WORLD ECONOMIC OUTLOOK

RESEARCH

Coming Down to Earth: How to Tackle Soaring Public Debt

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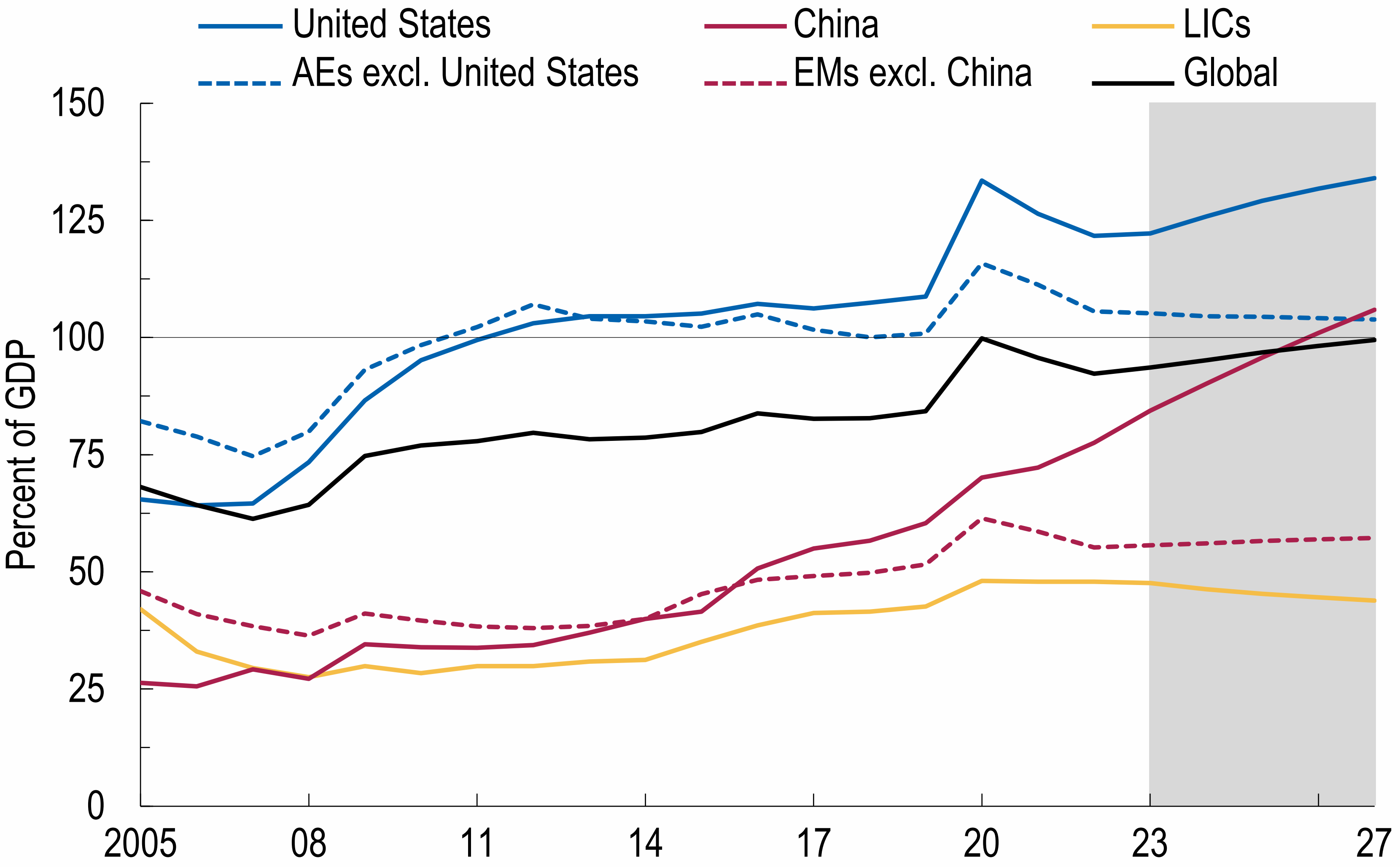
Public Debt to GDP remains elevated



Source: WEO, IMF staff calculations.
Note: Averages weighted by nominal GDP. Shaded area denotes forecast period. Sample covers 28 advanced economies from 1979 to 2021, 83 emerging market economies from 1991 to 2021, and 55 low-income countries from 1985 to 2021. AEs = advanced economies; EMs = emerging market economies; LICs = low-income countries.

Question: How to durably reduce public Debt to GDP?

1. **How have countries reduced public debt ratios in the past?**
   - What was the contribution of different factors, including growth and inflation?

