Chapter 1

International Banking: Functions, Theories, and Types

1.1. Introduction

International banking refers to the provision of financial (banking) services to clients in many different (legal and banking) jurisdictions. The services provided may include transactions with foreign as well as domestic residents relating to offering the following services: deposit-related products and extending loans in domestic and foreign currencies; facilitating foreign currency transactions; advising clients on foreign exchange and other financial risk hedging services; participating in international loan syndications; facilitating international trade finance for clients, etc. In today's world of highly integrated financial architecture, deregulated banking activities, market openness, fast and secure flow of information, and value transfer, the playing fields of banks are not limited to the domestic market. Instead, a whole spectrum of financial services in many different geographical markets is available even for small domestic banks as well as large multination banks. In addition, the development of communication and payment-related technologies combined with the widespread adoption of mobile Internet devices allow financial technology (or FinTech) start-ups to challenge traditional financial institutions in domestic and potentially international intermediation activities.

International banks are also referred to as multinational banks. Although the two terms *international* and *multinational* are sometimes used interchangeably, there is a subtle difference when they are applied to banking. Multinational banking refers to the activities of banks that own and operate physical banking facilities (e.g., branches and subsidiaries) across multiple country locations. For example, HSBC (https://www.hsbc.com/) has a presence (branches and subsidiaries) in 35 countries (as of July 2022), providing both domestic and international banking services. Thus, *multinational* relates more to organisational forms than the types of services provided. On the other hand, the term *International* banking specifically refers to traditional cross-border and cross-currency foreign banking and eurobanking[1] activities. It relates more to the types of banking services provided, not necessarily the location of the provision of the services or clients. From these definitions, it is clear that international banking services can be provided by both multinational and domestic banks, and these two terms can be used interchangeably throughout this chapter without loss of generality.

Exhibit 1.1 shows the total cross-border claims of the Bank for International Settlements (BIS) reporting banks for the fourth quarter of 1977 to the first quarter of 2022. Panel A shows international bank claims, which include total cross-border loans and other assets of the reporting banks. The initial spur to growth in the mid-1980s coincides with the deregulation of the financial system of major economies. The rapid growth from the early 2000s continued until its peak of USD 35 trillion in the first quarter of 2008 before starting a reversal. The Global Financial Crisis (GFC) which began in mid-2007 induced the withdrawal of international banking activities that continued until the fourth quarter of 2016, where it reached USD 27 trillion before it began to rebound, reaching USD 36 trillion by the first quarter of 2022. The recovery of international banking activities from 2016 is coming mostly from the USD-denominated claims, as seen by rising USD-denominated claims. On the other hand, Euro-denominated claims have been falling since the start of the GFC. Panel B shows currency shares of total cross-border claims. The USD accounted for as much as 78% of the total claims in the fourth quarter of 1983. Its share gradually declined until 2008, when it reached its lowest level of 40% of the total.

The German Mark/the Euro is the second most popular currency denomination in international assets. Its popularity started to grow from

[1] Eurobanking refers to those international banking activities involving financial services denominated in currencies foreign to the market where the transactions occur (e.g., an Australian bank providing a loan denominated in the USD to a Japanese multinational borrower in London). See Chapter 5.

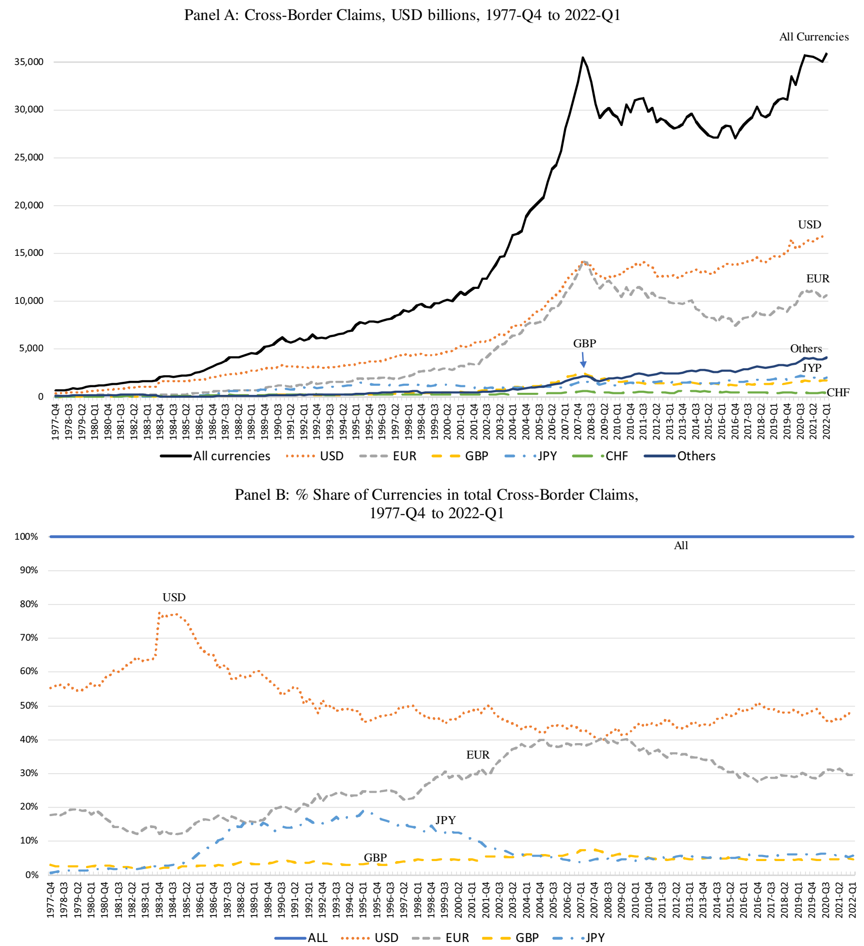

Exhibit 1.1. Cross-border claims and currency compositions of BIS reporting banks, 1977Q1–2022Q1.

Source: BIS international banking statistics, Locational banking statistics.

the mid-1980s during the financial market deregulation phase to match the USD in importance by the second quarter of 2008. The USD and the Euro accounted for 40% and 41% of cross-border bank assets, respectively, in the second quarter of 2008. However, this trend was reversed due to the weakening international positions of major European banks during the GFC of 2007–2009 and the Eurozone debt crisis of 2009–2012. By the first quarter of 2022, 47% and 30% of cross-border assets were denominated in the USD and the Euro, respectively.

The cross-border claims denominated in the Japanese Yen started to rise from the fourth quarter of 1985 and peaked in the second quarter of 1995 at 19% of the total. This coincides with the periods of the heightened international presence of Japanese banks, as seen in Panel A of Exhibit 1.2. However, the financial difficulties faced by Japanese banks since the bursting of the stock and real estate market bubbles in 1991 led to the substantial reduction of the Japanese Yen's share of the total cross-border claims to settle between 5 and 6% of the total from 2004.

Exhibit 1.2 shows the 10 largest banks in the world by total assets over the period 1996–2020. The landscape of top banks has changed significantly over the last three decades. There are a number of noteworthy developments. *First,* the average size of bank assets has increased by a factor of six, from USD 502 billion in 1996 to over USD 3 trillion in 2020. This corresponds to the significant increase in the cross-border banking activities shown in Exhibit 1.1. There also has been an even larger growth in total equity from USD 18 billion to USD 213 billion over the same period, representing a more than eleven-fold increase and reflecting the efforts of the banks and the regulators in strengthening the capital position of banks, especially after the GFC. However, the profitability of top banks, as measured by return on equity, has fluctuated across the period in line with the various episodes of financial turbulence. The profitability of banks recovered after the dip in the late 2000s.

