_t$ is the stock-flow adjustment.

Figure 2 summarizes the debt decomposition from 2006 to 2019. The debt decomposition for the post-2013 period is very similar to figure 7 in the paper. Looking at the period before 2013, the figure reveals that several factors counteracted the high primary surpluses in the 2000s. The $r - g$ differential contributed to a rise in debt-to-GDP in 2009 through both lower growth (g) and a higher real interest rate (r). The global financial crisis hit Jamaica hard, as exports of natural resources fell sharply (IMF 2010). Interest costs also rose. Furthermore, the share of foreign currency denominated public debt exceeded 30 percent in this period. As a result, real exchange rate depreciation boosted the debt-to-GDP ratio in some years, especially during the global financial crisis.

However, figure 2 reveals that large positive values of the stock-flow adjustment (the residual) was the most important factor for understanding why public debt-to-GDP remained elevated in the 2000s. Moreover,

Figure 2. Dynamic Debt Decomposition—Pesky Residuals

Contribution to Δb in percent of GDP



Source: IMF World Economic Outlook Database.
Note: This figure implements the dynamic debt decomposition in equation (1).

reductions in the stock-flow adjustment played an important role in reducing the debt ratio.[3]

This raises the question: what is captured in the stock-flow adjustment? The stock-flow adjustment can reflect accounting differences across how primary surpluses and public debt are measured. However, it also reflects extra-budgetary expenditures, the realization of contingent liabilities, and losses on state-owned enterprises (SOEs). According to the IMF, repeated fiscal slippages, including losses at SOEs, were at the root of Jamaica's fiscal problems in the 2000s (IMF 2010, 2014). Improvements in the governance and divestment from SOEs mattered for reducing the residual, allowing Jamaica's large primary surpluses to reduce debt (Johnston 2015). This also implies that the extent of fiscal consolidation in the 2010–2013 period was larger than what would be inferred by looking at the primary surpluses alone.

The large role of the stock-flow adjustment is not unique to Jamaica. Campos, Jaimovich, and Panizza (2006) find that this term plays an important

3. The debt sustainability analysis in IMF (2014) also finds large positive residuals contributing to the debt-to-GDP ratio in the 2000s.

role in explaining debt changes in emerging economies and low-income countries, often because of the realization of contingent liabilities. The Jamaica case thus offers an example of a debt reduction where large primary surpluses were not the full story. Rather, the elimination of "below-the-line" contributors to public debt was also important.

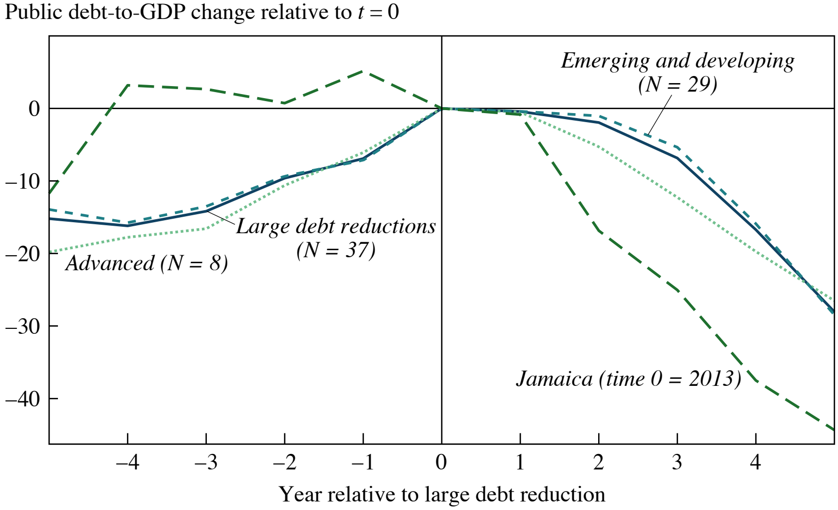
JAMAICA'S DEBT REDUCTION IN AN INTERNATIONAL PERSPECTIVE How does the Jamaica case compare to other large, sustained debt reductions? Is the Jamaican case unique in recent history, or are there parallels? To understand these questions, I turn to an international panel database to identify episodes of major sustained debt reductions. I use the IMF World Economic Outlook Database, which contains an unbalanced panel with information on public debt starting in 1980 and covering up to 193 countries. I define a sustained debt reduction as an episode where the debt-to-GDP ratio declines by at least 20 percentage points over five years. I exclude debt reductions that are accompanied by a default and haircut following the classification in Cruces and Trebesch (2013) and Asonuma and Trebesch (2016). This exercise follows in the spirit of prior work studying large debt reduction episodes (Reinhart, Rogoff, and Savastano 2003; Nickel, Rother, and Zimmermann 2010; Villafuerte and others 2010).

