

## RESEARCH REPORT

# *Fiscal room under external financing constraints*

Currency composition, repricing, and refinancing determine the payments behind a debt ratio. Four official debt-management records and an original stress calculation explain how revenue volatility and foreign-currency requirements constrain usable fiscal room.

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A government can have a manageable debt ratio and a difficult financing calendar. It can also have a high debt ratio while retaining a relatively predictable stream of local-currency funding. The difference depends on the currencies owed, the dates on which principal and interest must be paid, the instruments that reprice, and the revenues and liquid resources available when payment falls due. Fiscal room is therefore a conditional capacity to finance commitments, rather than a number implied by the debt ratio alone.

This report examines debt-management evidence from Brazil, Indonesia, South Africa, and Türkiye. The sources describe different debt perimeters, periods, and policy arrangements. They are used to identify concrete risk dimensions, not to create a ranking from inconsistent headline ratios. An original two-government scenario then separates exchange-rate valuation, interest repricing, refinancing, and revenue losses. The calculation makes explicit why the government with the lower immediate funding requirement can still have the larger foreign-currency exposure.

External financing constraints do not affect only debt formally issued abroad. Foreign investors can hold local-currency securities, domestic institutions can hold foreign-currency claims, and public enterprises can create contingent obligations. Investor residence, currency denomination, issuance market, and guarantee status should be recorded separately. Each creates a different connection between domestic fiscal policy and international financial conditions.

## Evidence from four debt-management settings

Brazil's Treasury reported that federal public debt at the end of 2025 was divided among fixed-rate instruments, price-indexed instruments, floating-rate instruments, and exchange-linked instruments. Its January 29, 2026 account gives floating-rate exposure of 48.3 percent and exchange-linked exposure of 3.8 percent. Those figures describe the federal public-debt perimeter in that report. A limited exchange-linked share does not imply equally limited exposure to domestic interest-rate changes. [Brazilian Treasury, 2025 federal debt results](#).

Indonesia's September 2025 Ministry of Finance presentation sets out medium-term debt-management targets for 2025-29. Among its new-issuance targets are a minimum 70 percent rupiah share and a minimum 80 percent fixed-rate share. It separately presents outstanding-debt risk indicators and a maturity profile by currency. These are policy targets and reporting categories, not evidence that every subsequent issuance achieved the thresholds or that outstanding debt has the same composition as new borrowing. [Indonesia, Recent Economic Development, debt strategy and portfolio pages.](#)

South Africa's February 25, 2026 Budget Review describes foreign-currency borrowing used to meet external commitments and records a dual-tranche international bond with 12-year and 30-year maturities. Part of the issuance prefunded the following year's foreign-currency requirement. That transaction illustrates how borrowing can increase cash resources before the corresponding payment falls due. Its gross amount should not be interpreted as spending already undertaken or as an equivalent increase in the current deficit. [South African National Treasury, Budget Review 2026, chapter 7.](#)

Türkiye's January 2026 Public Debt Management Report identifies strategic benchmarks including borrowing mainly in lira, managing the share maturing within twelve months, monitoring debt with a rate-refixing period below twelve months, and maintaining cash reserves. The separate maturity and refixing concepts are important: a long-maturity floating-rate instrument can face an early change in interest cost without requiring repayment of principal. The report also separates treasury-guaranteed obligations from other debt categories. [Türkiye, Public Debt Management Report, January 2026.](#)

These records demonstrate that actual debt management already operates across several dimensions. The economic assessment should follow that structure. Currency share, refixing, maturity, and cash buffers are related, but no one measure replaces the others. The policy statements also need to be distinguished from outcomes: a strategy can identify the desired risk profile without proving that every financing condition or target will be achieved.

## A perimeter before a ratio

Debt ratios are useful summaries when the debt numerator and output denominator have consistent coverage and dates. They do not specify the payment calendar or the resources available to meet it. Central-government debt, general-government debt, public-sector debt, and debt guaranteed by the treasury are different perimeters. A comparison that changes the perimeter between countries can attribute an institutional classification difference to fiscal strength.

