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MOODY'S
INVESTORS SERVICE

CROSS-SECTOR METHODOLOGY

Assessing the Impact of Sovereign Credit Quality on Other Ratings

This cross-sector rating methodology replaces the *How Sovereign Credit Quality Can Affect Other Ratings* cross-sector methodology published in March 2015. The update clarifies the scope and provides greater detail on the characteristics of an issuer that are most important in deciding whether its ratings are constrained at the level of the sovereign bond rating, or one, two or more notches above the sovereign. We have also provided guidance on how a country ceiling may affect instruments issued in the currency of that country by a non-domestic issuer.

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Introduction

In this cross-sector rating methodology, we outline broad, globally applicable principles that we use in assessing the credit linkages between sovereign ratings and the ratings of other issuers, including non-financial corporates, infrastructure and project finance issuers, non-bank financial institutions,[1] sub-sovereign entities (including US public finance) and structured finance transactions.[2]

Deterioration in sovereign credit quality is typically associated with macroeconomic and financial market disruptions that can directly affect the creditworthiness of other issuers that are domiciled in the country. Sovereign credit quality can also affect issuers that have principal operations in the country or significant reliance on its capital markets. The ratings of many issuers domiciled within a country are constrained by the sovereign's rating. As a result, sovereign downgrades are often accompanied by downgrades of many issuers in the country, and sovereign upgrades may be accompanied by upgrades of issuers whose ratings were previously constrained.

There are differences in issuers' credit sensitivity to the sovereign. This methodology provides guidance on the characteristics we generally expect to be present in order for an issuer to be rated above the sovereign. We also provide guidance on how country ceilings may affect ratings.

[1] The sector rating methodology for banks provides guidance on the impact of the sovereign rating on banks; however, the guidance on country ceilings in this cross-sector methodology applies to banks. The non-bank financial institutions to which this cross-sector methodology applies include insurers, securities firms, finance companies and asset managers, as well as closed-end funds. In some cases where a sector methodology provides more specific guidance on linkages between ratings of issuers and the sovereign, that guidance applies to that sector. A link to an index of our sector and cross-sector methodologies can be found in the "Moody's Related Publications" section.

[2] The guidance in this cross-sector methodology applies unless specified otherwise in sector specific methodologies. For example, in some scorecards or models the sovereign rating may affect scoring of certain factors or sub-factors.

Many purely domestic fundamental[3] issuers have sufficient ties to the sovereign that their ratings are constrained by the sovereign rating. In some cases, domestic issuers with sufficient insulation from domestic economic cycles, credit markets and banking systems may have ratings that are a notch or two above the sovereign rating. Fundamental issuers are generally not rated more than two notches above the sovereign given the multiple channels of shared exposure and contagion for issuers in the same sovereign environment. In some cases, however, fundamental issuers may have sufficient assets and cash flow outside the country to limit the sovereign's impact on their ratings, or their credit obligations may benefit from reliable external support.[4] Additionally, for low-rated sovereigns (typically B1 or lower), if there is meaningful clarity on likely sovereign default scenarios and their expected impact on domestic issuers, the differential between the sovereign rating and the ratings of some domestic fundamental issuers may widen.

Sovereign credit quality is relevant to our analysis of structured finance and covered bond transactions because it typically affects the credit quality of underlying assets or key entities (such as support providers and covered bond issuers). However, structured finance and covered bond securities generally benefit from cash flow diversification, credit enhancement and other structural features that often enable their ratings to exceed sovereign ratings, subject to the constraint of the relevant country risk ceiling.[5]

Country Ceilings

For issuers in all sectors, we also consider the relevant country ceiling. Sovereign ratings reflect the credit risk associated with debt issued by governments, whereas country ceilings typically indicate the highest rating level that generally can be assigned to the financially strongest obligations of issuers domiciled in the country and the maximum credit rating achievable for a structured transaction with cash flow generated from domestic assets or residents. For structured finance and covered bond transactions, ratings are generally constrained at the level of the country ceiling rather than the sovereign bond rating, although the sovereign bond rating may be considered in assessing the credit quality of underlying assets and local counterparties. Ceilings also cap the ratings of almost all fundamental issuers, but fundamental ratings are more often constrained below the ceiling through their linkage with the sovereign rating.

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on www.moodys.com for the most updated credit rating action information and rating history.

Ratings above the relevant country ceiling are highly unusual but may be permitted for securities benefiting from special characteristics that we believe give them a lower risk of government interference than is indicated by the ceiling. For example, international fundamental issuers with diversified external revenues and assets and no enduring ties to the domestic banking or legal system may have ratings that exceed the relevant country ceiling. In many such instances, the issuers' domicile can easily be changed, should the need arise. Also, obligations benefiting from support mechanisms or credit enhancement based outside the country (or area) may on occasion be rated higher than the relevant country ceiling. However, if offshore support arrangements are not sufficient to reliably

[3] In this report, we use the term fundamental to describe issuers and transactions to which this methodology applies that are not structured finance issuers, i.e., non-financial corporates, non-bank financial institutions, project finance issuers, sub-sovereign and US public finance entities. The term "sovereign rating" refers to the sovereign's unenhanced senior unsecured rating.

