The Distributional Effects of Fiscal Consolidations: Evidence from Advanced and Developing Economies

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Abstract

This paper studies the dynamic distributional responses to fiscal consolidation episodes in Advanced and Developing economies. I combine narrative fiscal consolidation shocks from Adler et al. (2024) and Abdel-Latif et al. (2026) with pre-tax income-share data from the World Inequality Database and estimate local projections over a five-year horizon.

The results show that the distributional incidence of fiscal consolidation depends both on the composition of adjustment and on the development context in which adjustment occurs. Spending-based consolidations are followed by the clearest regressive pattern in Developing economies: the bottom 50 percent income share declines at short horizons, while the top 1 percent share rises. Pre-trend diagnostics show that the bottom 50 percent share was increasing before these episodes, so I interpret this pattern as a reversal around consolidation rather than as evidence from a fully balanced quasi-experimental design. In Advanced economies, tax-based consolidations are associated with a more equalizing pattern, with declines in the top 1 percent share and gains for the middle 40 percent. Spending-based consolidations in Advanced economies instead reallocate income away from the middle 40 percent and toward the top 1 percent.

Mechanism evidence based on private credit to GDP suggests that financial structure conditions the incidence of spending-based consolidation, although the role of financial depth differs across development contexts. The findings imply that fiscal consolidations should not be treated as homogeneous policy shocks: their distributional consequences depend on both policy composition and the macro-financial environment.

Keywords: Fiscal consolidations, income inequality, fiscal adjustment, income shares, financial depth, developing economies, local projections

JEL: E62, H62, D31, O11, O23

1. Introduction

How do fiscal consolidations affect income inequality? This question lies at the intersection of two central debates in macroeconomics. The first concerns the macroeconomic consequences of fiscal adjustment: whether consolidations reduce debt at acceptable output costs, whether spending-based and tax-based adjustments differ in their effects, and whether austerity can ever be expansionary (Guajardo et al., 2014; Alesina et al., 2015b; Beetsma et al., 2021). The second concerns the relationship between inequality, redistribution, and economic development (Kuznets, 1955; Kaldor, 1955; Bourguignon, 1981; Galor and Zeira, 1993; Galor and Moav, 2004). Yet the distributional incidence of fiscal consolidation remains less well understood than its effects on output, employment, or sovereign spreads.

This gap is increasingly important. Large fiscal expansions during recent crises have left many governments facing renewed pressure to restore fiscal sustainability. At the same time, inequality remains politically and economically salient, especially in economies where low-income households have limited access to credit, social insurance, and private adjustment margins. Fiscal consolidations may therefore have different distributional consequences depending not only on how large the adjustment is, but also on how it is implemented and where it takes place.

This paper studies the dynamic distributional responses to fiscal consolidation episodes in a panel of Advanced and Developing economies. I combine narrative fiscal consolidation shocks from Adler et al. (2024) and Abdel-Latif et al. (2026) with pre-tax income-share data from the World Inequality Database. The main outcomes are the pre-tax income shares of the bottom 50 percent, the middle 40 percent, and the top 1 percent of the distribution. I also use the pre-tax Gini coefficient as a supplementary summary measure. This distributional decomposition allows the paper to examine not only whether inequality changes after consolidation, but also which parts of the distribution gain or lose income share.

The central comparison is between Advanced and Developing economies. Advanced economies correspond to the OECD sample in Adler et al. (2024). Developing economies combine the Latin American and Caribbean sample in Adler et al. (2024) with the Sub-Saharan African sample in Abdel-Latif et al. (2026). The motivation is that the same fiscal adjustment may propagate differently in economies with deep financial systems, broad tax capacity, and stronger private smoothing margins than in economies where households and firms remain more financially constrained.

The paper also emphasizes the composition of adjustment. Fiscal consolidations are not homogeneous policy shocks. A spending-based consolidation may affect inequality through public employment, transfers, subsidies, public investment, or aggregate demand. A tax-based consolidation may instead affect market income through labor supply, capital income, reporting incentives, or the incidence of revenue measures

across the distribution. For this reason, I estimate the dynamic responses to spending-based and tax-based consolidations separately throughout the paper.

Identification is the central empirical challenge. Governments typically consolidate in periods of fiscal stress, weak growth, or external constraint, and those conditions may themselves affect the income distribution. I address this concern by using narrative fiscal consolidation shocks, which identify policy actions motivated by deficit reduction rather than by contemporaneous cyclical stabilization. I then estimate local projections with country and year fixed effects, lagged outcomes, lagged macroeconomic controls, and Driscoll–Kraay standard errors.

The empirical strategy is deliberately transparent about the limits of the design. I report balance tests and event-study pre-trend diagnostics before presenting the main results. These diagnostics show that identification is not equally strong across all shocks and samples. In particular, spending-based consolidations in Developing economies display a statistically significant positive pre-trend in the bottom 50 percent income share before the shock. This means that the main Developing-spending result should not be interpreted as coming from a perfectly balanced quasi-experiment. A more cautious interpretation is that spending-based consolidations in Developing economies are associated with a reversal of prior gains for the bottom half of the distribution. The post-shock deterioration remains economically meaningful and robust across several exercises, but the pre-trend evidence requires moderate causal language.

Three results stand out. First, spending-based consolidations are followed by the clearest regressive distributional pattern in Developing economies. The bottom 50 percent income share falls at short horizons, while the top 1 percent share rises. This pattern is central to the paper, although it is interpreted cautiously in light of the pre-trend evidence. Second, tax-based consolidations in Advanced economies are associated with a more equalizing pattern: the top 1 percent share declines and the middle 40 percent share rises at medium horizons, while the bottom 50 percent share does not fall significantly. Third, spending-based consolidations in Advanced economies are not distributionally neutral, but their incidence differs from the Developing case. The bottom 50 percent share does not decline significantly, while the middle 40 percent loses income share and the top 1 percent gains at medium horizons.

I then examine whether these differences are consistent with observable variation in private adjustment capacity. The main mechanism exercise focuses on financial depth, measured by private credit to GDP. The results suggest that financial depth conditions the distributional response to spending-based consolidations. In Advanced economies, deeper private-credit markets are associated with a more muted initial regressive response, while in Developing economies higher private-credit depth is associated with larger bottom-50 losses after spending-based consolidations. This mechanism evidence does not remove the identification caveat, but it shows that private financial structure is closely related to the incidence of fiscal retrenchment,

with financial depth operating differently across development contexts.

The paper makes three contributions. First, it shifts the fiscal consolidation literature from average macroeconomic outcomes toward distributional incidence, showing that the consequences of adjustment differ across the income distribution rather than only in aggregate output or employment. Second, it shows that the composition of consolidation is central: spending-based and tax-based adjustments are associated with sharply different distributional dynamics. Third, it brings development context into the analysis of fiscal adjustment. The contrast between Advanced and Developing economies shows that similar fiscal shocks can have different distributional incidence depending on macro-financial structure and private adjustment capacity. In this sense, the paper connects the literature on fiscal consolidations with work on finance, inequality, and development (Alesina et al., 2015a,b; Beck et al., 2007; Claessens and Perotti, 2007; Gründler and Scheuermeyer, 2018).

The remainder of the paper is organized as follows. Section 2 describes the data, sample construction, and fiscal consolidation episodes. Section 3 presents the empirical strategy and identification diagnostics. Section 4 reports the main results for spending-based and tax-based consolidations. Section 5 examines how financial depth conditions the distributional incidence of consolidation. Section 6 presents robustness checks. Section 7 concludes.

2. Data

This section describes the data used in the paper. I combine narrative fiscal consolidation episodes with annual data on income distribution and macroeconomic conditions for a panel of Advanced and Developing economies. The purpose of this section is descriptive: I focus on the construction, coverage, and main summary properties of the variables used in the analysis, and leave identification issues and the econometric design for the next section.

2.1. Narrative fiscal consolidation shocks

My measure of fiscal consolidation builds on the narrative methodology introduced by Devries et al. (2011) and extended to a broader cross-country setting by Adler et al. (2024). The main advantage of this approach is that it identifies policy measures explicitly intended to reduce budget deficits, rather than fiscal movements that merely reflect cyclical fluctuations in revenues and expenditures.

I use a harmonized set of narrative episodes from two sources. For Advanced economies and Latin America and the Caribbean, I rely on Adler et al. (2024). For Sub-Saharan Africa, I use the new episode database compiled by Abdel-Latif et al. (2026). I then regroup countries into two broad categories. Advanced economies correspond to the OECD countries in the Adler sample. Developing economies combine Latin

America and the Caribbean with Sub-Saharan Africa. This regrouping is conceptually preferable to the earlier OECD–LAC split because it preserves the original narrative identification while aligning the comparison with the paper's substantive question about development level.

I work with three types of fiscal consolidation measures: overall consolidation, tax-based consolidation, and spending-based consolidation. In the baseline specification, these variables enter the local projection equations in continuous form, preserving information on both the timing and the scale of each identified adjustment.

2.2. Income distribution and macroeconomic controls

My main distributional outcomes are drawn from the World Inequality Database (WID). I focus on the pre-tax income shares of the bottom 50 percent, middle 40 percent, and top 1 percent of the distribution. Together, these variables allow me to distinguish between episodes that disproportionately reduce lower-income shares and episodes that mainly alter top-income concentration. I use the pre-tax Gini coefficient as a supplementary summary measure.

To account for concurrent macroeconomic conditions, I include three baseline controls in all specifications: log real GDP per capita, real GDP per capita growth, and inflation. These variables capture the broad macroeconomic environment in which consolidation takes place and help separate identified fiscal shocks from contemporaneous cyclical conditions.

2.3. Sample composition

The baseline panel contains 40 countries and 1,503 country-year observations after excluding Argentina, Costa Rica, and the Dominican Republic because of insufficient coverage in the inequality and control variables. Within this panel, the core estimation sample contains 1,235 observations. Of those, 721 correspond to Advanced economies and 514 to Developing economies. The Developing group is itself composed of 231 LAC observations and 283 SSA observations.

