Say What You Do, Do What You Say

Fiscal Credibility and Debt Dynamics

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Abstract

Do governments that keep their fiscal promises manage their debt better? I build a measure of fiscal credibility from the IMF Global Fiscal Actions database. To do it I used the share of past consolidation announcements that were followed by enacted measures. I combine entropy balancing for continuous treatments with local projections, on 137 countries over 1994–2024. Three results emerge. First, consolidations announced one year ahead improve the primary balance by about 0.3 percentage points of GDP and do not raise public debt. The debt increases usually associated with austerity tend reflect the reverse causality of measures enacted in response to budget deteriorations. Second, credibility has an effect of its own. A country one standard deviation above the world average improves its primary balance for two years, and its debt is about 3.4 points of GDP lower six years later. Third, credibility does not amplify the budgetary effect of announcements, but it lowers the interest bill that follows them. These effects are concentrated in high-income countries. Finally, in low-income countries, announced consolidations are followed by higher debt in the medium run.

Keywords: fiscal credibility; fiscal consolidation; fiscal announcements; public debt; primary balance; entropy balancing; local projections.
JEL codes: E62, H62, H63, H68, C23.

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1 Introduction

Public debt has reached levels unseen in peace time in many countries. The different crisis that happen such as global financial crisis, the euro area sovereign debt crisis and the pandemic each left a lasting imprint, and the subsequent rise in interest rates has made high debt costlier to carry. Governments in advanced, emerging and developing economies have responded by announcing fiscal consolidations. Whether these announcements stabilize debt depends on two questions that the literature has largely treated separately. The first is whether consolidations reduce debt at all, or whether their contractionary effects on output make them self-defeating. The second is whether the announcements are believed. A government that has repeatedly announced adjustments without implementing them is unlikely to see its new plans taken at face value. So, the economic effects of its announcement may therefore depend on the record of the government that makes it.

The first question has been the subject of a long debate on the macroeconomic effects of fiscal consolidation. Early studies identified consolidation episodes from large improvements in the cyclically adjusted primary balance. They found that some of them were followed by an expansion of output, notably when they relied on spending cuts. Giavazzi and Pagano (24) documented such episodes in Denmark and Ireland in the 1980s. Alesina and Perotti (6) and Alesina and Ardagna (3) generalized the finding to OECD countries, arguing that expenditure-based adjustments restore confidence and crowd in private demand. Their identification strategy was later questioned. Changes in the cyclically adjusted balance are correlated with the business cycle, with asset price movements and with other policy decisions. The narrative approach introduced by Romer and Romer (35) for tax changes, and extended to fiscal consolidations by Devries et al. (19), identifies consolidations from the policy actions recorded in official documents instead. Using this action-based dataset, Guajardo et al. (26) find that consolidations are contractionary on average, with no evidence of expansionary austerity. Alesina et al. (4, 5) refine this evidence by treating consolidations as multi-year plans.

Whether consolidations lower the debt ratio is a distinct question, because the ratio depends on output as well as on the stock of debt (18). Eyraud and Weber (21) and Boussard et al. (15) show that this self-defeating effect is plausible for the multipliers and debt levels observed after the financial crisis. Blanchard and Leigh (13) find that multipliers were underestimated in the early years of the crisis, when many consolidations were launched. The evidence on fiscal sustainability tends to point in the same direction. Governments do react to rising debt by improving their primary balance (14), but this reaction weakens at high debt levels (23). (7) show that discretionary consolidations implemented during economic upturns,

are likely to be associated with sustained reductions in debt ratios. (32), (9) and (22) found some contrasted effects based on consolidation composition. Expenditure based consolidation seems to be more effective to stabiliza public debt. The debt effect of consolidation thus remains an empirical question, and the answer is likely to differ across countries, regions and periods.

A second literature emphasises the timing of fiscal measures and the role of expectations. Agents react to fiscal policy when measures are announced rather than when they are implemented. Ramey (34) shows that dating government spending shocks by the news about future spending changes their estimated effects. Leeper et al. (30) quantify the effects of fiscal foresight in a general equilibrium model, and Mertens and Ravn (31) find that anticipated and unanticipated tax changes have markedly different effects on output. Announcements, however, are not always followed by action. Beetsma et al. (11) document a systematic gap between planned and realised fiscal adjustments in European countries. If agents are aware of this gap, the effect of an announcement should depend on how far it is believed.

Credibility is a central concept in the theory of macroeconomic policy. In the reputation models developed for monetary policy, a policymaker who cannot commit builds credibility by honouring past commitments, and agents infer the policymaker's type from its track record (10; 8). Drazen and Masson (20) show that the link between tough policies and credibility is not straightforward. A tough policy can undermine credibility when it reveals how costly it is to sustain. Transposed to fiscal policy, these ideas imply that an announced consolidation should be more effective, and cheaper to finance, when the government has a record of implementing its past announcements.

Empirical work on fiscal credibility has, however, relied on indirect measures. A first strand uses fiscal institutions as a proxy. Numerical fiscal rules are associated with stronger budget balances in the European Union (17), and independent fiscal councils, whose number has risen sharply since the financial crisis, are expected to enhance the credibility of fiscal plans by providing independent forecasts and monitoring (16). A second strand uses market prices. Sovereign risk premiums respond to debt and deficit levels (12), and stronger fiscal rules are associated with lower spreads in the euro area (28; González; 33). A third strand infers fiscal responsibility from the estimated reaction of the primary balance to debt (14; 23). These approaches capture the institutional framework, the market's assessment of default risk or the average fiscal behaviour of a country. None of them measures whether a government actually does what it announces. All these points therefore leave a gap at the intersection of these literatures.

This paper addresses this gap. Its research question is the following: *does a government's record of keeping its fiscal promises affect its fiscal outcomes and the effects of its announced*

consolidations? The question arises from an unresolved debate, since the literature disagrees on whether consolidations reduce debt, and it can now be answered with new data. The IMF Global Fiscal Actions database ((2)) records, for a large panel of countries, both the fiscal measures that governments announce and those that they enact. It makes it possible to observe directly whether announcements are followed by action. The question matters for policy. Indeed, with debt at historical highs, the success of the consolidations now being announced may depend less on their size than on whether they are believed.

I delimit the question in three ways. Credibility is defined narrowly, as the share of a government's past consolidation announcements that were followed by enacted measures, relative to other countries in the same year[1]. The fiscal shock is an announced consolidation, dated at the time of the announcement. The outcomes are the primary balance and public debt, together with the components of debt dynamics, for 137 countries over 1994–2024.

The research question breaks down into three sub-questions. First, do announced consolidations improve the primary balance and reduce public debt? Second, does credibility have an effect of its own on fiscal outcomes, independently of consolidation episodes? Third, does credibility change the effect of an announced consolidation, either by making it more fully implemented or by lowering the cost at which it is financed?

The paper makes three contributions, each responding to a limitation of the existing literature. First, it proposes a direct, behavioural measure of fiscal credibility. The measure proposed here is built from the observed match between announcements and their implementation. Second, it addresses the identification problems raised against earlier studies of consolidation. Changes in the cyclically adjusted balance and measures enacted in a given year both respond to the state of the budget in that year. Dating the treatment at the announcement made one year earlier, help to isolate the effect of the announcement itself. Third, it separates the two channels through which reputation models predict that credibility should matter. The implementation of announced plans and the expectations they create.

To answer this question, I combine entropy balancing for continuous treatments with local projections. Observations are reweighted so that announced consolidations, credibility and their interaction are uncorrelated with lagged growth, inflation, income, the current account, the primary balance, debt and interest payments. I then trace their effects on the primary balance and public debt over ten years. Three results emerge. Announced consolidations improve the primary balance by about 0.3 points of GDP and do not raise public debt. Credibility has an effect of its own. A country one standard deviation above the world average improves its primary balance for two years, and its debt is about 3.4 points of GDP lower six years later. Credibility does not make announced consolidations larger, but

[1]It does not cover fiscal rules, institutions or market perceptions, which I treat as distinct concepts

it lowers the interest bill that follows them. These effects are concentrated in high-income countries, whereas in low-income countries announced consolidations are followed by higher debt in the medium run.