[4] Guidance on external support is located in our cross-sector rating methodologies that discuss credit substitution and credit considerations in assigning subsidiary ratings absent legally binding parent support. A link to an index of our cross-sector rating methodologies can be found in the "Moody's Related Publications" section.

[5] Country ceilings are assigned pursuant to a separate methodology. The local currency country risk ceiling summarizes the general country-level risks (excluding foreign-currency transfer risk) that affect all local currency ratings of locally domiciled obligors or structured transactions whose cash flows are primarily generated from domestic assets or residents. Foreign currency ceilings generally indicate the highest ratings that can be assigned to a foreign-currency denominated security issued by an entity subject to the monetary sovereignty of that country or area. For more information, see *Rating Symbols and Definitions* and our methodology that discusses country risk ceilings. A link to an index of our sector and cross-sector methodologies and a link to *Rating Symbols and Definitions* can be found in the "Moody's Related Publications" section.

mitigate risks reflected in the ceiling, such as redenomination risk, the ceiling could still act as an absolute or partial constraint.

The local currency country ceiling is typically only relevant for domestic issuers. In cases where a security repayable in the currency of country A is issued by an obligor located in country B, the rating assigned to such a security can be higher than country A's local currency ceiling. In instances where we believe investors would be adequately compensated in the event that country A's currency could not be directly accessible by the obligor, the instrument rating would typically align with the rating of a comparable security of the obligor.[6] In such an event, investors are likely to receive payment of value that is economically equivalent to the original promise if the bond's indenture provides for an alternative payment mechanism. We do not generally differentiate ratings for instruments that lack this mechanism if we expect the obligor will voluntarily provide adequate compensation in order to maintain a positive reputation with investors or to avoid investor litigation. In cases where there is uncertainty whether investors would be adequately compensated, then the instrument rating could be one or more notches below that of the comparable security. In such instances the local currency ceiling of country A and the governing law for the instrument could be relevant considerations.

Deteriorating Sovereign Credit Quality Has Broad Negative Effects on Other Issuers

Sovereign defaults are typically accompanied by severe disruptions in the economic environment and often by a loss of investor confidence combined with capital outflows, frequently culminating in a systemic banking crisis and foreign exchange controls. These disruptions generally lead to higher default rates and lower recovery rates across all sectors in the country. As a result, we constrain most fundamental issuers' ratings to at or below the rating assigned to the sovereign.

Deteriorating sovereign credit quality negatively affects issuers in a country even if the sovereign rating remains relatively high. The negative impact is usually more pronounced as the sovereign moves down the rating scale and the probability of default increases, but highly rated issuers are typically not immune to the wider pressures that accompany a decline in sovereign credit quality. There is potential for negative pressure on a domestic issuer if the sovereign's credit quality were to decline, even in cases where the sovereign's current credit quality is relatively high and that pressure may not be evident.

All issuers in the same sovereign environment are exposed to some degree to the transmission of shocks across sectors in the economy and to the domestic banking system. Sovereign crises can cause financial distress across sectors through a number of channels, such as:

» Slowing or contracting economic activity;

» Liquidity constraints and higher financing costs resulting from diminished investor confidence and credit availability;

» Capital outflows leading to foreign exchange controls and a systemic banking crisis;

» Government austerity measures that reduce or delay government payments;

» Unfavorable changes or restrictions to movements in capital flows, exchange rates, interest rates or price levels;

[6] A comparable security means a security with the same priority of claim issued in the currency of expected repayment.

- Government interference or changes in regulation, changes in tax policies, increased risk of asset seizures (i.e., nationalizations); and
- Increased risk of political uncertainty and civil or labor unrest.

General Considerations for Rating Fundamental Issuers Above the Sovereign

We rate most locally domiciled fundamental issuers at or below the level of the sovereign rating.[7]Sovereigns typically possess broad taxation powers across the full breadth of the domestic economy, and they generally have greater financial flexibility and market access than other domestic issuers. An issuer rated above the sovereign will usually be both fundamentally stronger than the sovereign and have some insulation from the domestic economic and financial disruption that generally accompanies sovereign distress; there is a substantial likelihood[8] that the issuer will not default as a consequence of sovereign credit stress or default. Domestic fundamental issuers are typically vulnerable to many of the same broad credit pressures as the sovereign, including a weak economy or dislocations in credit and capital markets. Some domestic fundamental issuers or instruments may be rated above the sovereign, but only if we believe that they have a materially lower probability of default, or we expect a materially lower loss given default (LGD) relative to sovereign bond obligations.

In some cases, higher recovery expectations can drive a rating differential for fundamental and other issuers, even where there is strong default linkage with the sovereign and where the issuer's reference rating is at the same level as or below the sovereign. Instruments that benefit from priority of claim considerations (e.g., cushion provided by a significant layer of junior capital or structural protections) may be assigned a rating above the senior unsecured debt rating of the sovereign if we believe that these instruments are likely to have a lower LGD than the senior unsecured debt of the sovereign. However, our views of the rule of law, the extent to which legal priority of claim will be recognized and enforced by the relevant judicial or governmental authority, and the likelihood that a debt moratorium or other government mandated interference would generally impede priority enforcement may limit the effect of collateral or junior capital in allowing a fundamental instrument rating to exceed the sovereign rating.

