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INVESTMENT MANAGEMENT

DECODING DEBT-TO-GDP USING A MULTI-FACETED RISK SCORE

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In the complex landscape of global economics, few metrics have as much influence as the debt-to-GDP ratio – a fundamental indicator that offers a window into a nation's financial well-being and a powerful gauge of its fiscal health and stability. Yet, relying solely on this solitary metric is akin to peering through one window in a multi-roomed house.

To truly grasp the intricate dynamics at play, we must venture deeper. Consider the case of riskier countries like South Africa and Brazil, which boast lower debt-to-GDP ratios than the formidable economic giants, the US and Japan. But the latter have size and stability on their side, underscoring the need to dig deeper to get a more informed view beyond the headline numbers.

The debt-to-GDP ratio is an economic indicator that gauges a country's debt burden in relation to its economic output. It serves as a fundamental measure for assessing a nation's fiscal well-being and stability, providing surface level insight into its ability to repay debt relative to the size of its economy. While governments need debt to fund various projects and stimulate economic growth, excessive debt can pose significant risks, particularly for riskier countries.

South Africa falls into this riskier category and thus government faces distinctive challenges when it comes to managing the debt-to-GDP ratio. Problems arise when a country's debt burden becomes unsustainable, leading to economic instability and the potential for a financial crisis to arise. High levels of debt can result in increased borrowing costs, curtailing fiscal flexibility and diverting resources from essential public services, which, in turn, diminishes government's ability to respond to economic downturns and unexpected shocks.

Now, let's compare debt-to-GDP ratios and understand why they pose unique challenges for countries like South Africa and Brazil, as opposed to more stable economies like the US and Japan, which have higher ratios. Figure 1 visually represents the economic disparities among the top 50 countries based on GDP. The US is the world's largest economy, followed by China and Japan, while South Africa ranks 42nd in size. Brazil, often regarded as an emerging market counterpart to South Africa, falls in 11th position, with an economy more than five times larger than SA.

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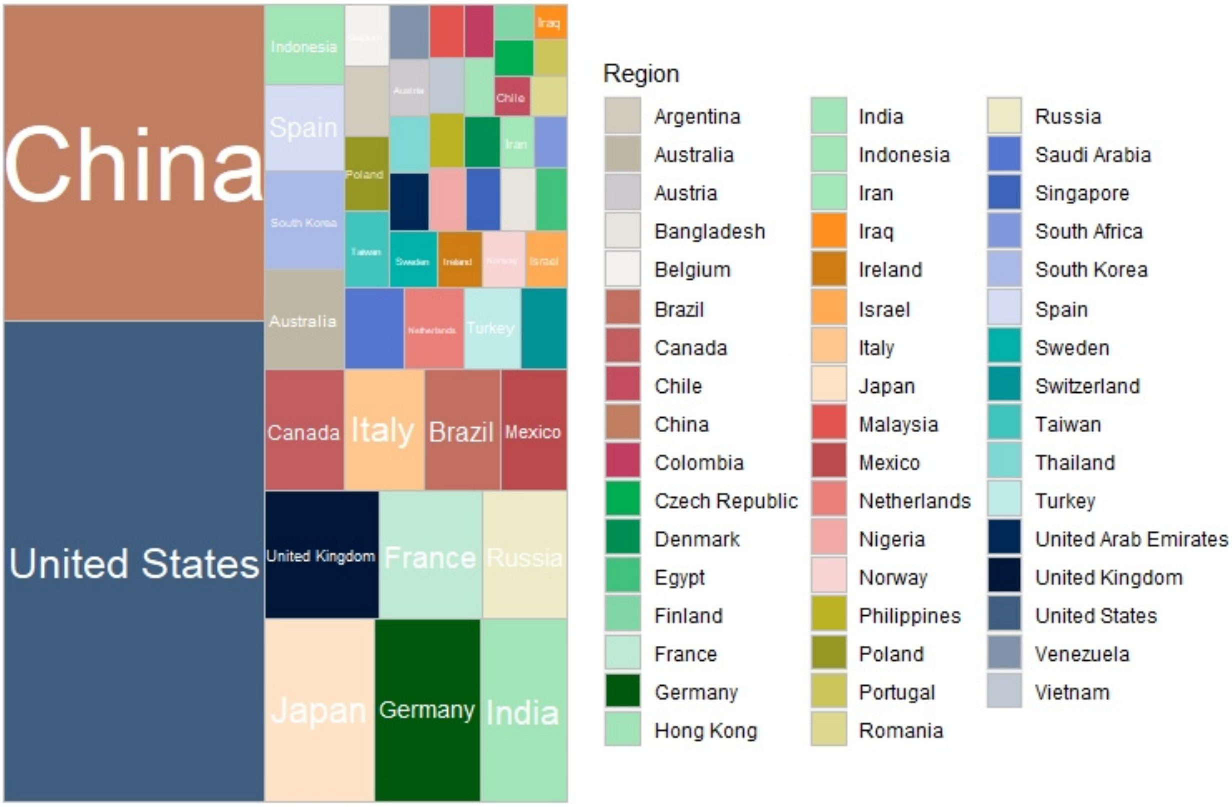
FIGURE 1: ECONOMIC DESPARITIES BETWEEN TOP 50 COUNTRIES BASED ON GDP