2. **How effective are different approaches to durable reduce public debt ratios?**
   - What are the short- and medium-term effects (1-5 years) of fiscal consolidations and debt restructuring, and how these approaches interact?
   - Under what conditions are fiscal consolidations and debt restructuring more likely to reduce debt ratios durably?

3. **What are the implications for countries dealing with high debt today?**

Key takeaways

1. **Primary surplus (AEs), growth and inflation (EMs) are important drivers**

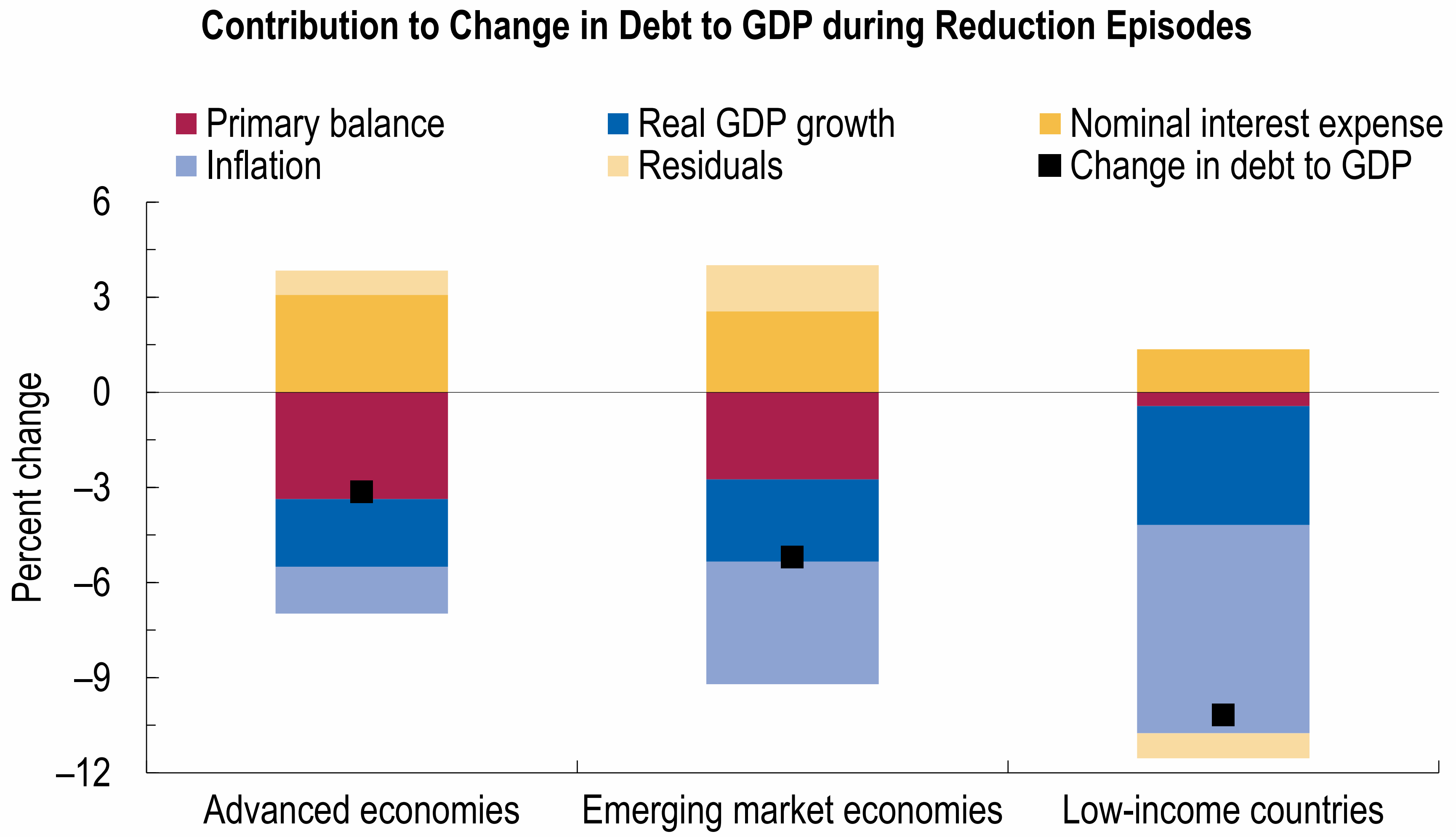
2. **Fiscal consolidation, when adequately tailored, can reduce debt ratios**
   a) done during good times
   b) initial debt is high or private credit is low
   c) more expenditure- than revenue-based (AEs)

   Impact of restructuring on debt ratios is sizable and long-lasting, effective when
   a) executed through face value reduction
   b) part of coordinated and large-scale initiatives for debt reduction
   c) deep enough and implemented with growth-friendly fiscal consolidation.

