On the Debt Repayment Capacity of the BRST Nations

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Abstract

This paper examines the debt repayment capacity of Brazil, Russia, South Africa, and Turkey (BRST nations), analyzing their fiscal positions, macroeconomic fundamentals, and structural vulnerabilities. Using data through 2024, we assess debt sustainability through multiple indicators including debt-to-GDP ratios, external debt burdens, foreign exchange reserves, credit ratings, and economic growth trajectories. Our analysis reveals significant heterogeneity among these nations: Russia maintains the strongest fiscal position with minimal government debt (20.3% of GDP), Turkey demonstrates concerning external vulnerabilities despite low government debt (25.6% of GDP), while Brazil and South Africa face elevated debt levels (76.1% and 75.1% respectively) that constrain fiscal flexibility. We conclude that while none face imminent default risk, Brazil and South Africa require sustained fiscal consolidation, Turkey needs to rebuild external buffers, and Russia's capacity remains robust despite geopolitical constraints.

The paper ends with "The End"

1 Introduction

The question of sovereign debt sustainability has gained renewed prominence in the post-pandemic global economy, as governments worldwide grapple with elevated debt burdens accumulated through crisis response measures and structural fiscal imbalances. This paper examines the debt repayment capacity of four major emerging markets: Brazil, Russia, South Africa, and Turkey, collectively termed the BRST nations. While these countries share certain characteristics as middle-income economies with significant global influence, their fiscal trajectories and debt sustainability profiles diverge substantially.

Understanding debt repayment capacity requires analyzing multiple dimensions beyond simple debt-to-GDP ratios. We must consider debt composition (domestic versus external), foreign exchange reserves adequacy, economic growth prospects, institutional quality, political stability, and market access conditions. This multidimensional approach reveals that countries with similar headline debt figures may face vastly different sustainability challenges.

The BRST nations present a particularly interesting case study due to their diverse economic structures, policy frameworks, and geopolitical positions. These differences produce distinct debt sustainability dynamics worthy of careful examination.

2 Theoretical Framework

2.1 Debt Sustainability Indicators

Debt sustainability is fundamentally about a government's capacity to service its obligations without requiring exceptional financing or adjustment. The primary condition for sustainability is that the growth rate of the economy exceeds the effective interest rate on debt:

$$g > r - \pi \tag{1}$$

where g is real GDP growth, r is the nominal interest rate, and π is inflation. When this condition holds, debt-to-GDP ratios stabilize or decline even with primary deficits.

The evolution of the debt-to-GDP ratio can be expressed as:

$$\Delta\left(\frac{D}{Y}\right) = \frac{r-g}{1+g} \cdot \frac{D}{Y} + \frac{PD}{Y} \tag{2}$$

where D is total debt, Y is nominal GDP, and PD is the primary deficit. This relationship demonstrates that debt dynamics depend on the interest-growth differential, existing debt levels, and fiscal balances.

2.2 External Debt and Foreign Exchange Constraints

For emerging markets, external debt denominated in foreign currency introduces additional vulnerabilities through currency mismatch and rollover risks. The key constraint becomes:

$$\frac{R}{ED_{ST}} \geq 1 \tag{3}$$

where R represents foreign exchange reserves and ED_{ST} denotes short-term external debt. The Greenspan-Guidotti rule suggests reserves should exceed short-term external debt to provide adequate liquidity buffers.

The debt service ratio, defined as debt service payments relative to export earnings, provides another critical metric:

$$DSR = \frac{IP + AP}{X} \tag{4}$$

where IP is interest payments, AP is amortization payments, and X represents export revenues. High debt service ratios indicate potential balance of payments pressures.

3 Comparative Debt Profiles

3.1 General Government Debt Levels

Table 1 presents the general government gross debt as a percentage of GDP for the BRST nations as of 2024.

Table 1: Government Debt-to-GDP Ratios (2024)

Country	Debt/GDP (%)	Trend
Brazil	76.1	Stable/Increasing
Russia	20.3	Gradually Increasing
South Africa	75.1	Increasing
Turkey	25.6	Decreasing
Average	**49.3**	–

The data reveal a striking bimodal distribution. Brazil and South Africa cluster at elevated debt levels approaching 76% of GDP, substantially exceeding the European Union's Stability and Growth Pact threshold of 60%. In contrast, Russia and Turkey maintain relatively modest government debt burdens below 26% of GDP.

