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Subcommittee on National Security, Illicit Finance, and International Financial Institutions

"International Financial Institutions in an Era of Great Power Competition"

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Chairman McHenry, Ranking Member Waters, Subcommittee Chairman Luetkemeyer, Subcommittee Ranking Member Beatty, and members of the Subcommittee, thank you very much for the opportunity to testify today. I am Jesse Schreger, the Class of 1967 Associate Professor at Columbia Business School and a founding co-director of the Global Capital Allocation Project, an academic research lab.

Addressing sovereign debt crises, and many other issues in the international financial system, starts by understanding who owns what, and who owes what to whom. At its core, a sovereign debt crisis arises when a debtor country is unable or possibly unwilling to meet the contractual value of its obligations. In such a crisis, the task at hand is to ascertain how much a debtor is willing and able to pay its creditors, and then coordinate an agreement among creditors to allocate the losses. This has always been a challenging problem since sovereign debt lacks the type of seniority structure or bankruptcy procedures that facilitate the resolution of private debt defaults. The difficulty of resolving a debt crisis is further compounded when creditors have differing objectives, especially when we lack a clear understanding of the ultimate creditors' identities.

I will begin by providing an overview of the sources of the current debt distress. Then, I will highlight how today's crises compare to from those of the past and discuss the challenges of quantifying crucial financial exposures.

Today's Challenges

The international financial institutions currently face a significant challenge in the form of ongoing sovereign debt restructurings and countries on the verge of debt crises. Much of the responsibility for resolving these issues falls to these institutions, with the International Monetary Fund traditionally acting as the global crisis lender.

There are some aspects of today's crises that mirror the past. As in many previous crises, the countries currently facing debt distress have largely borrowed from foreign creditors in US dollars and other foreign currencies they do not control. The rise in commodity and energy prices following

Russia's invasion of Ukraine have added a significant economic burden to many countries around the world and made it more challenging to service their debt. Particularly for those countries with dollar denominated debt, the sharp recent rise in dollar interest rates adds another source of stress. As US inflation surged and the Federal Reserve responded by increasing interest rates, the dollar borrowing costs of other countries escalated in parallel. With US Treasury rates now significantly higher, countries that borrowed in dollars when rates were low face the challenge of trying to roll over their debt at a time when investors have various other high-yielding dollar assets available to purchase.

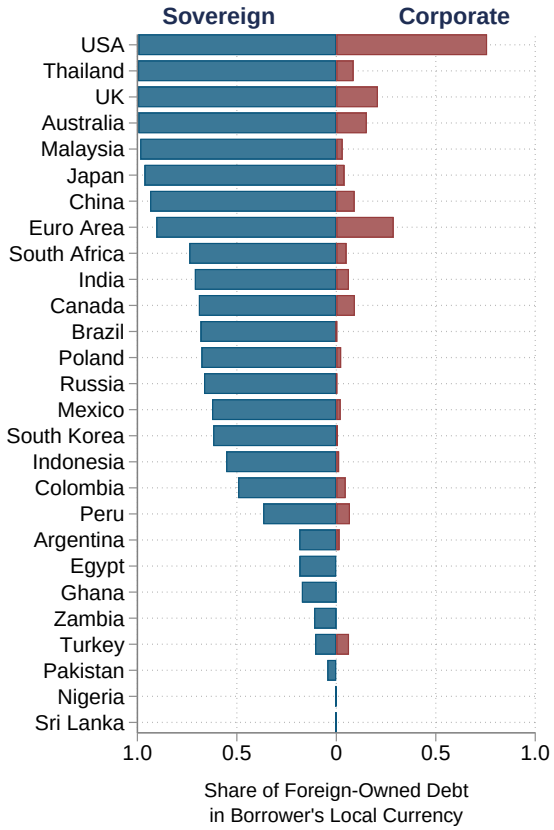
As in previous periods of sovereign debt distress, many countries will need significant reductions in their debt burdens, requiring both private and official creditors to take writedowns on their lending. The sooner creditors move towards agreeing to major debt relief, the sooner debt distressed countries can move forward.

What is different about today's sovereign debt crises?