Second, Japanese banks dominated the top 10 bank ranking from the late 1980s, and their dominance continued well into the second half of the 1990s, as evidenced by the 1996 ranking shown in Panel A, where seven Japanese banks were listed in the top 10 list. This is in large part due to the delayed response of the Japanese banks and their regulator to address the accumulating non-performing loans (NPL) created by the Japanese bubble collapse in 1991. The negative effects of not addressing the NPL are reflected in the large and negative profitability of some of the banks listed. Four of the seven banks listed reported a negative return on equity for 1996, ranging from –19.4% for Fuji bank to –6.6% for Sanwa bank. The Asian Financial Crisis of 1997 triggered the banking crisis in Japan in 1998, which highlighted the need to write off/down the accumulated NPLs. Consequently, the Japanese banks largely withdrew from the

Total Asset	Capital	Bank	Country	Total Asset USD m.	Total Equity USD m.	ROE %
Panel A: 1996						
1	2	Bank of Tokyo-Mitsubishi	Japan	720,098	28,389	3.0
2	12	Deutsche Bank	Germany	536,319	15,581	9.9
3	9	Sanwa Bank	Japan	500,713	17,665	-6.6
4	8	Sumitomo Bank	Japan	499,604	18,594	2.0
5	7	Dai-Ichi Kangyo Bank	Japan	498,296	19,480	4.3
6	13	Fuji Bank	Japan	487,020	15,551	-19.4
7	11	Sakura Bank	Japan	477,736	15,950	-10.6
8	3	Crédit Agricole Banque Indosuez	France	477,329	22,846	7.5
9	127	Norinchukin Bank	Japan	429,234	3,092	-16.5
10	1	HSBC Holdings	UK	401,666	29,396	19.9
		Average		502,802	18,654	-0.7
Panel B: 2004						
1	17	UBS	Switzerland	1,533,306	35,630	20.1
2	11	Mizuho Financial Grp	Japan	1,324,075	44,990	8.7
3	2	HSBC	UK	1,276,778	99,817	11.9
4	6	Groupe Credit Agricole	France	1,245,213	67,621	8.0
5	8	BNP Paribas	France	1,236,062	48,825	13.0
6	1	JP Morgan Chase	USA	1,157,248	105,653	4.2
7	18	Deutsche Bank	Germany	1,146,189	35,343	9.5
8	5	Royal Bank of Scotland Grp	UK	1,124,108	68,768	12.6
9	3	Bank of America Corporation	USA	1,112,035	99,645	14.2
10	12	Mitsubishi Tokyo Financial Grp	Japan	1,024,804	44,654	12.1
		Average		1,217,982	65,095	11.4
Panel C: 2012						
1	19	Deutsche Bank	Germany	2,800,133	63,462	0.1
2	7	Mitsubishi UFJ Financial Group	Japan	2,664,171	117,018	0.2
3	4	HSBC Holdings	UK	2,555,579	139,590	0.2
4	11	BNP Paribas	France	2,542,880	91,858	0.1
5	3	ICBC	China	2,456,295	140,028	0.3
6	13	Credit Agricole	France	2,431,932	80,222	0.1
7	15	Barclays	UK	2,417,369	78,036	0.1
8	12	Royal Bank of Scotland (RBS)	UK	2,329,767	88,112	0.0
9	2	JP Morgan Chase & Co	USA	2,265,792	150,384	0.2
10	1	Bank of America	USA	2,136,578	159,232	0.0
		Average		2,460,049	110,794	0.1
Panel D: 2020						
1	1	Industrial and Commercial Bank of China	China	4,307,502	380,189	11.8
2	2	China Construction Bank Corporation	China	3,638,950	316,122	12.2
3	3	Agricultural Bank of China	China	3,559,126	277,608	11.0
4	4	Bank of China	China	3,257,474	258,431	11.2
5	10	Mitsubishi UFJ Financial Group	Japan	3,096,333	143,729	3.9
6	9	HSBC Holdings	UK	2,715,152	148,359	5.9
7	5	JP Morgan Chase & Co	USA	2,687,379	214,432	17.0
8	6	Bank of America	USA	2,434,079	188,492	14.6
9	13	BNP Paribas	France	2,432,262	101,081	9.5
10	12	Credit Agricole Group	France	2,259,512	105,812	8.2
		Average		3,038,777	213,426	10.5

Exhibit 1.2. Top 10 banks in the World by total assets, 1996–2020.

Source: Euromoney (1996, 2004) and The Banker (2012 and 2020).

international banking scene, and the process of addressing the thorny NPL issue began in the early 2000s, reducing the balance sheet size for most banks. In addition, the wave of mergers and acquisition activities (both the private sector initiated and due to the government's pursuit of Too-Big-To-Fail (TBTF) policy) significantly changed the landscape of the Japanese banking sector.[2] The adjustment process of Japanese banks continued until 2005, and through M&As, structural reforms, further diversification of assets, and addressing NPLs, they started to report healthy profits from 2005. However, Japanese banks have never regained their prominence on the world stage. Mitsubishi UFJ was the only top 10 presence in the 2012 and 2020 lists shown in Exhibit 1.2.

Third, US and European multinational banks had largely replaced Japanese banks in the world rankings in the 2000s and the early 2010s. Due to their traditional cross-border banking activities and the strength of their economies, US and European banks were able to regain their position as top global banks. Due to the Eurozone debt crisis of 2009–2012, German and French banks fared worse from the mid to late 2010s.

Fourth, there have been ranking upgrades due to M&A activities between banks. For example, as noted in the second point above, a number of Japanese banks have merged to create new entities. These include Mizuho financial group (from the mergers of Dai-Ichi Kangyo Bank, Fuji Bank, and the Industrial Bank of Japan in 2002) and Mitsubishi UFJ Financial Group (from the mergers of Mitsubishi Tokyo Financial Group and UFJ group in 2005). In the US, JPMorgan Chase was an outcome of a series of mergers since 1996 involving Chase Manhattan Bank, J.P. Morgan & Co., Bank One, Bear Stearns, and Washington Mutual.

Fifth, the Chinese banks' ascendency to the world ranking is also noteworthy. The big four Chinese banks (Industrial and Commercial Bank of China, China Construction Bank, Agricultural Bank, and Bank of China) emerged in the early 2010s and started to dominate the world rankings from the mid-2010s. In 2020, the top 4 world banks were the top 4

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[2] Hosono *et al.* (2007) provide the details of the mergers and acquisition activities in the Japanese Banking sector from 1990 to 2004. In general, they find that although the government's Too-Big-To-Fail (TBTF) policy had a significant impetus to the M&A activities, the desired goals (especially efficiency and profitability gain and reduction in NPLs) were not met. Instead, they find that the bank mergers were motivated by the desire to increase the size of their operations to take advantage of the government's TBTF policy. However, they did not find support for empire-building as a motive.