3. **Main lessons for today:**
   a) an all-out approach
   b) strong institutional frameworks
   c) all options may have to be on the table from the outset

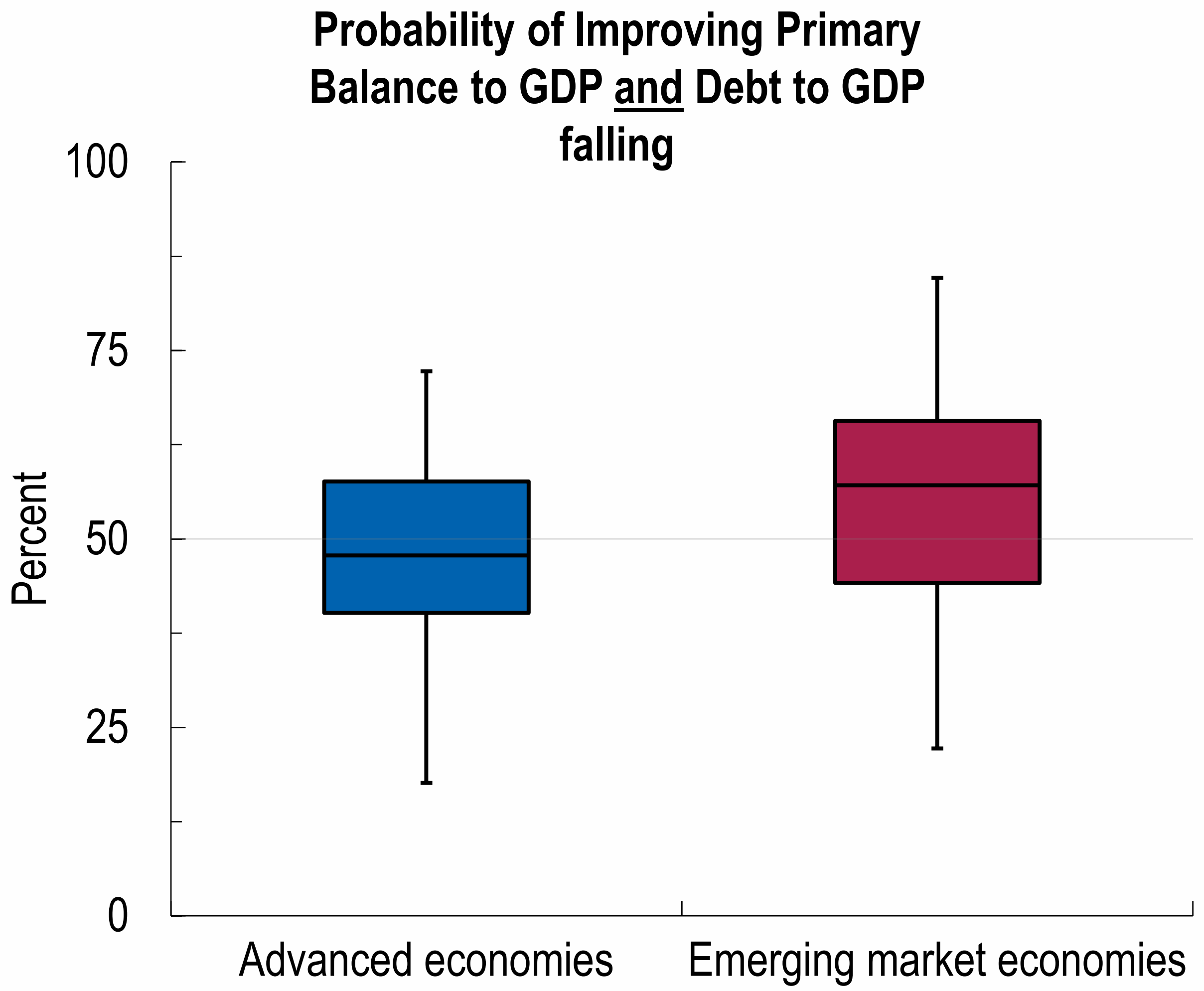
Debt to GDP reductions and its drivers

Primary balance more important in AE, but growth and inflation play a bigger role in EM and LIC



Sources: IMF, Global Debt Database; Mauro and others (2013); and IMF staff calculations.
Note: Contribution of real exchange rate to debt to GDP is reflected in the residual because the share of foreign currency-denominated debt is not available for all countries. Sample covers 28 advanced economies from 1979 to 2021, 83 emerging market economies from 1991 to 2021, and 55 low-income countries from 1985 to 2021.