Sources: Prescient Investment Management, Bloomberg as at 13 October 2023

For potential investors considering SA as an investment destination, fiscal stability is a paramount consideration. However, relying solely on the debt-to-GDP ratio is insufficient for measuring risk. To gain a more comprehensive understanding of risk, we can break it down into three factors: financial, economic, and political risks, with subsectors in each factor, as illustrated in Table 1.

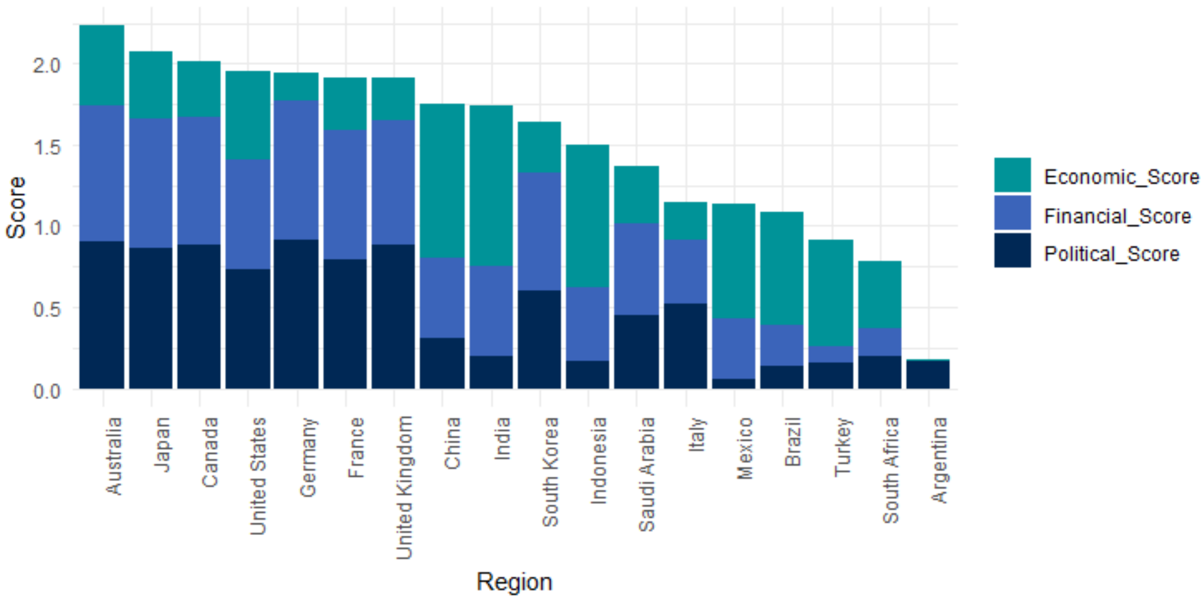
TABLE 1: VARIABLE INPUTS TO THE COUNTRY RISK SCORE CALCLATION

FINANCIAL	ECONOMIC	POLITICAL
CDS 5 year	GDP	WGI control of corruption
Equity index return	GDP forecast	WGI government effectiveness
FX forecast return	GDP per capita	WGI regulatory quality
Historical 3 month volatility	CPI actual	WGI rule of law
3 month implied volatility	Unemployment	Ease of doing business rank
	Budget deficit/surplus per GDP	Starting a business rank
	World fuel imports to country	
	World fuel exports from country	
	Currency reserves	
	Total foreign claims on country	
	Foreign direct investment	

Sources: Prescient Investment Management, Bloomberg (as at 13 October 2023)

When we calculate a risk score for 18 G20 member states (excluding Russia and the European Union) based on these factors, Figure 2 shows Japan, Canada, Germany, the UK, and the US receive favourable scores across all factors. Although some emerging markets compete favourably with their developed counterparts from an economic and a financial perspective, political instability brings down their overall score. South Africa occupies the 17th spot, with only Argentina performing worse.