Chinese banks accounting for 48.58% of the top 10 banks' total assets. The spectacular ascendency of the Chinese banks in the world bank rankings coincides with the underlying Chinese economy's successful transformation into a global player since the early 2000s culminating in China becoming the second-largest economy in 2010.[3]

An additional observation in the top global ranking presented above is that top global banks are not necessarily global in terms of diversification of income streams. For instance, most of the Japanese banks in the 1990s relied almost exclusively on domestically generated income. Also, the top Chinese banks from the early 2000s relied heavily on domestic intermediation activities. This is an important difference from non-financial multinational corporations that are operating out of many geographical locations and draw income across these markets. Canals (1997) suggests that this difference is due to additional complexities associated with bank internationalisation compared to the internationalisation of companies in other industries.

1.2. Functions of International Banks

International banking is more about the functions that banks perform rather than the organisational aspects of banking operations. These functions are cross-border in nature and are spread across the following activities: international trade financing, activities in the interbank foreign exchange market, participation in the eurocurrency market, sovereign lending, and international investment banking activities. In this section, a brief discussion of each of the functions is provided.

1.2.1. *International trade finance*

Financing international trade has traditionally been the most important hallmark of an international bank. Due to the gap between the payment and shipment of goods, the exporter is exposed to counterparty default.

[3]Although the large Chinese banks were highly ranked in terms of various performance measures (e.g., tier 1 capital, ROA, and profitability), their income comes predominantly from traditional commercial banking activities (i.e., interest income). Conversely, large US and European banks dominated the rankings in non-interest income categories in the trading, fee, and commission income rankings in 2016.

Due to the added complications and costs arising from a distance (physical, political, legal, regulation, and cultural) between the two parties in an international transaction, the exporter is unlikely to manage the counterparty default risk effectively. Thus, international trade may not occur without an international bank providing financial and performance guarantees and gap financing. Trade financing involves the process of financing business transactions that involve the transfer of ownership of goods or providing services in return for financial remuneration. Financial institutions are usually involved in the process by providing advances to the buyer through business overdrafts, loans, and bill acceptance facilities.[4] International trade financing may be viewed as an extension of domestic trade financing with additional complications. These include geographic risk, foreign exchange risk, political risk, inflation and interest rate risk, market risk, and payment risk, just to name a few. Facilitating international trade has been one of the most important functions associated with international banking. Although domestic banks (as opposed to multinational banks) have also been providing trade payment guarantees, especially for their domestic clients, access to international financial markets and presence in multiple country locations allowed international banks to be in a better position to assess these risks and provide international trade financing more readily. In general, international trades in goods need to be financed because there is a time gap between the time of sale and receipt of payment for an exporter, and the exporter needs funding to continue the production cycle. Also, international trade involves some degree of uncertainty which may lead to a non-completion of trade. Thus, the exporter requires assurance of payment before shipment can be made.

Although domestic banks can participate in this process, international banks with access to the networks of banks located worldwide are in a better position to assess and manage the associated risks of default.

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[4] Bill acceptance facilities allow banks to accept (or guarantee) commercial bills issued by their corporate customers (usually long-standing business customers). This enables corporations to raise funds directly from the capital market, assisted by the banks' payment guarantee. The bills are issued and traded in the domestic market and denominated in the currency of the market. The letter of credit is similar in that a bank provides a payment guarantee for its customer. However, at least two currencies are involved in this process (e.g., the AUD and the USD if an Australian importer pays the invoice of the trade in the USD).

1.2.2. *Interbank foreign exchange market*

The foreign exchange market represents a vehicle facilitating international transactions that require the transfer of value from one currency to another. For example, international trade between an Australian exporter of natural resources (e.g., coal and iron ore) and a Chinese importer is typically denominated in the USD as commodities are priced and traded in the USD, a trade vehicle currency. The Chinese exporter needs to raise the USD funds, and the Australian exporter then needs to exchange the USD funds received into the Australian Dollar. The interbank foreign exchange market is where such transactions are facilitated, and it is unique in its characteristics which distinguish it from other international financial markets. These include continuous trading on a 24-hour-per-day basis, especially between the major currencies (USD vs Euro is the most important currency pair followed by USD vs Japanese Yen); a large volume of transactions (USD 7.5 trillion per day on average in 2022, BIS, 2022); lower transaction costs measured by narrower bid and ask spreads compared to other financial instruments; and relatively unregulated operations due to cross-border nature of the transactions. International banks account for the bulk of foreign exchange trading.[5]

International banks typically perform four roles in the foreign exchange market. *First,* they provide an intermediary service to their non-financial customers. In dealing with retail customers needing foreign exchange (international travellers, investors, etc.), they act as an agent for their customers servicing their foreign exchange needs. They participate in the foreign exchange market to buy or sell foreign currencies on behalf of their customers and provide foreign exchange hedging services. They offer both spot and forward (outright and swap) contracts and over-the-counter foreign exchange derivative products to their customers. When they act on behalf of their customers, their main aim is to minimise the costs of providing these services.[6] This was the traditional service

[5]In the 2022 survey of the BIS's triennial survey of Foreign Exchange and Over-the-counter (OTC) derivatives markets, financial institutions (the sum of reporting dealers and other financial institutions) accounted for 94% of the daily turnover of USD 7.5 trillion. In the 1995's survey, the daily volume was USD 1.1 trillion, and the financial institutions' share was 84%. https://www.bis.org/statistics/rpfx22.htm.

[6]An outright forward contract requires the seller to deliver a specified amount of foreign currency at some future date. The seller of the contract assumes the resulting exchange rate

function performed by international banks. As such, this aspect of the foreign exchange business is treated as a cost centre of their operations. This portion of the foreign exchange market volume was only around 6% of the total in 2022 (see Exhibit 4.9).

Second, international banks act as brokers matching bid and ask transactions for a fee. They provide a matchmaking service whereby they match buyers' bid process to sellers' ask prices. They generate fee income by providing this service and are not acting as a counterparty to transactions. The existence of search costs makes the services provided by brokers invaluable. Brokers in major money market centres receive limit orders (specific amount and price) from other banks and work out the best bid and ask rates for a given amount for a currency pair. These best rates are known as the broker's inside spread and are released to the market upon request or via trading screens. The identities behind these best rates are usually hidden until the enquiring bank accepts the prices.

Third, international banks act as market makers and stand ready to transact on the bid and ask quotes they provide to the market. Market-making banks are expected to quote both their buying (bid) and selling (ask) prices for a specified trade size in a foreign currency. This is a common characteristic of other types of financial markets, such as interbank money markets, where market makers are expected to provide liquidity in a given currency when required. Once quotes are given, market makers must be able to honour their quotes, and they would not know beforehand which of the two rates (bid or ask) would be hit, so they must have sufficient reserves in both the foreign currencies in which they are dealing and bank reserves (i.e., money).