Characterizing fiscal consolidations



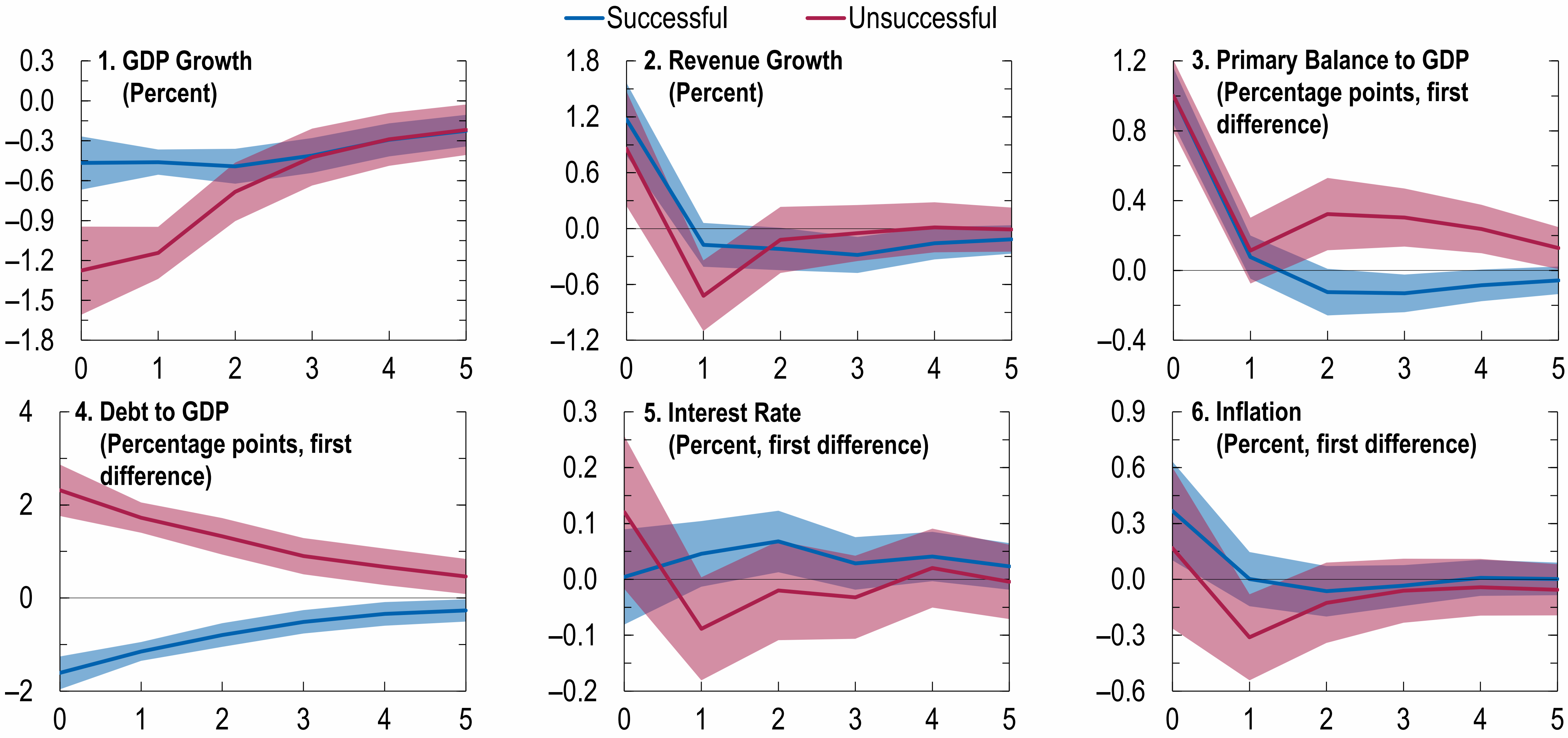
SVAR Structural Shocks (identification through sign restrictions)

	GDP	Real Revenue	Primary Balance to GDP	Debt to GDP	Interest Rate	Inflation
Demand Shock	+	+				+
Supply Shock	+	+				–
Successful Consolidation	–		+	–		
Unsuccessful Consolidation	–		+	+		

Sources: IMF, Global Debt Database; IMF, Historical Public Debt Database; and IMF staff calculations.
Note: Consolidations are defined as period of positive change in the primary-balance-to-GDP ratio at annual frequency. Sample consists of 22 advanced economies from 1980 to 2020 and 36 emerging market economies from 1991 to 2020.

