<u>**Learning Module 5: Fixed Income Market for Government Issuers**</u>

LOS 5a: describe funding choices by sovereign and non-sovereign governments, quasi-government entities, and supranational agencies

National or Sovereign Government Issuers

National governments possess the sovereign authority to derive tax cash flows from economic activities within their jurisdiction. In contrast, private sector issuers depend on operating cash flows and alternative repayment sources, such as asset sales, to fulfill their debt responsibilities. Debt obligations of national issuers can also be repaid using tariffs, usage fees, and revenues from government-owned enterprises.

The role of national versus regional or local governments varies greatly among different markets, as does the extent of government participation in the economy. While private issuers use GAAP to prepare financial statements, public sectors might use different financial accounting standards, often based on cash rather than accrual principles. An economic balance sheet is more relevant for public sector issuers as it accounts for expected future claims and obligations.

The size of the government sector in relation to a country's economy differs greatly among nations. Additionally, the responsibilities shared between national governments, quasi-government agencies, and local governments can also vary. Consequently, non-sovereign issuers may emerge in the same jurisdiction as the sovereign issuer.

Developed Vs. Emerging Sovereign Issuers

Developed Market (DM) Sovereign Issuers

DMs typically have a strong, diversified, and stable domestic economy. Their national government budgets consist mainly of consistent outlays funded through comprehensive individual and business tax revenues, ensuring a stable and transparent fiscal policy. Their fixed-income securities are often in major currencies held as reserves by other nations. This allows DM sovereigns to issue what's generally regarded as default-risk-free debt, accessible across various maturities.

Emerging Market (EM) Sovereign Issuers

EM economies usually experience higher growth, but they may be less stable and diversified. These economies might be more susceptible to the economic cycle's ups and downs and may rely on a primary domestic industry or commodities. Their central government budgets might prioritize investment in economic and social infrastructure that exceeds the current domestic tax revenues, leading to external or supranational funding requirements. Their sovereign debt securities could be in a restricted domestic currency or one with limited convertibility. Investors in developed markets who purchase these bonds face indirect exposure to currency fluctuations.

Domestic Debt vs. External Debt

Domestic debt is denominated in the country's own currency. For emerging market sovereign issuers, it's notable that domestic entities predominantly take up such debts. Financial institutions within the country, along with other local investors, are the primary holders of these bonds. By being in the domestic currency, the direct risk associated with currency fluctuations is minimized for these investors. Essentially, the risk of repayment doesn't hinge on the volatile exchange rates or international market dynamics to the same degree as it does with external debt.

On the other hand, external debt pertains to obligations owed to foreign creditors. This kind of debt can come from various sources. For instance, supranational financial organizations often lend to emerging market nations. Additionally, there are sovereign Eurobonds, such as the euro-denominated bond from Romania or the US dollar-denominated bond from the quasi-government PT Indonesia Infrastructure Finance. These bonds, being in foreign currencies, are primarily held by foreign private investors.

Investors from developed markets purchasing external debts of emerging countries don't directly encounter risks from the domestic currency's fluctuations. However, they still face indirect currency risks. Their returns largely depend on the issuing country's ability to generate foreign currency revenue from international capital, goods, and services flows, ensuring the timely settlement of foreign currency interest and principal payments. The government of Sri Lanka serves as a significant example of the challenges tied to managing such external debts.

Government Debt Management

A country's fiscal policy determines its level of sovereign debt by comparing government spending, including budget requirements and debt service costs, against tax receipts, fees, and other revenue sources. Debt levels are influenced by budget deficits and surpluses. Projections must account for fiscal policy changes and the impact of economic growth and inflation on expenditures and revenues.

Governments have to strategize the composition of their debt, taking into consideration the short versus long term. Sovereign debt could encompass short-term securities like Treasury bills, and medium to long-term securities such as Treasury notes and bonds. Some governments might guarantee other instruments, effectively treating them as a form of sovereign debt, with mortgage-backed securities being a notable example.

National governments usually represent the lowest default risk and are typically the largest bond issuers in a domestic market. The Ricardian equivalence theorem suggests that a government's debt maturity choice doesn't affect the present value of future tax cash flows. It makes the following assumptions:

i. Taxpayers save for future tax payments.
ii. Capital markets are assumed to be perfect, with no transaction costs.
iii. Taxpayers have rational expectations about future taxes.
iv. Intergenerational altruism by taxpayers, where they leave their tax benefits to their offspring.

However, when these assumptions are relaxed, it results in debt management policies that offer various benefits to both investors and other issuers.