Fourth, international banks also trade foreign currencies on their own accounts. That is, they trade for profit, and some have grown to rely on this source of income. To the extent that the foreign exchange market is decentralised and information asymmetries exist, banks trading with superior information (e.g., advanced knowledge of macroeconomic

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risk. A swap contract is a combination of an outright forward and a spot transaction on the opposite side in the same amount. Although this eliminates the exchange rate exposure for the customer, an interest rate exposure (due to the interest rate differential between domestic and foreign currencies) arises. In 2022, the composition of total daily volume was FX swaps: 50%, Spot: 28%, Outright forwards: 16%, currency swap: 2%, and options and other products: 4%.

announcements and monetary policy changes) can realise trading profits by trading with uninformed dealers. However, it can be argued that trading for profit in the foreign exchange market itself does not lead to economically productive activities as there are no underlying trades in goods and services. Thus, it might be questionable whether the active participation of international banks in the foreign exchange markets for profit motives is desirable from social and economic standpoints. However, the reality is that international banks' foreign exchange market activities will continue to grow thanks to the continuing growth of international financial markets and the international integration of national economies. The factors contributing to the market growth include the rapid growth of international market opportunities for both financial and non-financial corporations (e.g., emerging market opportunities, financing cross-border M&A activities), the continuous improvement of trading technologies, and the recent floating of many emerging market currencies.

1.2.3. *Participation in eurocurrency market*

International banks play a crucial role in intermediating cross-border financial flows between clients in various jurisdictions. International money markets located in financial centre locations, such as London, New York, and Hong Kong, facilitate trades of short-term credit denominated in major currencies. The eurocurrency market is the segment of the international money market where credit products traded are denominated in currencies other than the currency of the market where the transactions occur. Specifically, eurocurrency markets refer to the Over-The-Counter (OTC) interbank market for bank time deposits (short-term, up to 12 months) in the currency denomination other than the national currency of the location of the bank. For example, a domestic corporation that requires USD funds for its operation in the US can borrow the necessary USD amount from a UK bank in London. Eurobanks are international banks that engage in eurocurrency transactions and are typically foreign branches of international banks located in major money market centres. By far, the most important currency in the eurocurrency market is the USD. It is in the form of eurodollar (USD deposits and loans outside the US), accounting for approximately 62% of the eurocurrency market in 2021 (BIS Locational Banking Statistics, see Exhibit 5.2).

1.2.4. *Sovereign lending*

International banks engage in lending to sovereign borrowers. National governments often tap into the international banking market to fund infrastructure investments and other national projects, as their domestic financial markets may not be able to fund them. In general, most sovereign borrowings are in hard currencies (such as the USD and the Euro) and in large denominations. Due to the large size of the loans involved, sovereign lendings are usually syndicated with multiple international banks involved, which may also include domestic banks of the sovereign borrowers. International banks face additional risks when extending loans to sovereigns as the normal array of legal protection is not available to them when sovereign defaults occur. There have been many occurrences of international debt crises involving sovereigns. The most notable are the Latin American debt crisis in the early 1980s and the Eurozone debt crisis of 2009–2012, among others. International banks, in these cases, were forced to take alternative arrangements that invariably involved loss to the lenders. Examples include loan rescheduling, partial or full debt forgiveness, and alternative payment arrangements, such as swaps for equity, natural resources, or lower-valued debt.

1.2.5. *International investment banking*

Investment banks act as an intermediary between corporations and the capital market and offer fee-based services for arranging for their clients to access the market to raise required funds. Corporations can tap into equity markets via initial public offerings and subsequent equity raising or alternatively, issue debt instruments directly to the capital market. Investment banks act as arrangers and sometimes underwriters facilitating such capital market access for their clients. Large international banks, as shown in Exhibit 1.2, especially those from the US and Europe, provide investment banking services backed up by commercial banking presence in the location of the client. Corporations planning to issue securities (e.g., long-term bonds in the USD, either in the US or non-US markets) can entertain accessing multiple markets across many jurisdictions for large denomination debt issues. National governments wishing to privatise government-owned enterprises (e.g., electricity or other utility companies) can allocate shares to both onshore and offshore investors due to the large size of such endeavours. Such cross-border investment banking activities require international banks that can access multiple markets. Other cross-border activities of international investment banking include the following: trading, as well as underwriting, of international securities (international loans, euronotes, eurobonds, etc.); trading in international equities; and providing funds management and risk management services.

1.3. Theories of International Banking

Banks engage in international banking activities for several reasons. In this section, various determinants of bank internationalisation are examined. These include (1) defensive expansion where banks are forced to follow their customers to a foreign location, (2) accessing foreign markets to expand and diversify their balance sheets, (3) participating in the eurocurrency market, and (4) benefiting from regulation arbitrage.

1.3.1. *Defensive expansion* (*Follow the customer*)

Insomuch as the relationship with customers (especially corporate borrowers) is valued, banks follow them when they establish foreign operations requiring financial and local market-specific services. This is known as a defensive expansion. If the bank does not follow its customers, they are forced to seek assistance from the banks operating in the target market (domestic and multinational banks in the target market). If multinational banks are servicing these customers in the target foreign markets, they may also attempt to service them in the customers' home market as well. This will result in the bank losing customers in both home and foreign markets. In banking systems where banks traditionally played an important role in corporate governance, it is not uncommon for business corporations to have cross-shareholding arrangements with their banks (e.g., Japan and most continental European countries). Under these circumstances, companies usually deal with one bank for most of their financing. It is a natural progression for the bank to follow its customers wherever they expand to. In Japan, these banks were called a 'main bank', and in Germany, they were referred to as a 'Haus bank'.

Most multinational banks have established presence in countries that represent major export (or input) markets for their main customers, such as the Japanese banks in the US, and the US banks in Western Europe and Latin America. Australian banks' presence in foreign soils dates back to the late 19th century when they opened their offices in London due to their importance for Australian exporters.

1.3.2. *Growth potential*

In order to achieve further growth in banking activities that are not possible domestically, banks look to foreign markets for expansion. This is important because banks need to be of sufficient size (especially for capital market and currency dealing transactions) to realise scale economies. Due to a lower degree of heterogeneity of core banking products (i.e., intermediation), the marginal cost of providing international banking services in addition to servicing the domestic market is low. For instance, a credit product initially developed for the domestic market might be introduced to a foreign market (with some localisation, if needed). This is especially true if the target markets share common business, legal, and cultural characteristics with the country of the expanding banks. For example, Spanish banks found Latin American banking markets a hospitable environment. Australian banks expanded first to New Zealand and the UK due to the similarity in market conditions.

Also, if the expanding bank has a clear technical and cost superiority over local banks and the local market is in the early stage of deregulation, then expansion into that local foreign market would offer sizable profits and market share. This was the case with the US banks when they saw the opening of western European markets in the 1960s. They had both the technical expertise and the access to a cheaper cost of capital and were in a position to benefit from their expansion into the then emerging European markets.

1.3.3. *Access to money market centres*

Ready access to the interbank money market[7] has been crucial for banks' short-term money management (raising and unloading credit in various currencies). Before the advent of an efficient global payment and communication system, it was essential to have a presence in the key international money market centres such as London and New York to access the interbank market for liquidity and cost minimisation purposes.

[7] The interbank market refers to the network of (international) banks that facilitate borrowing and lending short-term money between banks.

In addition to achieving lower costs of funds through the interbank market, banks might also consider international expansion to achieve a higher return on investments. In light of the events regarding LIBOR manipulation scandals in London (the Libor Scandal of 2012, see Chapter 5), the kinds of market intelligence (and a trading edge) banks can obtain by being in the strategic markets are highlighted.