The rating of a fundamental issuer or instrument may be more than two notches higher than the sovereign bond rating in specific situations. Principally, these include the following: external support, substantial assets and cash flows outside the country and, less commonly, greater clarity into the sovereign distress scenario. The presence of any one of these may lead to a rating more than two notches above the sovereign, or they may occur simultaneously.

Support from a stronger foreign parent or other support provider can allow the rating of a fundamental issuer to be above the rating of the sovereign.[9]

In cases where the operating assets, cash flows and sources of financing are predominantly in a single country, we typically consider the rating of that country (whether or not it is the legal domicile). Where a substantial majority of operating assets and cash flows are outside the country of legal

[7] For comparison to ratings of fundamental issuers, the reference rating is the unenhanced senior unsecured rating of the sovereign.

[8] Notionally, "substantial likelihood" in this context typically means we expect that the issuer would not default as a consequence of sovereign default in about half or more of the instances of sovereign default. This is related to, but somewhat different from, the concept of default dependence, which refers to the degree of joint susceptibility of the issuer and the sovereign to adverse circumstances that simultaneously move them closer to default.

[9] Please see our cross-sector rating methodologies that discuss credit substitution and credit considerations in assigning subsidiary ratings absent legally binding parent support. A link to an index of our cross-sector rating methodologies can be found in the "Moody's Related Publications" section.

domicile, the domicile's sovereign rating may have less relevance, given the limited impact of the domestic economy on cash flows and limitations on the sovereign's ability to impose taxes and royalties.[10]In cases where the operating assets, cash flows and funding sources are predominantly in another country, we typically consider the rating of that country. In cases with no clearly dominant exposure to a single country, where the operating assets, cash flows and financing sources are fairly evenly concentrated in two or three countries, we may consider the average or weighted average sovereign rating of those countries, where the weights reflect the importance of those countries to the issuer's creditworthiness. In cases where an issuer's operating assets and cash flows are diversified among many countries, we may consider the country, if any, where the issuer has its predominant funding dependence.

As a sovereign's credit profile deteriorates, there may be greater clarity about the nature of a sovereign default and its likely impact on fundamental issuers. In these cases, we may consider a somewhat looser rating relationship between the sovereign and a fundamental issuer (generally when the sovereign is rated B1 or lower) when we consider that the issuer has very low default linkage with the sovereign. However, such instances will likely be uncommon, because the broad power of sovereigns combined with the heightened political and economic uncertainty when sovereigns are in financial distress usually limit the clarity around the nature and impact of a sovereign default. For example, a distressed sovereign might choose to exclude a company from a debt or foreign exchange moratorium if that company owns essential natural resources, such as oil and gas assets, and needs foreign investment to maintain or expand its business. Conversely, the government might impose excessive royalties such that the company could sustain only a minimum level of profitability and could no longer service its debt, resulting in losses for creditors while the government benefits from the royalty income and foreign currency inflows.

When considering rating an issuer above the sovereign, we assess the presence and strength of various characteristics that might insulate it from the sovereign. In the following sections, we provide guidance on typical situations that may result in ratings above the sovereign for non-financial corporates, non-bank financial institutions, and sub-sovereign entities. Our approach is principles-based and not formulaic. We take a forward looking view and typically consider each issuer's unique circumstances, including its relationship to the sovereign, the country's economy, the banking system and the domestic operating and regulatory environment. We may incorporate non-public information in this analysis.

Non-financial Corporates, Including Infrastructure and Project Finance Issuers[11,12]

For non-financial corporates, we compare the sovereign reference rating to the corporate's senior unsecured rating (which may be an issuer rating or an instrument rating) when the entity is investment grade, or to the corporate family rating (CFR) when the issuer is speculative grade.[13]

[10] Similarly, local and foreign country ceilings may have little relevance when the substantial majority of an issuer's assets and cash flow are outside of the nominal country of domicile. However, to exceed the level of the local currency ceiling, it is generally necessary that the issuer's debt agreements are governed by the law and jurisdiction of another country with a higher ceiling.

[11] Infrastructure includes utilities, airports, ports, toll roads, and related businesses, which may be private sector or public sector entities.

[12] Considerations for linkages of many non-governmental organizations (e.g., not-for-profits, private universities or private hospitals) to the sovereign credit are similar to those for non-financial corporates.

[13] We also consider the guidance in this methodology when assigning Baseline Credit Assessments (BCAs).

Characteristics That Influence Linkage to, or Divergence from, the Sovereign Credit

In assessing whether an issuer can be rated higher than the relevant sovereign bond rating, we consider the following characteristics.