The rest of the paper is organised as follows. Section 2 presents a simple reputation framework linking announcements, their implementation and debt dynamics, and derives the testable predictions. Section 3 describes the data, the construction of the announced consolidation and credibility variables, and the empirical strategy. Section 4 reports the baseline and dynamic results. Section 5 assesses their robustness and examines how they differ across income groups and regions. Section 6 decomposes the effects on debt into their transmission channels. Finally, section 7 concludes.

2 Theoretical framework

The change in the debt-to-GDP ratio d_t follows the standard accounting identity

$$\Delta d_t \;=\; -\,pb_t \;+\; int_t \;-\; \frac{g_t}{1+\gamma_t}\,d_{t-1} \;-\; \frac{\pi_t(1+g_t)}{1+\gamma_t}\,d_{t-1} \;+\; sfa_t, \tag{1}$$

where pb_t is the primary balance, int_t interest payments, g_t real growth, π_t the GDP deflator, γ_t nominal growth and sfa_t the stock-flow adjustment, all relative to GDP. A fiscal consolidation can move every term of this identity. It works directly through the primary balance, and indirectly through growth, inflation, the interest bill and below-the-line operations. Whether it lowers debt therefore depends not only on the size of the announced adjustment, but also on how much of it is implemented and on how much of it agents expect to be implemented.

To formalize this, let a government announce in year $t-1$ a consolidation of size $a_{t-1} > 0$ for year t, of which only a fraction $\theta_i \in [0,1]$ is implemented:

$$pb_t \;=\; pb_{t-1} \;+\; \theta_i\, a_{t-1} \;+\; \varepsilon_t, \tag{2}$$

where ε_t collects cyclical and discretionary shocks. The implementation rate θ_i is the government's private type. A high-θ government delivers what it announces, whereas a low-θ government dilutes, postpones or reverses its plans, consistent with the systematic gap between planned and realised adjustments documented by Beetsma et al. (11). As in reputation models of macroeconomic policy (10; 8), agents do not observe θ_i and infer it from the government's track record. With a Beta(α,β) prior, after observing that k_{it} of the n_{it}

consolidations announced over a rolling window were enacted, their posterior expectation is

$$\rho_{it} \;\equiv\; \mathbb{E}[\theta_i \mid \text{history}] \;=\; \frac{\alpha + k_{it}}{\alpha + \beta + n_{it}} \;\xrightarrow[\alpha,\beta\to 0]{}\; \frac{k_{it}}{n_{it}}. \tag{3}$$

Under a diffuse prior, reputation is simply the share of past announcements that were kept. This is exactly our empirical measure of credibility. We standardise it against the cross-country mean of each year, because what matters to investors allocating funds across sovereigns is relative reputation.

Reputation affects outcomes through expectations. The sovereign risk premium depends on the expected debt path, which depends on how much of the announced adjustment agents believe will be delivered:

$$int_t \;=\; \bar{r}\, d_{t-1} \;+\; \psi(\mathbb{E}_{t-1} d_{t+k})\,, \qquad \frac{\partial\, \mathbb{E}_{t-1} d_{t+k}}{\partial a_{t-1}} \;\propto\; -\,\rho_{it}. \tag{4}$$

An announcement by a government with a strong record lowers expected debt and the premium. The same announcement by a government with a weak record is discounted. It may even raise the premium if it is read as a signal of fiscal stress rather than of resolve, in the spirit of Drazen and Masson (20), who show that tough policies can undermine credibility when they reveal underlying weakness. The implemented adjustment also lowers output through the fiscal multiplier μ, so that, to a first approximation,

$$\Delta d_t \;\approx\; -\,\theta_i a_{t-1}\,(1 - \mu\, d_{t-1}) \;+\; \Delta int_t. \tag{5}$$

When $\mu\, d_{t-1} > 1$, consolidation raises the debt ratio in the short run, the case of self-defeating austerity (21; 15). The multiplier is larger in downturns (13) and smaller for expenditure-based adjustments (5).

The framework delivers four predictions. First, an announced consolidation raises the primary balance, while its effect on debt is ambiguous and depends on the multiplier (equation 5). Second, credibility raises the primary balance independently of consolidation episodes: high-θ governments are disciplined types that deliver small and regular adjustments rather than episodic plans. Third, credibility should amplify the budgetary effect of a consolidation, since a larger share of the announcement is implemented (equation 2). Fourth, credibility should dampen the interest cost of a consolidation announcement, since announcements by reputable governments are believed while others are discounted or read as signals of stress (equation 4). This last channel operates through the market pricing of sovereign debt. It should therefore be stronger in countries that borrow on open bond markets, typically high-income economies.

The framework also guides the empirical design. Measures enacted in year t respond to

the contemporaneous shock ε_t in equation (2), since governments tighten when the budget deteriorates. Naive estimates are therefore biased towards finding that consolidation raises debt. Measures announced in $t-1$ are predetermined with respect to ε_t, which is why we use announcements as the treatment in the analysis that follows.

3 Empirical strategy

My main source is the IMF Global Fiscal Actions (GFA) database of (2). A quarterly narrative record of fiscal policy actions covering a large panel of advanced, emerging and developing economies. Each action is coded from textual sources. The coding records its direction (contractionary or expansionary), its intensity, its legislative status (announced, passed by parliament, signed, enacted administratively, suspended or withdrawn) and its timing, distinguishing measures that take effect in the current period from measures announced for future periods. Each action carries a confidence score from the coding model, which I use to weight its intensity. I aggregate actions to the country-year level by summing over the four quarters, rescaling years with missing quarterly reports. Fiscal outcomes and macroeconomic covariates come from the IMF World Economic Outlook. Finally, the two outcomes are the primary balance and general government gross debt, both in percent of GDP. So, my final sample covers 137 countries over 1994–2024.

The GFA allows me to separate what governments announce from what they implement, which is the basis of the three variables I test. The first is the *announced consolidation* dummy $D_{i,t}$. Following the literature on fiscal foresight, I date the treatment at the time measures are announced rather than implemented (34; 30; 31), and treat consolidations as plans that combine immediate and announced measures (4). Because the GFA records the intensity of announced measures on a coding scale rather than in percent of GDP, a fixed threshold would have no economic meaning. I therefore use a scale-free criterion, in the spirit of the standard-deviation-based definitions of Afonso (1). GFA intensities are negative for contractionary measures, so a consolidation corresponds to a negative net score. $D_{i,t}$ equals one when the net measures announced by country i in year $t-1$ are contractionary by more than half a standard deviation of the net announcement score in the pooled sample, and zero when net announcements lie within half a standard deviation of zero in either direction. Years following a net expansionary announcement larger than half a standard deviation are excluded. Years following an announced expansion are excluded, and Table 5 shows that the results are robust to thresholds of 0.25 and 1 standard deviation. Because the announcement is made in $t-1$, $D_{i,t}$ is predetermined with respect to the shocks that hit the budget in year t. Measures enacted in year t, by contrast, partly respond to these shocks, as governments

tighten when the budget deteriorates. Using announcements avoids this source of reverse causality.

The second variable I used is *credibility*, which follows directly from the reputation mechanism in equation (3). For each consolidation announced by country i, I record whether a consolidation was enacted within two years. I then compute the share of announcements kept over the five years preceding year t:

$$\rho_{i,t} \;=\; \frac{k_{i,t}}{n_{i,t}}, \qquad C_{i,t} \;=\; \frac{\rho_{i,t} - \bar{\rho}_t}{\sigma_t(\rho)}, \tag{6}$$

Where $n_{i,t}$ is the number of announcements whose outcome is known by $t-1$ and $k_{i,t}$ the number that were kept. I require at least two announcements in the window. Standardizing against the cross-country mean $\bar{\rho}_t$ and standard deviation $\sigma_t(\rho)$ of the same year yields a relative measure. A one-unit increase in $C_{i,t}$ means that a country keeps its promises one standard deviation more often than the average country that year. The measure only uses announcements made in $t-3$ or earlier, so it does not overlap with $D_{i,t}$. The third variable is the interaction $D_{i,t} \times C_{i,t}$, which captures whether the effect of an announced consolidation depends on the credibility of the government that announces it.