In many sovereign debt crises over recent decades, private dollar-denominated debt (primarily sovereign bonds issued on global capital markets) would be the central focus of negotiations. While dollar (and other foreign currency) debt remains at the heart of current debt distress, it is not solely international sovereign bonds that are struggling to be repaid. Many developing countries also owe considerable debt to Chinese bilateral bank creditors. This debt is also predominantly denominated in foreign currencies, especially the US dollar, and is coming under increasing stress.

Sovereign Debt Denomination Importantly, the largest emerging markets are not generally included among the countries in debt distress today. One key reason for this is that over the last 20 years, many emerging markets began borrowing from international investors in their own currency in their domestic bond markets. This shift was influenced by multiple crises over the past few decades revealing foreign currency debt as a major source of vulnerability (Eichengreen and Hausmann (1999)). In bad times, either for the global economy or individual borrowing countries, emerging and developing market currencies tend to lose value against the US dollar. This currency depreciation makes it more challenging for the borrowing government to repay their dollar-denominated debt, as it would require a larger amount of their local currency-denominated tax revenue to make the payments. In the wake of painful debt crises, many emerging market governments chose to avoid foreign currency borrowing in international capital markets, particularly after the Asian Financial Crisis. Instead, they focused on developing their domestic bond markets and borrowing in their own currency. While very few emerging market local currency denominated bonds were or are issued on international capital markets, many major emerging markets welcomed foreign investors to purchase these domestically issued local currency bonds. As of 2020, much of the bond debt owed to foreign creditors by emerging market countries was in their own local currency (Figure 1). An additional benefit to borrowers of this switch to local currency denominated sovereign debt is that these bonds are generally governed under domestic law. This means that the restructuring

Figure 1: Local Currency Share of Foreign Held Bonds by Global Funds, 2020



Notes: Estimates from the Global Allocation Project using data on mutual fund and exchange traded fund holdings from Morningstar. This figure reports the share of each country's foreign-owned sovereign and corporate bonds in the issuing country's local currency. The sovereign local currency share is reported in blue to the left and the corporate local currency share is reported in red to the right. Zambia has no foreign or local currency corporate bonds owned by foreign funds in the dataset.

procedure is generally under the control of local authorities instead of courts in the United States, United Kingdom, or other investor countries.

The transition to local currency external borrowing has increased the resilience of emerging markets. However, it has also introduced a new challenge: it has become more difficult to calculate a country's foreign indebtedness. Typically, foreign currency denominated bonds issued in global capital markets remain with foreign creditors throughout a debt crisis. In contrast, local currency domestic debt may be resold to domestic investors, such as banks and pension funds, during a crisis. This complicates measuring how much a country owes to foreign investors. The international financial institutions have made significant progress in tracking foreign ownership of local currency debt but it remains a challenge to determine who holds the local currency domestic debt during a crisis.

While the countries that are currently experiencing relatively tranquil debt markets tend to borrow primarily in their own currency, the situation is markedly different for those currently in debt

distress. These countries are largely indebted in US dollars or other foreign currencies. Investors continue to mainly avoid lending to low-income developing countries in their domestic currencies, as these countries generally have higher inflation, less-liquid capital markets, and potentially a higher perceived risk of imposing capital controls during a crisis.

Why do some countries continue to borrow in foreign currency given the risks they face? The answer is simple: dollar debt is typically cheaper than borrowing from foreign investors in a country's own currency, especially for low income nations. Governments worldwide are often forced to choose between riskier but cheaper dollar debt, or safer but costlier local currency debt. When the interest rate differential is high, it is understandable that a government might opt for dollar debt. Indeed, in Figure 1 we can see that firms in every country around the world, with American firms borrowing in US dollars a massive exception, tend to borrow from foreign investors in foreign currency rather than in their own currency, underlining the allure of cheaper foreign currency borrowing.[1] By focusing on lending via bond markets, Figure 1 understates the degree of foreign currency borrowing of many lower income borrowers, as the debt they contracted from China also tends to be in foreign currency. According to AidData, nearly all of Chinese bilateral lending is in foreign currency, with more than 80% denominated in US dollars (see Figure 6 in Malik et al. (2021)). Many developing countries heavily indebted in dollars will need to significantly reduce their debt burdens via restructuring to regain debt sustainability.