Cash Flows and Assets Outside the Sovereign

The credit profile of a company that relies entirely on cash flows derived from domestic customers and domestic assets is more likely to deteriorate during a period of sovereign stress than a company with an international customer base that derives a substantial portion of cash flow from foreign operations and foreign assets. Domestic assets and operations are also vulnerable to sovereign interference and to labor strikes and civil unrest that may coincide with sovereign distress. While they have less leeway to interfere directly with foreign operations and assets, sovereigns may impose taxes based on a company's foreign holdings.

Independence from Domestic Sources of Financing

Access to financing sources outside of the domicile country generally helps insulate a company from challenges that may arise during sovereign distress when domestic banks' willingness and ability to lend may diminish or cease. Heavy reliance on domestic funding sources can lead to liquidity shortfalls and default if those funding sources cease to be available during an economic or banking crisis. The market's perception of a company as primarily domestic or as international can play an important role in its ability to access non-domestic sources of capital.

Some issuers may have greater resilience to dislocations in domestic credit and capital markets due to greater levels of internal cash generation, including the ability to cut dividends and capital expenditures and to pare back expansion plans without materially impacting the core business.

Exchange Rate and Foreign Exchange Control Risks

Companies with foreign currency debt are exposed to exchange rate risk, and, even for companies with sufficient local currency financial resources, foreign exchange controls could hinder their ability to service that debt. Significant foreign currency revenue and cash flow help to mitigate these risks, which underscores the importance of international diversification.

Depreciation in the domestic currency, which often accompanies sovereign distress, is generally a greater risk for companies with revenues and cash flow denominated in local currency and debt that is denominated in foreign currency. Conversely, it generally benefits companies with costs and debt service denominated in local currency but revenues and cash flow denominated in foreign currency.

Exposure to Government Interference

Companies that rely on governmental sources for revenues and cash flow are vulnerable to reductions or delays in those payments, especially when the sovereign is undergoing stress. Default linkage with the sovereign may arise from direct reliance on the government for funding or revenues or from indirect reliance, such as through licenses or franchises granted by the government. Additionally, a company's revenues and profitability may be susceptible to changes in taxes, royalties, tariffs or other government influences, such as employment demands. Historically, some governments have required companies to fund government priorities or fulfill social functions. This is particularly likely for entities with a significant level of government ownership.[14] Even an independently owned company that exports most of its products may be vulnerable to sovereign deterioration if the government imposes increased export duties or windfall taxes. Although earning revenues in a foreign currency can be a

[14] Board composition may be a consideration in our evaluation of potential interference for entities with full or partial government ownership.

credit positive (as discussed in the section above), in situations of increased government interference, profitable companies earning foreign currency cash flow can be the most likely targets for capital controls. Similarly, asset appropriation or nationalization of assets can also be a risk when the sovereign is under stress.

In assessing the risk of government interference, we may consider the sovereign's institutional strength in addition to its rating, and companies operating in countries with strong rule of law are generally more likely to achieve a rating above the sovereign than those in countries with weaker rule of law.

Business Profile and Resilience to Economic Downturns

During an economic downturn, a company that is dependent on cyclical or discretionary spending for its products and services will generally fare worse than one that is more resilient to a drop in GDP. Among companies with primarily local customers, those with a leading market position and stable cash flow through economic cycles will likely perform better than companies that are less competitive, operate in fragmented markets or have more cyclical cash flow.

In relatively rare cases, a company may have the ability to move its business and assets and to replicate the skill set of its work force in a new location. A company with this level of flexibility has much greater ability to respond to weakening domestic conditions than an asset-heavy business with production or operations concentrated in the domicile, for example an oil and gas producer with primarily domestic reserves (even if sales are primarily international), or a purely domestic utility or telecommunications provider.

Credit Enhancement

Credit enhancement can in some cases effectively mitigate many of the risks associated with sovereign distress. Such enhancement may be implicit, for example implied support from a strong parent for a strategically important subsidiary. Alternatively, such enhancement may be explicit, for example parental guarantees, partial guarantees provided by multilateral development banks, or political risk insurance.

Summary Guidelines Absent External Support for Rating Non-financial Corporates, Infrastructure and Project Finance Issuers Above the Sovereign

One Notch Above the Sovereign

An issuer rated one notch above the sovereign generally meets the following criteria:

- A considerably stronger fundamental credit profile than the sovereign, including some resilience to economic cycles and a strong market position.
- We consider there is a substantial likelihood[15] that the issuer will not default as a consequence of sovereign credit stress or default.
- Limited reliance on domestic funding sources, evidenced by, for example, demonstrated access to non-domestic banks or capital markets or sufficient internally generated cash flow (including in a sovereign distress scenario) to meet its debt service requirements.
- Limited exposure to foreign currency risk.
- Typically, some diversification of cash flow or assets outside of the country. However, a purely domestic issuer with no exports or international assets can achieve a rating one notch above the

[15] Notionally, "substantial likelihood" in this context typically means we expect that the issuer would not default as a consequence of sovereign default in about half of the instances of sovereign default.

sovereign if the characteristics referenced above are clearly met and we have high confidence that government interference will not have a materially negative impact on the company's cash flow or market position.