Table 1 reports the distribution of the treatment. Of the 2,123 country-years in the baseline sample, 888 (42 percent) follow an announced consolidation. Almost every country contributes to both treated and untreated years (132 of 137 countries have at least one announcement), so identification relies on within-country variation over time. The share of treated years is similar across income groups and regions, between 37 and 45 percent. It rises to 48 percent in 2020–2024, consistent with the announced withdrawal of pandemic support. Table 2 summarizes all variables used in the analysis.

Table 1: Treated and untreated units

	Treated	Untreated	Total	Share treated (%)
Country-years	888	1,235	2,123	41.8
Countries	132	137	137	
By income level (country-years)				
High income	420	519	939	44.7
Low income	468	716	1,184	39.5
By region (country-years)				
Africa & Middle East	360	493	853	42.2
Americas	149	188	337	44.2
Asia-Pacific	113	193	306	36.9
Europe & Central Asia	266	361	627	42.4
By period (country-years)				
1994–2007	312	455	767	40.7
2008–2012	161	226	387	41.6
2013–2019	236	356	592	39.9
2020–2024	179	198	377	47.5

Baseline sample ($h = 0$). Treated: country-years following an announced consolidation; untreated: no net announcement; years following an announced expansion are excluded. A country can contribute both treated and untreated years. Income groups: above / below the median of the country-average GDP per capita. Regions: World Bank regions grouped into four areas.

Table 2: Summary statistics

	Obs.	Mean	SD	Min	Max
Panel A: Outcomes (pp of GDP)					
Δ Primary balance, $t-1$ to t	2,123	0.10	3.57	-31.73	32.33
Δ Public debt, $t-1$ to t	2,123	0.17	11.44	-88.70	145.02
Δ Public debt, $t-1$ to $t+6$	1,658	-0.50	38.17	-574.72	222.45
Panel B: Tested variables					
Announced consolidation (D)	2,123	0.42	0.49	0.00	1.00
Credibility (C, SD vs world mean)	2,123	0.02	0.99	-1.22	2.16
$D \times C$	2,123	0.04	0.65	-1.22	2.16
Panel C: Balancing covariates ($t-1$)					
Real GDP growth (%)	2,123	3.53	3.86	-14.07	17.81
Inflation (%)	2,123	6.72	11.88	-3.05	328.67
Log GDP per capita (US$)	2,123	8.24	1.51	4.76	11.55
Current account (% of GDP)	2,123	-2.23	7.68	-32.41	36.62
Primary balance (% of GDP)	2,123	-0.61	4.17	-29.92	31.24
Public debt (% of GDP)	2,123	57.38	41.60	0.00	600.12

Baseline sample: 2,123 country-years, 137 countries, 1994–2024. Unweighted statistics. The change in debt at $t+6$ is observed for fewer country-years. Inflation, growth and the current account are winsorised at the 1st and 99th percentiles. Sources: IMF Global Fiscal Actions database (tested variables) and IMF World Economic Outlook (outcomes and covariates).

It is important to notice that announcements and credibility are not randomly assigned. Governments are more likely to announce consolidations, and to have kept past promises, under particular macroeconomic conditions, which may also drive fiscal outcomes. I address this by using entropy balancing (27) as (**?**) and (**?**), but in its version for continuous treatments (36). Let $T_{i,t} = (D_{i,t},\, C_{i,t},\, D_{i,t}C_{i,t})'$ denote the vector of tested variables and $X_{i,t-1}$ the vector of covariates such as real GDP growth, inflation, log GDP per capita, the current account, the primary balance and public debt, all measured in $t-1$. The weights $w_{i,t}$ solve

$$\min_{w} \sum_{i,t} w_{i,t} \log w_{i,t} \quad \text{s.t.} \quad \sum_{i,t} w_{i,t}\, \tilde{X}_{i,t-1} = 0, \quad \sum_{i,t} w_{i,t}\, \tilde{T}_{i,t} = 0, \quad \sum_{i,t} w_{i,t}\, \tilde{T}_{i,t} \otimes \tilde{X}_{i,t-1} = 0, \tag{7}$$

together with $\sum_{i,t} w_{i,t} = 1$, where tildes denote variables centred on their sample means. The first two sets of constraints preserve the means of covariates and treatments. The third removes any correlation between each tested variable and each covariate in the reweighted

sample. Among all weights satisfying these constraints, entropy balancing selects those closest to uniform weights, which limits the loss of effective sample size. Balance is exact by construction (Table .8). Lagged debt and the lagged primary balance enter the balancing only, never the outcome regression. This avoids the mechanical correlation that arises when a lagged level of the outcome appears on both sides of an equation in first differences.

To finally try to assess the effects on the long run, I then estimate the dynamic effects with local projections of (29) on the reweighted sample:

$$y_{i,t+h} - y_{i,t-1} = \beta_1^h D_{i,t} + \beta_2^h C_{i,t} + \beta_3^h D_{i,t} \times C_{i,t} + \alpha_i^h + \tau_t^h + \varepsilon_{i,t+h}, \qquad h = 0, \ldots, 10, \quad (8)$$

where y is the primary balance or public debt. Country fixed effects α_i^h absorb time-invariant characteristics such as institutions or fiscal rules. Year fixed effects τ_t^h absorb global shocks such as the financial crisis or the pandemic. No other control enters the regression. Conditioning is done entirely through the weights. The coefficient β_1^h measures the cumulative effect of an announced consolidation for a country of average credibility. β_2^h measures the effect of credibility one standard deviation above the average in the absence of an announcement. β_3^h tests whether credibility changes the effect of the announcement. Weights are re-estimated at each horizon on the corresponding sample and finally, standard errors are clustered by country.

4 Results

4.1 Baseline results

I start by assessing whether the reweighting achieves its purpose. Before reweighting, the tested variables are mildly but systematically related to the macroeconomic environment (Table 3). Consolidations tend to be announced, and past promises tend to have been kept, after years of weaker growth and higher debt. The largest correlation is between credibility and lagged growth (-0.11), and correlations with lagged debt range from 0.07 to 0.10. Announcements also follow years of weaker primary balances (-0.07), while credibility is slightly higher after years of higher inflation (0.08). These patterns are consistent with the view that governments commit to fiscal adjustment when fiscal pressures build up, and they would bias unweighted estimates if the same pressures also shaped subsequent fiscal outcomes. Entropy balancing removes every correlation: the largest remaining one is below 10^{-7} in absolute value. The cost in precision is small, since the effective sample size falls only from 2,123 to 1,997 observations. The weights are therefore close to uniform, and the estimates do not rest on a handful of heavily weighted observations.

Table 3: Covariate balance: correlation between tested variables and covariates

	Announced consolidation (D)		Credibility		D × credibility	
Covariate	Before	After	Before	After	Before	After
Real GDP growth $(t-1)$	-0.07	0.00	-0.11	0.00	-0.09	0.00
Inflation $(t-1)$	0.04	-0.00	0.08	-0.00	0.09	-0.00
Log GDP per capita $(t-1)$	0.05	0.00	0.07	-0.00	0.05	-0.00
Current account $(t-1)$	-0.05	0.00	0.04	0.00	0.01	-0.00
Primary balance $(t-1)$	-0.07	0.00	0.01	0.00	0.05	-0.00
Public debt $(t-1)$	0.07	-0.00	0.09	-0.00	0.10	-0.00

Correlations before and after entropy balancing ($h = 0$ sample: 2,123 observations, 888 with an announced consolidation; effective sample size after reweighting: 1,997; largest absolute correlation after reweighting: 6.7×10^{-8}). Entropy balancing for continuous treatments (Hainmueller, 2012; Tübbicke, 2022): observations are reweighted so that the announced consolidation dummy, credibility and their interaction are uncorrelated with real GDP growth, inflation, log GDP per capita, the current account, the primary balance and public debt (all at $t-1$), with their means preserved. Lagged balances and debt enter the balancing only; the regression contains no control. Country and year fixed effects; standard errors clustered by country in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table 4 reports the baseline estimates of equation (8) at $h = 0$, that is, the change between $t-1$ and the year in which the announced measures are due. Columns 1 and 4 report unweighted estimates, columns 2 and 5 omit the interaction, and columns 3 and 6 report the full specification. Three results stand out.