The panel is unbalanced by construction. Advanced economies are observed over a longer horizon, while the effective estimation window for Developing economies is concentrated in the post-2000 period because pre-2000 WID coverage is insufficient for a large share of the developing sample. This difference in coverage does not invalidate the comparison, but it should be kept in mind when interpreting differences in persistence across groups.

Table 2.1: Summary statistics by country group

	Advanced		Developing		Full sample	
Variable	Mean	SD	Mean	SD	Mean	SD
Income share bottom 50 (%)	21.01	2.78	11.23	2.97	16.94	5.61
Income share middle 40 (%)	46.10	2.61	35.97	3.75	41.89	5.90
Income share top 1 (%)	9.98	2.66	20.08	5.98	14.19	6.62
Gini (pre-tax)	0.44	0.05	0.64	0.06	0.53	0.11
Tax revenue / GDP (%)	20.76	6.02	14.90	4.87	18.68	6.30
Fiscal consolidation (% GDP)	1.12	1.00	1.03	0.88	1.09	0.96
Log GDP per capita	10.65	0.29	8.83	0.85	9.89	1.07
GDP per capita growth (%)	1.61	2.58	2.16	3.42	1.84	2.97
Inflation CPI (%)	3.54	3.90	6.81	7.31	4.90	5.81
Private credit / GDP (%)	105.36	45.88	35.37	29.68	70.73	52.19
Broad money / GDP (%)	91.34	54.06	42.90	24.07	60.80	44.61
Capital stock per capita	214557.52	58221.05	36127.10	27549.04	140295.79	100176.37
Human capital index	3.10	0.42	2.18	0.52	2.72	0.65

Notes: Statistics are computed over the baseline estimation sample. For fiscal consolidation, moments are computed conditional on an episode taking place (total shock > 0). Advanced economies correspond to OECD countries in Adler et al. (2024). Developing economies combine LAC countries from Adler et al. (2024) and SSA countries from Abdel-Latif et al. (2026). Pre-tax income shares are from the World Inequality Database.

Table 2.1 highlights the structural contrast that motivates the empirical comparison. Developing economies display substantially lower bottom 50 percent shares, substantially higher top 1 percent shares, and markedly higher pre-tax inequality than Advanced economies. They also have much lower private-credit depth, which is relevant for interpreting the broader macroeconomic environment in which fiscal retrenchment occurs.

Table 2.2: Fiscal consolidation episodes by country group

	Advanced	Developing
Country-years	731.00	772.00
Consolidation episodes	233.00	130.00
Frequency (% of country-years)	31.90	16.80
Mean size (% of GDP)	1.12	1.03
SD size	1.00	0.88
Mean tax component	0.45	0.61
Mean spending component	0.67	0.41
Spending-based (%)	63.90	41.50
Tax-based (%)	36.10	58.50
Mixed (%)	0.00	0.00

Notes: Advanced: OECD countries (Adler et al. 2024). Developing: LAC + SSA (Adler et al. 2024; Abdel-Latif et al. 2026). Consolidation episodes: country-years with total shock > 0. See Table A.1 for breakdown of Developing into LAC and SSA.

Table 2.2 shows that consolidation episodes are much more frequent in Advanced economies and also more likely to be spending-based. In Developing economies, consolidation is less frequent and more often tax-based. This compositional difference is central to the interpretation of the impulse responses below, since cross-group comparisons based only on total shocks would aggregate over meaningfully different fiscal instruments.

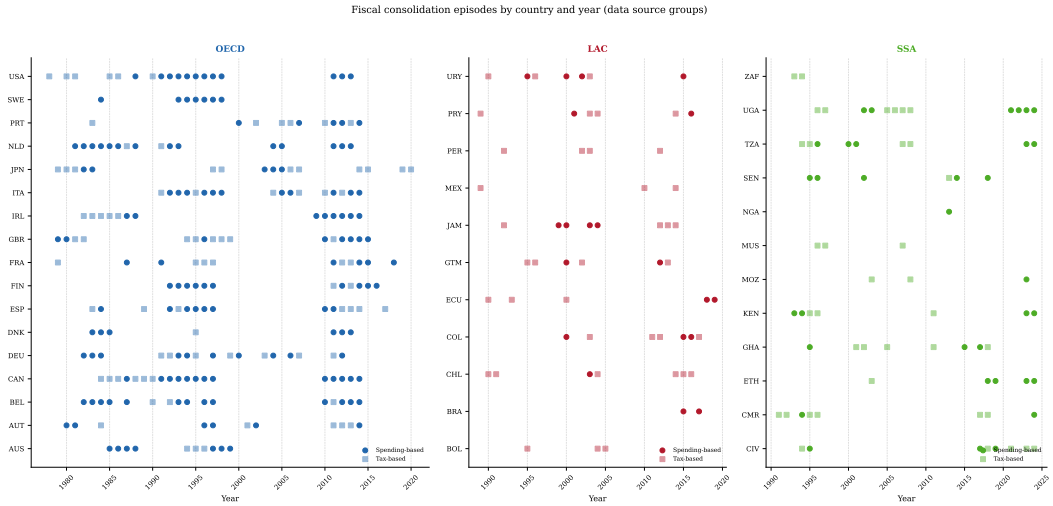


Figure 2.1: Fiscal consolidation episodes over time

Notes: The figure plots the timing and intensity of identified fiscal consolidation episodes across the sample. The dispersion of episodes across countries and years indicates that the identifying variation is not concentrated in a small number of events.

The aggregation of LAC and SSA into a single Developing group is deliberate, and Appendix Table A.1 makes its internal composition explicit. LAC and SSA have similar episode frequency, but LAC episodes are somewhat larger and more tax-heavy. This matters for interpretation: the pooled Developing estimates should be read as the average distributional response of Developing economies in this expanded sample, while keeping in mind that the LAC component is likely to carry more of the signal in the main spending results.

3. Empirical Strategy

3.1. Identification

Estimating the distributional responses to fiscal consolidations is empirically challenging because fiscal policy is not randomly assigned. Governments typically tighten fiscal policy in periods of debt pressure, weak growth, external constraint, or broader macroeconomic adjustment. These conditions may themselves affect the income distribution. A regression of inequality outcomes on observed changes in revenues or expenditures would therefore risk confounding the response to consolidation with the economic and political circumstances that led governments to consolidate in the first place.

I address this concern by relying on narrative fiscal consolidation shocks. The narrative approach identifies policy actions that were explicitly motivated by deficit reduction rather than by contemporaneous cyclical stabilization. This distinction is central for identification. Because the shock variable is based on historically

documented policy measures rather than on realized changes in budget balances, it is less likely to mechanically reflect the same macroeconomic fluctuations that affect income shares. The identifying variation therefore comes from the timing and size of deficit-reduction measures, not from endogenous movements in fiscal aggregates.

The empirical design combines this narrative variation with country and year fixed effects. Country fixed effects absorb time-invariant differences in institutional structure, tax systems, inequality levels, and development trajectories. Year fixed effects absorb global shocks and common trends that may affect both consolidation decisions and inequality outcomes. I also include lagged distributional outcomes and lagged macroeconomic controls to account for observable pre-existing dynamics. The baseline specification is estimated separately for Advanced and Developing economies and separately for tax-based and spending-based consolidations. This structure allows the distributional response to differ both by the composition of the adjustment and by the level of development.

The credibility of the design ultimately depends on whether the narrative shocks are orthogonal to pre-existing distributional trends after conditioning on fixed effects and controls. I therefore implement two complementary diagnostics. First, following Jordà and Taylor (2016), I estimate balance regressions in which each fiscal shock is regressed on lagged inequality outcomes, lagged macroeconomic controls, and fixed effects. Second, I inspect dynamic pre-trends directly using event-study specifications for the bottom 50 percent income share. These exercises are not treated as formal proof of exogeneity. Instead, they discipline the interpretation of the local projection estimates and help identify where the evidence is strongest and where it requires caution.

Table 3.1: Balance test: fiscal shocks and pre-existing inequality outcomes

		Total		Tax-based		Spending-based	
Outcome	Controls	Advanced	Developing	Advanced	Developing	Advanced	Developing
Bottom 50	Baseline	0.06	0.96	0.15	3.98***	0.17	2.47*
Middle 40	Baseline	1.94	1.60	4.14***	1.88	1.06	1.98
Top 1	Baseline	3.18**	2.28*	1.25	0.75	2.01	1.87
Gini	Baseline	0.08	1.04	0.27	3.97***	0.57	1.79
Bottom 50	Extended	0.73	1.76	1.02	6.16***	1.82	2.60*
Middle 40	Extended	0.48	2.72**	0.93	1.37	0.83	1.55
Top 1	Extended	0.74	4.47***	0.07	1.40	2.02	4.37***
Gini	Extended	0.54	2.87**	0.34	8.92***	1.76	3.75**

Notes: The table reports F-statistics for the joint significance of three lags of the corresponding inequality outcome in regressions of the fiscal consolidation shock on lagged inequality outcomes, lagged macroeconomic controls, country fixed effects, and year fixed effects. Baseline controls include the lagged outcome and the baseline macroeconomic controls used in the local projections. Extended controls add further lagged macroeconomic variables. Advanced economies correspond to the OECD sample. Developing economies combine Latin America and the Caribbean with Sub-Saharan Africa. Standard errors are Driscoll–Kraay. $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

The balance tests show that the identification properties differ across shocks and samples. In Advanced economies, the shocks are generally less strongly predicted by lagged inequality outcomes, although some isolated rejections appear depending on the outcome and shock type. In Developing economies, tax-based shocks display weaker balance properties: lagged bottom-50 and Gini outcomes predict tax consolidations in several specifications. For this reason, the Developing tax results are interpreted as descriptive dynamic correlations rather than as the paper's strongest causal evidence.