1.3.4. *International diversification benefits*

One of the core benefits of being a multinational corporation is the ability to diversify both the revenue and cost sides of its operation across multiple jurisdictions. International diversification is likely to reduce aggregate risk and enhance the profitability of multinational corporations. Similar benefits exist for banks that operate across national markets. By diversifying the sources of funds and the geographical area of fund deployment, banks may be subject to less overall portfolio risk. This is especially relevant, considering that business cycles of different regions of the world tend not to coincide perfectly. This is intuitively appealing since an opportunity for multinational banks to diversify their loan portfolios across borders would reduce their portfolio risk. In addition, expansion into emerging markets would have the potential to improve overall profitability at the same time. Recent evidence shows, however, that this strategy may not always be successful as the continued globalisation of international financial markets (even the emerging markets) increases financial contagions and thus reduces the potential for diversification benefits. MSCI (2020) reports diminished benefits of global portfolio investment diversification due to increased market correlations and geopolitical risks. However, they suggest that alternative investments may still yield global diversification benefits, such as real estate, infrastructure and ESG (Environment, Social and Governance) themed opportunities.

1.3.5. *Regulation considerations*

The existence of a considerable difference in the severity of the banking sector regulation between countries presents a tempting opportunity for the banks in heavier regulation countries to expand into less onerous regulation countries. This is because the compliance costs would be higher the more severe the regulation. One of the reasons for the internationalisation of US banks into Western Europe in the late 1960s was to escape the domestic regulation in the US that added to the costs of bank operations. For example, Regulation Q placed caps on domestic deposit rates, limiting the ability of US banks to raise funds from this source. Moreover, mandatory deposit insurance, the separation of commercial and investment banking under the Glass Steagal Act, and the limitations of state branching regulations for state-chartered banks under the McFadden Act all contributed to US banks seeking less stringent regulation jurisdictions. The emergence of the eurodollar market that was free from these cost-adding regulations provided an impetus for US banks to raise funds from this source.

As banks become internationalised, they face additional risks that must be managed effectively. Country risks (or political risks) need to be identified and managed effectively. In its extreme form, nationalisation by host governments of foreign-owned banks would lead to a significant capital loss. Alternatively, the imposition of capital control may prevent local borrowers from repaying in hard currencies, thus leading to costly processes of unwinding positions in that market. Exchange rate risk is another potentially debilitating aspect of international transactions, and currency mismatches between assets and liabilities expose banks to swings in exchange rates leading to higher uncertainty. Another consideration is the high set-up costs in internationalisation. This is especially true in commercial banking activities because of the branch networking requirement and greater efforts needed to overcome the loyalty of local customers to local banks.

In recent decades, these additional risks involved in international banking have become more prominent in international bank regulation arbitrage. Houston, Lin, and Ma (2012) report that international bank flows tend to concentrate on countries with strong investor protections, lower systemic risk, and fewer regulations. They highlight the role of the strength of the institutional environment as a prerequisite before regulation arbitrage can be effective in recent times. Karolyi and Taboada (2015) report that cross-border bank acquisitions are positively received by the stock market when the acquirers face more stringent regulations in their home countries. They regard this as evidence of international regulation arbitrage.

1.4. Types of International Banking

Different organisational forms of international banking permit different sets of international banking activities. The organisation forms range from a corresponding banking arrangement where there is little resource commitment for the banks involved to a full branch presence in the target banking market, which operates at the same level as local banks in the host country. Some forms of banking are investment-specific joint-venture banks, while others are set up to compete against the local banks in the host market.

1.4.1. *Correspondent bank*

Correspondent banking is the minimal form of international presence. A bank may have a correspondent relationship with another bank in countries where it does not have a presence. A correspondent bank relationship is established when two banks maintain a correspondent bank account with each other. Through these accounts, they service their clients in their operations in that foreign country. For example, an Australian bank might have a correspondent arrangement with a Japanese bank. The Australian bank holds a Japanese Yen cheque account with the Japanese bank, and conversely, the Japanese bank holds an Australian dollar cheque account with the Australian bank. From the Australian bank's perspective, the Japanese Yen account it holds is called a *Nostro* account (our account) and the Australian dollar cheque account it provides for the Japanese bank is called a *Vostro* account (their account).[8] These accounts are used when the clients of each bank request payments in local currencies. This arrangement is useful for servicing multinational corporate clients to conduct business worldwide through the bank's own and the correspondent bank's networks. In addition, a correspondent banking relationship involves assistance with trade financing and advising clients on local business conditions. This represents the lowest-cost solution for servicing multinational corporate clients in foreign countries without setting up operations in the host markets, but the range and quality of services provided are unlikely to be satisfactory for multinational corporate clients that require a deeper level of commitment from their banks.

1.4.2. *Representative office*

A representative office is a service facility designed to service a bank's multinational client in its foreign operation. However, it is not a direct

[8]The *Nostro* and *Vostro* accounts are held between banks and used to facilitate payment requirements arising from bilateral transactions of foreign exchange and eurocurrency transactions, in addition to transferring funds to each other on behalf of their customers.

operational presence, rather, it is a business post located in the banking district of a host country and represents the interests of the bank in the host foreign country. Its role is limited to acting as a listening post for business opportunities, monitoring correspondent relationships, and generally helping clients carry out business in a foreign country on behalf of their parent. It is suitable when a full banking presence is not called for due to insignificant market opportunities or as a probing instrument for a possible future full banking presence in the host market. In this role, representative offices collect intelligence on the conditions of the host market for their parents as well as their multinational clients operating in the host market. Typically, services provided are also very limited. They are not permitted to carry out the general intermediation business (taking deposits and lending to local borrowers) in the foreign host market as they are not a bank, but the services involved are generally more comprehensive than in a correspondence arrangement.

1.4.3. *Foreign branch*

Foreign branches of banks operate at the same level as the local banks in the host countries and are subject to the banking regulations of both the home and host countries. However, they are often subject to restrictions designed to limit their activities (such as a limit on the number of permitted branches, activities limited to business banking and retail banking not permitted, etc.). In the case of US banks, their foreign branches were not subject to home (US) reserve requirements nor were they required to pay deposit insurance on deposits taken in the foreign markets. This was the most popular method of overseas expansion by US banks. In general, due partly to branch restrictions and other potential local resistance, foreign branches usually concentrate on the wholesale business where the extensive branch network is not essential, and they perform more specialised functions more closely in line with the areas of competitive advantage of the parents. In short, foreign branches generally concentrate on the business end of the market and perform specialised functions to cater to non-retail customers in the target host market.

Foreign branches are legally a part of their parent banks which afford them the following comparative advantages compared to local competitors: *First,* they allow a much faster global payment system through the parent's access to the global network. *Second,* they can handle much larger loan volumes than their balance sheets would allow since they are backed by the balance sheets of their parents. That is, their headquarters can provide additional funds required for loans by foreign branches. *Third,* both liquidity and solvency risks can be lower than local market competitors as their parents can provide necessary liquidity on short notice if required. Foreign branches are a part of their parents' global networks, so the liquidity and solvency of their globally consolidated operations are managed instead of at the individual foreign branch operation level. *Fourth,* consistency in corporate culture is achieved. Each multinational bank strives to have distinct characteristics to appeal to its clientele, so they wish to project a particular image in the minds of their customers. For example, HSBC is known for global retail banking, Credit Swiss for private banking services, Standard Chartered for an emerging market concentration, JPMorgan for their tilt towards syndication deal-making efforts, etc. Foreign branches are a preferred form of foreign presence to instil corporate culture and specific methods of business operation. However, this can also be a source of potential problems for the banks on a consolidated basis, as a financial crisis arising from a foreign banking location can have the potential to destabilise the entire operation of the multinational bank. Also, foreign branches require substantially more effort and time to get them up to operating levels as they require building banking operations from the ground up in the host market.

