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The rise of cross-border financial centres*

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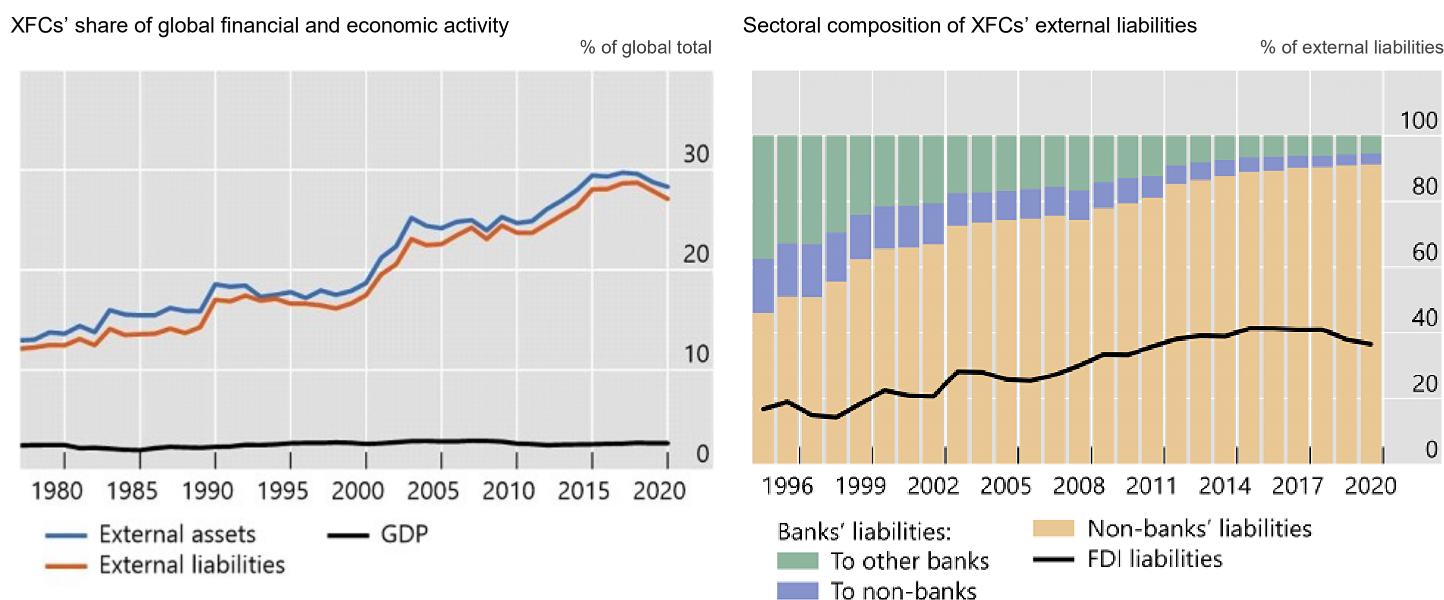
Cross-border financial centres (XFCs), which cater predominantly to non-residents, are important intermediaries of international financial flows. Considering the size and nature of XFCs' activities, it is useful to distinguish them from other countries when analysing capital flows and interconnectedness. XFCs' defining feature is that both their external assets and their liabilities are exceptionally large compared to the size of their economy. While countries identified as XFCs vary with time and different measures of activity, in 2020 a core set of 7 countries clearly stood apart. XFCs' importance is underpinned by geography and institutional characteristics, but regulation and taxation also have a significant influence. The large share of foreign direct investment in XFCs, mainly in the form of funds that only pass through, is indicative of substantial activity motivated by tax considerations.

*The views expressed in this Policy Brief are those of the authors and do not necessarily reflect those of the Bank for International Settlements.

