Privilege Lost?
The Rise and Fall of a Global Currency

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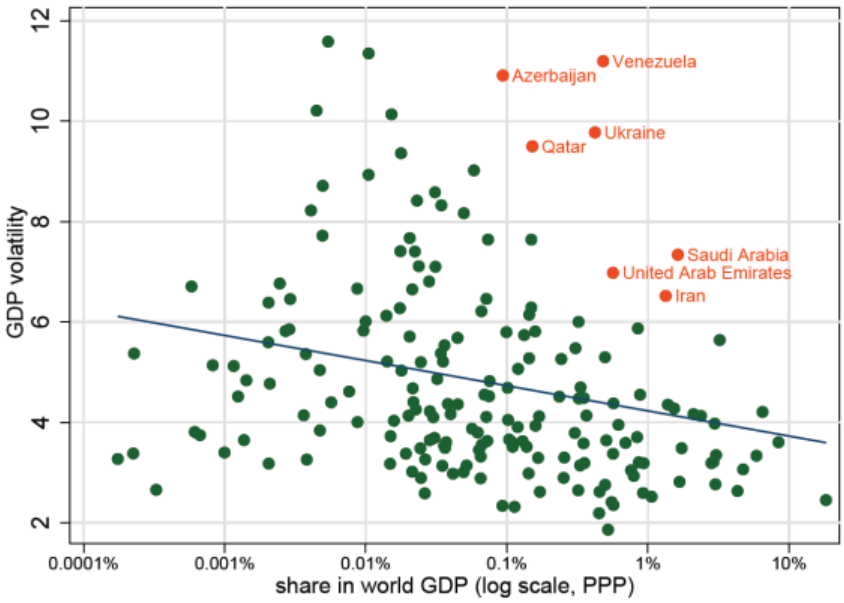
As a country becomes larger and more diversified, default becomes less likely, leading to lower interest rates and higher borrowing capacity. We show that the larger a country's share in the supply of safe assets, the lower is its bond liquidity premium. If the dominant country grows less than the rest of the world, its status as a safe haven erodes.

Chart 1: GDP volatility and log share in world GDP



Note: The chart shows the log GDP share and GDP volatility of 176 countries over time. Mean between 1980-2023, GDP in PPP (IMF data). Volatility is standard deviation of GDP over the period. Countries highlighted in red are large commodity producers.

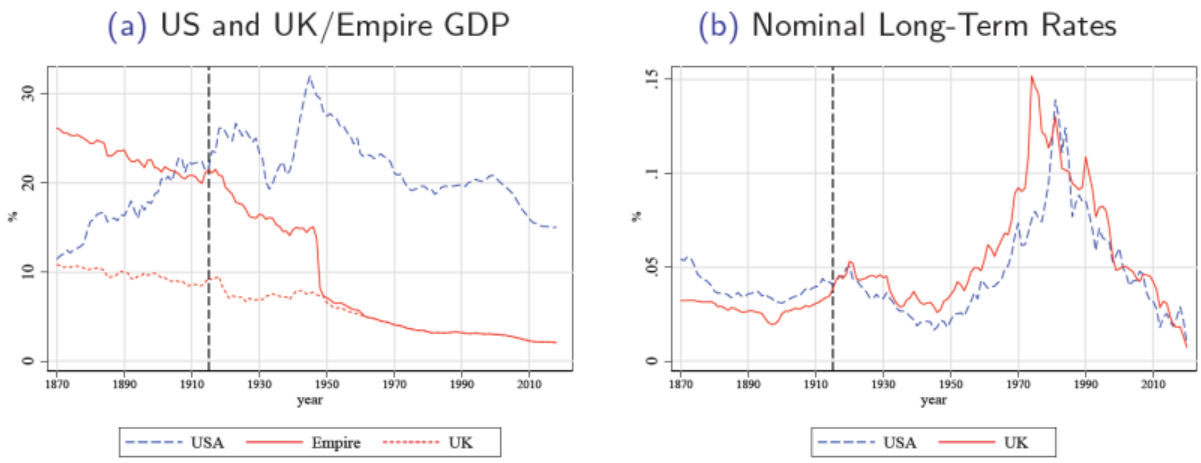
The United States and the US Dollar play a crucial role in the international financial system. Dollar-denominated US government bonds are used extensively as safe assets by investors around the world. This special demand can give rise to yield differentials, lowering the required interest rates the US needs to pay when compared to other countries. This became known as the *exorbitant privilege*, a term coined in the 1960s by Valéry Giscard d'Estaing, at the time the French Minister of Finance, when discussing the position of the USD in the Bretton Woods system, see Gourinchas and Rey (2007) and Maggiori (2017).

Pound Sterling and the fall of Empire

There are not many examples when a country has lost its dominant global currency status. The last instance of such an event was the decline of the British Pound Sterling and its replacement by the American US Dollar (see Vicquéry, 2022). The Sterling's loss of status as a dominant global currency

was preceded by a relative decline of the UK in world GDP share and an increase of government borrowing costs relative to the US, see Chart 2. In a similar way, there is some recent claims (see Jian et al, 2022 and Atkeson et al, 2022) that the US is about to lose its exorbitant privilege today, as the rise of China and other emerging countries reduces its relative size of the global economy and the US' relative bond return advantage diminishes.