The approach results in a sample of thirty-seven large, sustained debt reduction episodes. The criterion of a 20 percentage point reduction is thus quite stringent. Of the thirty-seven episodes, eight are in advanced economies and twenty-nine are in emerging markets. I also separately analyze advanced economies and emerging markets to understand whether the dynamics of debt reductions differ across the two groups of countries.

Figure 3 plots an event study of the government debt-to-GDP ratio across these large, sustained debt reductions. The level of debt-to-GDP is normalized to zero in event time $t = 0$, the year that the debt reduction begins. The figure also plots Jamaica's debt ratio, with 2013 normalized to event time $t = 0$. The average reduction in public debt-to-GDP amounts to 28 percentage points over five years in this sample of large debt reductions. Jamaica's debt reduction of 44 percentage points over five years is even larger.

Figure 4 plots the average evolution of real GDP (g), the real interest rate (r), the real interest rate minus growth differential ($r - g$), and the primary surplus-to-GDP ratio for the large debt reduction episodes. The typical debt reduction features relatively strong real GDP growth (panel A). This is in sharp contrast with Jamaica, where growth was low throughout its debt reduction. The real interest rate is also negative during the typical debt reduction episode (panel B). This is driven by emerging markets, where high inflation often reduces ex post real interest rates. In Jamaica, as well as

Figure 3. Public Debt-to-GDP Change during Episodes of Large Public Debt Reductions



Source: IMF World Economic Outlook Database.

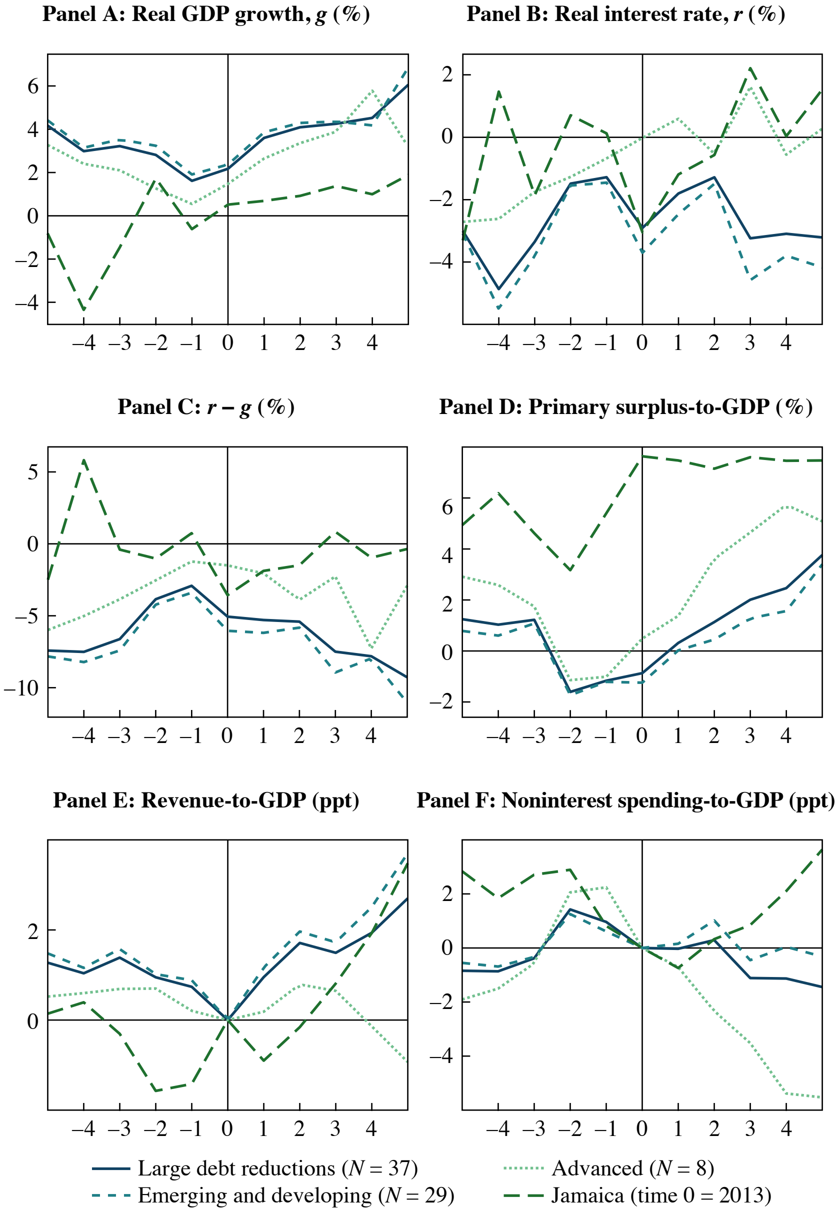
Note: This figure plots the average evolution of public debt-to-GDP across major debt reduction episodes. Public debt-to-GDP is measured as the percentage point change relative to year zero. Time zero is the start of a large public debt reduction, defined as a reduction of at least 20 percentage points over five years. Advanced economies and emerging and developing economies are defined based on the World Economic Outlook country composition.