The central case for the paper is spending-based consolidation in Developing economies. The balance tests suggest that these shocks are cleaner than Developing tax shocks, but not fully orthogonal to pre-existing distributional conditions. To evaluate this concern more directly, Table 3.2 reports event-study pre-trend tests for the bottom 50 percent income share.

Table 3.2: Pre-trend event study: bottom-50 income share by country group

	Spend		Tax	
k	Advanced	Developing	Advanced	Developing
Pre-shock periods (pre-trend test)				
$k = -3$	0.008	0.109***	0.019	-0.010
	(0.030)	(0.039)	(0.045)	(0.049)
$k = -2$	0.034	0.118**	-0.020	-0.049*
	(0.036)	(0.048)	(0.050)	(0.027)
Post-shock periods				
$k = -1$	0	0	0	0
$k = +0$	0.029	-0.053	0.023	0.004
	(0.044)	(0.039)	(0.047)	(0.032)
$k = +1$	-0.060	-0.215***	0.016	-0.011
	(0.063)	(0.067)	(0.061)	(0.067)
$k = +2$	-0.072	-0.225***	0.042	-0.019
	(0.062)	(0.069)	(0.051)	(0.050)
$k = +3$	-0.067	-0.087	0.076	-0.028
	(0.061)	(0.112)	(0.065)	(0.063)
$k = +4$	-0.074	-0.297**	0.063	-0.029
	(0.062)	(0.146)	(0.056)	(0.069)
$k = +5$	-0.072	-0.209	0.042	-0.096
	(0.054)	(0.135)	(0.060)	(0.088)
Pre-trend joint test: H_0: $\beta_{-3} = \beta_{-2} = 0$				
F-stat (df=2)	0.48	6.96***	0.17	1.65
N	670	445	670	445
Countries	17	23	17	23

Notes: Each cell reports the coefficient β_k from a local-projection regression of $(y_{i,t+k} - y_{i,t-1})$ on the fiscal consolidation shock, where y is the bottom-50 income share. Specification: country and year fixed effects, two lags of outcome and controls (log GDP p.c., GDP growth, CPI inflation). Standard errors: Driscoll–Kraay. The normalization period $k = -1$ is the year before the shock (dependent variable equals zero by construction). Pre-trend joint test assumes independence across horizons (conservative). $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

The pre-trend evidence reveals a statistically significant positive pre-trend in the bottom 50 percent share prior to spending-based consolidations in Developing economies. The bottom 50 share rises before the shock, and the joint test rejects the null of no pre-trend with $F = 6.96$ and $p = 0.001$. This pattern is substantively important. It indicates that spending-based consolidations in Developing economies tend to occur after periods in which the bottom half of the distribution had been gaining income share.

This pre-trend does not mechanically explain away the post-shock decline, but it changes the interpretation

of the result. The estimates for Developing spending shocks should not be read as coming from a perfectly balanced quasi-experiment in which treated and untreated observations followed identical pre-shock paths. A more conservative interpretation is that spending-based consolidations in Developing economies are associated with a reversal of prior gains for the bottom half of the distribution. The post-shock decline is economically meaningful and appears consistently across several specifications, but the pre-trend evidence calls for cautious causal language. Throughout the paper, I therefore refer to the Developing-spending estimates as the main empirical pattern rather than as definitive proof of a fully causal effect.

3.2. Baseline specification

To estimate the dynamic distributional responses to fiscal consolidations, I use the local projections framework of Jordà (2005). For each horizon $h = 0, 1, \ldots, 5$, I estimate

$$y_{i,t+h} - y_{i,t-1} = \alpha_i^h + \gamma_t^h + \beta_h \, Shock_{i,t} + \sum_{m=1}^{2} \delta_m^h \, \Delta y_{i,t-m} + \sum_{m=1}^{2} \boldsymbol{\phi}_m^{h\prime} X_{i,t-m} + \varepsilon_{i,t+h}, \tag{1}$$

where $y_{i,t}$ is one of the distributional outcomes, $Shock_{i,t}$ is the narrative fiscal consolidation measure expressed as a percent of GDP, α_i^h are country fixed effects, γ_t^h are year fixed effects, and $X_{i,t-m}$ contains lagged macro controls. I estimate the equation separately for Advanced and Developing economies and separately for total, tax-based, and spending-based consolidation shocks.

The dependent variable is specified as the cumulative change in the outcome between $t-1$ and $t+h$. This means that the estimated coefficient β_h traces the cumulative response of each income share relative to the year before the shock. A negative coefficient for the bottom 50 percent share at horizon $h = 3$, for instance, indicates that the share is lower three years after the consolidation than it was in the year before it.

Standard errors are computed using the Driscoll–Kraay covariance estimator (Driscoll and Kraay, 1998), which is robust to heteroskedasticity, arbitrary serial correlation within countries, and cross-sectional dependence. This is important in the present setting because fiscal consolidations and macroeconomic shocks are likely to be correlated across countries.

4. Results

This section presents the main dynamic responses of income shares to fiscal consolidation shocks. I focus on the spending-versus-tax decomposition because the descriptive evidence shows that the composition of adjustment differs sharply across Advanced and Developing economies. Spending-based consolidations are more frequent in Advanced economies, while Developing economies rely relatively more on tax-based measures. Estimating the two components separately is therefore essential for distinguishing differences in the incidence of consolidation from differences in the type of consolidation implemented.

4.1. Spending-based consolidations

Figure 4.1 presents the baseline impulse responses to spending-based consolidations, and Table 4.1 reports the corresponding coefficients and standard errors.

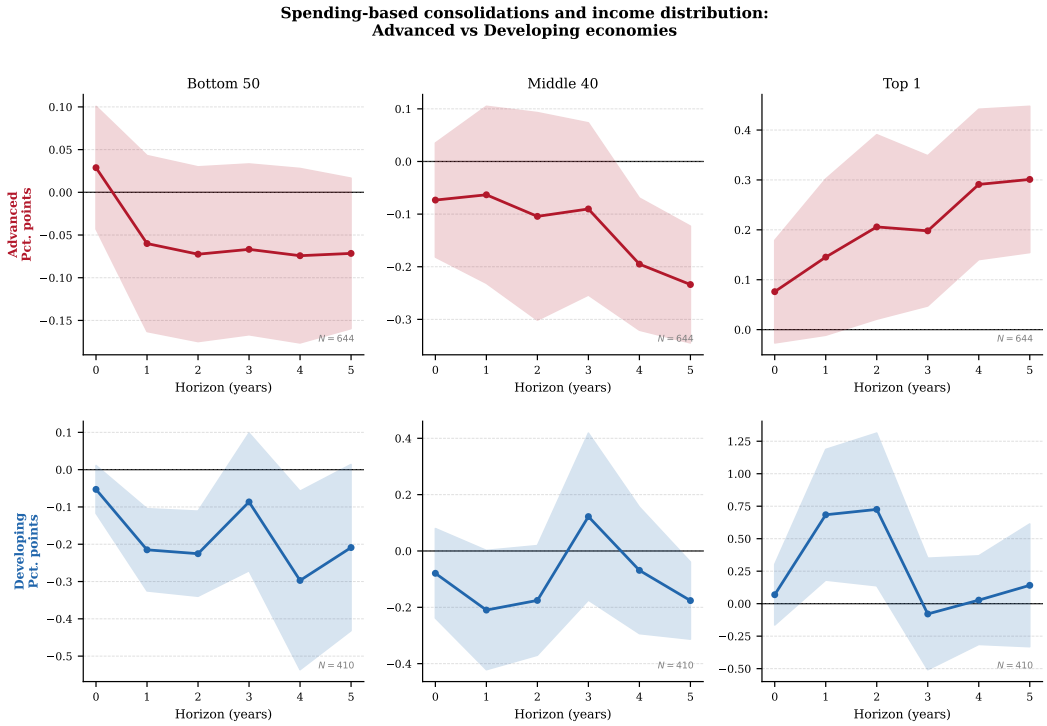


Figure 4.1: Spending-based fiscal consolidations in Advanced and Developing economies

Notes: Local-projection impulse responses to a one-percentage-point-of-GDP spending-based consolidation shock. Each panel reports the cumulative change in the corresponding income share relative to the year before the shock.

In Developing economies, spending-based consolidations are followed by a decline in the income share of the bottom 50 percent. The estimated response is negative on impact and becomes larger at short horizons. The bottom 50 share falls by about 0.22 percentage points at the one-year horizon and by a similar amount at the two-year horizon. The top 1 percent share moves in the opposite direction, rising by roughly 0.68 to 0.73 percentage points over the same horizons. The middle 40 percent share also tends to fall, although those estimates are less precise. Taken together, the pattern points to a regressive reallocation around spending-based consolidation episodes in Developing economies: the lower half receives a smaller income share, while the top of the distribution receives a larger share, especially in the first two years after the shock.