Chart 2: Historical Evidence: UK vs US (1870-2017)



Note: World-GDP share of the US and the UK/British Empire in chart (a). Nominal 10-year gov. bond rates in chart (b). Vertical dotted line indicates 1915. Sources: Bolt et al. (2019), Jorda et al. (2019)

Dominant currencies: the role of size and safety

How does a country obtain the status of a dominant global currency provider, and how can it lose this position? In a recent paper, we focus on two key aspects: safety and size, and how they relate to each other. We highlight two channels how interest rate spreads arise between two countries. First, safety is important because a defaulting bond has little resale or collateral value. Second, the larger the country, the deeper the market for its bonds, conditional on its level of financial development. This increases its liquidity and the probability that investors match with lenders in order to finance their investment opportunities.

Interest rate differentials are then composed of both a risk and a liquidity premium. While abundant supply of bonds is good from the perspective of liquidity provision, there is a trade-off as the country's risk premium increases at the same time. As in the Triffin dilemma (Triffin, 1961), a country that acts as the global liquidity provider needs to be prudent not to overextend itself.

We develop a model in which a government strategically defaults on its debt obligations when repayment is too costly relative to default. Investors anticipate this possibility and demand higher or lower interest rates depending on the distribution of the underlying shocks. In larger economies, idiosyncratic shocks originate from more and more sources and therefore become less granular and less important. This is equivalent to a diversification of risk.

We also discuss which features in an economy determine whether there is growth with or without diversification. The first feature is the correlation of shocks. A large economy with a low shock correlation across units enjoys a lower aggregate shock variation. This decreases the likelihood of an aggregate tail-event that could lead to a default. An optimal debt area therefore requires a low correlation of shocks. Furthermore, we also formalize how these idiosyncratic shocks are aggregated.

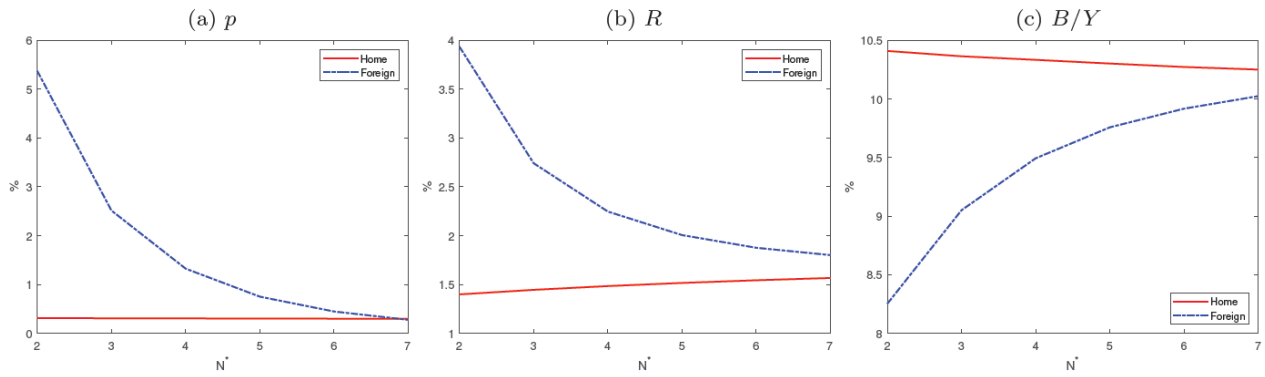
The aggregation depends on how much the nation-wide government cares about variation across units. Growth together with low shock correlation and institutional features that increase the cost of default (hence reduce the incentive for governments to default on their external debt) can therefore decrease the risk premia. Extending the evidence in Di Giovanni and Levchenko (2012), Chart 1 suggests indeed that countries with exceptionally large GDP volatility are small, or – if they are larger – have a low degree of diversification in the economy, as they are large commodity producers (the highlighted countries in red).

We embed this framework in a two-country open economy model in which investors can save in bonds of two countries and governments behave strategically. The relative size of both countries matters for interest rate spreads. As the small country grows and diversifies, it increases its debt capacity: default becomes less likely, its interest rate falls and debt-to-GDP rises, while the larger country's interest rate increases slightly. A previously dominant country can lose its exorbitant privilege if it is eventually overtaken by another rising country in terms of size and safety. The paper highlights several key factors that determine when a challenger could be ready to assume that role, and when it might not. The challenging country would need to have sufficient size, diversification, institutional quality and financial development.

Liquidity and yield differentials

To introduce interest spreads beyond pure risk premia, we also consider that bond holdings can be liquidated or used as collateral to finance investment opportunities. The safer the bond and the larger and more developed the financial market is, the higher its value for investors. If financial markets are insufficiently developed, size might not be enough to make its asset markets liquid enough to replace the current dominant currency, as shown in Chart 3. Still, the position of the dominant country erodes as the other country grows.

Chart 3: Lower Financial Development in the Foreign country



Note: Chart (a) default probability 'p' of the government, (b) nominal interest rates 'R' on government bonds, (c) the debt to GDP ratio 'B/Y' as a function of the Foreign country's (F) size (N) .*

As it relates to current global currency dominance, our analysis tentatively suggests that further development and openness of China's financial markets would be required for the Renminbi to challenge the US dollar. Also, it suggests the development of large unified debt market in the euro area would go some way to enhancing the international role of the euro.