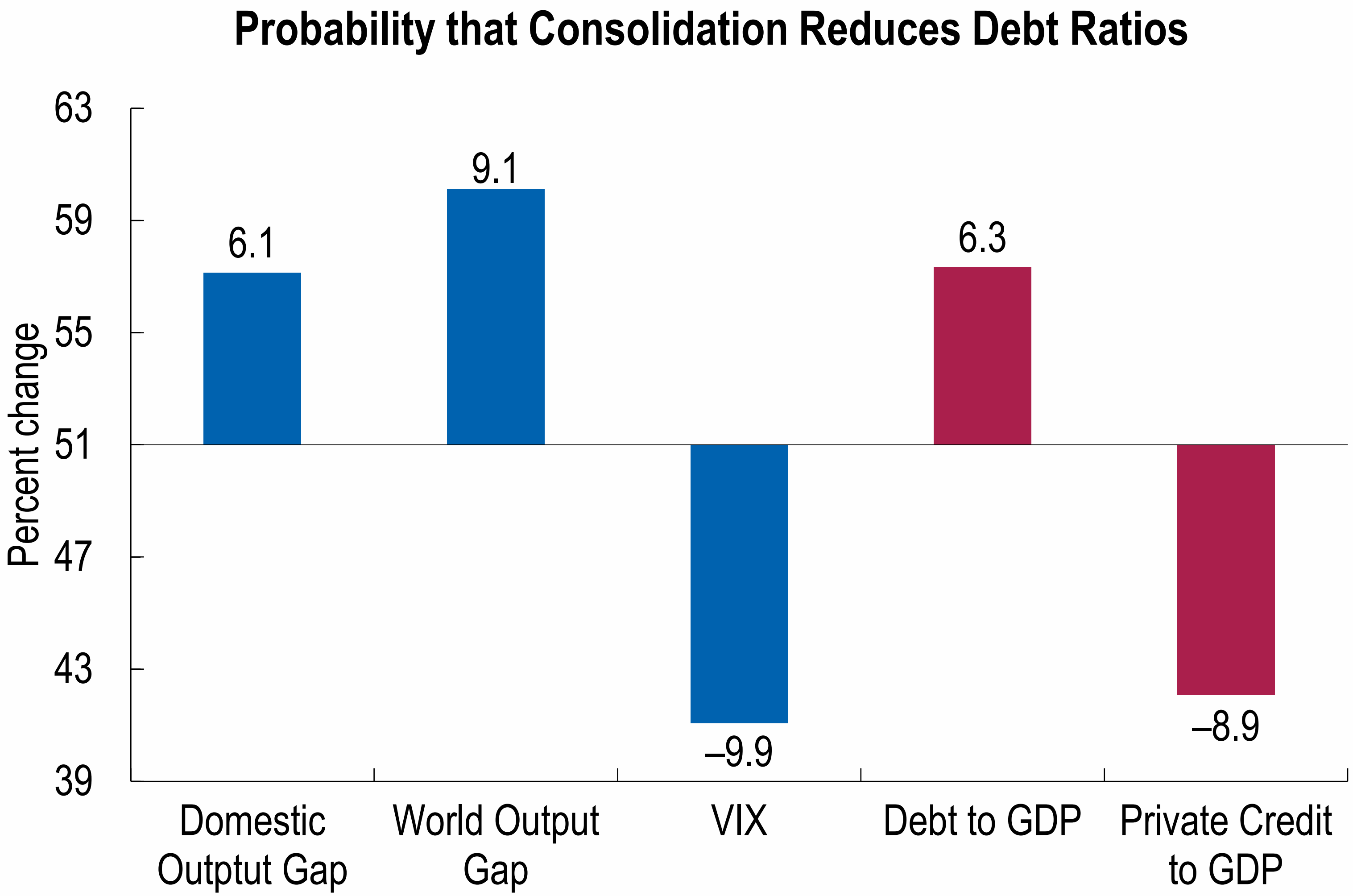
Features of consolidations that reduce Debt to GDP

Impulse Responses to a Primary Balance shock, Advanced Economies



Sources: Canova and Ferroni (2022); IMF, Global Debt Database; IMF, Historical Public Debt Database; and IMF staff calculations.
Note: Primary balance shock is scaled to one percentage point of GDP on impact on average. Displayed impulse responses are inverse variance weighted means across countries from a Bayesian vector autoregression estimated country by country with 2 lags at annual frequency. Shaded areas represent the 16th–84th percentile range of the posterior distribution. Sample consists of 21 advanced economies from 1981 to 2019.