Table 4.1: Local projections: spending-based consolidations in Advanced and Developing economies

	Advanced			Developing		
Horizon	Bottom 50	Middle 40	Top 1	Bottom 50	Middle 40	Top 1
$h = 0$	0.029	-0.073	0.076	-0.053	-0.079	0.069
	(0.044)	(0.066)	(0.062)	(0.039)	(0.097)	(0.142)
$h = 1$	-0.060	-0.063	0.145	-0.215***	-0.210	0.684**
	(0.063)	(0.102)	(0.095)	(0.067)	(0.129)	(0.306)
$h = 2$	-0.072	-0.104	0.206*	-0.225***	-0.176	0.725**
	(0.062)	(0.120)	(0.112)	(0.069)	(0.118)	(0.357)
$h = 3$	-0.067	-0.090	0.198**	-0.087	0.122	-0.079
	(0.061)	(0.099)	(0.092)	(0.112)	(0.180)	(0.261)
$h = 4$	-0.074	-0.195**	0.291***	-0.297**	-0.069	0.027
	(0.062)	(0.076)	(0.092)	(0.146)	(0.137)	(0.207)
$h = 5$	-0.072	-0.234***	0.301***	-0.209	-0.176**	0.141
	(0.054)	(0.067)	(0.089)	(0.135)	(0.083)	(0.287)
N	644	644	644	410	410	410

Notes: The table reports local-projection responses to a one-percentage-point-of-GDP spending-based fiscal consolidation shock. The dependent variable is the cumulative change in the corresponding pre-tax income share relative to the year before the shock. All specifications include country and year fixed effects, two lags of the outcome, and two lags of macroeconomic controls: log real GDP per capita, real GDP per capita growth, and CPI inflation. Standard errors are Driscoll–Kraay and are reported in parentheses. Advanced economies correspond to the OECD sample. Developing economies combine Latin America and the Caribbean with Sub-Saharan Africa. $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

The magnitude of these responses is economically meaningful. The bottom 50 percent share is substantially lower in Developing economies than in Advanced economies in the pre-shock data. A decline of roughly two-tenths of a percentage point is therefore not large in absolute macroeconomic terms, but it represents a non-negligible movement for a group that already receives a small fraction of national income. The corresponding increase in the top 1 percent share reinforces the interpretation that the adjustment is not distributionally neutral.

This evidence should be read together with the pre-trend diagnostics in Section 3. The bottom 50 percent share was rising before spending-based consolidations in Developing economies, so the post-shock decline is best interpreted as a reversal around consolidation rather than as an estimate from a perfectly balanced design. The pattern remains central because the reversal is large, visible in the impulse responses, and supported by the robustness exercises.

The pattern in Advanced economies is different. Spending-based consolidations do not significantly reduce the bottom 50 percent share at any horizon. Instead, the distributional response operates mainly through the middle and the top. The middle 40 percent share declines at medium horizons, while the top 1 percent

share rises from roughly the second year onward. By horizons four and five, the top 1 percent response is positive and statistically significant. Thus, spending-based consolidations in Advanced economies are not distributionally neutral, but their incidence is less concentrated on the bottom half of the distribution. The main adjustment appears to be a reallocation away from the middle 40 percent and toward the top 1 percent.

This contrast is one of the central results of the paper. Spending-based consolidation is associated with regressive distributional dynamics in both groups, but the location of the burden differs. In Developing economies, the bottom 50 percent bears the clearest losses. In Advanced economies, the bottom half is comparatively insulated, while the middle loses income share and the top gains.

4.2. Tax-based consolidations

Figure 4.2 reports the corresponding responses to tax-based consolidations. The results differ markedly from the spending-based case, especially in Advanced economies.

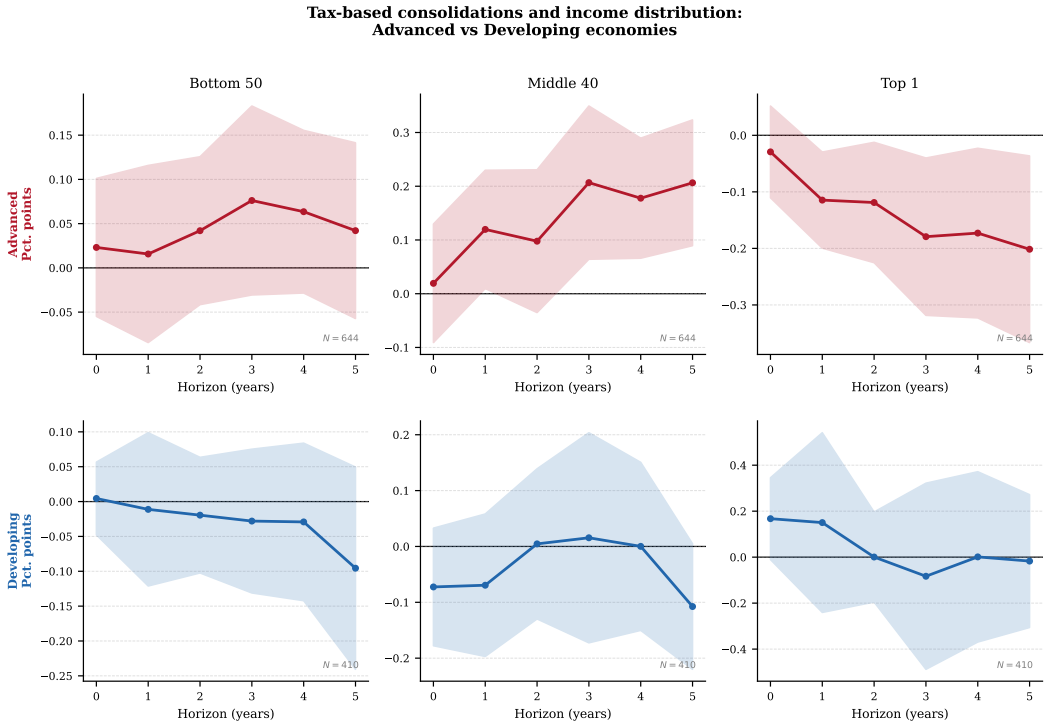


Figure 4.2: Tax-based fiscal consolidations in Advanced and Developing economies

Notes: Local-projection impulse responses to a one-percentage-point-of-GDP tax-based consolidation shock. Each panel reports the cumulative change in the corresponding income share relative to the year before the shock.

In Advanced economies, tax-based consolidations are associated with an equalizing pattern. The bottom 50 percent share does not decline significantly. The middle 40 percent share rises at medium horizons, and the

top 1 percent share falls from the first year onward. The decline in the top 1 percent share is statistically significant at several horizons and reaches about 0.20 percentage points by the end of the five-year window. Because the outcomes are measured before taxes and transfers, this pattern should not be interpreted as the mechanical redistributive effect of taxation. Rather, it is consistent with revenue-based adjustment being associated with changes in market income, reporting incentives, capital income, or the composition of income at the top. The results therefore suggest that tax-based consolidations in Advanced economies are less regressive than spending cuts and may even be associated with a compression of top income shares.

Table 4.2: Local projections: tax-based consolidations in Advanced and Developing economies

	Advanced			Developing		
Horizon	Bottom 50	Middle 40	Top 1	Bottom 50	Middle 40	Top 1
$h = 0$	0.023	0.019	-0.029	0.004	-0.072	0.167
	(0.047)	(0.067)	(0.049)	(0.032)	(0.064)	(0.108)
$h = 1$	0.016	0.120*	-0.115**	-0.011	-0.069	0.150
	(0.061)	(0.067)	(0.052)	(0.067)	(0.078)	(0.238)
$h = 2$	0.042	0.098	-0.119*	-0.019	0.005	0.001
	(0.051)	(0.081)	(0.065)	(0.050)	(0.082)	(0.119)
$h = 3$	0.076	0.207**	-0.179**	-0.028	0.016	-0.083
	(0.065)	(0.087)	(0.085)	(0.063)	(0.114)	(0.246)
$h = 4$	0.063	0.178***	-0.173*	-0.029	0.000	0.001
	(0.056)	(0.068)	(0.091)	(0.069)	(0.091)	(0.225)
$h = 5$	0.042	0.206***	-0.202**	-0.096	-0.108	-0.017
	(0.060)	(0.071)	(0.100)	(0.088)	(0.068)	(0.176)
N	644	644	644	410	410	410

Notes: The table reports local-projection responses to a one-percentage-point-of-GDP tax-based fiscal consolidation shock. The dependent variable is the cumulative change in the corresponding pre-tax income share relative to the year before the shock. All specifications include country and year fixed effects, two lags of the outcome, and two lags of macroeconomic controls: log real GDP per capita, real GDP per capita growth, and CPI inflation. Standard errors are Driscoll–Kraay and are reported in parentheses. Advanced economies correspond to the OECD sample. Developing economies combine Latin America and the Caribbean with Sub-Saharan Africa. $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

In Developing economies, tax-based consolidations are associated with weaker and less systematic responses. The bottom 50 percent estimates are small and imprecise. The middle 40 and top 1 percent responses also do not display a stable pattern across horizons. This muted response contrasts with the much clearer spending-based responses in the same group. It suggests that, within Developing economies, the adverse distributional dynamics documented in the paper are driven primarily by spending-based adjustment rather than by fiscal consolidation as such.

At the same time, the Developing tax estimates should not be overinterpreted. The balance tests indicate

that tax-based shocks in Developing economies are more strongly related to lagged inequality outcomes than the other shock types. For this reason, the absence of a strong tax response should be read cautiously. The safest conclusion is that the data do not provide robust evidence that tax-based consolidations in Developing economies are associated with the same regressive pattern observed after spending-based consolidations.

4.3. Interpreting the Advanced–Developing contrast

The baseline results point to two main conclusions. First, the composition of fiscal consolidation matters. Spending-based consolidations are associated with the strongest adverse distributional responses, while tax-based consolidations are either more benign or, in Advanced economies, associated with a decline in top income shares. This finding cautions against treating fiscal consolidation as a homogeneous policy shock. The distributional consequences depend on whether adjustment occurs through expenditure cuts or revenue increases.

Second, the level of development matters for the incidence of spending-based adjustment. In Developing economies, fiscal consolidations that rely on spending cuts are associated with income losses for the bottom 50 percent and short-term gains for the top 1 percent. In Advanced economies, the bottom half does not experience a statistically significant decline, but the middle 40 percent loses income share and the top 1 percent gains at medium horizons. The same broad type of fiscal adjustment therefore appears to propagate differently across development contexts.

This difference is consistent with the theoretical motivation of the paper. The same fiscal adjustment may propagate differently depending on financial depth, social insurance, and the structure of private adjustment margins. In Advanced economies, deeper financial systems may help cushion the initial effects of spending cuts. In Developing economies, however, financial depth may also capture broader exposure to private financial and market channels. The mechanism section evaluates this interpretation by examining whether the responses vary with private-credit depth, while additional evidence using capital stock per capita as a broader proxy for structural depth is reported in the appendix.