However, these headline figures mask important compositional differences and varied sustainability challenges:

- **Brazil**: While debt is primarily domestic and denominated in local currency, high real interest rates and persistent primary deficits create unfavorable debt dynamics. Interest payments consume approximately 5-6% of GDP annually, constraining fiscal space.
- **Russia**: The low debt burden reflects fiscal conservatism and substantial commodity export revenues accumulated over the past decade. However, international sanctions limit market access and complicate debt management.
- **South Africa**: Debt has risen sharply from 23.5% of GDP in 2008 to current levels, driven by state-owned enterprise bailouts, particularly for the electricity utility Eskom. Debt is projected to continue rising, reaching 89% of GDP by 2030 without policy changes.
- **Turkey**: Despite low government debt, high external debt (45.1% of GDP) and substantial short-term obligations create vulnerability to external shocks and currency depreciation.

3.2 External Debt and Currency Exposure

External debt positions introduce currency risk and rollover vulnerabilities. Table 2 summarizes external debt metrics.

Table 2: External Debt Indicators (2023-2024)

Country	External Debt/GDP (%)	Short-term/Total (%)
Brazil	∼40	Moderate
Russia	13.4	Low
South Africa	∼55	Moderate
Turkey	45.1	High (∼34%)

Russia demonstrates the strongest external position with external debt at only 13.4% of GDP in 2024, down from 15.3% in 2023. This reflects both debt reduction and limited international borrowing capacity under sanctions.

Turkey presents the most concerning external vulnerability profile. With external debt at 45.1% of GDP and short-term external debt reaching $177.9 billion as of September 2024, the country faces significant rollover requirements. Foreign exchange reserves of approximately $83.5 billion in December 2024 provide limited coverage relative to short-term obligations, falling below the Greenspan-Guidotti threshold.

South Africa's external debt position has deteriorated substantially, with total external obligations (including private sector debt) contributing to a total debt-to-GDP ratio of 177.1% when combining government, household, and corporate debt.

Brazil maintains a more balanced external position, with external debt manageable relative to its export capacity and foreign exchange reserves.

4 Macroeconomic Fundamentals and Growth Capacity

Debt sustainability critically depends on economic growth to expand the revenue base and improve debt ratios. Table 3 presents recent growth performance and projections.

Table 3: GDP Growth and Inflation (2024-2025)

Country	**2024 Growth (%)**	**2025 Proj. (%)**	**2024 Inflation (%)**
Brazil	3.4	2.2	4.2 (target)
Russia	∼1.1 (Q2 2025)	4.8 (IMF)	8.1 (Aug 2025)
South Africa	∼1.0-1.5	1.5-2.0	Moderate
Turkey	∼1.6 (Q2 2025)	3.0-3.5	33.0 (Aug 2025)

4.1 Brazil

Brazil achieved robust growth of 3.4% in 2024, driven by strong consumption, a tight labor market with unemployment at a record low of 6.2%, and fiscal transfers. However, growth is projected to moderate to 2.2% in 2025 as monetary tightening takes effect (interest rates raised to combat inflation) and fiscal transfers diminish. Medium-term potential growth is estimated at 2.3%.

The growth slowdown complicates debt dynamics. With real interest rates substantially exceeding growth rates, Brazil faces an adverse interest-growth differential that automatically increases the debt-to-GDP ratio. Fiscal consolidation is essential but politically challenging.

4.2 Russia

Russia's growth decelerated to 1.1% in Q2 2025 from stronger performance in previous quarters, reflecting the impact of sanctions, capital controls, and structural constraints. However, the IMF projects growth of 4.8% for 2025, though this appears optimistic given external headwinds.

Inflation remains elevated at 8.1% in August 2025, down from higher levels but still above target. The Central Bank has begun a monetary easing cycle, cutting rates in September 2025.

Despite geopolitical constraints, Russia's fiscal capacity remains strong due to commodity export revenues, though sanctions have reduced market access and complicated reserve management.

4.3 South Africa

South Africa suffers from chronic low growth, with GDP expansion of approximately 1.0-1.5% in 2024, constrained by electricity shortages, infrastructure deficits, high unemployment (near 30%), and structural rigidities. Medium-term growth potential remains below 2%, insufficient to stabilize debt ratios without substantial fiscal adjustment.

The growth constraint is particularly severe: with potential growth near 1.5-2% and government debt at 75% of GDP, even modest primary deficits will increase debt burdens. The country faces a "low-growth, high-debt trap" that requires comprehensive structural reforms to escape.

4.4 Turkey

Turkey's economy grew 1.6% quarter-on-quarter in Q2 2025, with projected annual growth of 3.0-3.5%. However, this growth occurs against a backdrop of high inflation (33% in August 2025) and significant external imbalances.