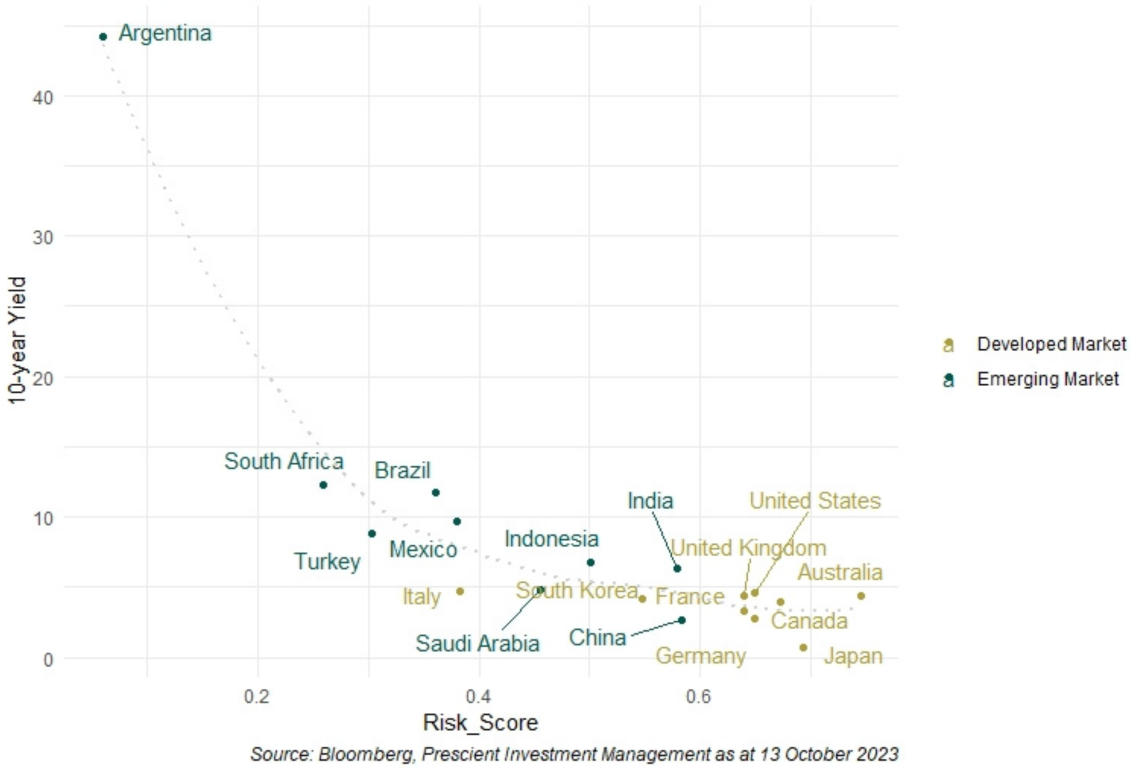
FIGURE 2: RISK SCORES BY REGION



Sources: Prescient Investment Management, Bloomberg (as at 13 October 2023)

Countries with higher risk levels evidenced in lower risk scores face greater hurdles in accessing capital, resulting in elevated borrowing costs that compensate investors for the associated risks. This trend is captured in Figure 3, which charts risk scores against the respective 10-year bond yields of countries.