First, announced consolidations improve the primary balance. In the full specification, the primary balance rises by 0.36 percentage points of GDP in the year following an announcement for a country of average credibility (column 3). This supports the first prediction of the framework. The unweighted estimate is larger (0.53, column 1), so selection on observables inflates the naive effect by about half. Announcements are more frequent after years of weaker primary balances and higher debt, which may be followed by some fiscal improvement regardless of the announcement. Announced consolidations do not raise public debt. The point estimates are negative (-0.33 to -0.37, columns 4–6), although not significant. This contrasts with the large positive effect obtained when the treatment is defined by measures enacted in the same year ($+1.08$ points; Table 5). That contrast supports the reverse-causality interpretation developed in Section 2. Measures enacted in year t partly respond to the deterioration of the budget in that year, whereas announcements made one year earlier do not.

Second, credibility improves the primary balance independently of consolidation episodes.

A country whose record of keeping its fiscal promises is one standard deviation above the world average improves its primary balance by 0.22 points of GDP (column 3). The estimate barely moves across specifications, from 0.20 to 0.25 with or without reweighting. This is the pattern predicted for disciplined types. The pattern is consistent with the pattern predicted for disciplined types, which deliver small, regular adjustments rather than relying on large, episodic plans. Its effect on debt is negative (-0.34 to -0.52) but imprecise on impact. Section 4.2 shows that these annual gains accumulate into a significant reduction of debt over the following years.

Third, credibility does not amplify the budgetary effect of an announced consolidation. The interaction is small and insignificant for both the primary balance (-0.10) and debt (0.27). The third prediction of the framework is therefore not supported. Governments with a stronger record do not deliver larger adjustments when they announce one. Announcements and reputation appear to operate through separate margins. The announcement shifts the budget in the year it targets, while reputation reflects a persistent difference in fiscal behaviour. The channel decomposition in Section 6 qualifies this conclusion. Credibility does interact with announcements, but through the cost of debt rather than through the primary balance.

The within-country R^2 is low, between 0.001 and 0.008, as is typical for annual changes in fiscal aggregates once country and year fixed effects are removed. The tested variables account for a small share of year-to-year fiscal fluctuations, which are dominated by cyclical shocks. They nonetheless have economically meaningful effects on the systematic component of fiscal policy, which, for credibility, survive most of the sensitivity checks in Table 5.

4.2 Dynamic effects

The baseline estimates of Section 4.1 capture the effects in the year targeted by the announcement. Fiscal plans, however, typically spread measures over several years, and reputation may affect the debt trajectory gradually rather than on impact. Figure 1 extends the baseline model over time. It reports the cumulative responses of the primary balance and public debt over ten years, estimated from equation (8) with the same specification and with weights re-estimated at each horizon. The full set of estimates is reported in Appendix Table .9. The sample shrinks from 2,123 observations at $h = 0$ to 1,321 at $h = 10$, so estimates at long horizons are less precise.

The response of the primary balance to an announced consolidation is significant on impact only. For a country of average credibility, the primary balance improves by 0.32 points of GDP in the year targeted by the announcement ($p < 0.1$), the only horizon at which the estimate is significant. The point estimates then follow a hump-shaped profile.

Table 4: Consolidation, credibility, primary balance and public debt

	Primary balance			Public debt		
Weights	OLS	EB		OLS	EB	
Model:	(1)	(2)	(3)	(4)	(5)	(6)
Variables						
Announced consolidation (D)	0.53***	0.29*	0.32*	-0.37	-0.54	-0.56
	(0.17)	(0.17)	(0.16)	(0.38)	(0.38)	(0.37)
Credibility (SD vs world mean)	0.25**	0.19**	0.21*	-0.52	-0.40	-0.52
	(0.11)	(0.09)	(0.11)	(0.37)	(0.34)	(0.43)
D × credibility	-0.17		-0.09	0.14		0.30
	(0.14)		(0.13)	(0.43)		(0.46)
Fixed-effects						
Country and year FE	Yes	Yes	Yes	Yes	Yes	Yes
Fit statistics						
Observations	2,123	2,123	2,123	2,123	2,123	2,123
R^2	0.16671	0.18108	0.18127	0.14702	0.16534	0.17057
Within R^2	0.00796	0.00406	0.00438	0.00149	0.00169	0.00192

Clustered (iso3) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

They fall to 0.05 at $h = 2$ and rise again to 0.40 at $h = 4$ and about 0.45 at $h = 5$, before fading after six years. This second peak is imprecisely estimated, but the profile is consistent with announcements describing multi-year plans whose measures are phased in progressively, as emphasized by Alesina et al. (4). Public debt declines after an announcement at every horizon, from 0.56 points of GDP on impact to 1.62 points after four years and 1.71 points after ten years. None of these estimates is statistically significant, but the absence of any increase confirms, at all horizons, that announced consolidations are not self-defeating.

Credibility displays a markedly different dynamic. Its effect on the primary balance is concentrated in the first two years (0.21 and 0.30 points, significant at the 10 and 5 percent levels) and fades from the third year. The point estimates even turn slightly negative between four and seven years (-0.16 at $h = 6$), although not significantly. Credibility therefore does not shift the primary balance permanently. Its effect on debt, by contrast, builds up over time. For a country one standard deviation above the world average, public debt is 1.76 points lower after three years, 2.05 points lower after four years and 3.42 points lower after six years ($p < 0.05$). The effect remains large at longer horizons, between -2.1 and -3.2 points up to ten years, and the 90 percent confidence band also excludes zero at seven and nine years (Figure 1). It is less precisely estimated at eight years (-2.53, $p \approx 0.11$) and at ten years (-2.11), where the sample is smallest. This is the main dynamic result of the paper: governments that keep their promises do not run permanently larger primary surpluses, yet their debt ratio follows a persistently lower path.

The size of the debt effect is larger than the primary balance response alone can account for. A primary balance improvement of 0.2 to 0.3 points sustained over two to three years lowers debt by less than one point of GDP, against a cumulative reduction of about three points after six years. The remainder must come from the other terms of identity (1). The channel decomposition at $h = 0$ offers suggestive evidence for credible governments. The stock-flow adjustment contributes about as much to the decline in debt as the primary deficit (-0.27 and -0.29), although neither estimate is precise, and credible announcements are followed by lower interest payments (Section 6 and Appendix Table .11). Credibility thus appears to affect debt through the way governments manage their balance sheet and finance themselves, and not only through the size of their primary surpluses.

The interaction between announcements and credibility remains insignificant for debt at every horizon. For the primary balance, it drifts downwards over time, mostly between -0.1 and -0.27, and becomes significant only at $h = 10$ (-0.43, $p < 0.1$), the horizon with the smallest sample. I do not consider this last estimate as robust. Taken together, the dynamic results reinforce the baseline conclusion that announcements and reputation operate through separate margins. Announcements deliver a temporary improvement in the primary

balance, phased in over several years. Reputation delivers a durable reduction in debt that accumulates over time and is largely independent of any single consolidation episode.