The current account swung to surplus in July 2025, but persistent deficits in prior periods accumulated external debt. The economy faces a difficult trade-off between growth support and inflation control, with monetary policy gradually tightening.

5 Credit Ratings and Market Access

Sovereign credit ratings provide market assessments of default risk and influence borrowing costs. Table 4 summarizes indicative credit rating levels.

Table 4: Indicative Credit Rating Status

Country	**Rating Category**	**Market Access**
Brazil	Investment Grade	Good
Russia	Suspended/Withdrawn	Severely Constrained
South Africa	Sub-Investment Grade	Moderate
Turkey	Sub-Investment Grade	Moderate

Brazil maintains investment-grade ratings from major agencies, providing favorable market access and relatively low spreads despite elevated debt levels. This reflects confidence in the country's large domestic investor base, diversified economy, and institutional framework.

Russia faces unique circumstances. Following the invasion of Ukraine, major rating agencies either withdrew ratings or assigned "Rating Withdrawn" (RD) status. Russia was suspended from many global financial platforms, severely constraining international market access. Debt management relies primarily on domestic financing and limited access to friendly nations.

South Africa has fallen to sub-investment grade across major rating agencies, though remains above distressed categories. This increases borrowing costs and limits the investor base, but the country retains market access. Continued fiscal deterioration risks further downgrades.

Turkey carries sub-investment grade ratings reflecting concerns about policy predictability, external vulnerabilities, and inflation dynamics. However, the country maintains market access, albeit at elevated spreads.

6 Fiscal Balances and Adjustment Challenges

Current fiscal positions and adjustment capacity determine the trajectory of debt burdens.

6.1 Brazil

Brazil's primary fiscal deficit decreased from 2.3% of GDP in 2023 to 0.3% in 2024, driven by strong revenue growth and reduced one-off expenditures. However, general government gross debt increased from 73.8% to 76.5% of GDP due to high interest payments (approximately 5-6% of GDP).

The key challenge is achieving sustained primary surpluses sufficient to stabilize and reduce debt. Efforts to contain expenditure growth face constitutional and political constraints, while revenue enhancement options are limited. The interest-growth differential remains unfavorable, requiring primary surpluses of 1.5-2% of GDP just to stabilize debt ratios.

Brazil's federal structure complicates fiscal coordination, though states and municipalities generally maintain better fiscal discipline than the federal government.

6.2 Russia

Russia recorded a consolidated fiscal deficit of 0.6% of GDP in June 2024, a modest shortfall easily financed domestically. Government debt servicing costs remain low given the small debt stock.

Fiscal space is substantial: with debt at only 20.3% of GDP and a conservative fiscal framework, Russia could significantly increase borrowing if needed for countercyclical purposes or strategic investments. The binding constraint is sanctions-limited market access rather than fiscal capacity.

Oil and gas revenues remain crucial to fiscal sustainability, creating vulnerability to commodity price fluctuations. However, accumulated reserves and National Wealth Fund assets provide buffers against temporary revenue shortfalls.

6.3 South Africa

South Africa faces the most challenging fiscal position among BRST nations. The primary balance remains in deficit, while interest payments consume an increasing share of revenues (approximately 20% of spending). Total debt is projected to reach 89% of GDP by 2030 without policy changes.

State-owned enterprises, particularly Eskom, represent major contingent liabilities. Government transfers to Eskom total approximately R180 billion over three years (2023-2026), equivalent to 2-3% of GDP annually, directly adding to debt accumulation.

Fiscal consolidation is severely constrained by:

- High unemployment limiting tax base expansion

- Large public sector wage bill
- Social spending pressures
- Infrastructure investment needs
- SOE bailout requirements

Without structural reforms to accelerate growth and restore SOE viability, South Africa's debt trajectory appears unsustainable.

6.4 Turkey

Turkey's government debt-to-GDP ratio has actually declined from over 75% in 2001 to 25.6% in 2024, representing a remarkable fiscal consolidation over two decades. Government finances are in relatively good order.

However, fiscal sustainability concerns center on contingent liabilities from the banking sector, state-owned enterprises, and the large external debt burden of private corporations. Currency depreciation increases the local-currency value of external debt, potentially triggering fiscal costs if government support becomes necessary.

7 Foreign Exchange Reserves and Liquidity

Foreign exchange reserve adequacy provides a crucial buffer against external shocks and rollover risks.