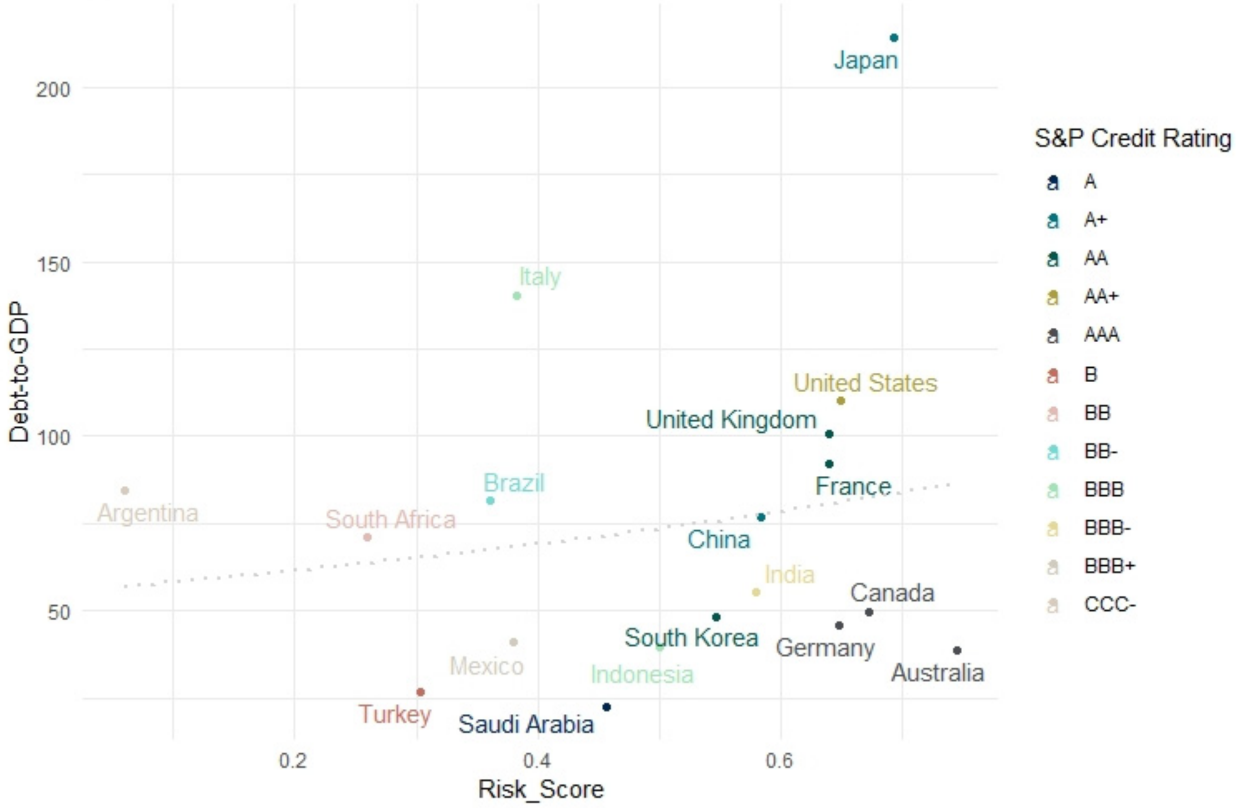
FIGURE 3: 10-YEAR YIELD VS RISK SCORE



Sources: Prescient Investment Management, Bloomberg (as at 13 October 2023)

If debt levels continue to rise and economic growth stagnates, borrowing costs will escalate. These higher borrowing costs necessitate allocating a larger proportion of GDP to servicing debt, leaving fewer resources for infrastructure and social programmes, as reflected in SA's situation. In Figure 4, we examine debt-to-GDP ratios alongside risk scores, with color-coding based on S&P credit ratings. SA shares similar debt-to-GDP ratios with countries such as Brazil, China, France, and India, but its credit score is considerably lower. As a result, it may be less appealing to investors unless they believe the rise in borrowing costs compensates for the risk. High debt levels in countries like South Africa and Brazil render them vulnerable to economic shocks and limit fiscal flexibility. In contrast, more stable economies like the US and Japan can effectively manage higher debt-to-GDP ratios due to their economic strength and unique circumstances.

FIGURE 4: DEBT-TO-GDP VS. RISK SCORE



Sources: Prescient Investment Management, IMF, Bloomberg (as at 13 October 2023)

In summary, it’s important to note that there is no universally agreed-upon ideal debt-to-GDP ratio, as perceptions of whether the level is acceptable or not will vary depending on the country and its economic conditions. However, it’s evident that countries with higher risk scores that reflect lower risks can better sustain high debt-to-GDP ratios because investors have confidence in the eventual repayment of the debt. This confidence is rooted in the country's strong economic, financial, and political status, combined with a sizable and diversified economy.

To mitigate the risks associated with high debt levels, it is crucial for riskier countries to focus on putting in place sustainable fiscal policies and structural reforms that promote economic stability and growth. Addressing these challenges is essential to secure a more stable financial future for countries facing heightened risk in already uncertain times.

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