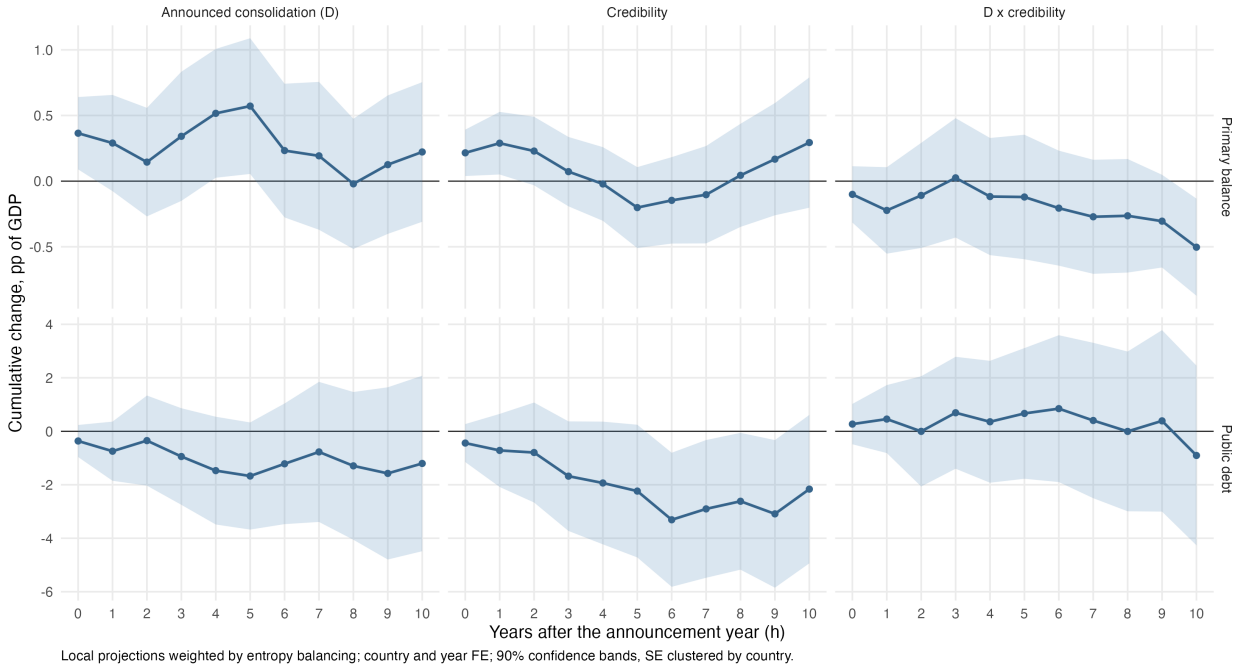

Figure 1: Dynamic effects of announced consolidation and credibility on the primary balance and public debt

Cumulative change between $t-1$ and $t+h$, in pp of GDP. Local projections (equation 8) weighted by entropy balancing, with weights re-estimated at each horizon; country and year fixed effects. Shaded areas: 90 percent confidence bands, standard errors clustered by country. Full estimates in Appendix Table .9.

5 Robustness and heterogeneity

5.1 Robustness and sensitivity checks

Table 5 re-estimates the four baseline coefficients under alternative choices. The first row reproduces columns 3 and 6 of Table 4. Each subsequent row changes one element of the specification.

The results are insensitive to the details of the reweighting. Balancing variances in addition to means, or trimming the largest weights at the 99th percentile, leaves all four coefficients virtually unchanged. Dropping one country at a time yields narrow ranges and never changes the sign of any estimate. The effect of an announced consolidation on the primary balance lies between 0.28 and 0.38, and the effect of credibility between 0.15 and 0.23. The placebo test, which reassigns announcements and credibility at random across countries

within each year, confirms that the two primary balance effects are unlikely to arise by chance: only 4 percent of random reassignments produce estimates as large. The two debt coefficients, by contrast, cannot be distinguished from random assignment on impact ($p = 0.29$ and $p = 0.17$), consistent with the dynamic evidence that the debt effects of credibility build up over several years rather than in the year of the announcement (Section 4.2).

Two rows document the identification strategy. When lagged debt, the lagged primary balance and lagged interest payments are left out of the balancing, the effect of an announced consolidation on the primary balance rises to 0.47. Governments tend to announce consolidations after a deterioration of their fiscal position, which is partly followed by a recovery regardless of the announcement, so that failing to balance on the lagged fiscal position overstates the effect by about half percentage point. When the treatment is defined by measures enacted in year t rather than announced in $t-1$, the effect on the primary balance disappears (-0.04) and the effect on debt turns positive and significant ($+1.08$). This is the pattern expected under reverse causality. Governments enact measures in response to a deterioration of the budget within the same year, so that enacted measures coincide with rising debt. Announcements made one year earlier are not contaminated by these shocks.

The size of the announced consolidation matters for its effect on debt. With a threshold of 0.25 standard deviations, which classifies small announcements as consolidations, the effect on debt is close to zero (-0.11). With the baseline threshold of 0.5 standard deviations it is -0.56,nand with a threshold of one standard deviation, which retains only large announcements, it reaches -1.01 and becomes significant at the 5 percent level. Only large announced consolidations reduce debt on impact. Interestingly, the effect of these large announcements on the primary balance in the same year is small (0.07), which suggests that large plans are back-loaded, or that they lower debt through channels other than the primary balance, such as financing conditions or below-the-line operations.

The length of the track record matters differently for the two outcomes. With a three-year window, the results are close to the baseline. With an eight-year window, the effect of credibility on the primary balance weakens (0.13) while its effect on debt increases by about 60 percent and becomes significant (-0.82). Short-term fiscal behaviour thus responds to the recent record, whereas the debt trajectory reflects reputation built over a longer period, in line with the gradual accumulation documented in Section 4.2.

Finally, crisis periods matter for the credibility effect. Excluding the global financial crisis and the euro area crisis (2008–2012) and the pandemic (2020–2021) reduces the effect of credibility on the primary balance from 0.21 to 0.09, and it is no longer significant. The effect of an announced consolidation on the primary balance is unchanged in size (0.33) but less precisely estimated. Credibility therefore seems to matter most when fiscal stress is high,

suggesting that in crises governments with a record of keeping their promises adjust their primary balance more than others. Excluding high-inflation episodes, by contrast, leaves the results unchanged.

Table 5: Sensitivity analysis

	Change in primary balance (t)		Change in public debt (t)	
	Consolidation	Credibility	Consolidation	Credibility
Baseline	0.32 (0.16)*	0.21 (0.11)*	-0.56 (0.37)	-0.52 (0.43)
Treatment: consolidation enacted in t	-0.04 (0.15)	0.18 (0.08)**	1.08 (0.56)*	-0.87 (0.50)*
Lagged debt, PB and interest not balanced	0.47 (0.17)***	0.25 (0.10)**	-0.39 (0.39)	-0.41 (0.42)
Means and variances balanced	0.32 (0.17)*	0.22 (0.11)*	-0.44 (0.36)	-0.52 (0.43)
Weights trimmed at 99th percentile	0.33 (0.16)**	0.21 (0.11)*	-0.56 (0.37)	-0.50 (0.42)
Consolidation threshold: 0.25 SD	0.26 (0.17)	0.30 (0.15)**	-0.11 (0.36)	-0.57 (0.50)
Consolidation threshold: 1 SD	0.07 (0.20)	0.12 (0.08)	-1.01 (0.43)**	-0.44 (0.31)
Credibility window: 3 years	0.37 (0.17)**	0.19 (0.11)*	-0.52 (0.40)	-0.38 (0.43)
Credibility window: 8 years	0.36 (0.15)**	0.13 (0.10)	-0.39 (0.31)	-0.82 (0.40)**
Excluding 2008-2012 and 2020-2021	0.33 (0.20)	0.09 (0.09)	-0.18 (0.50)	-0.46 (0.41)
Excluding high inflation (>20% at t-1)	0.32 (0.18)*	0.22 (0.12)*	-0.27 (0.33)	-0.60 (0.41)
Jackknife by country: min / max	0.28 / 0.38	0.15 / 0.23	-0.66 / -0.43	-0.66 / -0.32
Placebo: random treatments (empirical p)	p = 0.04	p = 0.04	p = 0.29	p = 0.17

Each row re-estimates the model with interaction (entropy balancing) under one change. Jackknife: range of estimates when dropping one country at a time. Country and year fixed effects; standard errors clustered by country in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

5.2 Heterogeneity

Table .10 re-estimates the baseline model separately by income level and by region, with entropy balancing weights re-estimated within each group. Panel A uses the baseline measure of credibility, standardised against all countries in the same year. Panel B standardises credibility against the countries of the same group in the same year, so that the coefficient measures the effect of being more credible than one's peers rather than the effect of belonging to a group that is more credible on average. The two panels deliver very similar estimates, so the differences across groups are not an artefact of differences in average credibility between them.

The results are driven by high-income countries. There, an announced consolidation raises the primary balance by 0.47 points of GDP in the year it targets and lowers public debt by 3.84 points after six years, both significant at the 5 percent level. Credibility lowers debt by 1.10 points on impact ($p < 0.05$) and by 2.90 points after six years ($p < 0.1$). In low-income countries, neither announcements nor credibility have a significant effect on the

primary balance or on debt on impact. Six years after an announced consolidation, however, their debt is 3.34 points *higher* ($p < 0.1$; 3.72 in Panel B), and the difference with high-income countries is highly significant ($p = 0.01$ in Panel A, $p < 0.01$ in Panel B). The difference in the impact effect of credibility on debt is also significant ($p = 0.03$ in Panel A, $p = 0.08$ in Panel B). Announced consolidations thus lower debt in the medium run in high-income countries but appear to raise it in low-income countries. Two interpretations are consistent with this pattern. Announcements in low-income countries may more often be made under financial stress or external programmes, so that they coincide with depreciations and growth slowdowns that raise the debt ratio. Alternatively, weaker implementation capacity may prevent the announced measures from being carried out, so that the announcement signals stress without delivering the adjustment. The primary balance response is consistent with the second interpretation: in low-income countries, announcements have no effect on the primary balance (0.06), against 0.47 in high-income countries.