Ceruttia *et al*. (2007) report that banks prefer foreign branches over subsidiaries for the host market with a higher corporate tax rate. Higher corporate taxes can be more effectively managed via profit shifting across different tax jurisdictions that foreign branch networks would allow for multinational banks. On the other hand, they find that foreign branches are not suitable in host countries with restrictive regulations on new banks and foreign bank activities. Also, host countries with higher levels of country risk make establishing and running foreign branches potentially more expensive as the branches in the host countries are more likely to require bailouts than the branches in other host countries.

1.4.4. *Subsidiary and affiliate banks*

A subsidiary bank is a locally incorporated bank with a local board of directors that is wholly or majority-owned with controlling interests by a foreign parent. On the other hand, an affiliate bank is only partially owned by a foreign parent with no controlling interest. These are appropriate when branch banking is not allowed due to a regulatory feature of the host market or more grassroots-level banking operations are required to avoid local resistance. They are subject to the banking regulations of the host country, and the foreign parent is not legally liable for the deposits of the subsidiary banks. Subsidiaries operate at the same level as local banks in the host market, and as such, they can provide a full range of banking services, and they engage in both retail and wholesale banking activities.

The advantages of subsidiaries over foreign branches are as follows: (1) banks can get a quick full banking presence in a target foreign market through mergers and acquisition activities, (2) subsidiaries with substantial local affiliations (e.g., local name and usage of local managers and employees) can face substantially less customer resistance, especially in retail banking area, (3) the parent bank is not legally liable to guarantee deposits and other liabilities of the subsidiaries (a local crisis firewall). However, cultural consistency is difficult to achieve, and as a result, it takes longer to instil the parent's specialities onto the subsidiaries, if at all.

Ceruttia *et al.* (2007) suggest that foreign subsidiaries are more suitable for the host countries with higher country risk as the bank has limited liabilities in the event of a full-blown banking crisis in the host country. Moreover, Gleason *et al.* (2006) show that the acquisition of foreign banks is more feasible than other modes of entry when the expansion aims for scale and the target markets are developing countries.

1.4.5. *Edge Act bank in the US*

Edge Act banks are subsidiaries of US (or foreign) banks created under the Edge Act 1919 and located in the US to engage in all aspects of international banking without being subjected to state laws. The US Federal Reserve is responsible for monitoring and regulating Edge Act banks. They provide intermediation services to US corporations conducting business internationally. Their initial developments were due to the Edge Act of 1919, an amendment to the United States Federal Reserve Act of 1913 that allowed federally chartered US banks to engage in foreign banking activities to compete against foreign banks servicing US multinational corporations. In addition to Edge Act banks, Edge Act investment corporations are similarly allowed under the Act but engage in investments in foreign companies rather than financial intermediation.

Foreign banks are also allowed to operate Edge Act bank and corporations. As of September 2022, there were three foreign banks operating Edge Act bank branches: Banco Itau International and Banco Santander International both in Miami, Florida; and Standard Chartered Bank International in New York, New York. There is also one foreign bank operating an Edge Act investment corporation, HSBC International Financial Corporation in Wilmington, Delaware.

1.4.6. *International banking facility for US banks*

An International Banking Facility (IBF) is a separate accounting entity within a bank operating in the US to provide intermediation service to non-US residents and companies while not being subjected to US regulations and some state and local income taxes. IBFs were developed, in December 1981, to allow US banks to compete more effectively with foreign competitors in their offshore banking activities in the eurocurrency market (Key and Terrell, 1988). Deposits taken under this facility are exempt from the Federal Reserve's reserve and mandatory deposit insurance requirements.[9] Any depository institution operating in the US can potentially operate an IBF, and these include federally or state-chartered domestic US banks, US branches and subsidiaries of non-US banks, Edge Act banks, savings and loan associations, and mutual savings banks. IBFs allow US banks to accept deposits from and make loans to foreign corporate customers within their US locations. Before the introduction of IBF, only banks operating foreign branches or subsidiaries (i.e., multinational banks) were able to service their foreign customers. After establishing an IBF, smaller US banks (e.g., state-chartered banks) could also compete for foreign customer business without leaving the US.

IBFs are allowed to undertake the following activities: take large denomination time deposits with two-day notice of withdrawal from foreign non-banking customers; take overnight funds from foreign banking

[9]The reserve requirement in the US was reduced to zero on 26 March 2020. The current deposit protection, as of 2023, provided by the Federal Deposit Insurance Corporation (FDIC), is up to USD 250,000 per deposit category. https://www.federalreserve.gov/monetarypolicy/reservereq.htm.

and official institutions; take deposits from and make loans to foreign non-banking customers on the condition that funds are only to be used for non-US operations of the IBF, and non-bank deposits and withdrawals greater than USD 100,000.

As of 31 December 2022, there were 21 large US banks that operated an IBF (11 Nationally chartered and 10 state-chartered) out of 1,997 large commercial banks as defined by the US Federal Reserve. The four largest banks were JP Morgan Chase, Bank of America, Citigroup and Wells Fargo.[10]

1.4.7. *Offshore banking unit and offshore financial centre*

International banking activities can often be conducted via Offshore Banking Units (OBUs) of multinational banks, typically located in Offshore Financial Centres (OFCs). A significant portion of international banking flows is facilitated by OFCs due to several regulatory advantages this form of banking offers. In the first quarter of 2021, 15% of all cross-border claims and 16% of cross-border liabilities of all banks reporting to the Bank for International Settlement were against OFCs.

OBUs are typically foreign branches of a bank established in a foreign location. They are established mostly to conduct eurocurrency transactions against other foreign banks that are also OBUs in that location.[11] They cater to non-resident banking businesses such as foreign exchange, eurocurrency, and over-the-counter products. They are not permitted to service local residents, and as a result, local financial regulators have no incentive to regulate or restrict the activities of the OBUs in their jurisdictions. Moreover, they allow tax-effective environments for international banking operations. They can operate as a branch or a subsidiary of a parent bank and need not be more than an office as all transactions can be carried out at the parent's headquarters.

Banks from major countries established OBUs in the early 1970s in countries closer to their business time zones (e.g., US OBUs in the

[10] https://www.federalreserve.gov/releases/lbr/current/.

[11] A eurocurrency transaction is defined as a short-term money market participation whereby the currency denomination of an instrument differs from the national currency of the market where the transaction occurs. For example, the eurodollar market is an inter-bank market outside the US where USD denominated short-term funds are traded. For more detailed discussions of eurocurrency markets, please refer to Chapter 5.

Caribbean countries; European OBUs in the Middle East Countries, Switzerland, and Liechtenstein; Australian OBUs in Singapore and Malaysia). They can provide more tax-effective services (and potentially financial secrecy) to their existing clients in foreign locations via their OBUs. OBUs operating as foreign branches are legally a part of their parents, whereas those established as independent entities can be legally separate from their parents. The distinction between foreign branches and wholly or majority-owned foreign subsidiaries discussed above also applies to these two different ownership types of OBUs.