The treatment of assets matters too. Net debt can deduct cash or other financial assets from gross liabilities, but those assets differ in liquidity, currency, restrictions, and risk. A long-term equity holding cannot necessarily finance a near-term foreign-currency coupon without sale, valuation loss, or a change in policy. An aggregate net position should therefore be accompanied by the assets usable over the relevant financing horizon.

Consolidation can remove claims between public entities without eliminating all economic consequences. A treasury liability held by a public fund can be internal to a consolidated perimeter, while the fund still has obligations to households. A transfer between the treasury and central bank can change the location of a claim

while leaving a broader public-sector exposure. The correct perimeter depends on the question and should be maintained throughout the analysis.

External debt is also an ambiguous shorthand unless defined. A residency-based measure counts liabilities to nonresidents regardless of currency. A currency-based measure identifies obligations payable in foreign currency regardless of who holds them. A market-based description records where an instrument was issued. Those classifications can overlap, but they need not coincide. Treating all three as synonyms obscures the channel through which a shock reaches the budget.

For an expenditure decision, the relevant fiscal position combines a sustainable medium-term path with usable near-term finance. A project can have positive economic benefits and still be unaffordable during a binding payment constraint. Conversely, a liquid cash position can postpone stress without correcting an underlying primary imbalance. Distinguishing liquidity from the longer-term fiscal trajectory helps identify whether the response should change timing, financing, revenue, expenditure, or some combination.

## Two governments with the same opening debt ratio

The following scenario concerns hypothetical governments A and B. Both begin with GDP of 100 and debt of 60. All amounts are expressed in domestic monetary units at the initial exchange rate. A has 50 of domestic-currency debt and 10 of foreign-currency debt. B has 30 of each. Domestic debt pays 6 percent and foreign debt 4 percent. The example omits index-linked instruments, hedges, assets, and guarantees to keep the principal mechanisms visible.

A’s initial annual interest is  $50 \times 0.06 + 10 \times 0.04 = 3.40$ . B’s is  $30 \times 0.06 + 30 \times 0.04 = 3.00$ . The government with more foreign-currency debt has the lower initial coupon bill under these assumptions. That apparent saving is accompanied by exposure to the domestic-currency value of future foreign payments. It is not evidence that either currency mix is optimal.

Assume the domestic-currency price of foreign currency then rises by 20 percent, with GDP held at 100 solely to isolate valuation. A’s debt becomes  $50 + 10 \times 1.20 = 62$ . B’s becomes  $30 + 30 \times 1.20 = 66$ . The debt ratio rises by two percentage points for A and six for B without any new borrowing. If output, prices, or fiscal transactions also changed, those effects would need to be added separately.

| Hypothetical opening and valuation measure    | Government A | Government B |
|-----------------------------------------------|--------------|--------------|
| Opening GDP                                   | 100          | 100          |
| Opening domestic-currency debt                | 50           | 30           |
| Opening foreign-currency debt, domestic value | 10           | 30           |

| Hypothetical opening and valuation measure       | Government A | Government B |
|--------------------------------------------------|--------------|--------------|
| Opening debt/GDP                                 | 60%          | 60%          |
| Initial annual interest                          | 3.40         | 3.00         |
| Debt after the stated exchange-rate move         | 62           | 66           |
| Interest after valuation, before local repricing | 3.48         | 3.24         |

The interest calculation uses the unchanged foreign coupon applied to the higher domestic-currency value: A pays  $3.00 + 0.48$ , while B pays  $1.80 + 1.44$ . The example specifies a 20 percent rise in the domestic price of foreign currency. It does not use the different convention of a 20 percent fall in the foreign-currency value of the domestic unit, which would imply a larger reciprocal movement. Stating the quotation convention prevents that common arithmetic ambiguity.

The valuation change does not itself use domestic cash on the entire outstanding stock immediately. Cash is required when interest and principal become payable. This distinction explains why the debt ratio can move before the full budget impact appears. It also explains why maturity and payment calendars are necessary even after currency composition has been established.

## Repricing and refinancing are separate shocks

Now assume that 20 units of A's domestic debt and five units of B's reprice immediately by three percentage points. The additional annual interest is 0.60 for A and 0.15 for B. Combined with the foreign-currency valuation effect, interest becomes 4.08 and 3.39 respectively. A remains less exposed to the exchange-rate valuation but experiences the larger local-rate cost in this scenario. A single currency-risk measure would miss that result.