Issuers that meet these characteristics but not the characteristics in the following section are typically constrained by the relevant country ceiling.

Two Notches Above the Sovereign

The issuer satisfies the criteria necessary to be rated one notch above the sovereign as well as all of the following criteria:

- We consider that the issuer is highly unlikely[16] to default as a consequence of sovereign credit stress or default.
- A significant share of revenues and cash flow comes from outside of the country, or a significant share of assets is located outside of the country (significant typically means at least one-third).
- Cash flow and profitability typically exhibit minimal correlation with domestic economic conditions.
- Strong, demonstrated access to non-domestic banks or capital markets.
- Government interference that would have a negative impact on its business profile or cash flow is extremely unlikely.
- Capital controls that may be imposed are unlikely to impact its ability to service debt.[17]
- An entirely domestic entity can in rare cases achieve a rating two notches above the sovereign bond rating; such cases are likely to be project finance issuers with an extremely broad and stable revenue base. Such an entity must meet all of the other characteristics necessary to be rated two notches above the sovereign, except for having a significant share of revenues, cash or assets outside the country and access to non-domestic funding sources, and must also meet the following criteria:
  - Extremely high resilience to economic cycles, essentially no exposure to public sector sources of cash flow, essentially no foreign currency risk, and the clear ability to withstand prolonged disruption of local credit and capital markets.
  - De minimis likelihood that capital controls would impact its ability to service debt.

More Than Two Notches Above the Sovereign

Non-financial corporates, infrastructure and project finance issuers are rated more than two notches above the sovereign only in very rare cases where we consider there is minimal likelihood they would default as a consequence of sovereign credit stress or default. The lack of ties to a sovereign[18] that justify rating an issuer more than two notches above the sovereign's rating generally also implies the absence of a firm credit linkage to a single country.

- Except when there is high clarity for the form and consequences of a sovereign default scenario, or very strong and transparent external support such as a guarantee, an issuer rated three notches

[16] Notionally, "highly unlikely to default" in this context typically means we expect that the issuer would not default as a consequence of sovereign default in about three quarters or more of the instances of sovereign default.

[17] When there is meaningful clarity on likely sovereign default scenarios for a low rated sovereign (typically B1 and lower) and their expected impact on domestic issuers, the characteristics for exceeding the government bond rating by two notches also indicate a possibility that the issuer may exceed the local currency ceiling by one notch.

[18] Given ties related to government ownership, it is highly unlikely that a government-related issuer would be rated more than two notches above the sovereign.

above the sovereign must have all of the characteristics necessary to be rated two notches above the sovereign and must also meet the following criteria:

  - A substantial majority of its operating assets are located outside the country and a substantial majority of its cash flows are derived outside of the country.
  - Essentially no reliance on domestic funding sources and essentially no ties to the sovereign, direct or indirect.
  - Viewed as international by customers and investors and able to maintain its business profile and global market share in the event of sovereign distress.
  - Unquestioned insulation from the impact of any government imposed capital controls.

These characteristics for issuers rated three notches above the sovereign may mean that the relevant country ceiling does not constrain an issuer because it has sufficient international assets and cash flows to service foreign currency debt and to provide a reliable cushion of unleveraged value in excess of foreign debt obligations, and would be resilient to capital controls imposed by the sovereign.

- Issuers rated more than three notches above the sovereign have all of the qualities of issuers rated three notches above the sovereign and have additional characteristics that fully de-link them from the sovereign credit.
  - For example, the domicile may be a domicile of convenience, such that there is no nexus of the issuer's business and the purview of the sovereign.
  - The issuer may be able to fully extricate itself from the sovereign's influence. For example, a globally dominant provider of enterprise software solutions with a multinational clientele and multinational work force that could easily and cost-effectively move its headquarters and in-country operations to a different jurisdiction with essentially no negative impact on its cash flow could potentially be rated more than three notches above the sovereign.
  - If an issuer with these characteristics also arranges all of its financing to be independent of the legal system and national currency of the domicile of convenience, the country ceilings are likely not relevant for its ratings.

Non-bank Financial Institutions

For insurers, we compare the sovereign reference rating to the Insurance Financial Strength Rating (IFSR); for securities firms, finance companies and asset managers, we compare it to the senior unsecured rating when the entity is an investment grade issuer or the corporate family rating (CFR) when the issuer is speculative grade;[19] for closed-end funds, we compare it to the senior rating profile.[20]

[19] For insurers, we typically compare the sovereign bond rating to the standalone credit profile, which is an opinion of an insurer's standalone intrinsic strength, absent any extraordinary support from an affiliate or government. In addition, if the IFSR incorporates support, we may also consider constraints that the sovereign rating places on the ability and willingness of the supporter. We take a similar approach for securities firms, finance companies, and asset managers, where we typically compare the sovereign bond rating to the standalone credit profile or standalone assessment, and may also consider sovereign constraints on any support.

[20] We also consider the guidance in this methodology when assigning BCAs.