In my view, one of the most effective ways that international financial institutions can mitigate sovereign debt risk is to help governments refrain from borrowing in dollars and other foreign currencies. As the United States and the rest of the G7 contemplate expanding the lending capacity of the multilateral development banks for infrastructure and other development finance, it is important to help borrowers avoid currency mismatch as much as possible. Even though development finance lending generally occurs at below-market interest rates, as Chinese lenders are experiencing now, repaying even concessional interest rates on dollar-denominated debt can be challenging when countries are faced with a sharp and persistent depreciation of their local currencies.

The Rise of China as a Lender The second major difference with today's sovereign debt crises is that many developing and emerging markets are heavily indebted to China. Indeed, China now ranks as the world's largest bilateral creditor. This shift in the international financial system presents several key challenges to the international financial institutions.

The first challenge is the sheer size of the debt for some countries. By the end of 2017, Horn et al. (2021) estimate Chinese lending to developing and emerging economies at nearly $400 billion. Particularly since launching the Belt and Road Initiative a decade ago, China has dramatically increased its role in global development finance. In many developing countries in Africa and Asia, government debt to China frequently exceeds 10% of GDP. For some countries like Djibouti and the Republic of Congo, this debt can exceed half of their GDP.

[1] Firms may also be more willing to borrow in foreign currency because they are less vulnerable than governments to a currency mismatch, particularly if they earn foreign currency revenue from international sales. However, evidence in Bruno and Shin (2017) shows some global firms' foreign currency borrowing decisions are driven by differences in perceived currency-specific borrowing costs.

The second issue stems from a lack of consensus on how Chinese lenders should be treated in the debt restructuring process. China's style of lending effectively positions it between the conventional international private creditors and the bilateral official creditors. A significant proportion of China's loans are made by its policy banks, the Export-Import Bank of China and the China Development Bank. Given that these banks are government-controlled, it seems logical to treat them as official creditors. However, unlike other official bilateral creditors, loans from these Chinese policy banks often involve commercial terms and market interest rates, causing them to resemble private obligations in these aspects. The global community has grown accustomed to resolving debt crises involving borrowing from private markets (typically through international bonds), as well as from the set of official creditors that form the Paris Club and multilateral development lenders like the World Bank. The protracted negotiations and long resolution periods we are seeing today in part stem from the fact that there is no established procedure for dealing with this new situation.

The third challenge associated with China's rise as a lender to low income countries is the uncertainty about precisely how much these countries owe to China. While the debt statistics of the international financial institutions are designed to capture bilateral loans from foreign governments, the structure of China's lending makes tracking these debts particularly challenging. Most of these loans from China do not go directly to the sovereign government of the borrowing country. Instead, China tends to lend to state-owned enterprises or special purpose vehicles in borrower countries. Questions remain about the extent to which Chinese bilateral loans are creating unrecorded contingent liabilities for borrowing countries (Malik et al. (2021), Dreher et al. (2022)). Further uncertainty about levels of indebtedness arises from China's policy of not disclosing its foreign lending portfolio and including non-disclosure clauses in its loan contracts, preventing borrowers from revealing the terms of the contracts (Gelpern et al. (2022)).

China's lending style also potentially alters the debt restructuring process through its attempts to design contracts that effectively grant it seniority over other creditors. A portion of China's lending appears to be collateralized as China may require borrowers to set up offshore escrow accounts and maintain a cash balance (Gelpern et al. (2022)). While the extent of this practice is unclear due to the non-disclosure clauses in loan contracts, the apparent aim is to ensure (partial) repayment in the event of a default. This contrasts with private bond creditors who generally provide unsecured finance directly to the foreign sovereign. If Chinese creditors can seize the contents of an escrow account before restructuring negotiations begin, foreign private creditors have reason to believe they may bear a larger share of the losses in a debt renegotiation.

Tax Havens and Offshore Financial Centers Obscure True Creditors and Debtors

The challenge of measuring cross-border exposures extends beyond secondary markets for domestic debt and China's bilateral lending policies. In particular, tax havens and offshore financial centers obscure the true picture of financial exposures between countries.