in advanced economy debt reductions, the real interest rate is not especially low. As a result of strong growth and low real interest rates, the typical debt reduction features highly negative values of $r - g$, which is an important driver of debt reduction (panel C). In contrast, in Jamaica's case the $r - g$ differential was close to zero and thus played a negligible role in its debt reduction.

Panel D in figure 4 shows that the average debt reduction episode involves a rising primary surplus that goes from negative to positive. This is especially the case in advanced economies, where the primary surplus gradually rises by over 6 percentage points relative to GDP.[4] In this sense, Jamaica's debt reduction looks more like the typical advanced economy debt reduction, with two differences. First, the adjustment in the primary surplus was more sudden in Jamaica. Second, the level of the primary surpluses was

4. The outsized role of $r - g$ dynamics in many emerging market episodes of debt reductions is consistent with earlier evidence from Villafuerte and others (2010), who find that in emerging markets $r - g$ often plays as large or even a larger role than the primary surplus. In contrast, in advanced economies, primary surpluses are more important for reducing debt.

Figure 4. Event Study of Large Public Debt-to-GDP Reductions



Source: IMF World Economic Outlook Database.

Note: This figure plots the average evolution of the indicated variable across major debt reduction episodes. Revenue-to-GDP and noninterest spending-to-GDP are the percentage point change relative to year zero, so these two variables are mechanically normalized to zero in event time zero.

much higher. Jamaica's large primary surpluses are especially striking considering its low growth. Running large primary surpluses is easier when strong growth passively raises tax revenues.[5]

Figure 4 also plots the average change in government revenues and noninterest spending as a share of GDP. These values are measured as the percentage point change relative to event time $t = 0$. The path of revenues and spending differs considerably across advanced economies and emerging markets. In advanced economies, the increase in the primary surplus is driven by a reduction in noninterest spending, while revenues are flat or even declining slightly. In contrast, for emerging market episodes the opposite happens: revenues rise as a share of GDP, while spending is relatively flat. In the case of Jamaica, revenues-to-GDP rise, as in other emerging market cases. At the same time, spending was brought down in the run-up to the start of the debt reduction but then began rising again three years into the debt reduction. This did not reduce the primary surplus, as tax revenues also continued to rise.

Prior studies focusing on advanced economies have found that most successful fiscal consolidations are driven by expenditure cuts (Alesina and Perotti 1995; Nickel, Rother, and Zimmermann 2010). However, Jamaica illustrates how fiscal consolidation based partly on an increase in tax revenues can work, especially if revenues are starting from a relatively low initial level, as is often the case in emerging markets and developing countries. At the same time, while revenue increases were important, Jamaica also sharply reduced public sector wages, in line with other successful episodes of debt reduction (Nickel, Rother, and Zimmermann 2010; IMF 2014).

THE IMPACT ON GROWTH The poor growth performance in Jamaica raises the question of whether the extremely tight fiscal policy depressed growth. Research from the IMF finds that fiscal consolidations are often unsuccessful in reducing debt ratios because they harm growth too much (Ando and others 2023). If fiscal consolidation leads to a fall in growth, then debt reduction becomes even more difficult for three reasons. First, lower growth reduces the denominator of the debt-to-GDP ratio. Second, a recession makes it more difficult to run primary surpluses. And, third, it is difficult to maintain political support for fiscal reforms when they cause economic hardship. In the case of Jamaica, a slowdown in growth was highlighted as a key downside risk by the IMF (2010).