Table 5: Foreign Exchange Reserves (2024)

Country	**Reserves (USD bn)**	**Adequacy**
Brazil	∼350-370	Strong
Russia	∼590-600	Very Strong
South Africa	∼60-65	Moderate
Turkey	∼83-91	Insufficient

Russia maintains very strong reserves exceeding $590 billion despite sanctions, accumulated through years of current account surpluses. These reserves far exceed external debt obligations and provide substantial buffers, though access to some foreign assets is restricted.

Brazil holds adequate reserves of approximately $350-370 billion, providing comfortable coverage of short-term external debt and import requirements. The Central Bank has successfully rebuilt reserves following earlier drawdowns.

Turkey's reserve position is concerning. With gross foreign exchange reserves of approximately $83.5 billion (December 2024) against short-term external debt of $177.9 billion (September 2024), the country falls significantly below the Greenspan-Guidotti adequacy threshold. Net reserves (accounting for swaps and forward positions) are substantially lower, creating vulnerability to sudden stops in capital flows.

South Africa maintains moderate reserves of approximately $60-65 billion, adequate for current import coverage but limited relative to external debt obligations and potential capital outflows. Reserve building is constrained by persistent current account deficits.

8 Structural and Institutional Factors

Beyond quantitative metrics, structural and institutional factors critically influence debt sustainability.

8.1 Economic Diversification

Brazil and Turkey demonstrate greater economic diversification across agriculture, manufacturing, and services, providing more resilient revenue bases. Russia remains heavily dependent on oil and gas exports (40-50% of government revenues), creating vulnerability to commodity price cycles. South Africa has a moderately diversified economy but suffers from competitiveness challenges.

8.2 Institutional Quality and Governance

Brazil's strong institutions, independent judiciary, and democratic governance provide policy credibility, though political fragmentation can complicate reform implementation. Russia's governance framework supports fiscal discipline but faces sanctions-related constraints. South Africa's institutions have weakened in recent years, with corruption and state capture undermining policy effectiveness. Turkey has experienced erosion in central bank independence and policy predictability.

8.3 Political Stability and Policy Continuity

Brazil faces political fragmentation but maintains policy continuity through institutional checks and balances. Russia's centralized governance ensures policy stability but limited flexibility. South Africa's political transitions have been peaceful, but policy paralysis hinders needed reforms. Turkey has experienced significant policy volatility, particularly in monetary policy, undermining market confidence.

9 Synthesis: Debt Repayment Capacity Assessment

Integrating multiple dimensions, we assess each nation's debt repayment capacity on a scale from Strong to Weak:

9.1 Russia: Strong Capacity

Russia demonstrates the strongest debt repayment capacity among BRST nations:

- Very low government debt (20.3% of GDP)
- Minimal external debt (13.4% of GDP)
- Substantial foreign exchange reserves ($590+ billion)
- Fiscal discipline and conservative debt management
- Natural resource revenues providing fiscal buffers

Key Risks: Sanctions-limited market access, commodity price dependence, structural growth constraints, and geopolitical uncertainty.

Conclusion: Russia faces no near-term solvency risk and possesses substantial fiscal space. The binding constraint is international market access rather than repayment capacity.

9.2 Brazil: Moderate-to-Weak Capacity

Brazil presents a mixed profile with concerning trends:

- Elevated government debt (76.1% of GDP) with rising trajectory
- Unfavorable interest-growth differential
- High interest payments (5-6% of GDP) constraining fiscal space
- Adequate external position and reserves
- Investment-grade credit rating maintaining market access

Key Risks: Persistent primary deficits, limited fiscal adjustment capacity, political fragmentation impeding reforms, and potential growth slowdown.

Conclusion: Brazil's debt is sustainable in the medium term but requires sustained fiscal consolidation to prevent further deterioration. Failure to achieve primary surpluses risks a gradual slide toward unsustainability.

9.3 South Africa: Weak Capacity

South Africa faces the most challenging sustainability position:

- High and rising government debt (75.1% of GDP, projected 89% by 2030)
- Chronic low growth (1-2% potential)
- Persistent primary deficits and high interest burden
- Major contingent liabilities (Eskom and other SOEs)
- Sub-investment grade credit rating
- Limited fiscal space for adjustment

Key Risks: Continued debt accumulation, growth stagnation, SOE crisis, unemployment, social tensions limiting adjustment capacity, and potential rating downgrades.

Conclusion: South Africa's debt trajectory is unsustainable without significant policy reforms. While immediate default risk is low given domestic debt composition, the country faces a potential debt crisis within 5-10 years absent corrective action. Comprehensive structural reforms to accelerate growth and restore SOE viability are essential.