Government bond issuance in both the short and long term should strike a balance between higher borrowing costs and fiscal stability, considering the benefits of providing low default risk across maturities. The benefits of long-term sovereign bond issuance are as outlined below:

i. Establishing risk-free benchmarks for specific maturities: Government debt policies issue benchmark securities across various maturities to enhance capital market efficiency. These benchmarks, derived from sovereign bond yields, set a standard to measure the creditworthiness of other issuers.
ii. Managing and hedging against market interest rate risks: Medium to long-term government securities and their derivatives are tools used by financial intermediaries and asset managers to manage the volatility of interest rates, separating it from credit risk.
iii. Serving as referred collateral in various transactions: Long-term government securities are favored as collateral in transactions like repos due to their high liquidity and safety. These offer sellers financing avenues and buyers a collateralized, low-risk investment.
iv. Assisting in monetary policies and foreign exchange reserves: Central banks utilize government securities for monetary policy implementation, including buying and selling these securities. Additionally, their liquidity and safety make them a top choice for foreign currency reserves held by foreign market participants.

Non-Sovereign Governments

Within a given jurisdiction, it is common to have non-sovereign issuers alongside the national or sovereign government. These non-sovereign issuers often encompass regional or local governments. Their funding varies, depending on whether they provide services at the national, regional, or local level. Some have the capability to levy taxes similar to sovereign entities, while others rely on national government budget allocations or user fees. The stability of their income streams often determines their access to different funding avenues.

Quasi-Government Organizations

Quasi-government entities can be thought of as entities that operate in the private sector but have a government's backing or ownership. They typically serve purposes that might not be immediately profitable but are deemed necessary for the public good. This could range from national airlines to housing authorities. Since these entities have some degree of government backing, their debt is often considered less risky than that of purely private entities but riskier than direct sovereign debt.

Local and Regional Government Authorities

These non-sovereign government authorities might issue debt either for general objectives, financed by local taxes, or for specific projects, repaid through user fees or other directly related revenues. General obligation bonds (GO bonds), for instance, help finance public goods and services within a limited jurisdiction. On the other hand, revenue bonds are targeted at specific infrastructure projects, with repayment often tied to the project's revenue, like tolls from bridges or roads.

Supranational Agencies

Supranational agencies stand distinct from sovereign and non-sovereign issuers. They are formed by international agreements and are usually constituted by multiple nations coming together for a common purpose. Examples of such agencies include the World Bank, International Monetary Fund (IMF), and regional development banks. Their main goal is often to provide funding for projects that promote economic development or integration across member nations.

When supranational agencies issue debt, it is backed by the commitments of its member nations. This often means that their bonds come with a very high degree of creditworthiness, given the diverse backing from multiple national governments. However, they aren't entirely risk-free. The risk associated with these bonds is tied to the collective economic health of the member countries and the specific projects they fund.

Question #1

Why might the debt of supranational agencies, such as the World Bank, be considered to have a high degree of creditworthiness?

A. Their debt is exclusively funded by developed market sovereign issuers.
B. Their bonds are backed by the commitments of their member nations.
C. They issue debt only in major currencies held as reserves by other nations.

Solution:

The correct answer is B:

The debt of supranational agencies is backed by the commitments of its member nations, which gives their bonds a high degree of creditworthiness.

A is incorrect: While developed market sovereign issuers might be significant contributors, they aren't exclusive funders.

C is incorrect: The currency in which the debt is issued does not necessarily correlate directly with the creditworthiness of the agency.

Question #2

Which of the following best describes the primary purpose of a quasi-government entity?

A. To govern and derive tax cash flows from economic activities.
B. To provide funding for projects promoting economic development across multiple nations.
C. To serve specific public needs, such as infrastructure development, that may not be immediately profitable but are deemed essential for the public good.

Solution

The correct answer is C:

Quasi-government entities are entities that operate in the private sector but have government backing. They typically serve purposes that might not be immediately profitable but are necessary for the public good.

A is incorrect: This describes the role of national or sovereign governments.

B is incorrect: This describes the role of supranational agencies like the World Bank.

Question #3

Which of the following best differentiates developed market (DM) sovereign issuers from emerging market (EM) sovereign issuers?

A. DM sovereign issuers typically have a volatile and undiversified domestic economy, whereas EM issuers have a stable, diversified economy.
B. DM sovereign issuers primarily focus on external or supranational funding requirements, while EM issuers fund through comprehensive individual and business tax revenues.
C. DM sovereign issuers generally have a stable and diversified domestic economy with transparent fiscal policies, while EM issuers may rely more on a primary domestic industry or commodities.

Solution

The correct answer is C:

Developed Market sovereign issuers typically have a strong, diversified, and stable domestic economy with transparent fiscal policies. In contrast, Emerging Market issuers might be more susceptible to economic cycles and may depend on a dominant domestic industry or commodities.

A is incorrect: This statement reverses the characteristics of DM and EM issuers.

B is incorrect: EM issuers might prioritize infrastructure investments that exceed current domestic tax revenues, leading them to seek external or supranational funding.