For instance, Chinese law prohibits foreigners from owning equity stakes in strategic sectors like internet communications. However, international investors can buy shares of Alibaba, a Chinese

internet giant, on the New York Stock Exchange. The shares they purchase actually represent a claim on a shell company based in the Cayman Islands, known as Alibaba Group Holdings Limited. According to standard global financial statistics, this is recorded as a portfolio equity claim on the Cayman Islands, not China. This is because these statistics are compiled on a residency basis, where the location of an investor or borrower is attributed to the immediate geographic location, i.e., where the financing subsidiary or shell company is based, rather than the location of the controlling entity or the so-called "nationality" basis.

Because of China's restrictions on foreign ownership in certain sectors, many Chinese firms adopt complex financial structures to circumvent the restrictions, and in the process distort the measurement of cross-border financial exposures. As can be seen in Figure 2, most global equity investment recorded as going to the Cayman Islands and other offshore centers is actually directed toward China (roughly $2.4 trillion in 2020). Additionally, an increasing portion of bond investments recorded as flowing to the Cayman Islands and the British Virgin Islands (about $600 billion in 2019) are in reality loans to Chinese firms.[2]

However, the problem is not just restricted to investment in China. Companies globally, including state-owned enterprises taking on quasi-sovereign debt, operate financing subsidiaries in offshore centers like the Cayman Islands, British Virgin Islands, and Bermuda. When investors purchase bonds from these companies, their investments are recorded as flowing to these offshore centers rather than the actual borrowing countries. With trillions of dollars invested in tax havens and offshore financial centers, these sums can significantly cloud the actual stocks of debt and mask potential vulnerabilities.

A similar problem exists for the investor side. Using the official statistics of the United States (the Treasury International Capital data), after Japan and the United Kingdom, our next largest foreign portfolio investors are the Cayman Islands at $2.24 trillion and Luxembourg $1.97 trillion in June 2022.[3] With a population of under one hundred thousand people, the Cayman Islands are not the actual source of this investment. Instead the size of the positions demonstrate that we often do not know the true identity of our creditors.

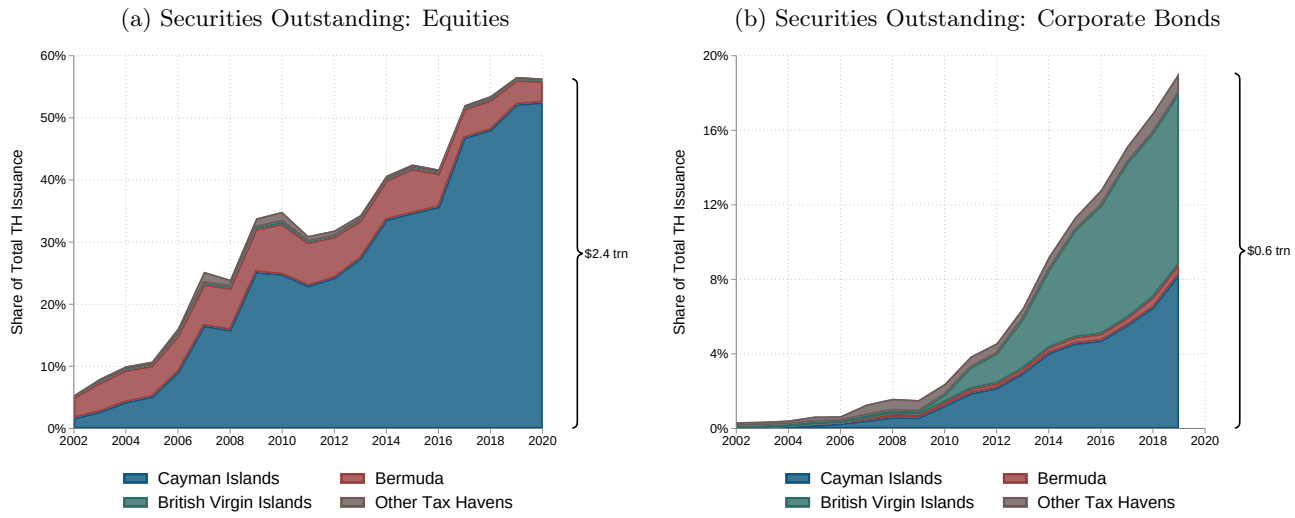
This issue is not unique to the United States; countries around the world face a similar situation with a significant portion of investment recorded as flowing in or out of tax havens and offshore financial centers. While there is ongoing work by academics, the Federal Reserve, and others, to address these challenges, achieving a comprehensive understanding of global financial exposures remains a multilateral issue.