Characteristics That Influence Linkage to, or Divergence from, the Sovereign Credit

In assessing whether an issuer can be rated higher than the sovereign bond rating, we consider the following characteristics.[21]

Diversification of Assets, Revenue and Earnings

We consider the broad correlations between macroeconomic factors that affect the sovereign's credit risk and financial institutions' asset quality. Because the value of sovereign debt will generally decline with deterioration of the sovereign and other domestic asset values also typically decrease, an issuer with a greater concentration of sovereign debt and other domestic investments[22] will likely experience greater deterioration of its credit profile than an issuer with more diversified investments. The loan and investment portfolios of many domestic financial institutions are broadly exposed to domestic economic cycles and, depending on the business mix, some portfolios are pro-cyclical, while others may be more stable through economic cycles.

We typically also consider the geographic diversification of revenue and earnings, since a company that sells products and services across multiple countries will likely be less vulnerable to economic deterioration in any one country.

Credit and Capital Markets

Many financial institutions have exposure to domestic credit and capital markets and to the dislocation that can occur in these markets when there is sovereign distress. Institutions that depend heavily on short-term debt or engage in maturity transformation (the funding of long-term loans and investments with shorter-term funding) have material exposure, as do firms that depend on well-functioning markets to generate revenues. Confidence in capital markets generally erodes with sovereign distress, which can decrease demand for many products and services sold by financial institutions and can shrink available liquidity.

Product Characteristics

Some products contain features that may partially mitigate concentrations of exposure to a particular sovereign and contribute to a resilient business profile, particularly for insurers. For example, some life insurance products allow for investment losses to be passed on to policyholders in part or in full. This credit-positive "put option" can limit an insurer's potential downside risk in the event of sovereign distress. We may also consider the demand characteristics of products sold, because some products, such as required insurance coverage, have a somewhat looser link to the underlying economic environment in the sovereign than others.

Stress Testing

For many financial institutions, we often consider a variety of stress scenarios as a fundamental part of our rating analysis, which could include the potential effect of sovereign stress or default. To rate a company above the sovereign, we generally expect issuers to be able to withstand sovereign stress. For example, for insurers a typical sovereign stress scenario would consider haircuts to the investment portfolio relative to the firm's capital. The outcomes of these scenarios would reflect the insurer's diversification or concentration of its assets as well as its product mix.

[21] As explained in the "General Considerations for Rating Fundamental Issuers Above the Sovereign" section of this document, support from outside the country can also lead to a rating above the sovereign bond rating. Please see our cross-sector rating methodologies that discuss credit substitution and credit considerations in assigning subsidiary ratings absent legally binding parent support. A link to an index of our cross-sector rating methodologies can be found in the "Moody's Related Publications" section.

[22] For insurers, we may consider exposure to domestic sovereign debt and other domestic assets relative to equity using a variety of stress scenarios and asset haircuts.

Summary Guidelines Absent External Support for Rating Non-bank Financial Institutions Above the Sovereign

One Notch Above the Sovereign

An issuer rated one notch above the sovereign generally meets the following criteria:

- The issuer has a considerably stronger fundamental credit profile than the sovereign, typically evidenced by robust capitalization and sufficient capital buffers to absorb a decline in asset value.
- We consider there is a substantial likelihood[23] that the issuer will not default as a consequence of sovereign credit stress or default.
- The issuer has a strong ability to withstand a prolonged dislocation in credit and capital markets and very manageable foreign exchange exposure.
- Extensive diversification of its loan and investment portfolio such that it is more stable than the broader economy of the country, with manageable exposure to the sovereign or substantial diversification of revenue or earnings outside the sovereign.
- A resilient business profile.
- An all-domestic insurer can be rated one notch above the sovereign if policies sold provide sufficient loss absorption such that it can withstand severe sovereign stress.

Two Notches Above the Sovereign

- The issuer meets all of the characteristics necessary to be rated one notch above the sovereign and in addition meets the following criteria:
  - We consider that the issuer is highly unlikely[24] to default as a consequence of sovereign credit stress or default.
  - Generates at least a majority of revenues and cash flow outside of the country and has a similar portion of its assets located outside of the country.
  - Minimal exposure to obligations of the sovereign country in its investment portfolio.
  - Essentially no foreign currency risk and extremely high resilience to economic cycles and any capital controls that may be imposed.

Funds, Fund Managers and Insurance Brokers and Service Providers

For closed-end funds, the amount of overcollateralization available to creditors during periods of market stress is a key credit consideration. We also consider any sector concentration. We compare the discounted asset value, typically based on a variety of stress tests, to the total amount of leverage in the fund. The senior rating profile may exceed the sovereign rating, subject to the relevant country ceiling. The ability of a fund's rating to exceed the sovereign rating may be limited by our view of the sovereign's institutional strength, including the strength of the rule of law and the expected observance of the legal priority of claim, as well as our view of the likelihood of a debt moratorium.

For fund managers, securities industry service providers and insurance brokers, the analysis is similar to our approach for non-financial corporates, but we also consider the effects of capital market dislocation on the demand for the firm's products.

[23] Notionally, "substantial likelihood" in this context typically means we expect that the issuer would not default as a consequence of sovereign default in about half of the instances of sovereign default.