For the same period, assume principal repayments at the initial exchange rate of 12 for A and eight for B. Of those amounts, two and six respectively are payable in foreign currency. The exchange-rate move raises their domestic values to 12.40 and 9.20. Initial primary deficits are two each. A revenue loss of two, with noninterest expenditure unchanged, raises each primary deficit to four.

Gross funding need here is defined as principal repayment plus interest plus the primary deficit. Before the shocks it is  $12 + 3.40 + 2 = 17.40$  for A and  $8 + 3.00 + 2 = 13.00$  for B. After the combined shocks it is  $12.40 + 4.08 + 4 = 20.48$  and  $9.20 + 3.39 + 4 = 16.59$ . These are one-period illustrative cash requirements, not official fiscal forecasts.

| Hypothetical cash-funding component | A, initial | A, stressed | B, initial | B, stressed |
|-------------------------------------|------------|-------------|------------|-------------|
| Principal repayments                | 12.00      | 12.40       | 8.00       | 9.20        |
| Interest on the specified stock     | 3.40       | 4.08        | 3.00       | 3.39        |
| Primary deficit                     | 2.00       | 4.00        | 2.00       | 4.00        |
| Gross funding need                  | 17.40      | 20.48       | 13.00      | 16.59       |

The example calculates interest on the specified opening stock and treats borrowing to meet the funding need as a financing transaction; interest on new deficit borrowing is outside this single-period illustration. A full forecast would need issuance dates, redemptions, accrual conventions, and coupons on new securities. It would also distinguish refinancing principal from financing a deficit. Replacing a maturing bond does not by itself add that principal again to the debt stock.

B still has the smaller total gross requirement, but the foreign-currency portion of its specified principal and interest is larger. At the initial exchange rate that portion is  $6 + 1.20 = 7.20$ , rising to 8.64 after the move. A's corresponding amount is  $2 + 0.40 = 2.40$ , rising to 2.88. Funding need in domestic units and the need to obtain foreign currency are related but different constraints.

## Revenue volatility changes usable room

Revenue forecasts depend on the tax base, collection, policy, and timing. A commodity price fall can affect resource receipts directly and other taxes through profits, wages, and expenditure. Its exchange-rate effect can partly offset or amplify the domestic-currency revenue change. A government should not assume that foreign-currency debt is naturally hedged by exports unless the relevant export income actually accrues to the budget and is available when payments are due.

The quantity and timing of resource revenue matter alongside the price. Production disruptions can reduce receipts even when international prices are favorable. Tax payments may follow profits with a lag, while royalties or dividends have different schedules. A fiscal stress test should identify these channels rather than apply the same percentage change to every revenue category. It should also separate temporary windfalls from an expansion in the recurrent tax base.

Expenditure can move in the opposite direction during the same shock. A weaker currency can raise the cost of imported public equipment or fuel support. Inflation can affect indexed benefits, wages, or procurement contracts. Economic weakness can increase social spending. An assessment of usable fiscal room should therefore consider the joint movement of revenue and commitments, rather than treat the primary balance as a fixed quantity while stressing only debt service.

A nominal revenue increase is not necessarily an improvement in real room. If prices rise, more receipts can coexist with higher costs of delivering the same service. The debt ratio can fall through a higher nominal GDP denominator while interest and refinancing remain difficult. Inflation-linked or floating-rate liabilities can also transmit the shock into future payments. These mechanisms explain why a favorable ratio movement and a tighter cash budget can occur together.

For a fiscal decision, the appropriate stress is connected to the revenue structure. A government reliant on volatile receipts should examine a lower-revenue path and the commitments already attached to expected income. It should identify expenditure that can be delayed without destroying value and expenditure whose interruption would create larger future costs. That assessment supplies a practical meaning to room; it cannot be replaced by a comparison with another government's debt threshold.

## Cash buffers, prefunding, and liability management

A cash buffer can reduce the risk of having to borrow during an unfavorable market interval. Prefunding can place resources ahead of a known redemption. These strategies have an economic cost where the return on cash is lower than the cost of debt, and they can leave currency or investment risks. Their value lies in the flexibility and protection they provide over a defined horizon, rather than in reducing the gross debt number at every point.