5. Financial Depth and Distributional Incidence

The baseline results show that the distributional responses to fiscal consolidations differ sharply across Advanced and Developing economies, especially for spending-based adjustments. This section asks whether those differences are consistent with observable variation in financial structure and private adjustment capacity. The exercise is intentionally modest. It does not estimate a structural model of transmission, nor does it claim to identify a single causal mechanism. Instead, it examines whether the response of income shares varies systematically with predetermined characteristics that proxy for the ability of households and firms to absorb fiscal retrenchment.

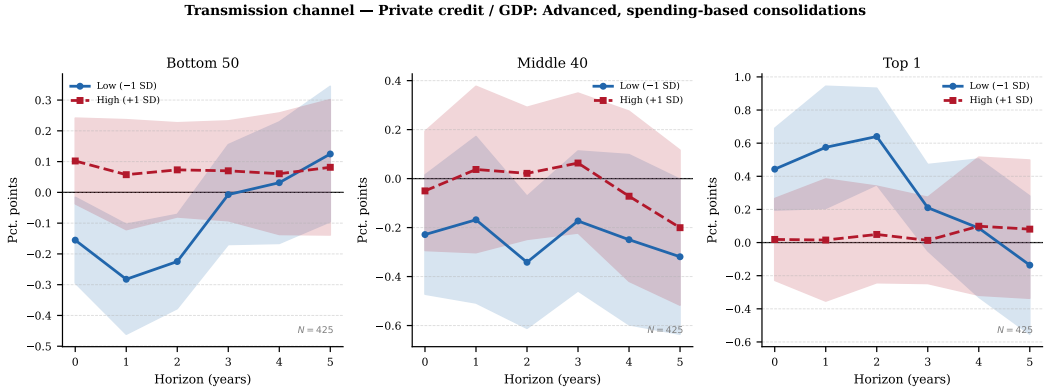
I focus on financial depth, measured by private credit to GDP. This channel is central to the paper's interpretation because financial systems shape how households and firms absorb fiscal retrenchment. Credit markets may provide smoothing margins, but they may also reflect broader exposure to private financial cycles, market income fluctuations, and credit-sensitive sectors. The empirical exercise, therefore, treats private credit as a conditioning variable: it asks whether the distributional response to spending-based consolidation differs systematically with financial depth, without imposing that the channel operates identically across Advanced and Developing economies.

For each country group, I estimate local projections that interact the fiscal consolidation shock with the lagged value of private credit to GDP. The channel variable is standardized, so the interaction coefficient measures how the response to a consolidation shock changes with a one-standard-deviation increase in financial depth. The estimates are reported separately for Advanced and Developing economies. The main text focuses on spending-based consolidations because this is where the baseline distributional responses are strongest and where the mechanism evidence is most directly connected to the paper's central result. Additional results for tax-based consolidations and for capital-stock depth are reported in Appendix E.

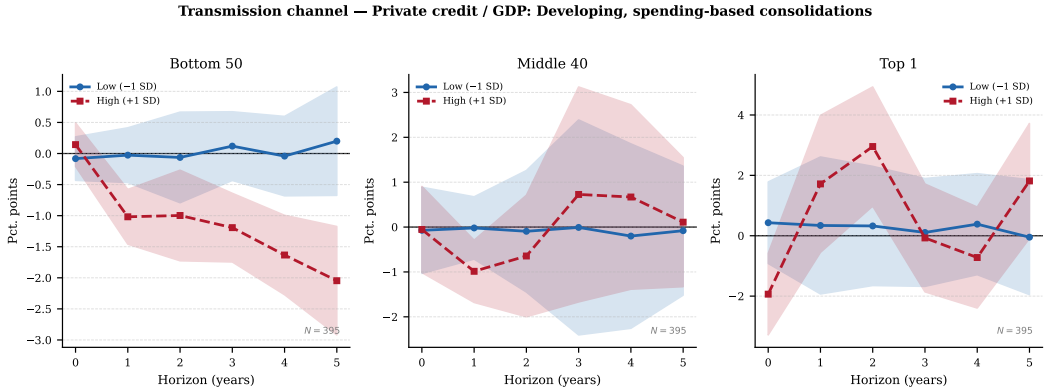
5.1. Private credit and spending-based consolidations

Figure 5.1 shows the estimated responses to spending-based consolidations at low and high levels of private credit for Advanced and Developing economies. Panel (a) reports the responses for Advanced economies, while Panel (b) reports the responses for Developing economies. Table 5.1 reports the corresponding interaction coefficients for spending-based consolidations.

In Advanced economies, the interaction coefficients in Table 5.1 are positive for the bottom 50 percent share and negative for the top 1 percent share at short horizons. This suggests that deeper credit markets partly dampen the upward redistribution associated with spending-based fiscal adjustment. The pattern is strongest in the first two years after the shock and becomes weaker at longer horizons. Thus, in Advanced economies, financial depth appears to cushion the initial distributional impact of spending cuts, although it does not fully eliminate the medium-run reallocation toward the top.



(a) Advanced economies



(b) Developing economies

Figure 5.1: Private credit channel: spending-based consolidations in Advanced and Developing economies
Notes: The figure reports local-projection responses to a one-percentage-point-of-GDP spending-based fiscal consolidation shock at low and high levels of private credit. Low and high values correspond to one standard deviation below and above the mean of the standardized private-credit variable. Responses are cumulative changes in income shares relative to the year before the shock. Panel (a) reports responses for Advanced economies; Panel (b) reports responses for Developing economies.

In Developing economies, Table 5.1 shows that higher private credit is associated with a substantially more negative bottom-50 response to spending-based consolidation. The interaction coefficient is negative and statistically significant at several horizons. This pattern indicates that the role of financial depth in Developing economies is not simply a smoothing channel. Instead, private-credit depth may also proxy for broader financial exposure, marketization, or credit-cycle sensitivity, all of which can shape how fiscal retrenchment is transmitted to the lower half of the distribution.

Table 5.1: Private credit channel: spending-based consolidations

	Advanced			Developing		
Horizon	Bottom 50	Middle 40	Top 1	Bottom 50	Middle 40	Top 1
$h = 0$	0.129**	0.089	-0.212***	0.113	0.009	-1.183*
	(0.055)	(0.080)	(0.082)	(0.165)	(0.443)	(0.643)
$h = 1$	0.170**	0.103	-0.280**	-0.496**	-0.483	0.689
	(0.068)	(0.115)	(0.131)	(0.193)	(0.320)	(1.060)
$h = 2$	0.149**	0.182**	-0.296***	-0.467	-0.275	1.315
	(0.062)	(0.084)	(0.111)	(0.340)	(0.665)	(0.915)
$h = 3$	0.039	0.118	-0.099	-0.656***	0.368	-0.091
	(0.071)	(0.091)	(0.090)	(0.243)	(1.173)	(0.914)
$h = 4$	0.015	0.089	0.006	-0.796***	0.435	-0.553
	(0.073)	(0.121)	(0.139)	(0.297)	(1.032)	(0.834)
$h = 5$	-0.022	0.059	0.109	-1.123**	0.095	0.931
	(0.077)	(0.110)	(0.132)	(0.438)	(0.723)	(0.873)

Notes: The table reports interaction coefficients from local projections that interact spending-based fiscal consolidation shocks with lagged private credit to GDP. The channel variable is globally standardized, so coefficients measure how the response to a one-percentage-point-of-GDP spending-based consolidation shock changes with a one-standard-deviation increase in private credit. The dependent variable is the cumulative change in the corresponding pre-tax income share relative to the year before the shock. All specifications include country and year fixed effects, two lags of the outcome, and two lags of macroeconomic controls: log real GDP per capita, real GDP per capita growth, and CPI inflation. Standard errors are Driscoll–Kraay and are reported in parentheses. Advanced economies correspond to the OECD sample. Developing economies combine Latin America and the Caribbean with Sub-Saharan Africa. $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

Taken together, the private-credit results provide a coherent interpretation of the Advanced–Developing contrast, but they also show that financial depth does not operate identically across groups. In Advanced economies, deeper credit markets appear to cushion the initial regressive response. In Developing economies, private-credit depth is associated with larger bottom-50 losses, suggesting that credit depth may capture broader exposure to private financial and market channels rather than only household smoothing capacity. The evidence does not prove that credit access is the only mechanism, but it shows that the financial structure of the economy conditions the distributional cost of fiscal retrenchment.

This interpretation also helps connect the mechanism results to the identification discussion. The Developing-spending estimates should be read cautiously because the bottom 50 percent share displays a positive pre-trend before the shock. The private-credit evidence does not remove that caveat. What it does show is that the post-shock deterioration varies systematically with financial depth, in a way that is consistent with private financial structures shaping the incidence of spending-based adjustment. The mechanism evidence therefore supports the substantive interpretation of the baseline pattern while preserving the more cautious

causal language warranted by the pre-trend diagnostics.

5.2. Discussion

The mechanism evidence suggests that private adjustment capacity shapes the distributional response to fiscal retrenchment. Depending on the structure of private financial markets, cuts to public spending may translate into lower labor income, weaker aggregate demand, reduced transfers, or diminished access to publicly provided goods and services. These margins are likely to matter most for households at the bottom of the distribution.

At the same time, the results should not be interpreted as a complete decomposition of the channels through which consolidation affects inequality. Private credit is a persistent structural characteristic and may proxy for broader institutional differences that are difficult to separate empirically. For this reason, I interpret the estimates as evidence that the baseline distributional responses vary with private adjustment capacity, rather than as definitive proof of a single transmission mechanism.

The broader implication is that fiscal consolidations are not distributionally homogeneous policy shocks. Their distributional responses depend both on the composition of adjustment and on the economic environment in which adjustment takes place. Spending-based consolidations are especially regressive in Developing economies, and the mechanism evidence suggests that this pattern is related to the structure of private financial markets.