In addition, OBUs can be a domestic branch of a local bank established for the purpose of conducting non-resident business. The IBF for US banks is one example. Another is the Offshore Banking Unit regime in Australia, where Australian banks can establish an independent unit to conduct offshore banking activities against non-residents, which exempts the 10% withholding interest tax for deposits and enjoys a concessional corporate tax rate of 10% (as opposed to 30% applicable to domestic corporations).

However, the OECD's forum on harmful tax practices, which was created in 1998, recognised the harmful impact of OBUs on the domestic financial system due to the concessional tax rates and the ring-fenced nature of the OBUs.[12] As a result, some countries, such as Australia, have introduced legal measures to limit or abolish their activities.[13]

Locations hosting OBUs are typically offshore financial centres whose financial systems (especially banking systems) allow external financial flows to be beyond the normal economic activities of the host countries. The list of OFCs has changed over time, and the BIS's list as of December 2020 included a total of 25 countries.[14] In addition, the IMF has

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[12] https://www.oecd.org/tax/beps/beps-actions/action5/.

[13] The Australian federal government introduced the Treasury Laws Amendment Bill 2021 on 17 March 2021 to abolish the OBU regime. The bill aims to remove the preferential tax rate of 10% after the 2023–2024 tax year and the withholding tax exemption from 1 January 2024. In addition, the G7 countries agreed in June 2021 to set a minimum 15% global tax rate for multinational corporations. This will significantly impact the ability of corporations to avoid taxes by strategically locating their income generating activities in tax haven countries.

[14] The countries that host an offshore financial centre include Anguilla, Aruba, the Bahamas, Belize, Bermuda, British Virgin Islands, Cayman Islands, Cook Islands, Cyprus, Gibraltar, Guernsey, Isle of Man, Jersey, Liechtenstein, Macao, SAR, China, Monaco,

a similar list which is largely overlapping with that of the BIS's (see Chapter 12 for more details).

1.4.8. *Joint venture bank*

Multinational banks may choose to establish a bank in a foreign country with another bank, typically a local bank in that location. There are broadly two reasons for this approach: entry barriers and local market knowledge. Forming a joint venture with a local bank might be the only way a multinational bank can access the foreign market due to strict regulations preventing foreign bank entry. An example of regulation-induced joint ventures is multinational banks' expansion into China. Foreign corporations were required to form a joint venture with a Chinese company where the latter held a controlling interest. In 2018, the limit on foreign ownership of joint ventures was increased to 51%, and it was further relaxed on 1 April 2020 as a part of the US-China trade deals, which allows US banks to wholly own their joint ventures in China. Goldman Sachs bought out its Chinese partner to raise its ownership stake to 100% in December 2020, and JPMorgan managed to raise its stake in its joint venture with a Chinese partner to 71% in November 2020.

The second reason is to overcome the challenges posed by an inadequate understanding of the local business practices and market intelligence for a successful operation in the target market. The local knowledge gap can be successfully addressed by establishing a joint venture bank with a local partner who is an established player in that market. For example, the UBS group entered into a joint venture arrangement with Banco do Brasil in November 2019 to tap into the investment banking segment in Brazil and other countries in the region. Banco do Brasil could in turn be able to access the international network of UBS via the joint venture.

Joint venture banks must have a clear focus and the potential to benefit both parties in the joint venture. Once the barriers to entry are dismantled and the foreign bank gains enough local knowledge, the joint ventures are usually dissolved.

Montserrat, the Netherlands Antilles, Palau, Panama, Samoa, Seychelles, Turks and Caicos, and Vanuatu.

Gleason *et al.* (2006) report that for US banks, the joint venture mode of expanding into foreign markets was more profitable when the aim was complementary (e.g. expansion into non-banking areas) and the target market was more regulated or developed economies.

1.5. Linkage Between Reasons for International Banking and International Banking Forms

As detailed in the previous section, international banking activities can be conducted under various banking forms. They vary in terms of the banking activities permitted under each license and the financial commitment required. Each form is suitable for a specific scenario. Banks choose an appropriate form of foreign presence depending on the strategic reason for the expansion into a particular foreign market. Thus, there usually is a close relationship between the reasons and the organisational forms of foreign presence. Exhibit 1.3 links the reasons for the international expansion of banks and the organisation forms of their foreign operations. There can be more than one banking presence suitable for each internationalisation motivation.

1.5.1. *Customer-driven international expansion*

The follow-the-customer or defensive expansion can be in the form of correspondent banking in the first instance, which requires only a minimum presence in the target market. If a strategic business customer of a bank is expanding its business into a foreign country, as either an input market and a manufacturing hub or as an output market, the bank must establish a banking form that is suitable for effectively providing appropriate service for the customer in the foreign market. If funding and other financial services can be actioned from the headquarter location of the bank, then correspondent banking supplemented by a representative office could be sufficient. In addition to funding, the representative office can provide local market intelligence and financial advice. An advantage of this approach is lower resource commitment, which can be easily reversed if circumstances change. A downside, however, is that the range of services that can be provided is limited.

If a customer-driven expansion is project-specific and requires more substantial financial activities in the target market, then a more elevated