On the one hand, growth was very low in Jamaica during the debt reduction, as seen in panel A of figure 4. On the other hand, growth in Jamaica had

5. See, for example, Villafuerte and others (2010).

been low for decades. As the authors note, a structural analysis is required to understand the impact of the tight fiscal policy on growth. However, while we do not know the counterfactual, a casual analysis suggests that the impact of the fiscal contraction in 2011–2013 on growth seems to have been negative but, perhaps, modest relative to the size of the increase in the primary surplus. For example, real GDP growth averaged about 1.8 percent in the 2000–2007 period, but only about 1 percent in the 2012–2019 period according to the IMF World Economic Outlook Database.

It seems likely that tight fiscal policy would have depressed growth by depressing domestic demand. Moreover, the sharp reduction in infrastructure investment could have negative long-term growth consequences (Johnston 2015). However, the negative effects from reductions in demand and potential growth could have been offset by some of the benefits of putting public finances on a more sustainable path, such as improved expectations and reduced private sector borrowing costs (Giavazzi and Pagano 1990). This seems plausible for the case of Jamaica, which was on the verge of a crisis in 2012 when its debt reduction program started. Moreover, fiscal consolidation may have a smaller negative effect on growth in small and highly open economies such as Jamaica, where much of the reduction in demand leaks abroad (Farhi and Werning 2016). Understanding the impact of sustained tight fiscal policy on growth is an important question—both for the case of Jamaica and more broadly.

Despite sluggish growth, an interesting aspect of Jamaica's debt reduction is that social indicators gradually improved after 2013. Between 2012 and 2017, the unemployment rate fell from 13.9 percent to 11.6 percent, the household poverty rate declined from 14.4 percent to 13.3 percent, and inequality measured by the Gini index declined from 39.9 percent to 37.5 percent, according to data from the Statistical Institute of Jamaica.[6] These numbers suggest that tight fiscal policy likely had modest negative effects on real activity. Further, improvements in social indicators may have contributed to continued broad-based support for debt reduction and mitigated "fatigue" from running stringent fiscal policy.

BROADER LESSONS What are the lessons from Jamaica's experience? It is tempting to say that Jamaica is a unique case that proves how challenging debt reduction is. The size of the primary surpluses in Jamaica was exceptional, and it is difficult to imagine many other countries sustaining such large surpluses. Yet extreme cases often do carry more general lessons.

6. Statistical Institute of Jamaica, "Living Conditions and Poverty," https://statinja.gov.jm/living_conditions_poverty.aspx.

In my view, Arslanalp, Eichengreen, and Henry point to the two most important lessons: the roles of the fiscal rule and consensus building. Establishing strong fiscal institutions is important for achieving and sustaining debt reduction. Moreover, debt reduction must have buy-in from a broad set of stakeholders. In Jamaica's case, it is difficult to imagine how sustained debt reduction could have been achieved without these factors.

In addition, I would add the following lessons. First, the Jamaica case provides a reminder that fundamental structural and permanent fiscal reforms—rather than temporary measures—are required for sustained debt reductions.

Second, the Jamaican experience suggests that one size does *not* necessarily fit all in terms of how debt reduction is achieved. Debt reduction can be achieved in part by increasing tax revenues, not just by lowering spending. Moreover, in addition to increasing the primary surplus, eliminating "below-the-line" contributors to public debt can be important.

Third, the Jamaica case illustrates that in some cases it takes a crisis, or the threat of a crisis, to implement difficult fiscal adjustments. This is consistent with prior work by Ardagna (2004) and Villafuerte and others (2010). Jamaica's earlier attempts at reducing public debt were not successful. It was only when Jamaica reached the brink of crisis in 2012 that a program was put in place that led to meaningful debt reduction.

Finally, the Jamaica case highlights that it is difficult to predict which fiscal consolidations and debt reductions will work. As noted by several commentators, it was far from obvious ex ante that Jamaica's attempt to reduce its debt would work (Wigglesworth 2020). Jamaica's unlikely success story should thus remind economists and policymakers of the value of humility in making predictions about the effects of large fiscal consolidations.

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GENERAL DISCUSSION Laurence Ball asked for more clarity on where the surpluses came from—whether the burden of taxation is shared differently across the population, and whether the government spending is in a different way relative to other countries. Raghuram Rajan seconded Ball's question and wondered what the government of Jamaica was doing to achieve a shared burden, asking if they raised the taxes on the rich as part of the process. He inquired about more details on how the unemployment rate could come down in the face of tepid economic growth. Peter Henry replied that the surpluses were mainly achieved by spending cuts but included some increases in taxes.