6. Robustness

This section evaluates the robustness of the main findings along three dimensions. First, I assess whether the baseline responses are sensitive to alternative specification choices. Second, I examine whether the main bottom-50 response to spending-based consolidations is robust to alternative inference procedures. Third, I use leave-one-country-out exercises to evaluate whether the results are driven by individual countries.

First, the central Developing-spending pattern is stable across the main specification changes, although precision varies by horizon. Table 6.1 shows that the negative bottom-50 response remains present under alternative lag structures, the Teulings–Zubanov correction, and controls for fiscal expansions. The binary-shock specification is weaker, and the post-2005 subsample attenuates the medium-horizon effect, which is consistent with the smaller and later-developing effective sample. In Advanced economies, by contrast, the bottom-50 response to spending remains small and unstable across specifications, which reinforces the interpretation that the main bottom-50 response is concentrated in the Developing group.

Second, alternative inference weakens precision but does not reverse the substantive pattern. Table 6.2 shows that the Developing-spending bottom-50 coefficient at $h = 1$ remains economically large under clustered

and wild-bootstrap inference, but the confidence intervals widen and include zero. This finding supports a cautious interpretation: the baseline pattern is substantively important, but inference is less decisive once one moves beyond Driscoll–Kraay standard errors. For Advanced economies, the same exercise confirms the absence of a strong bottom-50 spending response.

Third, the leave-one-country-out exercise indicates that the main pattern is not driven by a single observation, but it is not perfectly uniform either. Table 6.3 shows that the Developing-spending bottom-50 response remains negative throughout the LOCO range, especially at horizons one and five; although the magnitude changes meaningfully as individual countries are removed. This is consistent with a pooled pattern that is not driven by a single country, even though some countries contribute more strongly to the estimated magnitude.

Table 6.1: Robustness: bottom 50 income share – Advanced vs Developing

	Advanced (Spend.)			Advanced (Tax)			Developing (Spend.)			Developing (Tax)		
Robustness check	$h=0$	$h=2$	$h=4$	$h=0$	$h=2$	$h=4$	$h=0$	$h=2$	$h=4$	$h=0$	$h=2$	$h=4$
Baseline	0.029	-0.072	-0.074	0.023	0.042	0.063	-0.053	-0.225***	-0.297**	0.004	-0.019	-0.029
Binary shock indicator	0.005	-0.053	0.009	0.067	0.055	0.109*	-0.013	-0.031	-0.244	0.058*	0.114	0.119
3 lags (baseline: 2)	0.021	-0.072	-0.047	0.014	0.022	0.036	-0.026	-0.204***	-0.356*	0.008	0.013	-0.012
1 lag (baseline: 2)	0.008	-0.093	-0.093	0.004	0.037	0.056	-0.051	-0.214**	-0.212*	0.015	0.023	0.024
Teulings–Zubanov correction	0.034	-0.055	-0.057	0.021	0.042	0.060	-0.003	-0.156*	-0.339**	-0.023	-0.001	0.002
Controlling for expansions	0.027	-0.073	-0.077	0.018	0.041	0.055	-0.052	-0.227***	-0.307**	0.008	-0.026	-0.027
Post-2005 subsample	0.140***	0.013	-0.116***	0.050	0.025	-0.037	-0.036	-0.166**	-0.199	0.073	0.130*	0.209*

Notes: Each row reports a separate robustness exercise for the baseline local projection. Outcome: income share of the bottom 50 percent. The table reports selected horizons $h = 0$, $h = 2$, and $h = 4$. Advanced economies correspond to the OECD sample; Developing economies combine LAC and SSA. Significance levels are based on Driscoll–Kraay standard errors. $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

Table 6.2: Alternative inference: spending-based consolidations and bottom-50 share

Group	h	DK (coef/SE)	Cluster SE	Wild CI (sym.)	Perc-t CI
Advanced	$h=1$	-0.060 (0.063)	-0.060 (0.044)	[-0.143, 0.023]	[-0.143, 0.023]
	$h=3$	-0.067 (0.061)	-0.066 (0.069)	[-0.192, 0.060]	[-0.188, 0.062]
	$h=5$	-0.072 (0.054)	-0.071 (0.099)	[-0.257, 0.114]	[-0.248, 0.119]
Developing	$h=1$	-0.215 (0.067)	-0.204 (0.126)	[-0.455, 0.046]	[-0.450, 0.053]
	$h=3$	-0.087 (0.112)	-0.052 (0.160)	[-0.360, 0.257]	[-0.332, 0.267]
	$h=5$	-0.209 (0.135)	-0.178 (0.207)	[-0.608, 0.251]	[-0.591, 0.275]

Notes: Outcome: income share of bottom 50%. Shock: spending-based fiscal consolidation (% GDP). DK: Driscoll–Kraay SE. Cluster: clustered by country. Wild CI: symmetric 90% CI via Webb (2014) wild cluster bootstrap ($B = 999$). Perc-t CI: asymmetric percentile-t 90% CI. $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$ based on wild bootstrap p-value.

Table 6.3: Leave-one-country-out robustness: bottom 50 income share

	Advanced			Developing		
Horizon	Baseline	LOCO range	Sign stable	Baseline	LOCO range	Sign stable
Panel A: Spending-based consolidations						
$h = 1$	-0.060	[-0.079, -0.029]	Yes	-0.215	[-0.261, -0.085]	Yes
$h = 3$	-0.067	[-0.101, 0.000]	Weak	-0.087	[-0.183, -0.007]	Yes
$h = 5$	-0.072	[-0.112, 0.032]	No	-0.209	[-0.383, -0.088]	Yes
Panel B: Tax-based consolidations						
$h = 1$	0.016	[-0.017, 0.034]	No	-0.011	[-0.036, 0.030]	No
$h = 3$	0.076	[0.035, 0.118]	Yes	-0.028	[-0.052, -0.006]	Yes
$h = 5$	0.042	[0.003, 0.112]	Yes	-0.096	[-0.147, -0.050]	Yes

Notes: The table reports leave-one-country-out robustness checks for the bottom 50 percent income share. The baseline coefficient is the estimate using the full sample for the corresponding group and shock type. The LOCO range reports the minimum and maximum coefficient obtained after excluding one country with at least one consolidation episode at a time. "Sign stable" indicates whether all leave-one-country-out estimates preserve the sign of the baseline coefficient. "Weak" denotes cases in which the LOCO range reaches zero but does not clearly reverse sign. Advanced economies correspond to the OECD sample; Developing economies combine LAC and SSA.

7. Conclusion

This paper studies the distributional responses to fiscal consolidation episodes in Advanced and Developing economies. Combining narrative fiscal consolidation shocks with pre-tax income shares from the World Inequality Database, I show that the incidence of fiscal adjustment depends both on the composition of consolidation and on the development context in which it takes place.

The main empirical pattern is that spending-based consolidations are followed by the most adverse distributional dynamics in Developing economies. The bottom 50 percent income share declines at short horizons, while the top 1 percent share rises. Because the bottom 50 percent share displays a positive pre-trend before these episodes, I interpret the result as a reversal of prior gains for the bottom half of the distribution rather than as an estimate from a perfectly balanced quasi-experimental design.

The contrast with Advanced economies is informative. Spending-based consolidations in Advanced economies do not significantly reduce the bottom 50 percent share, but they are associated with a reallocation away from the middle 40 percent and toward the top 1 percent at medium horizons. Tax-based consolidations display a different pattern, especially in Advanced economies, where they are associated with declines in the top 1 percent share and gains for the middle 40 percent. These results caution against treating fiscal consolidation as a homogeneous policy shock.

The mechanism evidence suggests that financial structure matters. In Advanced economies, deeper credit

markets appear to cushion the initial response to spending-based consolidation. In Developing economies, higher private-credit depth is associated with larger bottom-50 losses, suggesting that financial depth may also capture exposure to private financial and market channels. This evidence does not identify a single mechanism, but it shows that the macro-financial environment conditions the distributional incidence of fiscal retrenchment.

The policy implication is direct: fiscal adjustment packages should be evaluated not only by their expected effects on debt and output, but also by their distributional incidence. Spending-based consolidation can be especially costly for lower-income households in developing economies, particularly where private and public adjustment margins are limited. The design of consolidation packages should therefore account for the composition of adjustment, the strength of social protection, and the financial environment in which adjustment takes place.

Data Availability Statement

The data used in this paper are drawn from publicly available sources and from narrative fiscal consolidation datasets cited in the manuscript. Income distribution data come from the World Inequality Database. Macroeconomic controls are obtained from standard international databases. Fiscal consolidation episodes are based on the action-based datasets of Adler et al. (2024) and Abdel-Latif et al. (2026), as described in the paper.

Replication materials, including the cleaned estimation dataset, code used to construct the tables and figures, and scripts for the local-projection estimates, will be made available in an online repository upon publication, subject to the redistribution conditions of the underlying data providers.

Declaration of Interest

The author declares that there are no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Declaration of Generative AI and AI-assisted Technologies in the Writing Process

During the preparation of this work, the author used ChatGPT for language editing, organization, and clarity of exposition. After using this tool, the author reviewed and edited the content as needed and takes full responsibility for the content of the published article.

Appendix A. Composition of the Developing Group

Table A.1: Fiscal consolidation episodes: composition of Developing group

	LAC	SSA
Country-years	352.00	420.00
Consolidation episodes	58.00	72.00
Frequency (% of country-years)	16.50	17.10
Mean size (% of GDP)	1.10	0.98
SD size	0.88	0.88
Mean tax component	0.71	0.54
Mean spending component	0.40	0.41
Spending-based (%)	34.50	47.20
Tax-based (%)	65.50	52.80
Mixed (%)	0.00	0.00

Notes: LAC: Latin America and the Caribbean (Adler et al. 2024). SSA: Sub-Saharan Africa (Abdel-Latif et al. 2026). Together, LAC + SSA form the Developing group. Consolidation episodes: country-years with total shock > 0.