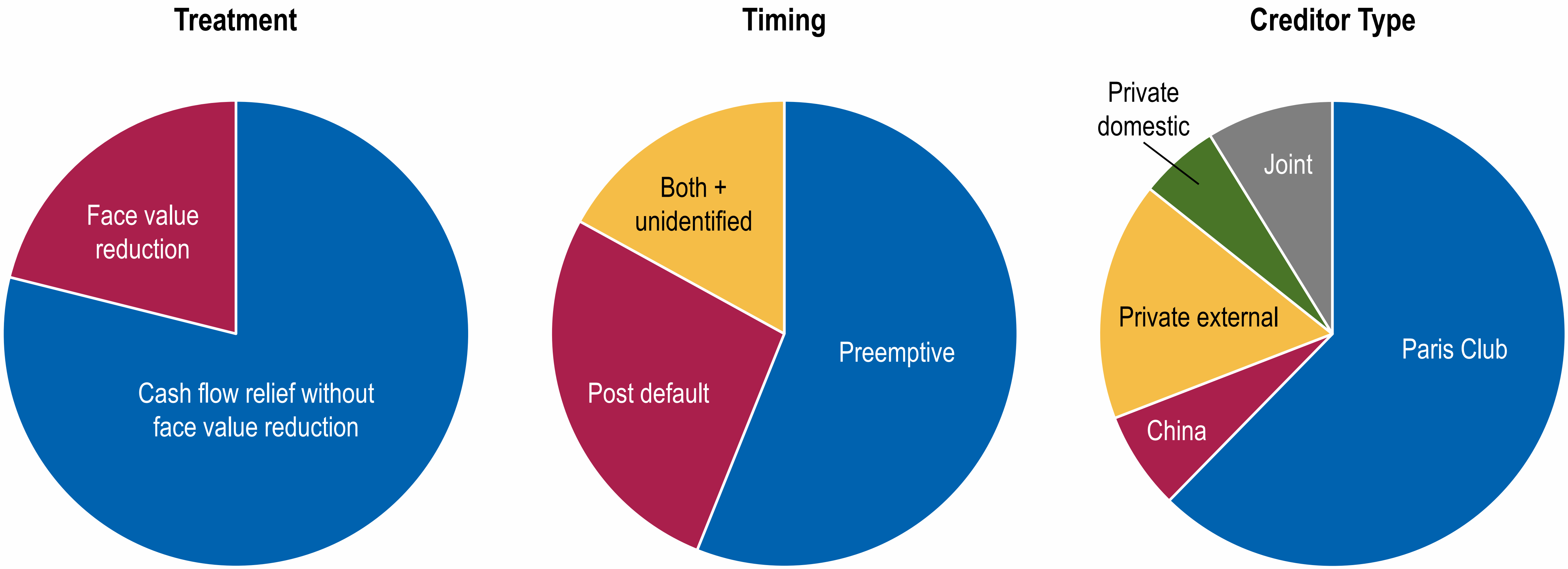
Factors that increase the probability of consolidations reducing debt ratios



Sources: Canova and Ferroni (2022); IMF, Global Debt Database; IMF, Historical Public Debt Database; and IMF staff calculations.
Note: The figure shows estimates of standardized logit regression with the dependent being a dummy variable equal to 1 for a successful consolidation, in which debt to GDP declines and the successful shock from the VAR contributes more than 50% to the decline, and equal to 0 for an unsuccessful one (for example, if debt to GDP increases and the unsuccessful consolidation shock from the VAR contributes more than 50% to the increase). All coefficients are statistically significant at the 5 percent level. VIX = Chicago Board Options Exchange Volatility Index.

