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Commerce Department

Module: International Finance

Branch: International Trade
Level: Third year Bachelor

Lecture 09: Global Financial Markets

Learning Outcomes

The specific objectives of this lecture are to describe the background and corporate use of the following international financial markets:

- International money market

- International bond markets

- International stock markets

Financial managers of MNCs must understand the available international financial markets (Foreign exchange market. International credit market. International money market. International bond markets. International stock markets) so they can be used to facilitate the firm's international business transactions.

1- International Money Market:

A- Eurocurrency Market

The core of the international money market is the Eurocurrency market. A Eurocurrency is a time deposit of money in an international bank located in a country different from the country that issued the currency. For example, Eurodollars are deposits of U.S. dollars in banks located outside of the United States, Eurosterling are deposits of British pound sterling in banks outside of the United Kingdom, and Euroyen are deposits of Japanese yen in banks outside of Japan. The prefix Euro is somewhat of a misnomer, since the bank in which the deposit is made does not have to be located in Europe. The depository bank could be located in Europe, the Caribbean, or Asia. Indeed, as we saw in the previous section, Eurodollar deposits can be made in offshore shell branches or IBFs, where the physical dollar deposits are actually with the U.S. parent bank. An "Asian dollar" market exists, with headquarters in Singapore, but it can be viewed as a major division of the Eurocurrency market

The international money market is centered around the Eurocurrency market, which consists of time deposits in a currency held outside its country of origin. For example, *Eurodollars* are U.S. dollars deposited in non-U.S. banks. The term "Euro" is historical and does not imply a European location—it includes deposits in Asia, the Caribbean, and elsewhere.

The market originated in the 1950s–60s, when Soviet-bloc countries placed U.S. dollar deposits in foreign banks (e.g., in France) to avoid seizure by U.S. authorities. This led to the rise of Eurobanks, which operate outside domestic banking regulations like U.S. reserve requirements or deposit insurance, allowing lower operational costs and thus rapid market growth.

The Eurocurrency market primarily serves the interbank (wholesale) level, with typical transactions exceeding $1 million. Rates used in transactions include interbank offered and bid rates, such as LIBOR, SIBOR, TIBOR, and EURIBOR, depending on location and currency.

Eurobanks raise funds via fixed time deposits and negotiable certificates of deposit (NCDs). NCDs, unlike fixed deposits, can be sold on a secondary market. By 2009, total external liabilities in the market reached over $28 trillion, mostly in euros, U.S. dollars, and British pounds, with interbank liabilities dominating the total.

B- Eurocredits

Eurocredits are short- to medium-term loans in foreign currencies issued by Eurobanks to borrowers such as corporations, governments, or international organizations. Because these loans are often large, banks commonly form lending syndicates to share the risk. The interest rate charged is LIBOR plus a margin (LIBOR + X%), where *X* reflects the borrower's credit risk.

To manage their own funding costs, Eurobanks use rollover pricing, meaning loans are structured as a series of short-term loans with the interest rate reset (usually every 3 or 6 months) based on current LIBOR rates.

Compared to U.S. domestic loans, Eurocredits can be cheaper.

For example, on June 2, 2010, U.S. banks charged a prime rate of 3.25%, while Eurobanks could offer loans at LIBOR + 0.5%–1.5%, with LIBOR itself much lower—making Eurocredits potentially more attractive.

An example shows that a $3 million Eurocredit at LIBOR + 0.75% over two three-month intervals would cost about $91,171.88 in interest, demonstrating how the rollover pricing mechanism works.

C-Forward Rate Agreements

Eurobanks face interest rate risk when there is a mismatch between the maturities of Eurodeposits and Eurocredits. If deposits are longer-term than loans and rates fall, the bank earns less on loans while still paying higher deposit rates. If deposits are shorter and rates rise, the cost of deposits increases while loan income remains fixed—both situations hurt profitability.

To manage this risk, Eurobanks use Forward Rate Agreements (FRAs). An FRA is a contract between two parties to lock in an interest rate on a future loan or deposit. If the actual rate differs from the agreed rate (AR), the contract settles the difference in cash:

- If market rates fall below AR, the seller pays the buyer.
- If market rates rise above AR, the buyer pays the seller.

For example, a “three-against-six” FRA protects a bank holding a six-month deposit and a three-month loan that will be rolled over. If future LIBOR falls below expectations, the FRA offsets the shortfall in loan interest.

In the December 2009 market, FRAs had a notional value exceeding $51 trillion, showing their importance in hedging interest rate risk. FRAs can also be used for speculation, depending on one's interest rate outlook.

Example ; Three against Six Forward Rate Agreement

Consider a scenario where a bank issues a three-month Eurodollar loan for $3,000,000, while simultaneously taking a six-month Eurodollar deposit of the same amount. The bank's main concern is that the three-month LIBOR may decline by the time the loan matures, leading to a lower interest rate when the loan is renewed. This would make the six-month deposit less profitable.