Appendix B. Additional Distributional Outcomes

Appendix Table B.1 reports the spending-based consolidation results, including the pre-tax Gini coefficient as an additional summary measure of inequality. The Gini responses are consistent with the income-share evidence. In Developing economies, spending-based consolidations are associated with an increase in the pre-tax Gini at short horizons, while the bottom 50 percent share declines and the top 1 percent share rises. In Advanced economies, the Gini response is smaller but becomes positive at medium horizons, consistent with the increase in the top 1 percent share and the decline in the middle 40 percent share.

Table B.1: Spending-based consolidations and additional distributional outcome

Horizon	Bottom 50 share	Middle 40 share	Top 1 share	Gini
Panel A: Advanced economies				
$h = 0$	0.029	-0.073	0.076	-0.000
	(0.044)	(0.066)	(0.062)	(0.001)
$h = 1$	-0.060	-0.063	0.145	0.001
	(0.063)	(0.102)	(0.095)	(0.001)
$h = 2$	-0.072	-0.104	0.206*	0.002
	(0.062)	(0.120)	(0.112)	(0.001)
$h = 3$	-0.067	-0.090	0.198**	0.001
	(0.061)	(0.099)	(0.092)	(0.001)
$h = 4$	-0.074	-0.195**	0.291***	0.002*
	(0.062)	(0.076)	(0.092)	(0.001)
$h = 5$	-0.072	-0.234***	0.301***	0.002**
	(0.054)	(0.067)	(0.089)	(0.001)
N	644	644	644	644
Panel B: Developing economies				
$h = 0$	-0.053	-0.079	0.069	0.001
	(0.039)	(0.097)	(0.142)	(0.001)
$h = 1$	-0.215***	-0.210	0.684**	0.005***
	(0.067)	(0.129)	(0.306)	(0.002)
$h = 2$	-0.225***	-0.176	0.725**	0.005***
	(0.069)	(0.118)	(0.357)	(0.001)
$h = 3$	-0.087	0.122	-0.079	0.001
	(0.112)	(0.180)	(0.261)	(0.002)
$h = 4$	-0.297**	-0.069	0.027	0.005**
	(0.146)	(0.137)	(0.207)	(0.002)
$h = 5$	-0.209	-0.176**	0.141	0.004*
	(0.135)	(0.083)	(0.287)	(0.002)
N	410	410	410	410

Notes: The table reports local-projection responses to a one-percentage-point-of-GDP spending-based fiscal consolidation shock. The dependent variable is the cumulative change in the corresponding pre-tax distributional outcome relative to the year before the shock. Income-share outcomes are measured in percentage points. The Gini coefficient is measured in index units. All specifications include country and year fixed effects, two lags of the outcome, and two lags of macroeconomic controls: log real GDP per capita, real GDP per capita growth, and CPI inflation. Standard errors are Driscoll–Kraay and are reported in parentheses. Advanced economies correspond to the OECD sample. Developing economies combine Latin America and the Caribbean with Sub-Saharan Africa. $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

Appendix C. Additional Identification Evidence

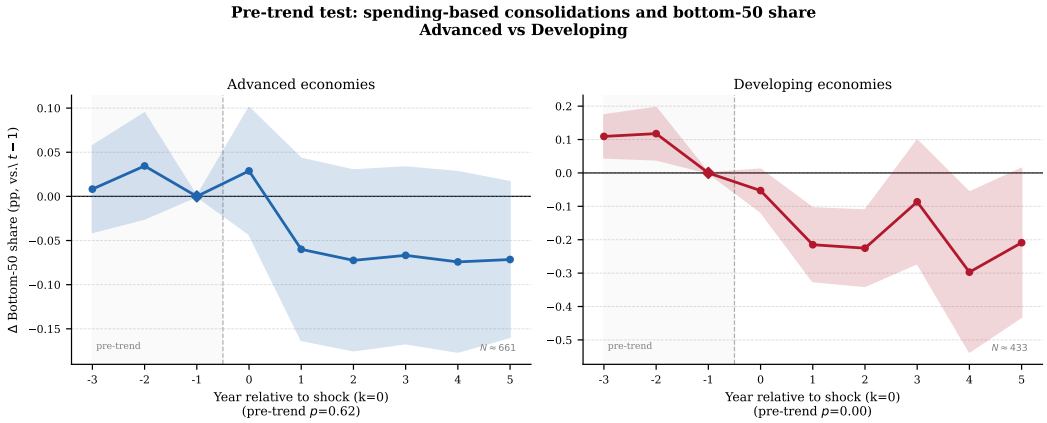


Figure C.1: Event-study pre-trends and post-shock dynamics: spending-based consolidations

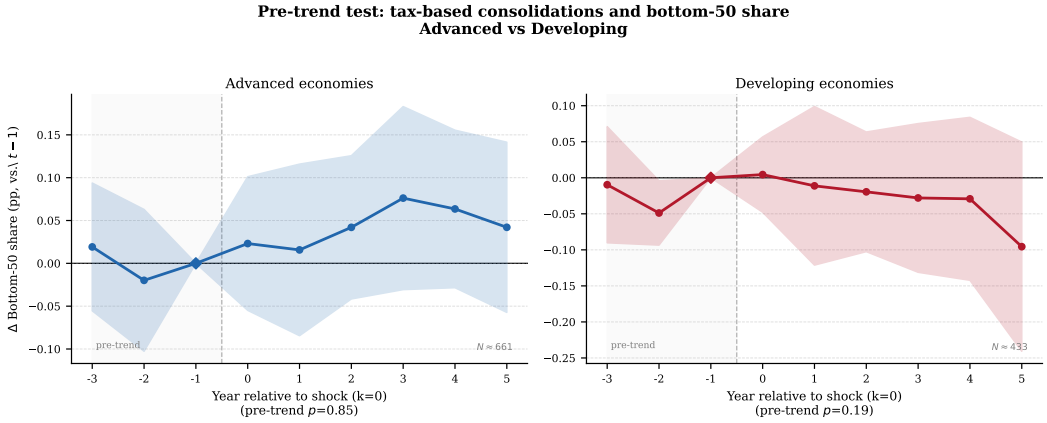


Figure C.2: Event-study pre-trends and post-shock dynamics: tax-based consolidations

Appendix D. Additional Robustness

Appendix Table D.1 reports the corresponding robustness checks for the top 1 percent income share. The main patterns are broadly consistent with the baseline results. Spending-based consolidations in Advanced economies are associated with increases in the top 1 percent share at medium horizons, while tax-based consolidations in Advanced economies are associated with declines in the top 1 percent share. In Developing economies, the top-income response to spending-based consolidations is strongest at short horizons but less stable across robustness exercises.

Table D.1: Robustness: top 1 income share – Advanced vs Developing

	Advanced (Spend.)			Advanced (Tax)			Developing (Spend.)			Developing (Tax)		
Robustness check	$h=0$	$h=2$	$h=4$	$h=0$	$h=2$	$h=4$	$h=0$	$h=2$	$h=4$	$h=0$	$h=2$	$h=4$
Baseline	0.076	0.206*	0.291***	-0.029	-0.119*	-0.173*	0.069	0.725**	0.027	0.167	0.001	0.001
Binary shock indicator	0.010	0.050	0.030	-0.114*	-0.180*	-0.227***	0.072	0.093	-0.297	0.078	0.093	-0.044
3 lags (baseline: 2)	0.075	0.198*	0.248***	-0.021	-0.113*	-0.189**	0.205	1.034***	0.251	0.226*	-0.060	-0.049
1 lag (baseline: 2)	0.102	0.226*	0.344***	-0.000	-0.092	-0.118	-0.014	0.577	-0.138	0.143	-0.054	0.022
Teulings–Zubanov correction	0.049	0.126	0.246**	-0.034	-0.115*	-0.156*	0.105	0.250	0.090	0.233*	-0.127	0.049
Controlling for expansions	0.076	0.204*	0.291***	-0.030	-0.127*	-0.180*	0.055	0.762**	0.057	0.103	0.017	0.066
Post-2005 subsample	-0.138*	-0.171*	0.195***	-0.016	-0.088*	0.118**	0.159	1.030***	-0.204	0.138	0.082	-0.403

Notes: Each row reports a separate robustness exercise for the baseline local projection. Outcome: income share of the top 1 percent. The table reports selected horizons $h = 0$, $h = 2$, and $h = 4$. Advanced economies correspond to the OECD sample. Developing economies combine Latin America and the Caribbean with Sub-Saharan Africa. Significance levels are based on Driscoll–Kraay standard errors. $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

Appendix Table D.2 reports the corresponding leave-one-country-out checks for the top 1 percent income share. The top-income results are especially stable in Advanced economies. For spending-based consolidations, the top 1 percent response remains positive at horizons one, three, and five after excluding countries one at a time. For tax-based consolidations, the response remains negative throughout the LOCO range. In Developing economies, the short-run top-income increase after spending-based consolidations is also stable at horizon one, but the medium- and longer-horizon responses are more sensitive to the exclusion of individual countries.

Table D.2: Leave-one-country-out robustness: top 1 income share

	Advanced			Developing		
Horizon	Baseline	LOCO range	Sign stable	Baseline	LOCO range	Sign stable
Panel A: Spending-based consolidations						
$h = 1$	0.145	[0.034, 0.176]	Yes	0.684	[0.373, 0.794]	Yes
$h = 3$	0.198	[0.018, 0.245]	Yes	-0.079	[-0.223, 0.096]	No
$h = 5$	0.301	[0.066, 0.373]	Yes	0.141	[-0.058, 0.334]	No
Panel B: Tax-based consolidations						
$h = 1$	-0.115	[-0.147, -0.079]	Yes	0.150	[0.015, 0.345]	Yes
$h = 3$	-0.179	[-0.246, -0.108]	Yes	-0.083	[-0.262, 0.052]	No
$h = 5$	-0.202	[-0.274, -0.121]	Yes	-0.017	[-0.117, 0.079]	No

Notes: The table reports leave-one-country-out robustness checks for the top 1 percent income share. The baseline coefficient is the estimate using the full sample for the corresponding group and shock type. The LOCO range reports the minimum and maximum coefficient obtained after excluding one country with at least one consolidation episode at a time. "Sign stable" indicates whether all leave-one-country-out estimates preserve the sign of the baseline coefficient. Advanced economies correspond to the OECD sample. Developing economies combine Latin America and the Caribbean with Sub-Saharan Africa.