In high-income countries, the interaction between announcements and credibility is positive for debt on impact (1.01 in Panel A and 0.97 in Panel B, both significant at the 10 percent level). For a high-income government one standard deviation above the average, the debt-reducing effect of credibility on impact (-1.10) is therefore almost entirely offset in the year targeted by an announcement. This suggests that credibility lowers debt mainly outside consolidation episodes, through the regular fiscal behaviour of reputable governments, rather than by making their announced plans more effective. This is consistent with the absence of any interaction in the full sample.

Regional estimates are less precise, as each region contains fewer countries. In Africa and the Middle East, an announced consolidation lowers debt on impact by about 1.4 to 1.5 points ($p < 0.1$ in both panels), even though its effect on the primary balance is not significant. The long-run effect of credibility on debt is strongest in Asia-Pacific (-4.18 after six years in Panel A, significant at the 10 percent level, and -3.40 in Panel B, not significant). In Europe and Central Asia, credibility and announcements both lower debt (by 1.83 points on impact and 3.74 points after six years, respectively), but these estimates are not significant. No coefficient is significant for the Americas. Outside the low-income group, no significant estimate points to announced consolidations raising debt.

6 Transmission channels

To identify how announcements and credibility affect debt, I estimate the baseline model on each term of the debt identity (1), the primary deficit, interest payments, the effects of real growth and inflation on the debt ratio, and the stock-flow adjustment. Every regression

uses the same sample, weights and specification, so the coefficients on the five contributions add up exactly to the coefficient on the change in debt. Panel A of Table 6 reports this decomposition at $h = 0$. Panel B splits the change in the primary balance into revenue and primary expenditure.

Announced consolidations operate through spending. The primary balance improves by 0.39 points of GDP, entirely through a reduction in primary expenditure (-0.34), while revenue does not move (0.05). This is the composition that Alesina et al. (5) find to be least costly in terms of output, and it is consistent with the absence of any adverse growth effect in Panel A (0.03). On impact, the contributions to debt largely offset each other, so that the overall effect on debt is small (-0.12). Interest payments are the only significant component (0.17). This positive coefficient, however, reflects a level difference rather than an effect of the announcement. Governments that announce consolidations already paid more interest before the announcement. Once lagged interest payments are added to the balancing covariates, the change in interest payments following an announcement is zero (Appendix Table .11).

Credibility lowers debt through the primary deficit and below-the-line operations. The decline in debt associated with a one standard deviation increase in credibility (-0.45) splits almost equally between a lower primary deficit (-0.29) and a negative stock-flow adjustment (-0.27). Neither contribution is significant on impact, but the role of the stock-flow adjustment helps explain why the cumulative reduction in debt documented in Section 4.2 exceeds what the primary balance alone can account for. Credibility does not affect the interest bill, growth or inflation. On the budget side, the improvement in the primary balance (0.25) combines slightly higher revenue (0.10) and slightly lower primary expenditure (-0.14), with no dominant instrument.

The interaction between announcements and credibility is significant only for interest payments (-0.11). Credible governments do not deliver measurably larger adjustments when they announce one, but their announcements are followed by a lower interest bill. This effect builds up over time. For a government one standard deviation above the average, interest payments fall by about 0.07 points of GDP per year after an announcement, and the cumulative contribution of interest to debt is about 0.3 points lower after two to three years (Appendix Table .11). This is the expectations channel of the framework: announcements by reputable governments are believed and rewarded with lower financing costs. The effect is too small relative to the volatility of the other components to be detected in the change in debt itself.

The channels differ across groups (Table 7). In high-income countries, credibility lowers debt by 1.12 points on impact, about half of it through the primary deficit (-0.53); in low-income countries the effect is absent, and the difference is significant ($p = 0.02$). Announced

consolidations rely on expenditure cuts in high-income countries (−0.34) and in Europe and Central Asia (−0.69). In the Americas, in Africa and the Middle East they translate into lower primary deficits (−0.72 and −0.64), partly through higher revenue in the Americas (0.39).

Table 6: Transmission channels: debt decomposition and budget composition

Panel A: Change in debt and its contributions (sum to column 1)						
	Change in debt	Primary deficit	Interest	Real growth	Inflation	Stock-flow adj.
Announced consolidation (D)	-0.12	-0.11	0.17**	0.03	-0.18	-0.03
	(0.34)	(0.17)	(0.07)	(0.13)	(0.20)	(0.30)
Credibility	-0.45	-0.29	0.08	-0.04	0.08	-0.27
	(0.36)	(0.18)	(0.06)	(0.14)	(0.20)	(0.27)
D × credibility	0.10	-0.05	-0.11**	0.03	0.24	-0.02
	(0.41)	(0.15)	(0.05)	(0.16)	(0.17)	(0.29)
Observations	2,091	2,091	2,091	2,091	2,091	2,091
Panel B: Composition of the fiscal adjustment (changes)						
	Primary balance	Revenue	Primary expenditure			
Announced consolidation (D)	0.39**	0.05	-0.34**			
	(0.17)	(0.15)	(0.13)			
Credibility	0.25**	0.10	-0.14			
	(0.11)	(0.09)	(0.10)			
D × credibility	-0.12	-0.01	0.10			
	(0.13)	(0.11)	(0.14)			
Observations	2,091	2,091	2,091			

Panel A: decomposition of equation (1); columns 2–6 add up to column 1. Panel B: changes in % of GDP. Baseline model at $h = 0$; years with any contribution above 50 pp of GDP excluded. See notes to Table 4.

Table 7: Transmission channels by income level and region

	Change in debt	Primary deficit	Interest	Real growth	Inflation	Stock-flow adj.	Revenue	Primary expenditure	Obs.
Panel A: Credibility									
All countries	-0.45	-0.29	0.08	-0.04	0.08	-0.27	0.10	-0.14	2,091
	(0.36)	(0.18)	(0.06)	(0.14)	(0.20)	(0.27)	(0.09)	(0.10)	
High income	-1.12**	-0.53*	0.07	-0.09	-0.20	-0.37	0.08	-0.22	932
	(0.47)	(0.29)	(0.08)	(0.15)	(0.21)	(0.26)	(0.09)	(0.19)	
Low income	0.34	-0.05	0.11	0.02	0.11	0.15	0.08	-0.09	1,159
	(0.42)	(0.22)	(0.08)	(0.17)	(0.28)	(0.42)	(0.12)	(0.10)	
High - low: p-value	[0.02]	[0.19]	[0.69]	[0.64]	[0.38]	[0.29]	[0.98]	[0.54]	
Africa & Middle East	0.00	-0.05	0.11	0.03	0.07	-0.17	-0.01	-0.13	831
	(0.49)	(0.31)	(0.11)	(0.24)	(0.34)	(0.49)	(0.16)	(0.14)	
Americas	0.28	-0.03	0.21	0.06	-0.04	0.08	0.03	0.07	330
	(0.77)	(0.23)	(0.16)	(0.13)	(0.15)	(0.66)	(0.13)	(0.18)	
Asia-Pacific	0.34	0.45	0.15	-0.17	0.25	-0.33	0.03	-0.08	304
	(0.51)	(0.30)	(0.10)	(0.11)	(0.38)	(0.32)	(0.11)	(0.13)	
Europe & Central Asia	-0.74	-0.48	-0.01	-0.01	-0.09	-0.15	-0.00	-0.28	625
	(0.51)	(0.31)	(0.08)	(0.22)	(0.25)	(0.29)	(0.13)	(0.20)	
Panel B: Announced consolidation									
All countries	-0.12	-0.11	0.17**	0.03	-0.18	-0.03	0.05	-0.34**	2,091
	(0.34)	(0.17)	(0.07)	(0.13)	(0.20)	(0.30)	(0.15)	(0.13)	
High income	-0.03	-0.00	0.25*	0.31	-0.53*	-0.06	0.15	-0.34**	932
	(0.42)	(0.22)	(0.13)	(0.21)	(0.27)	(0.33)	(0.13)	(0.16)	
Low income	0.06	-0.26	0.05	0.04	0.14	0.10	0.00	-0.17	1,159
	(0.55)	(0.23)	(0.09)	(0.21)	(0.25)	(0.41)	(0.23)	(0.18)	
High - low: p-value	[0.89]	[0.41]	[0.21]	[0.36]	[0.07]	[0.76]	[0.59]	[0.49]	
Africa & Middle East	-0.81	-0.64**	0.05	0.07	-0.34	0.05	0.21	-0.35	831
	(0.77)	(0.30)	(0.10)	(0.29)	(0.42)	(0.57)	(0.28)	(0.28)	
Americas	-0.40	-0.72***	0.03	-0.14	-0.23	0.66	0.39*	0.02	330
	(0.45)	(0.23)	(0.16)	(0.20)	(0.33)	(0.45)	(0.20)	(0.18)	
Asia-Pacific	-0.73	0.12	0.00	-0.34**	-0.25	-0.26	0.13	0.13	304
	(0.74)	(0.30)	(0.09)	(0.15)	(0.38)	(0.47)	(0.17)	(0.22)	
Europe & Central Asia	0.33	0.28	0.25	0.30	-0.47	-0.03	-0.45	-0.69***	625
	(0.56)	(0.36)	(0.19)	(0.25)	(0.44)	(0.60)	(0.38)	(0.22)	