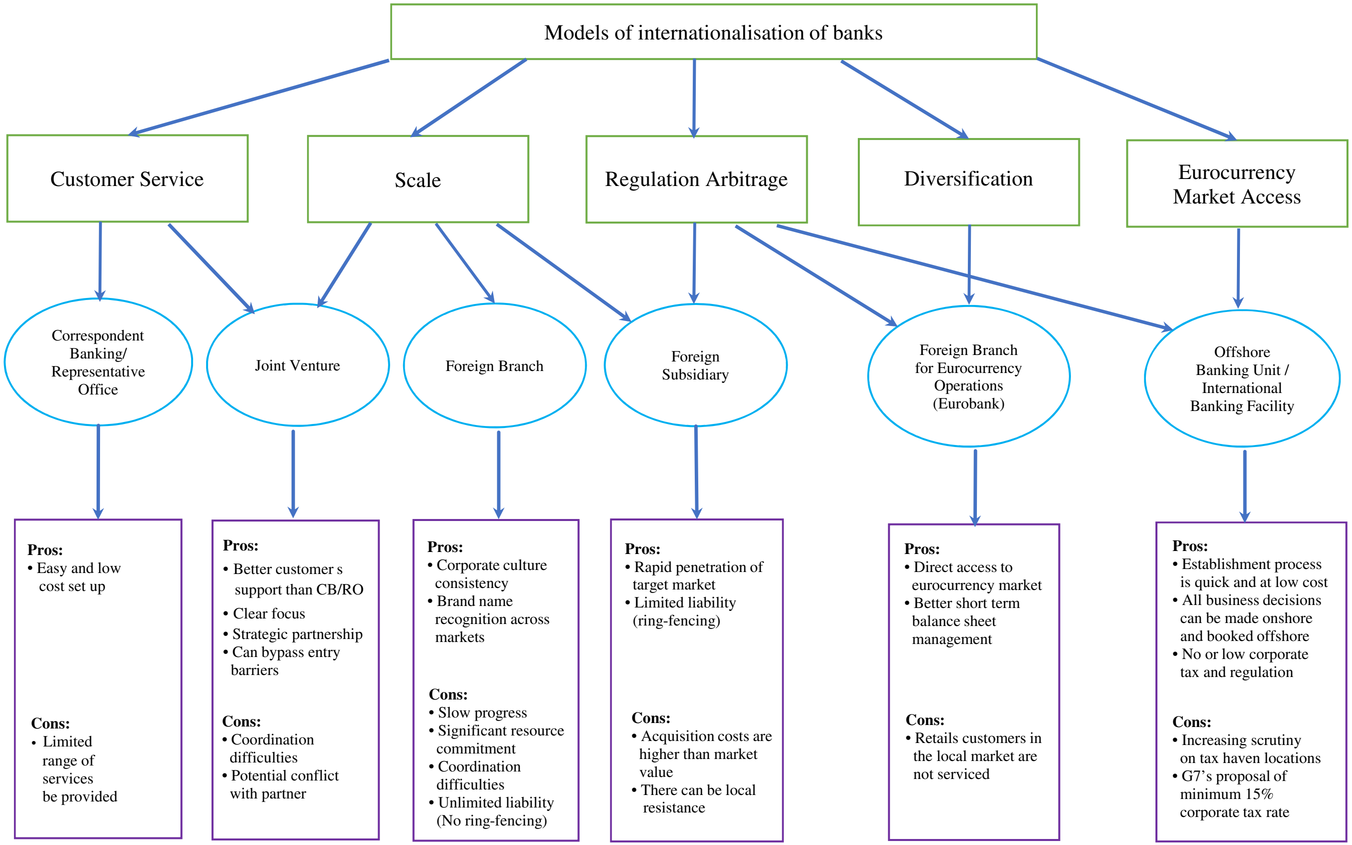

Exhibit 1.3. Linkages between the reasons for international banking and foreign banking form.

Source: Adapted from Canals (1997).

form, such as an alliance, can be considered. An alliance can be formed with a local bank in the host market to establish a joint venture bank that will provide the necessary services to the customer in the target market. It is possible that the customer's commitment can be proved to be a longer-term venture and that the target banking market could become an attractive location for expansion. One of the downsides of a joint venture bank is the potential conflicts with the local partner bank if the interests of the two banks in the partnership diverge. There may also be coordination difficulties with the partner bank, especially if a significant difference exists in bank sophistication between the partners.

Following the first contact with the target market, if a longer-term presence is called for, the bank may consider beyond the rudimentary forms of banking and establish a more permanent structure, such as a foreign branch or a subsidiary banking. These forms of banking presence would allow the bank to service its customer and local customers. However, the substantial cost and time required for such prominent expansion into the foreign market must be justified by the longer-term strategy of the bank.

1.5.2. *Scale economies*

If the aim of international expansion is to achieve scale economies, establishing full-service foreign branches is one option. International expansion is the only realistic option for banks located in relatively small economies to grow their business. For Australian banks, expanding into the nearby New Zealand market was one such option to achieve scale economies. Once successfully established, activities from the foreign branches can supplement domestic operations allowing the bank to achieve scale economies in their commercial (and investment) banking activities and a reduction in overall operating costs. In addition, this approach allows consistency of corporate culture across foreign branches, which is essential if the bank wishes to exploit its franchise value and brand name. However, a downside of this approach includes potential local resistance, especially in the retail banking space, significant resource and time requirements, and potential coordination difficulties. Furthermore, there is a potential for financial difficulties emanating from a struggling foreign branch to drag down the whole banking organisation. As the foreign branches are legally a part of the parent bank, their liabilities must be guaranteed by the parent bank if needed. For example, in 1995, Barings bank collapsed due to mounting losses suffered by its Singapore branch. A rogue trader managed to rack up GBP 825 million in losses from unhedged speculative futures trading on the Nikkei 225 index, which were beyond the capacity of the London parent bank to absorb.

Foreign subsidiaries and joint venture banking can also be considered for scale economies-driven expansion. Products and processes developed in the headquarters can be transferred to the foreign subsidiaries and joint venture banks, saving product development costs when deploying them in the foreign host market. However, these forms of full-service banking do not offer the additional benefits foreign branches do, such as instilling corporate culture, consistency in operational procedures, and integration with the bank's global network.

1.5.3. *Regulation arbitrage*

Regulation arbitrage is another motivation for the international expansion of a bank. Banks in a more onerous domestic regulation environment typically face a relatively limited scope of activities and a higher cost of conducting financial intermediation due to regulatory compliance. Moving some of their activities to jurisdictions (or facilities such as IBF) that allow more tax-effective operations would lower their overall cost of business. Moreover, this will allow the banks to compete more effectively against their international competitors headquartered in low regulation jurisdictions. Offshore Banking Units can be appropriate for this purpose. OBUs can be as simple as a postal address in an offshore financial centre if all that is required is to take advantage of the host jurisdiction's low tax and regulation status. All the investment and funding decisions are made and executed from the head office at home, but these activities are booked to the OBU for tax purposes. The offshore financial centres that host these facilities do not impose regulations on these offshore activities and offer very low or even zero effective corporate tax rates.

Foreign branches can also be useful if the longer-term international expansion strategy includes a full-banking presence in the target foreign markets. For example, US banks' expansion into foreign markets from the 1960s was partially motivated by the desire to avoid binding and costly domestic regulations.

1.5.4. *Diversification of asset and liability operations*

Diversification of asset and liability operations is also important for bank internationalisation. To reduce the credit risk of its loan portfolios, a commercial bank may consider acquiring foreign assets, including loan portfolios, in the desired target market, preferably funded by local sources in the host market. Acquiring an existing foreign bank as a wholly owned (or at least with a controlling interest in the case of a joint venture) foreign subsidiary is an appropriate option. An advantage of this approach is the potentially rapid pace of market penetration and the exposure to the target market for both asset and liability operations. This will work to diversify the overall risk of the consolidated banking operations. However, the costs involved in M&A activities can be substantial as the takeover prices can be much higher than the market price of the target bank. In addition, there can be local resistance to the takeover transaction, especially if the target bank has a loyal customer base.

If a bank wishes to diversify its short-term assets and liabilities (e.g., its money market positions), then adequate access to the international money market is essential. Due to the traditional over-the-counter nature of how money markets are organised, the bank needs a permanent and physical presence in the location where such money market activities take place, such as London, Hong Kong, and Singapore. Participants in the market must be visible and easily contactable (traditionally by phone before the advent of advanced communication networks) to be on top of current market trends. A purpose-built foreign branch (or an OBU) is established to handle the eurocurrency business. Such a foreign branch will be distinct from foreign subsidiaries or other foreign branches of the bank in the same location in that the former does not aim to service the local retail customers.

1.5.5. *Eurocurrency market access*

Eurocurrency market access is important to international banks as it offers competitive prices on both sides of liquidity management transactions, not to mention various hedging tools for interest rate and currency risks. Due to the over-the-counter nature of the eurocurrency market and the traditional voice-based communication, physical presence in the location of the eurocurrency market was compulsory for effective market participation. Multinational banks established purpose-built foreign branches in offshore market centres to act as eurobanks to engage in eurocurrency transactions. Also, OBUs were established for tax minimisation purposes. However, there have been recent OECD initiatives that limit the usefulness of OBUs as they aim to achieve a global minimum corporate tax rate of 15%. This will reduce the attractiveness of the tax benefits of establishing OBUs.

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