Financial centres that specialise in cross-border activity have become an entrenched feature of the global financial system. Until the 1970s, international financial intermediation was concentrated in a few major cities that also served as centres for domestic activity, notably London and New York (Kindleberger (1974)). Since then, financial centres that cater predominantly to non-residents – which we call cross-border financial centres (XFCs) – have loomed large as intermediaries of cross-border financial flows. Economies that host XFCs saw their share of global external assets and liabilities rise from around 15% in the late 1980s to 30% in the late 2010s – even as their share of world GDP remained constant at less than 3% (Graph 1, left-hand panel). Who are these XFCs, and what explains their growing importance in international intermediation?

Graph 1: XFCs account for a rising share of cross-border financial intermediation, boosted by business with non-bank entities



Sources: Lane and Milesi-Ferretti (2018), updated; Pogliani, von Peter and Wooldridge (2022).

XFCs have a larger global financial footprint than economic one. They are usually embedded in small economies and are neither an ultimate source nor final destination for investment. Instead, they channel funds from one country to another, often via entities with a minimal physical presence, such as booking offices, special purpose entities and shell companies.

Considering the size and nature of XFCs' activities, it is useful to distinguish them from other countries when analysing international financial developments, such as capital flows and interconnectedness. However, when analysing macroeconomic developments, such as global growth or inflation, the usefulness of classifying some countries as XFCs is low because many XFCs are small economies with small populations.

There are many potential ways to distinguish XFCs from other countries. Some classifications refer to the geographical network of counterparties that they serve, others to the types of services that they provide, and still others to their business environment. One oft-used way, which has the advantage of being quantitative, transparent and replicable, is by the size of their international financial business relative to domestic economic activity. Building on definitions in BIS (1995) and Zoromé (2007), Pogliani and Wooldridge (2022) follow this approach and define a XFC as a country or jurisdiction whose external assets and liabilities are exceptionally large compared to the size of its domestic economy.

International financial business has many aspects, from origination, underwriting and trading to legal, accounting and other corporate support services. For the purposes of analysing international financial developments, the most relevant aspect is the extent to which this business results in the accumulation of external positions. These positions comprise a country's outstanding claims on and liabilities to non-residents in the form of portfolio investment, direct investment, other financial investment (consisting mainly of bank loans and deposits), and the market value of derivatives.

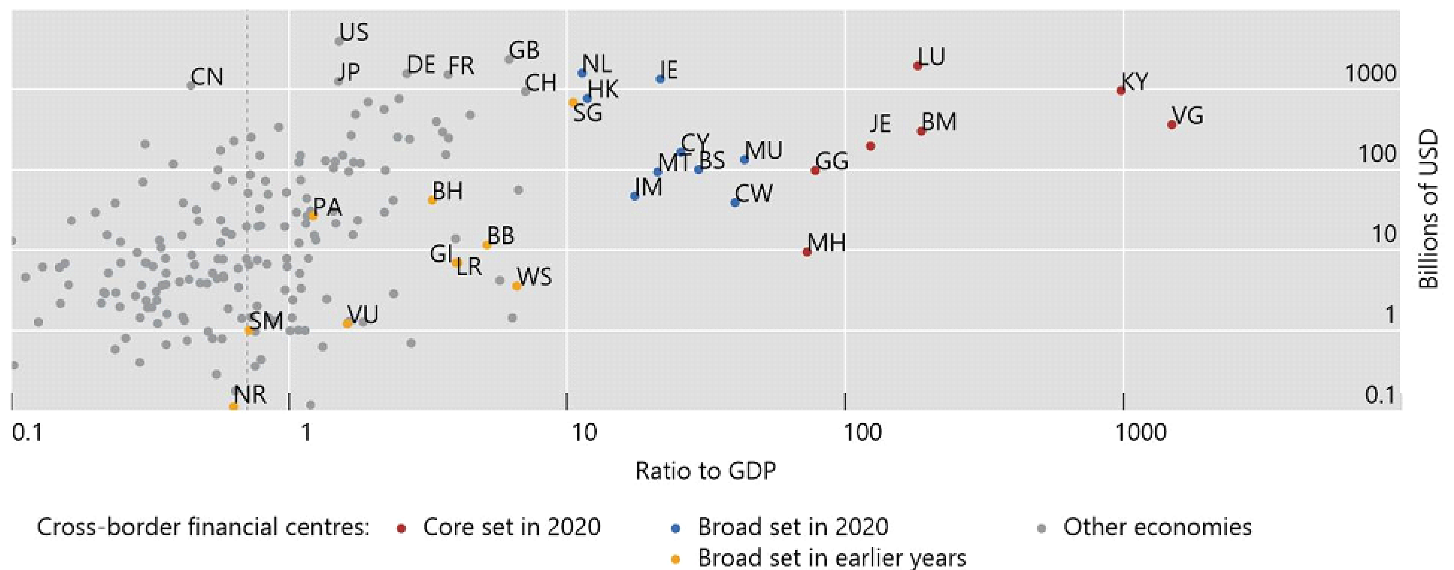
Pogliani and Wooldridge (2022) measure cross-border financial intermediation as the minimum of external financial assets and liabilities. This captures the extent to which a country acts as a conduit for financing between non-residents. The minimum underscores a country's role in cross-border intermediation and disregards its role as an external creditor or debtor.