[24] Notionally, "highly unlikely to default" in this context typically means we expect that the issuer would not default as a consequence of sovereign default in about three quarters or more of the instances of sovereign default.

Sub-sovereigns, Including US Public Finance Entities[25]

Credit quality of the sovereign typically anchors ratings for most sub-sovereign and public entities[26] globally, because they are generally exposed to the same macroeconomic and financial sector pressures that affect the central government. Also, a currency or debt moratorium imposed by the sovereign would in almost all cases affect the country's sub-sovereigns. However, entities that exhibit a high degree of independence from the sovereign may be rated one or two notches above the sovereign.

State, provincial, regional and local governments and other public entities in some countries exhibit a higher degree of autonomy from the central government than in other countries. In the US for example, states are sovereign entities, each with its own government and constitution, that delegate certain powers to the US federal government under the US Constitution. States have broad powers to control their own financial positions and service debt, which typically lowers the linkage with the sovereign relative to many sub-sovereign issuers in other countries. This reduced linkage is a key consideration for rating a state or a public entity within that state (such as local governments, school districts, public universities, and municipal utilities) above the sovereign.

More generally, we compare the sovereign reference rating to the long-term issuer or senior unsecured rating of the sub-sovereign.[27] For US public finance, we typically compare the sovereign reference rating to the senior-most unenhanced, uncollateralized full faith and credit obligation of the entity, e.g., the general obligation bond of a state or local government, or the issuer rating.[28]

Characteristics That Influence Linkage to, or Divergence from, the Sovereign Credit

Extent of Fiscal Autonomy from Central Government and Exposure to Government Interference

We typically consider constitutional protections or other binding arrangements that insulate the taxing authority, decision-making and revenues of the sub-sovereign from the central government as well as the reliance of the sub-sovereign on revenue transfers from the central government. We also consider the extent to which a sub-sovereign's access to credit markets is linked to the sovereign and the extent to which a sovereign can push down spending mandates to the sub-sovereign. For sub-sovereign public enterprises, we typically consider the autonomy of revenue-setting, the extent of subsidies from the central government and the ability of the central government to tax the entity or otherwise require transfers of funds. Sub-sovereign enterprises may have linkages to the credit of the sub-sovereign, which in turn has linkages to the sovereign credit.

Revenue Strength and Resilience to Economic Downturns

In most cases, a sovereign government has a stronger credit profile than a sub-sovereign government due to its broader taxing powers and access to a larger, more diversified economy from which to raise revenues. The sub-sovereign's economy may be highly correlated with the broader economy, but in some cases, the sub-sovereign's economy may be meaningfully more dynamic than the country as a

[25] For clarity, all references to sub-sovereigns include US public finance entities. Due to the particularities of the US municipal market, some specific aspects of US public finance entities are highlighted in this report.

[26] Public entities include non-governmental enterprises such as public universities, public hospitals, mass transit enterprises and housing projects. Considerations for linkages of many non-governmental organizations (e.g., not-for-profits, private universities or private hospitals) to the sovereign credit are similar to those for non-financial corporates.

[27] We also consider the guidance in this methodology when assigning BCAs.

[28] Because most US public entities are permitted to pledge their revenues or sub-sets thereof to bondholders but are generally prohibited from pledging assets as collateral, the broadest pledge of revenues (general obligation pledge) is usually the senior-most rating. In the limited cases where a US public entity's rating incorporates a meaningful benefit to creditors of a diversified pool of assets (e.g., an investment portfolio not correlated to the economy of the entity), the basis of comparison for the sovereign reference rating would be that entity's rating excluding the benefit of the asset pool.

whole, with low reliance on the sovereign government and substantially greater gross domestic product and wealth per capita. In assessing the sub-sovereign's economic ties to the sovereign, we may also consider the number of residents employed by the sovereign, either directly or indirectly through institutions that rely heavily on the sovereign for revenue.

In some cases, the economic resilience of certain sub-sovereign public enterprises may be somewhat higher than that of the sovereign, for instance where revenues are derived from user fees paid by more affluent segments of the population such that they are likely to remain stable (or even counter-cyclical) when there are material decreases in general government revenues. While most sub-sovereign public enterprises have a purely domestic customer base, a small minority, such as internationally recognized universities, generate substantial user fees from non-domestic sources. By contrast, sectors such as healthcare, housing and transit often depend on central government payments or subsidies.

Indirect or Direct Exposure to Sovereign and Domestic Markets for Funding

Many sub-sovereigns obtain direct funds or financing from the central government, or their credit market access is underpinned by an expectation that support from the central government will be forthcoming if needed, creating a strong linkage to the sovereign.

Sub-sovereign public entities generally rely on the sovereign for varying degrees of funding, and an entity with greater reliance on the sovereign is generally more vulnerable to a funding reduction if the government faces fiscal challenges. For sub-sovereign entities that rely partially on endowments for funding, we view diversification of assets outside the country positively, whereas an investment portfolio heavily concentrated in domestic assets will be more likely to decline in value with sovereign stress.