Decomposition of Table 6, re-estimated within each group with group-specific weights. Income groups: above / below the median of country-average GDP per capita; regions: World Bank regions grouped into four areas. p-values of the high- vs low-income difference from a Wald test on independent subsamples. See notes to Table 4.

7 Conclusion

This paper asked whether a government's record of keeping its fiscal promises affects its fiscal outcomes and the effects of its announced consolidations. To answer it, I built a behavioural measure of fiscal credibility from the IMF Global Fiscal Actions database ((2)). Then, I estimated the effects of announced consolidations, credibility and their interaction on the primary balance and public debt for 137 countries over 1994–2024, using entropy balancing for continuous treatments and local projections.

Three conclusions emerge. First, consolidations announced one year ahead improve the

primary balance on impact, by about 0.3 points of GDP, mainly through lower primary expenditure, and they do not raise public debt at any horizon. Second, credibility has an effect of its own. A country one standard deviation above the world average improves its primary balance for two years and follows a persistently lower debt path, with debt about 3.4 points of GDP lower six years later. Third, credibility does not make announced consolidations larger, but it lowers the interest bill that follows them over the first two to three years. These effects are concentrated in high-income countries. In low-income countries, announced consolidations are followed by higher debt in the medium run.

These results contribute to the literature in three ways. They show that the debt effect of consolidation depends on how the fiscal shock is dated, and that dating it at the announcement removes much of the evidence for self-defeating austerity in the year of adjustment. They provide direct evidence for the reputation mechanism of Barro and Gordon (10) and Backus and Driffill (8) applied to fiscal policy, using a measure of credibility that does not rely on institutions or market prices. They also separate the two channels through which credibility can operate. The evidence supports the expectations channel, through lower financing costs, but not the implementation channel, since credible governments do not deliver larger adjustments when they announce one.

The policy implications should be drawn with caution, within the limits of the sample and of the measure. The results indicate that the debt path of a country depends not only on whether it announces consolidations, but also on its record of implementing what it announces. In the baseline estimates, the effect of credibility on debt is larger and more persistent than the effect of an announcement, although large announcements also lower debt on impact. The interest savings that follow a credible announcement accumulate over the first two to three years and do not grow further afterwards, which suggests that lasting benefits require credibility to be maintained through successive announcements. Finally, the contrast between income groups suggests that announcing a consolidation does not have the same consequences everywhere. In low-income countries, the results do not support the view that announced consolidations reduce debt.

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Appendices

Appendix A

.1 Entropy balancing

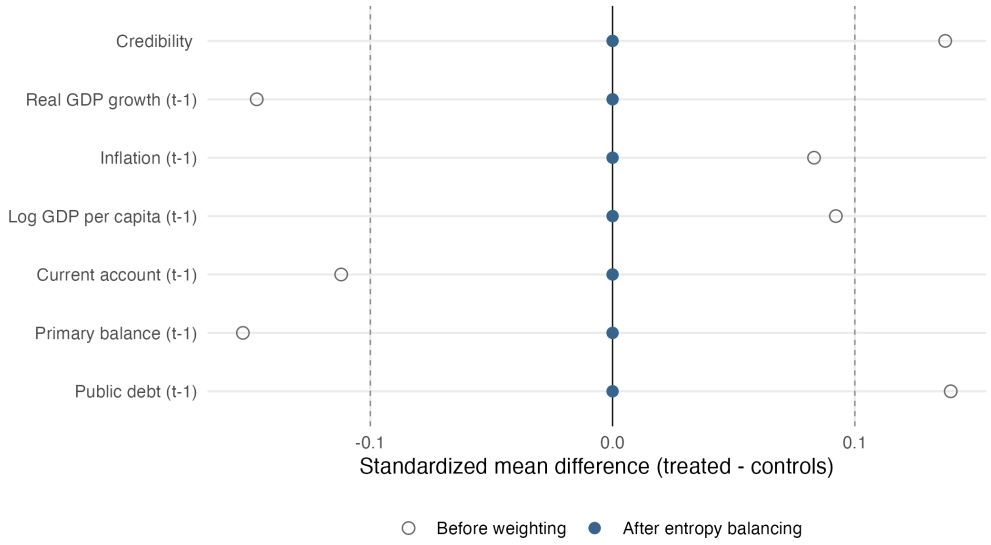

Figure .2: Standardized mean differences between treated and control country-years, before and after entropy balancing. Dashed lines: ±0.1.

Table .8: Covariate balance before and after entropy balancing

	Mean			Std. mean difference		Variance ratio	
	Treated	Controls (unweighted)	Controls (weighted)	Before	After	Before	After
Credibility	0.09	-0.04	0.09	0.14	-0.00	1.04	1.00
Real GDP growth ($t-1$)	3.21	3.77	3.21	-0.15	0.00	0.86	1.00
Inflation ($t-1$)	7.32	6.28	7.32	0.08	-0.00	3.55	1.00
Log GDP per capita ($t-1$)	8.32	8.19	8.32	0.09	0.00	0.88	1.00
Current account ($t-1$)	-2.72	-1.87	-2.72	-0.11	0.00	0.80	1.00
Primary balance ($t-1$)	-0.98	-0.34	-0.98	-0.15	0.00	0.91	1.00
Public debt ($t-1$)	60.71	54.99	60.71	0.14	-0.00	0.71	1.00
Treated / controls	888 / 1235	(effective controls after weighting: 781)					

Table .9: Consolidation, credibility, primary balance and public debt: local projections

	Consolidation (D)	Credibility	D × credibility	Obs.
Panel A: Primary balance				
$h = 0$	0.32*	0.21*	-0.09	2123
	(0.16)	(0.11)	(0.13)	
$h = 1$	0.18	0.30**	-0.27	2047
	(0.22)	(0.14)	(0.19)	
$h = 2$	0.05	0.25	-0.15	1970
	(0.25)	(0.16)	(0.25)	
$h = 3$	0.24	0.05	0.03	1895
	(0.30)	(0.16)	(0.29)	
$h = 4$	0.40	-0.05	-0.08	1824
	(0.30)	(0.17)	(0.28)	
$h = 6$	0.10	-0.16	-0.18	1658
	(0.32)	(0.20)	(0.27)	
$h = 8$	-0.16	0.02	-0.21	1485
	(0.31)	(0.23)	(0.26)	
$h = 10$	0.13	0.26	-0.43*	1321
	(0.33)	(0.30)	(0.22)	
Panel B: Public debt				
$h = 0$	-0.56	-0.52	0.30	2123
	(0.37)	(0.43)	(0.46)	
$h = 1$	-0.98	-0.86	0.52	2047
	(0.68)	(0.80)	(0.78)	
$h = 2$	-0.54	-0.91	0.02	1970
	(1.08)	(1.10)	(1.29)	
$h = 3$	-1.04	-1.76	0.64	1895
	(1.13)	(1.22)	(1.29)	
$h = 4$	-1.62	-2.05	0.33	1824
	(1.24)	(1.34)	(1.38)	
$h = 6$	-1.37	-3.42**	1.00	1658
	(1.46)	(1.64)	(1.80)	
$h = 8$	-1.67	-2.53	-0.01	1485
	(1.83)	(1.57)	(1.92)	
$h = 10$	-1.71	-2.11	-0.69	1321
	(2.17)	(1.80)	(2.19)	