The South African transaction described in the Budget Review supplies a concrete example of prefunding. Its interpretation requires both the new liability and the associated cash position. Looking only at issuance can overstate the deterioration in immediate net financing resources; looking only at the cash can ignore the future coupons. A transparent account connects the borrowing, the resources held, and the commitments they are intended to cover.

The availability of a buffer depends on restrictions. Cash held for a particular purpose may not be usable for general debt service. Foreign reserves held by a central bank should not automatically be treated as treasury cash. Their use can have legal, monetary, and financial implications. A consolidated public-sector analysis can examine the relationship, but it must not assume unrestricted access simply because both institutions are public.

Liability exchanges can smooth a maturity concentration without eliminating its economic cost. Replacing near-term debt with longer securities changes the payment calendar and may change coupons or market value. A buyback can require cash now to reduce a later obligation. An evaluation should follow the full transaction rather than describe a lower near-term redemption as a free reduction in debt. The relevant gain may be lower refinancing risk at an acceptable expected cost.

Average maturity can conceal a concentrated year or month. Two portfolios with the same average can have very different near-term redemptions. A useful schedule therefore shows principal by currency and interval, the interest resetting within each period, and resources already available. It should also distinguish an expected market issuance from committed financing. An authorization to borrow does not establish that the intended quantity can be raised at the assumed price.

## Domestic finance and external conditions

Local-currency borrowing avoids a direct foreign-currency obligation for the issuer, but its pricing can still respond to international conditions. Nonresident investors may sell local securities; domestic investors may shift their portfolios; inflation expectations may change. The resulting yield movement can affect new issuance or floating-rate debt. Currency denomination changes who initially bears exchange risk; it does not isolate the domestic market from global developments.

The domestic investor base matters to that response. Banks, pension funds, households, and other investors have different liabilities, liquidity needs, and investment horizons. A concentrated base can support predictable issuance in ordinary conditions while creating a stronger link between government risk and the financial system. A diversified base can broaden demand but may include investors more sensitive to short-term external conditions. Neither description determines the result without evidence about behavior and balance sheets.

A government can also obtain external finance through different instruments. A market bond, a multilateral loan, a bilateral arrangement, and a project-linked facility have different disbursement conditions, maturities, prices, and uses. An announced envelope is not necessarily cash immediately available to meet any obligation. The appraisal should identify the usable amount and the conditions required before it enters the financing plan.

Indonesia's distinction between new-issuance targets and outstanding-portfolio indicators is useful in this context. A year's borrowing policy changes the stock gradually. A high fixed-rate share in new issuance does not immediately fix the coupons on old floating debt, and a local-currency issuance target does not eliminate existing foreign repayments. Strategy, flow, and stock should therefore remain separate in the assessment of adjustment over time.

Brazil's reported combination of limited exchange-linked exposure and substantial floating-rate exposure illustrates another tradeoff. Reducing one risk can leave another important. The relevant question is how the portfolio behaves under plausible joint shocks and whether the resulting payments fit the revenue and financing calendar. A descriptive composition figure supplies an input to that test, not its conclusion.

## Guarantees and the boundary of the stress test

Contingent obligations can become cash needs during the same adverse conditions that weaken revenue. A public enterprise may face a foreign-currency payment, a decline in sales, or higher input costs. A guarantee may then be called, or the government may decide to provide support even where no formal guarantee exists. These risks require a separate schedule because they are not identical to principal already owed by the treasury.

The trigger, beneficiary, currency, and timing of a guarantee matter. A maximum nominal guarantee is not necessarily an expected loss, while an expected-loss estimate does not reveal the largest cash call in a severe period. The analysis should distinguish legal exposure, likely support, and stress liquidity. Türkiye's separate

reporting categories for treasury-guaranteed debt help preserve that boundary; they should not be merged with direct debt without explaining the perimeter change.

Public investment can create similar timing issues. A long-term project may have milestone payments, imported equipment, minimum revenue commitments, or termination provisions. A financing constraint can interrupt delivery and reduce the value of money already spent. Prioritization should therefore consider completion costs and future service benefits, rather than cut every project by the same percentage or protect every announcement regardless of its economics.