Most sub-sovereigns finance themselves in domestic credit markets. In cases where the sovereign faces funding challenges, there is likely to be turbulence in capital markets that causes even sub-sovereigns that finance themselves directly, with no support from the sovereign, to face similar challenges. Entities with a significant portion of short-term financing or exposure to short-term markets (e.g., via puttable variable rate debt) have heightened vulnerability to a market dislocation. Having a stronger credit profile typically means that the sub-sovereign has relatively greater financial resources than the sovereign to withstand a prolonged dislocation in credit markets.

Summary Guidelines Absent External Support for Rating Public Entities Above the Sovereign

One Notch Above the Sovereign

An issuer rated one notch above the sovereign generally meets the following criteria:

- The issuer has a considerably stronger fundamental credit profile than the sovereign, has minimal reliance on payments or other support from the sovereign and has greater fiscal flexibility.
- The issuer has strong autonomy from the sovereign, including revenue-raising authority and decision-making that cannot or is very unlikely to be changed unilaterally by the sovereign.
- The revenues of the sub-sovereign are insulated from those of the sovereign, due to a more dynamic regional economy, revenues that are significantly more stable than the sovereign's revenue base, or non-domestic revenues sources.
- Strong ability to withstand a prolonged dislocation in credit and foreign exchange markets due to limited need to access markets, limited reliance on funding from the government, or an investment portfolio with a significant portion of non-domestic assets.

Two Notches Above the Sovereign

- The issuer meets all of the characteristics necessary to be rated one notch above the sovereign and in addition meets the following criteria:
  - Extremely high level of independence established in law.
  - Extremely high resilience to economic cycles, essentially no reliance on revenues or support from the sovereign.
  - Essentially no exposure to credit markets and no foreign currency risk.
  - Capital controls that may be imposed are unlikely to impact its ability to service debt.

Structured Finance and Covered Bonds

For structured finance transactions, sovereign credit quality can affect the loss expectations and volatility of underlying assets and the credit quality of key entities (such as support providers and covered bond issuers). Therefore, although the ratings of structured finance and covered bond securities often exceed the relevant sovereign rating, with many at the same level as the relevant country ceiling,[29] they can be affected by sovereign ratings and, as a result, positioned below the country ceiling.

Characteristics That Influence Linkage to, or Divergence from, the Sovereign Credit

The extent to which structured finance and covered bond ratings are linked to sovereign ratings is primarily affected by the characteristics described below. We assess these characteristics in accordance with applicable structured finance and covered bonds rating methodologies.

Diversification and Type of Underlying Assets

The credit quality of underlying assets is generally correlated to some extent with sovereign credit quality. However, diversification of assets can reduce linkage between structured finance or covered bond securities and the relevant sovereign. For example, in the event of a sovereign default, a granular local portfolio of several thousand assets across multiple economic sectors is likely to experience a lower default rate than a highly concentrated asset pool in the same jurisdiction. Diversification of underlying assets across multiple jurisdictions also reduces the potential linkage to any single sovereign. Moreover, the type of underlying asset affects the degree of sovereign linkage: some assets, such as government bonds, securities issued by banks and debt owed by obligors that rely on refinancing,[30] are relatively highly correlated with sovereign credit quality, while other assets may be less vulnerable to the circumstances of sovereign distress.

Credit Enhancement in the Structure

Credit enhancement, such as overcollateralization or cash reserves, can reduce the linkage to sovereign credit quality. The more credit enhancement that benefits investors, the more protection they have against asset defaults associated with sovereign distress. The effectiveness of credit enhancement in reducing sovereign linkage also depends on the form it takes; for example, a cash reserve account held

[29] Structured finance and covered bonds ratings generally cannot exceed the relevant country ceiling. We compare the country ceiling to transaction ratings on a tranche-by-tranche basis. For more detail, see the section above on "Country Ceilings."

[30] In the event of sovereign default, refinancing may be more difficult as the local banking system will be negatively impacted by the prevailing economic environment and overseas investors may be deterred.

with an offshore bank generally provides greater protection than additional collateral that is correlated with the same sovereign.

Location of Counterparties and Contractual Provisions for Replacement

Structured finance and covered bond transactions typically depend on counterparties such as account banks, swap counterparties, servicers and cash managers to make payments or perform key operational functions. The creditworthiness of these counterparties is generally tied to the sovereign of the jurisdiction in which they are located.[31] However, structural features, such as contractual provisions that require downgraded counterparties to be replaced with stronger ones either within or outside the sovereign, can reduce the linkage between counterparty default risk and sovereign credit quality.

[31] Certain counterparties, such as government-related entities, may be more highly correlated with sovereign credit quality than others.

Moody's Related Publications

Credit ratings are primarily determined by sector credit rating methodologies. Certain broad methodological considerations (described in one or more cross-sector rating methodologies) may also be relevant to the determination of credit ratings of issuers and instruments. An index of sector and cross-sector credit rating methodologies can be found here.

For data summarizing the historical robustness and predictive power of credit ratings, please click here.

For further information, please refer to *Rating Symbols and Definitions*, which is available here.

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