9.4 Turkey: Moderate Capacity with External Vulnerability

Turkey presents a paradox of low government debt but high external vulnerability:

- Low government debt (25.6% of GDP)
- High external debt (45.1% of GDP) with substantial short-term component
- Inadequate foreign exchange reserve coverage
- High inflation complicating policy management
- Sub-investment grade rating
- Policy unpredictability

Key Risks: External financing rollover risk, currency depreciation, inflation persistence, reserve adequacy concerns, and sudden stops in capital flows.

Conclusion: Turkey's government debt is sustainable, but the country faces elevated external crisis risk. Rebuilding foreign exchange reserves, reducing external debt dependence, and restoring policy credibility are priorities. An external crisis remains possible if capital flows reverse sharply.

10 Policy Recommendations

Based on our analysis, we offer country-specific policy recommendations:

10.1 Brazil

1. Achieve and maintain primary fiscal surpluses of 1.5-2% of GDP to stabilize debt
2. Reform constitutional spending rules (particularly earmarking and indexation)
3. Enhance efficiency of public spending while protecting pro-growth investment
4. Advance tax reform to simplify system and broaden base
5. Accelerate structural reforms to lift potential growth toward 3%

10.2 Russia

1. Maintain conservative fiscal framework and debt management
2. Diversify economy to reduce commodity dependence
3. Rebuild international market access where possible
4. Utilize fiscal space for strategic infrastructure investment
5. Strengthen non-resource revenue sources

10.3 South Africa

1. Implement urgent fiscal consolidation targeting primary surpluses
2. Restructure and privatize failing state-owned enterprises
3. Address electricity crisis through regulatory reform and private investment
4. Implement labor market reforms to reduce structural unemployment
5. Accelerate infrastructure investment in transportation and logistics
6. Restore governance and combat corruption
7. Pursue structural reforms to lift potential growth above 3%

10.4 Turkey

1. Rebuild foreign exchange reserves to adequate levels
2. Reduce dependence on short-term external financing
3. Restore central bank independence and policy credibility
4. Anchor inflation expectations through consistent monetary policy
5. Reduce external debt through current account adjustment
6. Maintain fiscal discipline at government level
7. Monitor and address contingent liabilities in banking and corporate sectors

11 Conclusion

The BRST nations exhibit highly divergent debt sustainability profiles despite sharing emerging market characteristics. Russia's strong fiscal position and minimal debt burden provide substantial repayment capacity, though sanctions constrain market access. Brazil and South Africa face elevated debt levels requiring sustained fiscal consolidation, with South Africa's position particularly concerning given chronically low growth and rising obligations. Turkey's paradox of low government debt but high external vulnerability creates potential for liquidity crises despite solvency.

Several key conclusions emerge:

First, headline debt-to-GDP ratios provide incomplete pictures of sustainability. Turkey's government debt appears manageable at 25.6% of GDP, yet external vulnerabilities create significant risks. Conversely, Russia's 20.3% debt burden provides comfort despite geopolitical constraints.

Second, the interest-growth differential critically determines debt dynamics. Brazil and South Africa both face unfavorable differentials that automatically worsen debt ratios, requiring primary surpluses just to stabilize positions.

Third, external debt composition and foreign exchange reserve adequacy are crucial for emerging markets. Turkey's insufficient reserve coverage relative to short-term external debt creates vulnerability absent from primarily domestically-financed debt structures.

Fourth, growth capacity fundamentally determines fiscal space. South Africa's chronic low growth (1-2%) makes even moderate debt burdens difficult to sustain, while Brazil's potential for 3%+ growth with appropriate policies would significantly improve sustainability.

Fifth, institutional quality and policy credibility influence market access and borrowing costs. Brazil's investment-grade status reflects institutional strength, while Turkey's policy unpredictability contributes to elevated spreads despite low government debt.

Looking forward, the key challenge for Brazil and South Africa is escaping the "high debt, low growth" trap through fiscal consolidation paired with growth-enhancing reforms. Turkey must rebuild external buffers and restore policy credibility to reduce crisis risk. Russia's sustainability is assured barring extreme geopolitical scenarios, but diversification away from commodity dependence would enhance resilience.

None of the BRST nations face imminent default risk, but the margin of safety varies substantially. Russia enjoys comfortable buffers, Brazil and Turkey face moderate risks requiring policy attention, while South Africa's trajectory appears unsustainable without significant course correction. The next 5-10 years will be critical in determining whether these nations strengthen their fiscal positions or drift toward crisis.

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The End