Tristan Reed, thinking back to his coursework in development macroeconomics, noted that institutions were assumed to be the fundamental cause of long-run growth. The authors seemed to show instead that stable institutions give rise to fiscal responsibility. Reed queried the authors about the absence of growth in the case of Jamaica and raised the possibility that this might suggest that other factors, such as geography, deserve more attention as explanatory factors.

Henry discussed different cases of Barbados and Jamaica in relation to the impact of institutions on growth. He explained that the policy choices made by Michael Manley who was elected prime minister of Jamaica in 1972, including raising export barriers and increasing spending as a share of GDP more than twofold, had a devastating impact on the economy, which contracted every year for thirteen years straight starting in 1973. This happened under the same democratic institutional framework as that of Barbados, which did not experience a similar contraction, suggesting policies were to blame for Jamaica's deteriorating economic conditions.

Hoyt Bleakley brought up the benefits that the financial markets have enjoyed, using as an example the fact that Jamaica recently issued debt in its own currency. How large of a wealth effect has this been for the country? Turning to the other side of the capital account, Bleakley noted that government savings had gone up, but he asked whether there had been some sort of credibility effect that had affected private sector external borrowing positively as well.

David Romer queried the authors about the consensus building process that Jamaica went through. He pondered why a populist leader would not be able to achieve what Jamaica achieved, mentioning Chile as an example of a country with a populist leader who has seemingly not yet repudiated their fiscal responsibility.

Kenneth Rogoff wanted to know more about the history of Jamaica, recalling long periods of a poorly run government and asked the authors to provide more details. Steven Kamin similarly was hoping for more details on how the consensus for fiscal consolidation came about. Usually, he argued, it takes an economic crisis to move a society toward accepting budget consolidation. What was the igniting factor in the case of Jamaica? Kamin added that the weak economic growth in the decade or so after might make one wonder whether a consolidation of the magnitude implemented was needed in the first place.

Henry replied that, essentially, Jamaica was in a crisis for about forty years, from around 1972 under Manley to when the debt turnaround happened; and in fact, GDP per capita in Jamaica today is still not where it was in 1972 before Manley came to power. Speaking to the consensus building process, Henry noted that, as explained in more detail in the paper, the first steps toward social partnership were taken with the creation of the Electoral Advisory Committee in 1979 ahead of the 1980 elections. Stakes were incredibly high, Henry explained, and in the run-up to the elections more than eight hundred murders took place. The country was on the brink of complete collapse, and stakeholders realized that something needed to be done—and over the next many years more social partnerships were established. Fast-forward to 2013, the minister of finance and planning, Peter Phillips, embraced the approach of social partnership and, Henry argued, garnered support because people understood the consequences in the absence of cohesion, looking back to 1980. Barry Eichengreen added that the expensive bank bailout, which crippled the government's ability to spend in the late 1990s, was also fresh in the memory of many.

Gian Maria Milesi-Ferretti provided additional context, noting that he was the International Monetary Fund (IMF) reviewer during this time. Milesi-Ferretti explained that because Jamaica had a somewhat strained relationship with the IMF as a result of issues with keeping on track with previous IMF programs, the process of getting the loan to Jamaica was not easy. Milesi-Ferretti also recalled that negotiations with other actors who were needed to secure the loan, including the World Bank and the Inter-American Development Bank, were quite fraught. Ex ante, therefore, the odds of this project succeeding seemed very low. In addition, Milesi-Ferretti said, while we tend to think of $r - g$ as the channel through which growth affects debt, he reminded everyone about the primary balance, pointing out that with weak growth comes lower tax revenues. In sum, this made the effort by policymakers and others involved in finalizing the loan to Jamaica even more impressive. Building on Milesi-Ferretti's accounts, Henry explained that Jamaica had had twelve failed interactions with the IMF before the debt turnaround in 2013, and that in 2012, negotiations with the IMF were virtually nonexistent.

Eichengreen remarked on the discussant Emil Verner's comments about the underlying budget surplus prior to 2013. Eichengreen explained that calculations by the authors suggest that the debt increased between 2006 and 2013, half of which can be attributed to unfavorable $r - g$ and real depreciation, which increased the value of the external dollar denominated debt, and the other half because of hidden government spending on state bodies. The 2013 fiscal rule reform brought that hidden spending to the surface, and it was compressed. This, Eichengreen believed, is compatible with the authors' emphasis on the role of fiscal transparency.