To hedge against this risk, the bank enters into a "three against six" Forward Rate Agreement (FRA) by selling a $3,000,000 contract. The FRA is set at an agreement rate (AR) that reflects the expected three-month LIBOR in three months' time.

Assume the AR is 6%, and the FRA covers a 91-day period. Based on this, the bank anticipates earning $45,500 in interest on the renewed loan:
$3,000,000 × 0.06 × (91/360) = $45,500.

However, if the actual LIBOR at that time (SR) turns out to be only 5.125%, the interest income drops to $38,864.58, resulting in a shortfall of $6,635.42. Because the actual rate is lower than the agreed rate, the bank gains on the FRA. It receives a cash settlement from the FRA buyer at the start of the 91-day period. This payment equals the present value of the shortfall:

3,000,000×(0.05125−0.06)×(91/360)1+0.05125×(91/360)=6,635.421.01295=6,550.59\frac{3,000,000 \times (0.05125 - 0.06) \times (91/360)}{1 + 0.05125 \times (91/360)} = \frac{6,635.42}{1.01295} = 6,550.591+0.05125×(91/360)3,000,000×(0.05125−0.06)×(91/360)=1.012956,635.42=6,550.59

This $6,550.59 compensates the bank for the reduced interest earnings due to the lower LIBOR. Had the actual LIBOR been higher than the agreement rate, the bank would have paid the FRA buyer the present value of the extra interest earned. In either case, the FRA ensures that the bank effectively receives the agreement rate on its loan, preserving its expected profitability.

D- Euronotes

Euronotes are short-term debt instruments backed by a consortium of international investment or commercial banks known as a "facility." A borrower enters into an agreement with this facility to issue Euronotes under their own name, typically for a duration ranging from 3 to 10 years. These notes are issued at a discount and repaid at their full face value upon maturity. Their individual terms usually range from three to six months. Borrowers are drawn to Euronotes because the borrowing costs are generally lower—often around LIBOR plus 1/8 percent—compared to syndicated Eurobank loans. Banks benefit by earning fees from underwriting or by providing the funds and receiving the corresponding interest income.

E- Eurocommercial Paper

Eurocommercial paper is an unsecured, short-term promissory note issued by corporations or banks, similar to domestic commercial paper, and distributed directly to investors through a dealer. Like Euronotes, it is issued at a discount and repaid at face value upon maturity, which typically ranges from one to six months. Most Eurocommercial paper is issued in euros or U.S. dollars. However, there are key differences between the U.S. and Eurocommercial paper markets. Eurocommercial paper generally has longer maturities—about twice as long as U.S. commercial paper—which leads to a more active secondary market. Additionally, issuers of Eurocommercial paper are often of lower credit quality compared to U.S. issuers, resulting in higher yields.

2- International bond markets

A- Definition

The international bond market facilitates the flow of funds between borrowers who need long-term funds and investors who are willing to supply long-term funds. Multinational corporations can obtain long-term debt by issuing bonds in their local markets, and they can also access long-term funds in foreign markets. An international bond issued by a borrower foreign to the country where the bond is placed is known as a foreign bond. For example, a U.S. corporation may issue a bond denominated in Japanese yen that is sold to investors in Japan. In some cases, a firm may issue a variety of bonds in various countries.

B-Eurobond Market

Eurobonds are bonds that are sold in countries other than the country whose currency is used to denominate the bonds. Eurobonds are denominated in a number of currencies. The U.S. dollar is used most often, accounting for 70 to 75 percent of Eurobonds.

3- International stock markets

Some MNCs issue stock outside their home country, many investors purchase stocks outside their home country. MNCs may issue stock in foreign markets for various reasons. MNCs may more readily attract funds from foreign investors by issuing stock in international markets. They have their stock listed on an exchange in any country where they issue shares, because investors in a foreign country are only willing to purchase stock if they can later easily sell their holdings locally in the secondary market. The stock is denominated in the currency of the country where it is placed. An MNC's stock offering may be more easily digested when it is issued in several markets. The stocks of some U.S.-based MNCs are widely traded on numerous stock exchanges around the world, which gives non-U.S. investors easy access to those stocks and also gives the MNCs global name recognition. Many MNCs issue stock in a country where they will generate enough future cash flows to cover dividend payments.

4- How Financial Markets Serve MNCs

The first function is foreign trade with business clients. Exports generate foreign cash inflows while imports require cash outflows. A second function is direct foreign investment, or the acquisition of foreign real assets. This function requires cash outflows but generates future inflows either through remitted earnings back to the MNC or through the sale of these foreign assets. A third function is short-term investment or financing in foreign securities in the international money market, and the fourth function is longer term financing in the international bond or stock markets. An MNC may use international money or bond markets to obtain funds at a lower cost than they can be obtained locally.

Reference:

Jeff Madura. International Financial Management, 13th Edition. Cengage Learning . Canada. 2016