Appendix E. Additional Mechanism Evidence

This appendix reports additional mechanism evidence that complements the private-credit results shown in the main text. I present two sets of exercises. First, I report the private-credit channel responses for tax-based consolidations. Second, I report the interaction results using capital stock per capita as an alternative proxy for structural depth. These exercises are useful for assessing whether the mechanism evidence is specific to spending-based consolidations or reflects a broader form of heterogeneity in the response to fiscal adjustment.

Appendix E.1. Private credit and tax-based consolidations

Figures E.1 and E.2 report the private-credit channel responses for tax-based consolidations. Unlike the spending-based results in the main text, these responses do not display a clear and stable bottom-50 amplification pattern.

In Advanced economies, tax-based consolidations remain comparatively benign across levels of private credit. The bottom 50 percent response is small, and the top 1 percent response tends to remain below zero at several horizons. This is consistent with the baseline finding that tax-based consolidations in Advanced economies are less regressive than spending-based consolidations and may be associated with a compression of top income shares.

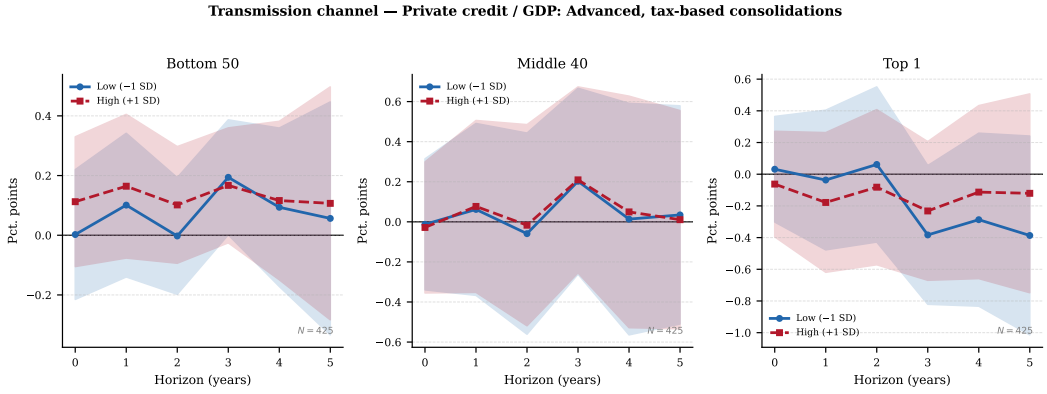


Figure E.1: Private credit channel: tax-based consolidations in Advanced economies

Notes: The figure reports local-projection responses to a one-percentage-point-of-GDP tax-based consolidation shock at low and high levels of private credit. Low and high values correspond to one standard deviation below and above the mean of the standardized channel variable. Responses are cumulative changes in income shares relative to the year before the shock.

In Developing economies, the tax-based private-credit responses are less systematic. The confidence intervals are wide, and the point estimates do not show the same stable pattern observed after spending-based

consolidations. This reinforces the interpretation that the main distributional mechanism in the paper is tied to expenditure-based adjustment rather than to fiscal consolidation in general.

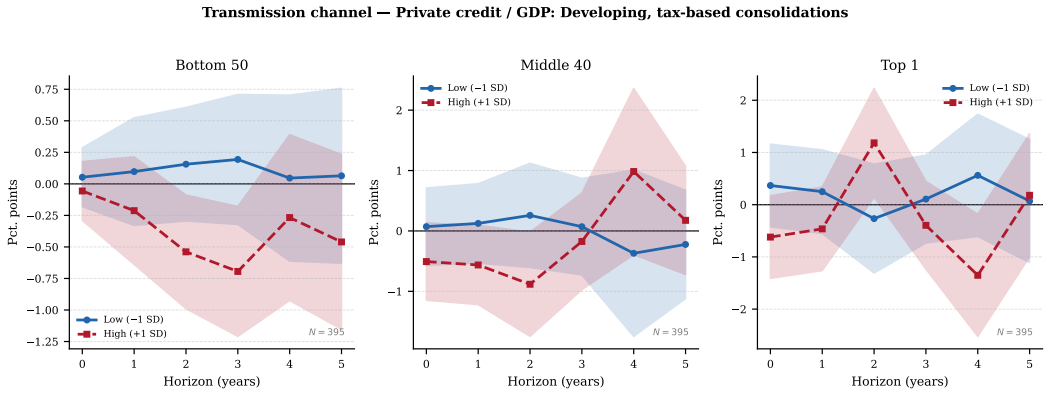


Figure E.2: Private credit channel: tax-based consolidations in Developing economies

Notes: The figure reports local-projection responses to a one-percentage-point-of-GDP tax-based consolidation shock at low and high levels of private credit. Low and high values correspond to one standard deviation below and above the mean of the standardized channel variable. Responses are cumulative changes in income shares relative to the year before the shock.

Appendix E.2. Capital-stock depth

Appendix Table E.1 reports the mechanism exercise using capital stock per capita as an alternative proxy for structural depth. The table follows the same Advanced–Developing structure used in the main mechanism table and reports both spending-based and tax-based consolidations. The evidence is weaker and less direct than the private-credit channel, especially in Advanced economies. In Developing economies, however, the interaction between spending-based consolidations and capital stock is negative and statistically significant for the bottom 50 percent share across several horizons. Because capital stock captures a broader set of development characteristics than private credit, I interpret these estimates as complementary rather than as the main mechanism evidence.

Table E.1: Capital-stock channel: Advanced and Developing economies

	Advanced			Developing		
Horizon	Bottom 50	Middle 40	Top 1	Bottom 50	Middle 40	Top 1
Panel A: Spending-based consolidations						
$h = 0$	0.033	0.118	-0.124	-0.211	-0.300	-0.701
	(0.091)	(0.143)	(0.131)	(0.167)	(0.331)	(0.476)
$h = 1$	0.057	0.292	-0.224	-0.854***	-0.609**	1.151
	(0.147)	(0.207)	(0.209)	(0.218)	(0.255)	(0.768)
$h = 2$	0.004	0.368	-0.218	-1.034***	-0.777*	1.502
	(0.137)	(0.243)	(0.232)	(0.274)	(0.405)	(1.370)
$h = 3$	-0.098	0.285	-0.020	-1.437***	-0.558	-1.352
	(0.095)	(0.233)	(0.207)	(0.331)	(0.640)	(0.966)
$h = 4$	-0.209	0.195	0.135	-1.478***	-0.874	-0.610
	(0.129)	(0.152)	(0.171)	(0.473)	(0.835)	(1.322)
$h = 5$	-0.141	0.081	0.164	-1.949***	-0.710	1.025
	(0.174)	(0.140)	(0.178)	(0.448)	(0.951)	(1.773)
Panel B: Tax-based consolidations						
$h = 0$	0.162**	0.037	-0.092*	-0.113	-0.623**	1.129*
	(0.075)	(0.122)	(0.049)	(0.157)	(0.290)	(0.646)
$h = 1$	0.154**	0.063	-0.072	-0.261	-0.252	0.283
	(0.064)	(0.110)	(0.086)	(0.369)	(0.451)	(1.263)
$h = 2$	0.038	0.035	-0.001	-0.764*	-0.113	0.308
	(0.082)	(0.147)	(0.115)	(0.444)	(0.605)	(1.536)
$h = 3$	-0.058	0.057	0.065	-0.755	0.355	-1.443**
	(0.076)	(0.147)	(0.160)	(0.475)	(0.581)	(0.604)
$h = 4$	-0.077	-0.249**	0.318*	-0.522	-0.074	-0.136
	(0.106)	(0.104)	(0.167)	(0.557)	(0.751)	(0.609)
$h = 5$	-0.025	-0.261**	0.320*	-1.185**	-0.911	0.936
	(0.121)	(0.118)	(0.172)	(0.467)	(0.630)	(0.908)

Notes: The table reports interaction coefficients from local projections that interact fiscal consolidation shocks with lagged capital stock per capita. The channel variable is globally standardized, so coefficients measure how the response to a one-percentage-point-of-GDP consolidation shock changes with a one-standard-deviation increase in capital-stock depth. The dependent variable is the cumulative change in the corresponding pre-tax income share relative to the year before the shock. All specifications include country and year fixed effects, two lags of the outcome, and two lags of macroeconomic controls: log real GDP per capita, real GDP per capita growth, and CPI inflation. Standard errors are Driscoll–Kraay and are reported in parentheses. Advanced economies correspond to the OECD sample. Developing economies combine Latin America and the Caribbean with Sub-Saharan Africa. $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

In Advanced economies, the capital-stock interactions do not materially sharpen the interpretation of spending-based consolidations. The coefficients do not show a stable bottom-50 pattern across horizons, and the evidence is weaker than in the private-credit exercise. This suggests that, within Advanced economies, variation in capital-stock depth is not the main source of heterogeneity in the distributional response to

spending cuts.

In Developing economies, however, the interaction between spending-based consolidations and capital stock is negative and statistically significant for the bottom 50 percent share across several horizons. This pattern suggests that the bottom-half response to spending-based fiscal adjustment varies with broader structural characteristics of the economy.

Overall, the additional mechanism evidence supports the emphasis placed on financial depth in the main text. Private credit provides the clearest and most theoretically direct mechanism, while capital stock offers complementary evidence that the distributional costs of spending-based consolidation vary with structural depth.

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