2. Debt Restructuring and its effects

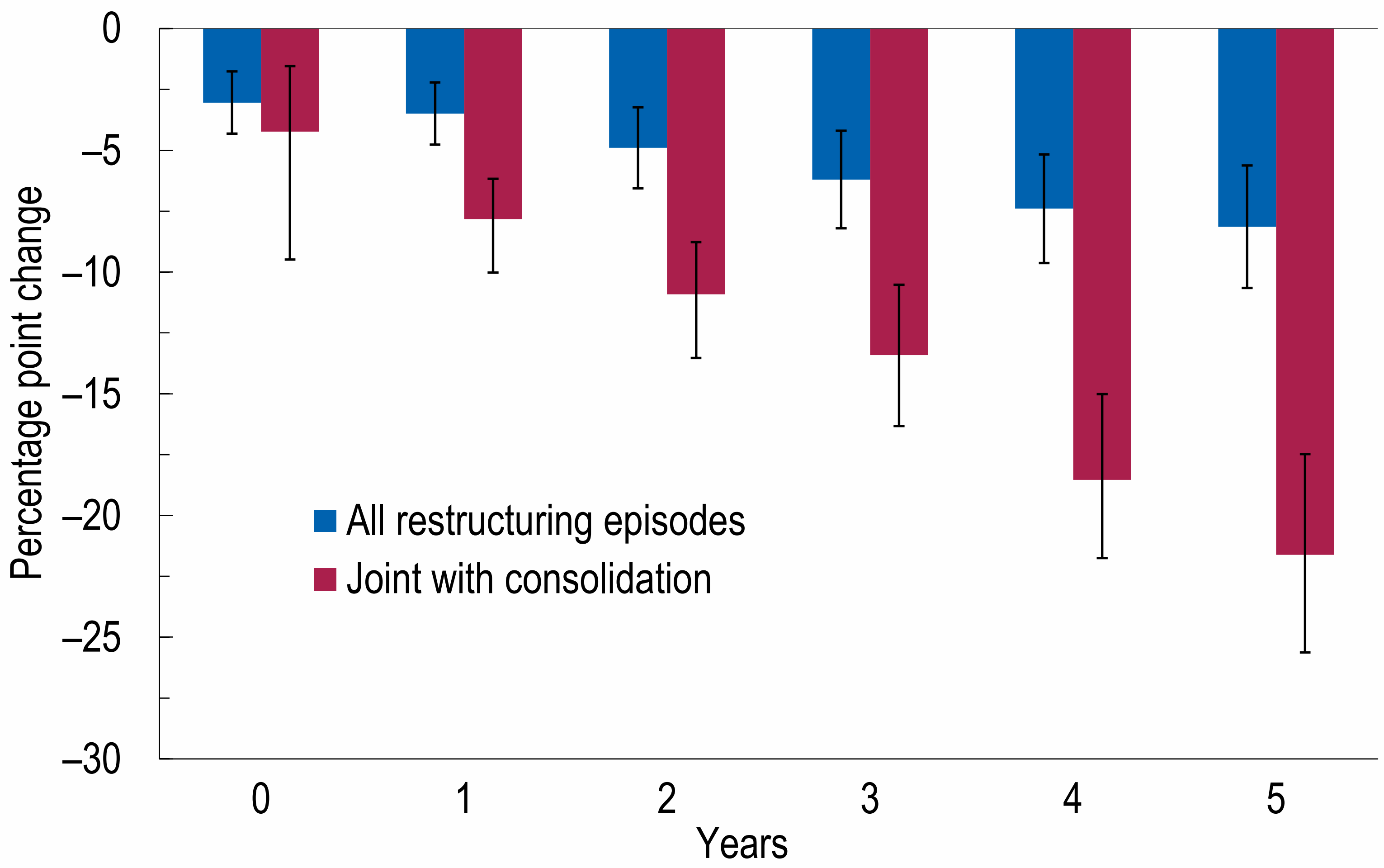
Debt restructurings more common in poorer countries; mainly done through reprofiling, preemptively, and by official creditors



Sources: Asonuma, Niepelt, and Ranciere (2023); Asonuma, and Trebesch (2016); Asonuma and Wright (2022); Cheng, Díaz-Cassou, and Erce (2018); Cruces and Trebesch (2013); Horn, Reinhart, and Trebesch (2022); IMF (2021); and IMF staff calculations.
Note: Data are based on the number of restructuring events, which can last for several years. The sample includes 310 restructuring events in emerging market economies and 396 restructuring events in low-income countries from 1950 to 2021.