LOS 5b: contrast the issuance and trading of government and corporate fixed-income instruments

Sovereign vs. Corporate Debt Issuance Process

There is a clear distinction between corporate and sovereign debt issuance processes. Corporate debt issuance tends to be opportunistic and is managed by investment bank underwriters on behalf of the issuers. On the other hand, sovereign debt typically follows the form of a public auction, often led by the National Treasury or finance ministry.

When a government announces a debt auction, it opens the door for prospective investors to place either *competitive* or *non-competitive* bids. A competitive bidder specifies both the price they are willing to pay and the number of securities they wish to acquire. Should the auction's final price exceed the bidder's set price, the competitive bidder walks away empty-handed. In contrast, a non-competitive bidder forgoes the price-setting privilege and agrees to whatever price the auction settles at, but with the assurance of always receiving the securities.

Competitive Bid Processes

There are two primary mechanisms for the competitive bid process: the single-price auction and the multiple-price auction. Both processes require the issuer to rank bids based on their prices. Starting from the highest, bids are selected until the entire issuance amount has been met. In a single-price auction, each winning bidder pays an identical price and receives the same coupon rate, regardless of their initial bid. The multiple-price auction, in contrast, might result in varied prices among bidders for the same bond issue. While the single-price approach could lead to a lower cost of funds and a diverse investor base, the multiple-price auctions might end up with a concentration of large bids.

Single-Price Auction Phases

1. Announcement by the government debt management office detailing the bond issue.
2. Submission of bids, either competitive or non-competitive, by dealers, institutional investors, and individuals.

3. Acceptance of all non-competitive bids; ranking of competitive bids from the lowest yield. Determination of the cut-off yield.
4. Delivery of securities to the successful bidders in exchange for proceeds.

Role of Financial Intermediaries in Sovereign Debt

Sovereign governments often appoint a group of primary dealers, financial intermediaries mandated to participate in all auctions. These primary dealers can also be counterparts for central banks in open market operations and help facilitate foreign central bank transactions. Additionally, investors might also directly participate in auctions through specific national platforms.

Trading of Sovereign vs. Corporate Debt

Sovereign debt, once issued, is primarily traded on Over-The-Counter (OTC) markets through financial intermediary brokers/dealers. However, in some places, like Australia, it is traded on exchanges. In most markets, the sovereign issuer is the primary borrower, and their securities are the most liquid in the fixed-income category. The most recent sovereign debt securities, termed “on-the-run” securities, stand out for their liquidity, making them pivotal for benchmark yield analyses. These contrast with older, less frequently traded “off-the-run” securities. Because of their high liquidity, some of “on-the-run” securities are traded on electronic platforms managed by private entities.

Investors in Sovereign Debt Vs. Corporate Debt

Sovereign debts often attract investors with varying non-economic objectives. For instance, the Federal Reserve uses US Treasuries for monetary policy, while certain governments use them as dollar reserves. Some entities, like banks and insurance companies, may need to hold Treasuries to meet specific regulatory requirements. Such factors can reduce sovereign borrowing costs compared to the private sector, especially for issuers with a reserve currency. Reserve currencies are those held by central banks globally, e.g., the US dollar, Euro, pound, etc. They are used for international trade and financial transactions.

Question #1

Which category of sovereign debt securities is *most likely* known for their high liquidity and is essential for benchmark yield analyses?

A. Off-the-run securities
B. On-the-run securities
C. Exchange-traded securities

Solution

The correct answer is **B.**

“On-the-run” securities are the most recent sovereign debt securities, known for their liquidity, making them pivotal for benchmark yield analyses.

A is incorrect: “Off-the-run” securities are older and less frequently traded.

C is incorrect: While some sovereign debt might be traded on exchanges (e.g., in Australia), this choice does not pertain to the liquidity and benchmarking aspect described in the notes.

Question #2

Which type of auction *most likely* result in varied prices among bidders for the same bond issue?

A. Single-price auction
B. Non-competitive auction
C. Multiple-price auction

Solution

The correct answer is **C.**

The multiple-price auction might result in varied prices among bidders for the same bond issue.

A is incorrect: In a single-price auction, all winning bidders pay the same price.

B is incorrect: Non-competitive bidders agree to pay whatever price the auction settles at, and therefore there is no variation in price among them.

Question 3

Where are most sovereign debt securities primarily traded after issuance?

A. Stock exchanges
B. Over-The-Counter (OTC) markets
C. Online public auction platforms

Solution

The correct answer is **B.**

Sovereign debt, once issued, is primarily traded on Over-The-Counter (OTC) markets through financial intermediary brokers/dealers.

A is incorrect: Though some sovereign debt, like in Australia, is traded on exchanges, the majority is traded OTC.

C is incorrect: Online public auction platforms might be used for issuing or buying the debt but not primarily for trading after issuance.