To gauge whether this measure of cross-border intermediation is high or low relative to economic activity, Pogliani and Wooldridge (2022) scale by GDP and identify XFCs as outliers in the distribution of this ratio across countries. GDP is readily available for almost all economies, including many dependent territories, and is highly correlated with less readily available measures of financial activity, such as total financial assets. The outliers are detected annually, using a method that is less sensitive than alternatives to the shape of the distribution. The distribution of the ratio is highly right skewed, and by incorporating a measure of skewness into the calculation for detecting outliers, the chosen method – the adjusted boxplot – is more robust than alternatives to the extreme values that it is intended to detect.

Based on this method, the group of countries classified as XFCs is reasonably stable over time, but not static. Over the 1995–2020 period the number of XFCs in any given year varied between 12 and 18, with a total of 27 different countries belonging to this set at some point in time. A smaller, more stable set of XFCs can be distinguished by de-trending the data and pooling all years before applying the adjusted boxplot. Over the 1995-2020 period this core set of XFCs varied between 5 and 11, from among 12 different countries. While the countries in this core set convincingly meet the definition of a XFC, the broader set might include upcoming centres or centres specialised in niche services. Indeed, the identification of XFCs is sensitive to how international financial business is measured. For example, focusing on interbank business results in a different set of XFCs.

Cross-border financial intermediation in 2020 is shown in Graph 2 for a sample of over 200 economies, both in US dollars (y axis) and as a ratio to GDP (x axis). The core set of XFCs appears on the right side of the graph (red dots). The British Virgin Islands (VG) and Cayman Islands (KY) stand out, with cross-border intermediation a thousand times greater than their GDP, followed by Bermuda (BM), Luxembourg (LU), Jersey (JE), Guernsey (GG) and Marshall Islands (MH). Most countries in the broader set of XFCs (blue dots) also stand out from the main cluster of countries, although a few are in the boundary zone, such as the Netherlands (NL) and Hong Kong SAR (HK). Several economies were classified as XFCs in the past but had fallen out of the group by 2020 (orange dots).

Graph 2: Distinguishing among financial centres — Cross-border financial intermediation at end-2020[1]



BB=Barbados; BH=Bahrain; BM=Bermuda; BS=Bahamas; CH=Switzerland; CN=China; CW=Curaçao; CY=Cyprus; DE=Germany; FR=France; GB=United Kingdom; GG=Guernsey; GI=Gibraltar; HK=Hong Kong SAR; IE=Ireland; IM=Isle of Man; JE=Jersey; JP=Japan; KY=Cayman Islands; LR=Liberia; LU=Luxembourg; MH=Marshall Islands; MT=Malta; MU=Mauritius; NL=Netherlands; NR=Nauru; PA=Panama; SG=Singapore; SM=San Marino; US=United States; VG=British Virgin Islands; VU=Vanuatu; WS=Samoa.