In this context, international financial institutions are uniquely well-situated to lead the way. They can facilitate the coordination required to pierce through the veil of tax havens and offshore financial centers in order to have a clearer understanding of global financial exposures. Recognizing that resolving debt and balance of payments crises requires knowing who owns what, there is

[2]This leads US equity investment in China alone to be understated by more than $800 billion in 2020. The details of these structures are discussed in Coppola et al. (2021). See Bertaut et al. (2019) for a restatement of the US Treasury International Capital data on a nationality basis.

[3]For studies of who owns the funds recorded as making investments via Luxembourg and Ireland, see Zucman (2013) and Beck et al. (2023).

Figure 2: The Rise of China in Offshore Markets



Notes: Clayton et al. (2023). Panels (a) and (b) plot the share of total outstanding securities issued by entities resident in tax havens and offshore financial centers that are Chinese by nationality.

an increasing need for a coordinated international effort. This effort should aim to reveal the true identities and relationships behind these centers, preparing the world for a more efficient and effective resolution of future debt crises.

Thank you very much to the Subcommittee for the opportunity to share my views. I look forward to answering your questions.

References

Beck, Roland, Antonio Coppola, Angus Lewis, Matteo Maggiori, Martin Schmitz, and Jesse Schreger, "The Geography of Capital Allocation in the Euro Area," *Working Paper*, 2023.

Bertaut, Carol C, Beau Bressler, and Stephanie Curcuru, "Globalization and the Geography of Capital Flows," *Working Paper*, 2019.

Bruno, Valentina and Hyun Song Shin, "Global Dollar Credit and Carry Trades: A Firm-Level Analysis," *The Review of Financial Studies*, 2017, *30* (3), 703–749.

Clayton, Christopher, Antonio Coppola, Amanda Dos Santos, Matteo Maggiori, and Jesse Schreger, "China in Tax Havens," *AEA Papers and Proceedings*, 2023.

Coppola, Antonio, Matteo Maggiori, Brent Neiman, and Jesse Schreger, "Redrawing the Map of Global Capital Flows: The Role of Cross-Border Financing and Tax Havens," *The Quarterly Journal of Economics*, 2021, *136* (3), 1499–1556.

Dreher, Axel, Andreas Fuchs, Bradley Parks, Austin Strange, and Michael J Tierney, *Banking on Beijing: The Aims and Impacts of China's Overseas Development Program*, Cambridge University Press, 2022.

Eichengreen, Barry and Ricardo Hausmann, "Exchange Rates and Financial Fragility," *Proceedings - Economic Policy Symposium - Jackson Hole, Federal Reserve Bank of Kansas City*, 1999, pp. 329–368.

Gelpern, Anna, Sebastian Horn, Scott Morris, Brad Parks, and Christoph Trebesch, "How China lends: A Rare Look into 100 Debt Contracts with Foreign Governments," *Economic Policy*, 2022.

Horn, Sebastian, Carmen M Reinhart, and Christoph Trebesch, "China's Overseas Lending," *Journal of International Economics*, 2021, *133*, 103539.

Malik, Ammar, Bradley Parks, Brooke Russell, Joyce Jiahui Lin, Katherine Walsh, Kyra Solomon, Sheng Zhang, T Elston, and Seth Goodman, "Banking on the Belt and Road: Insights from a New Global Dataset of 13,427 Chinese Development Projects," *Williamsburg, VA: AidData at William & Mary*, 2021, pp. 23–36.

Zucman, Gabriel, "The Missing Wealth of Nations: Are Europe and the US Net Debtors or Net Creditors?," *The Quarterly Journal of Economics*, 2013, *128* (3), 1321–1364.