A complete fiscal-room assessment should keep the debt-service schedule connected to the expenditure decision. It should show what additional commitment is proposed, when cash is required, what currency is needed, and how the obligation behaves if revenue disappoints. That approach makes the tradeoff reviewable. A statement that there is room because the debt ratio is below a selected benchmark leaves those practical questions unanswered.

## Turning the stress into a financing decision

A funding requirement becomes a constraint only in relation to resources available on the necessary dates. Extend the hypothetical example with a separate liquidity assumption: A can raise 18 during the period and can use three of cash, while B can raise 12 and can also use three. Against stressed requirements of 20.48 and 16.59, A has a surplus of 0.52 and B has a gap of 1.59. B's smaller gross requirement does not make it more liquid under those funding assumptions. These additional assumptions were excluded from the opening debt calculation and are introduced here solely to illustrate the financing comparison.

The totals still do not prove that every foreign payment can be made. If B's available cash and borrowing are entirely in domestic currency, the ability and cost of obtaining foreign currency remain relevant. If a financing commitment is already in the required foreign currency, it can meet that part of the calendar directly. The schedule should therefore reconcile each currency before consolidating the result into domestic units. A national total can otherwise conceal a mismatch at the payment date.

Cash timing creates another distinction within the same annual amount. A large revenue receipt late in the year cannot finance an earlier redemption unless there is bridge funding or an opening buffer. A forecast showing annual balance can therefore coexist with a temporary liquidity gap. Monthly or quarterly schedules should be used where commitments are concentrated, with the forecast uncertainty attached to the receipt rather than treated as if collection were certain.

This approach also clarifies the meaning of prefunding. Cash borrowed in advance can close an early gap but generates interest and may alter the government's exposure while held. Comparing an issuance year without following the future redemption would miss the purpose of the transaction. Conversely, assuming every cash balance is a permanent addition to room would ignore the payment it has already been set aside to meet.

## Reading strategy targets alongside implementation

The official documents need a similar separation of purpose and execution. Indonesia's medium-term framework sets risk constraints for the portfolio as well as composition targets for new issuance. A stock indicator and an issuance target can move at different speeds because old obligations remain outstanding. The practical test connects the auction or loan program with the repayment and refixing schedule, then shows how much of the targeted adjustment is achievable within the period.

Türkiye's separate short-maturity and short-refixing benchmarks likewise point to different decisions. Extending principal maturity can reduce a refinancing concentration while leaving an early interest reset intact. Fixing a coupon can stabilize payments while requiring a higher initial price for that protection. A complete assessment compares the resulting cash paths under the same set of shocks rather than choose the portfolio with the lowest initial coupon alone.

For all four economies, a useful monitoring record would distinguish the published plan, financing actually completed, changes in cash, and revisions to the remaining requirement. A missed issuance need not imply stress if it was replaced by another source or lower expenditure; a completed issuance need not imply additional room if an equally large obligation has also arrived. Reconciliation of those transactions supplies the evidence needed to move from a risk indicator to a decision.

## Conclusion

Fiscal room under external constraints is shaped by currency, maturity, repricing, revenue, and liquidity. Official debt-management records from the four economies demonstrate why those dimensions are reported separately. Their distinct statistical perimeters and dates should be preserved rather than compressed into an unadjusted country ranking.

The hypothetical comparison shows that identical opening debt ratios can conceal different interest and refinancing paths. A lower total funding need can coexist with a larger foreign-currency payment requirement, while a portfolio with limited currency exposure can remain sensitive to local rates. A defensible fiscal decision follows those schedules and their counterfactuals, including cash buffers and contingent commitments, before deciding how much additional expenditure can be sustained.

For the distinction between issuance, financing, and private investment, see [Federal financing and the allocation of private capital](#). For the contract timing behind interest costs, see [Monetary transmission under different financial structures](#).

## Source addresses

The links below retain the source addresses cited in the analysis. References should be read within their stated periods and scope.

<https://www.gov.br/tesouronacional/pt-br/noticias/divida-publica-encerra-2025-em-r-8-635-trilhoes-dentro-dos-limites-projetados/>

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