Local projections (Jordà, 2005): $y_{t+h} - y_{t-1}$ regressed on consolidation, credibility and their interaction only, weighted, re-estimated at each horizon. Entropy balancing for continuous treatments (Hainmueller, 2012; Tübbicke, 2022): observations are reweighted so that consolidation, credibility and their interaction are uncorrelated with real GDP growth, inflation, log GDP per capita, current account, primary balance, public debt, interest payments (all at t-1), with their means preserved. These lags enter the balancing only: the regression contains no control and no lag of the primary balance or of debt. Sample: all countries in the IMF Global Fiscal Actions database. Consolidation (D): net consolidation measures announced in t-1 above 1/2 standard deviation (predetermined with respect to shocks in t); reference: no net announcement, announced expansions excluded. Credibility: share of announced consolidations enacted within two years over the past five years, in standard deviations from the cross-country mean of the year. Primary balance and general government gross debt in % of GDP (IMF WEO). Country and year fixed effects; standard errors clustered by country in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Appendix B

.2 Heterogeneity

Table .10: Heterogeneity by income level and region

	Primary balance (t)			Public debt (t)			Public debt ($t+6$)			
	D	C	D × C	D	C	D × C	D	C	D × C	Obs.
Panel A: Credibility standardised against the world mean of the year										
All countries	0.32*	0.21*	-0.09	-0.56	-0.52	0.30	-1.32	-3.44**	1.02	2,123
	(0.16)	(0.11)	(0.13)	(0.37)	(0.42)	(0.46)	(1.46)	(1.64)	(1.80)	
High income	0.47**	0.30	-0.31	-0.09	-1.10**	1.01*	-3.84**	-2.90*	1.40	939
	(0.20)	(0.19)	(0.22)	(0.43)	(0.48)	(0.54)	(1.65)	(1.65)	(1.62)	
Low income	0.06	0.12	-0.07	-0.76	0.44	-0.22	3.34*	0.54	0.51	1,185
	(0.24)	(0.12)	(0.16)	(0.59)	(0.55)	(0.63)	(1.98)	(2.25)	(2.28)	
Africa & Middle East	0.42	0.10	-0.05	-1.47*	0.24	-0.08	-0.13	0.18	3.38	854
	(0.37)	(0.16)	(0.25)	(0.87)	(0.61)	(0.90)	(2.86)	(3.04)	(3.60)	
Americas	0.29	-0.12	-0.38	-0.48	-0.20	0.43	0.13	-0.65	-0.13	337
	(0.18)	(0.20)	(0.26)	(0.54)	(0.93)	(0.94)	(1.05)	(1.92)	(2.00)	
Asia-Pacific	-0.04	0.05	0.19	-0.07	0.36	0.35	-2.98	-4.18*	-0.92	305
	(0.20)	(0.13)	(0.19)	(0.91)	(0.55)	(1.03)	(3.63)	(2.10)	(2.72)	
Europe & Central Asia	0.18	0.22	-0.12	-0.94	-1.83	0.97	-3.74	-0.37	2.68	627
	(0.32)	(0.26)	(0.20)	(1.24)	(1.09)	(0.94)	(2.61)	(1.55)	(2.92)	
Panel B: Credibility standardised against the mean of the group in the year										
All countries	0.32*	0.21*	-0.09	-0.57	-0.52	0.30	-1.32	-3.44**	1.02	2,124
	(0.16)	(0.11)	(0.13)	(0.37)	(0.42)	(0.46)	(1.46)	(1.64)	(1.80)	
High income	0.44**	0.31*	-0.35	-0.06	-0.95**	0.97*	-3.69**	-2.53	1.19	939
	(0.20)	(0.19)	(0.23)	(0.40)	(0.45)	(0.50)	(1.66)	(1.63)	(1.58)	
Low income	0.04	0.10	-0.06	-0.71	0.29	-0.18	3.72*	0.49	-0.05	1,182
	(0.23)	(0.13)	(0.18)	(0.59)	(0.56)	(0.69)	(2.02)	(2.30)	(2.59)	
Africa & Middle East	0.38	0.07	-0.04	-1.42*	0.13	-0.14	-1.34	-0.26	3.50	845
	(0.37)	(0.17)	(0.26)	(0.84)	(0.59)	(0.84)	(3.02)	(2.70)	(3.42)	
Americas	0.14	-0.13	-0.32	-0.15	-0.41	0.87	-0.47	-0.06	-0.20	324
	(0.19)	(0.20)	(0.25)	(0.74)	(0.94)	(0.98)	(1.31)	(1.92)	(1.89)	
Asia-Pacific	-0.06	-0.12	0.43*	-0.09	0.51	-0.07	-2.81	-3.40	-0.10	297
	(0.21)	(0.15)	(0.21)	(0.65)	(0.56)	(0.99)	(2.96)	(1.99)	(2.98)	
Europe & Central Asia	0.16	0.14	-0.04	-0.60	-1.32	0.36	-2.52	-0.07	1.75	627
	(0.29)	(0.26)	(0.21)	(1.00)	(0.96)	(0.79)	(1.74)	(1.45)	(2.28)	

D: announced consolidation; C: credibility; columns report cumulative changes between $t-1$ and t (or $t+6$), in pp of GDP. Panel A uses the baseline measure of credibility (standardised against all countries in the same year). Panel B standardises credibility against the countries of the same group in the same year, so that C measures credibility relative to peers. Country and year fixed effects; standard errors clustered by country in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

.3 Interest cost transmission channel

Table .11: Credibility and the interest cost of consolidation announcements over time

	Announced consolidation (D)	Credibility	D × credibility	Obs.
Panel A: Cumulative interest bill				
$h = 0$	0.13*	0.06	-0.10**	2,123
	(0.07)	(0.06)	(0.05)	
$h = 1$	0.18	0.13	-0.21**	2,046
	(0.14)	(0.12)	(0.08)	
$h = 2$	0.20	0.14	-0.28**	1,964
	(0.22)	(0.19)	(0.13)	
$h = 3$	0.18	0.13	-0.32*	1,882
	(0.26)	(0.25)	(0.17)	
$h = 4$	0.20	0.02	-0.35	1,804
	(0.30)	(0.33)	(0.23)	
$h = 5$	0.02	-0.07	-0.39	1,717
	(0.34)	(0.40)	(0.26)	
$h = 6$	-0.11	-0.19	-0.30	1,619
	(0.35)	(0.43)	(0.27)	
Panel B: Change in interest bill				
$h = 0$	0.01	0.05	-0.07**	2,123
	(0.04)	(0.03)	(0.03)	
$h = 1$	-0.01	0.06	-0.08*	2,046
	(0.05)	(0.06)	(0.04)	
$h = 2$	0.00	0.03	-0.09	1,964
	(0.07)	(0.08)	(0.06)	
$h = 3$	-0.05	-0.00	-0.07	1,882
	(0.07)	(0.09)	(0.05)	
$h = 4$	-0.04	-0.00	-0.06	1,804
	(0.06)	(0.09)	(0.05)	
$h = 5$	-0.04	-0.02	-0.05	1,717
	(0.06)	(0.09)	(0.05)	
$h = 6$	0.04	-0.02	-0.07	1,619
	(0.07)	(0.10)	(0.07)	

Panel A: contribution of interest payments to the change in debt between t and $t + h$, $\sum_{j=0}^{h} int_{t+j}$ (at $h = 0$, the interest column of Table 6). Panel B: change in interest payments between $t - 1$ and $t + h$. Both in pp of GDP. Weights re-estimated at each horizon; years with interest payments above 50 pp of GDP excluded. Country and year fixed effects; standard errors clustered by country in parentheses. *** p<0.01, ** p<0.05, * p<0.1.