[1] Measured as the minimum of an economy's external assets and liabilities. Log10 scale, with axis labels in natural units. The vertical dotted line indicates the median ratio for all economies.

Many XFCs had already emerged as cross-border centres in the 1970s and have remained prominent since then, including the Cayman Islands (KY), British Virgin Islands (VG) and Luxembourg (LU). A few have faded in importance, notably Bahrain (BH), Panama (PA) and Vanuatu (VU) in the 1990s. Others have grown in recent years, such as the Netherlands (NL) and Mauritius (MU).

XFCs lack the economies of scale and scope enjoyed by financial centres in large economies and thus must compete for international financial business on other grounds. Many compete by offering lighter regulations or lower taxes. XFCs had their origins arbitraging differences in the regulatory treatment of banks' domestic and foreign funding. The liberalisation of capital accounts since the 1980s and the strengthening of financial regulation and supervision worldwide have reduced opportunities for regulatory arbitrage, especially in the banking sector. However, the regulation of non-bank financial institutions (NBFIs) tends to be more fragmented than that of banks and thus continues to offer opportunities for cross-border arbitrage.

Today business with non-bank entities, such as investment funds and other NBFIs, accounts for the largest share of most XFC's cross-border activity. Their interbank liabilities (including intragroup positions) fell from close to 40% of total liabilities in 1995 to about 5% in 2020 (Graph 1, right-hand panel, green bars). Over the same period, XFCs' liabilities to non-banks rose from 40% to over 80% (beige bars).

Corporate taxes are another area where XFCs often differentiate themselves. Several centres have tax rates of zero on some types of corporate income, or exemptions, double taxation treaties and other features that enhance the attractiveness of their tax regime. The size of foreign direct investment (FDI) in many XFCs is indicative of how much activity is motivated by tax considerations. In XFCs, most FDI takes the form of pass-through funds, whereby companies route investments through one or more financial subsidiaries on the way to their final destination (Weyzig (2013)). The steady rise in outstanding FDI, more than doubling as a share of the external liabilities of XFCs since 1995 and up over tenfold as a share of their GDP, points to the growing importance of tax optimisation strategies (Graph 1, right-hand panel, black line). These centres have small domestic economies, which suggests that little of this FDI was invested in the production of goods or services.

Notwithstanding their tailoring of regulations and taxes to attract cross-border financial activity, XFCs are not synonymous with offshore centres (Pogliani, von Peter and Wooldridge (2022)). When they first came to prominence in the 1970s offshore centres were considered centres for “eurocurrency” or international banking activity. They have since come to be defined by their tax and regulatory characteristics. While low taxes and light regulation can help to attract international financial business, they are neither necessary nor sufficient to do so. XFCs stand out for their success in attracting international business. For example, Luxembourg is usually not grouped with offshore centres but has been among the top cross-border centres for decades. Conversely, Lebanon and Vanuatu are often considered offshore centres but for many years have not stood out as having unusually large financial activities.

A country’s standing as a XFC is underpinned by several structural characteristics. Institutional prerequisites include a stable, transparent legal environment; the unrestricted use of foreign currencies; and openness to foreign financial institutions and their expertise (Pogliani, von Peter and Wooldridge (2022)). Geography is also important because information frictions increase with physical and cultural distance. As a result, many XFCs cater to a large neighbouring economy. Moreover, competitive pressures lead many XFCs to implement similar regulatory and tax regimes. Thus, to achieve a lasting advantage, XFCs tend to specialise in certain activities. They build an ecosystem of financial, advisory and legal services that cater to specific demands and differentiate them from other financial centres.

XFCs offer benefits to the global financial system but also pose challenges to its smooth functioning. Their rise has put competitive pressure on other financial centres to reduce costs, innovate and improve the quality of their services (Rose and Spiegel (2007)). At the same time, to the extent that XFCs facilitate regulatory arbitrage and obscure risks, they can undermine international efforts to strengthen the resilience of international financial intermediation. ■

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