Restructuring reduces Debt to GDP

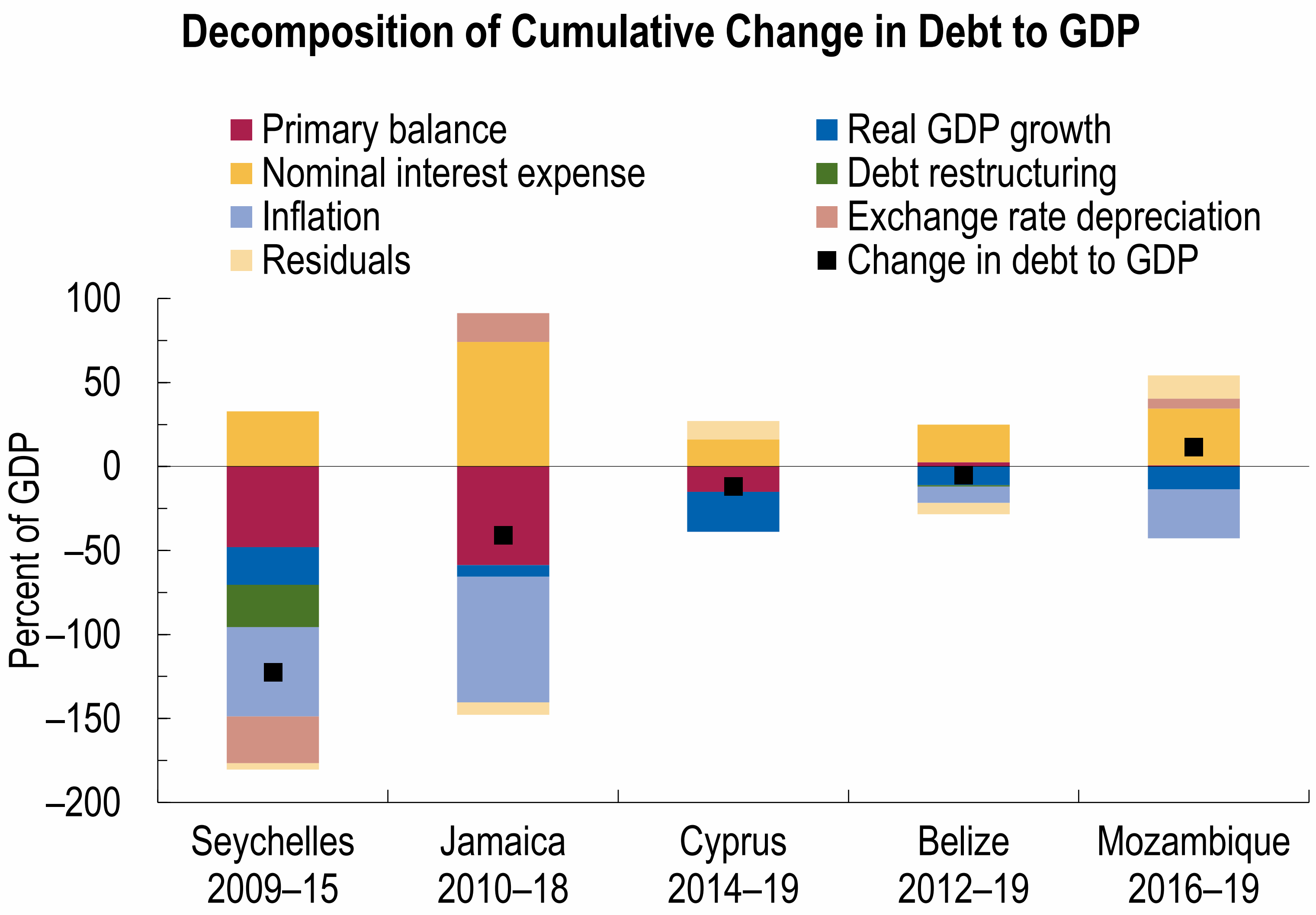
… and is more effective when combined with fiscal consolidation



Sources: Asonuma, Niepelt, and Ranciere (2023); Asonuma and Trebesch (2016); Asonuma and Wright (2022); Cheng, Díaz-Cassou, and Erce (2018); Cruces and Trebesch (2013); Horn, Reinhart, and Trebesch (2022); IMF (2021a); and IMF staff calculations.

Note: Figure shows the ATE of restructuring on debt to GDP using augmented inverse propensity weighted estimation. Vertical bars indicate the 90 percent confidence interval. X-axis shows the number of years since the restructuring event starts. Sample consists of 111 emerging market and developing economies from 1987 to 2021. See Online Annex 3.5 for details on the estimation of the ATE of restructuring with face value reduction. ATE = average treatment effect.

Case studies highlight importance of broad policy package



Source: IMF staff calculations.
Note: The figure reports a decomposition of cumulative change in debt to GDP by conventional debt drivers for each episode.

Policy lessons

1. **Countries aiming for a moderate and gradual reduction in debt ratios**
   - Should implement well-designed fiscal consolidations
   - Ideally during economic expansions and when external conditions are favorable
   - With growth-enhancing structural reforms (Box (1))
2. **Countries at risk of debt distress and aiming for more substantial/rapid debt reduction**
   - Need bold policy actions that do not preclude debt restructuring
   - Deep enough, with comprehensive policy packages including IMF programs
   - Creditors coordination is necessary
3. **Durable debt ratio reductions hinge on strong institutional frameworks**
   - to ensure good times translate into debt reductions and buffer building
   - to prevent below the line operations that undermine debt reduction efforts
   - to benefit from global forces pushing down the natural interest rate (Box (2))

Thank you