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Weighing Country Risk In Our Criteria For Asset-Backed Securities

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When determining the rating on a structured issuance, Standard & Poor's Ratings Services gives careful consideration to relevant sovereign and country risks. We analyze asset-backed securities (ABS) transactions case by case, and we consider the country, the assets being securitized, and the transaction's target rating. ABS refers to structured financings backed by pools of existing assets, including residential and commercial mortgages, auto loans, and other receivables. In this article, ABS does not refer to securities backed by future receivables, such as those generated by an entity's export sales or financial operations.

While sovereign and country risks are often important factors in assigning ratings to ABS, sovereign ratings do not form a rating "ceiling." There are several outstanding ABS transactions that are rated higher than the sovereign in which the assets are located (see table 1).

Table 1. Examples Of ABS Transactions Rated Higher Than The Sovereign

Issuer/issue name	Senior tranche rating	Jurisdiction	--Sovereign ratings--		T&C assessment
			Foreign currency	Local currency	
HK Synthetic MBS Co. Ltd. (class A)	AA+	Hong Kong	AA-	AA-	AAA
Ann Funding Four Co. Ltd. (class A)	AAA	Japan*	AA-	AA-	AAA
Hyundai Capital Auto Funding IV Ltd.	AAA	Korea	A	A+	AA-
Metrofinanciera Trust (series 2005-2)	BBB+	Mexico	BBB	A	A

*In Japan, Standard & Poor's has assigned 'AAA' ratings to several hundred ABS transactions.

Sovereign And Country Risks Analyzed By Standard & Poor's

Even though sovereign ratings do not "cap" the ABS ratings, many country-specific risks can affect the performance of an ABS transaction. (See sidebar, "How Important Are Sovereign Ratings?") These risks may also be relevant in countries with 'AAA' sovereign ratings, but they are often absent or immaterial. In sovereigns rated lower than 'AAA', these risks tend to become increasingly applicable to our analysis as the ratings on the country of the assets become lower. In emerging markets, most of these risks factor into our analysis. Nevertheless, the pertinence of one or more risks to a particular transaction varies from case to case.

How Important Are Sovereign Ratings?

Rating an ABS higher than the sovereign in which the securitized assets are located implies that the structured obligation would continue to perform in an economic scenario in which the government itself has defaulted. The same factors that underlie a government default would likely lead to deteriorating credit performance in any securitized asset pool whose underlying obligors are domiciled in that country. To this extent,

a national government's ability and willingness to service its own obligations, as reflected by its sovereign ratings, is relevant, and credit enhancement requirements tend to be raised to offset the risks associated with a sovereign default. Despite these higher credit enhancement requirements, however, sovereign ratings do not necessarily cap ABS transaction ratings.

Transfer and convertibility (T&C) risk

Under political or economic stress, governments may impose exchange controls to avoid an outflow of hard currency. A "T&C event" occurs when a sovereign limits the ability to convert its own currency into another currency and/or remit it overseas. For ABS transactions that depend on the conversion and transfer of local currency (generally, cross-border transactions whose rated securities are denominated in foreign currency), restrictions on access to foreign exchange needed for debt service can cause a default on the securities.

The need to mitigate the risk of exchange controls is relevant when the rating on the structured transaction is higher than the country's T&C assessment. T&C assessments reflect our opinion of the probability that transfer and convertibility controls will occur. In most countries, T&C assessments exceed the sovereign foreign currency rating by one to three notches, reflecting evidence that sovereigns are less often resorting to restrictions of nonsovereign debt service in periods of political and economic stress. (See related articles, "Ratings Associated With Risk Of Foreign Exchange Controls Raised In 27 Countries" and "Ratings Above The Sovereign: Foreign Currency Rating Criteria Update," published Nov. 3, 2005, and "Transfer And Convertibility Assessments Raised In 31 Countries," published April 6, 2006. These articles are available on RatingsDirect, Standard & Poor's Web-based credit analysis system, at www.ratingsdirect.com.) If the securitized assets are denominated in a local currency but the rated debt is issued in a foreign currency, a currency swap counterparty or third-party guarantor may be willing to make the scheduled payments on the rated debt notwithstanding the imposition of T&C controls by the sovereign. In that case, the transaction rating would be constrained by the rating on the swap counterparty or guarantor, but not by the T&C assessment of the country.

Table 2 is a selected listing of the current T&C assessments assigned by Standard & Poor's to the indicated sovereigns (as of April 11, 2005). For a full listing of T&C assessments and the methodology used to assign them, please see "Ratings Associated With Risk Of Foreign Exchange Controls Raised In 27 Countries," published Nov. 3, 2005. These assessments are subject to change, for example, due to sovereign rating changes or changes in sovereign foreign exchange regimes. Standard & Poor's will publish updated lists of these assessments periodically.

Table 2. Sovereign T&C Assessments			
Sovereign	T&C assessment	--Sovereign ratings--	
		Foreign currency	Local currency
Brazil	BBB-	BB	BB+
China	A	A-	A-
Hong Kong	AAA	AA-	AA-
India	BBB	BB+	BB+
Indonesia	BB+	B+	BB
Japan	AAA	AA-	AA-
Korea	AA-	A	A+
Mexico	A	BBB	A
Russia	BBB+	BBB	BBB+
South Africa	A	BBB+	A+
Turkey	BB+	BB-	BB

Note: All information as of April 11, 2006

Repatriation risk

In certain ABS transactions, a portion of the underlying revenues may be generated abroad. For example, in a cross-border commercial mortgage-backed securities (CMBS) transaction backed by hotel properties in Mexico, debt service payments may come from the hotel clients' country of origin (such as the U.S. or Europe). Payments are directed to an offshore special-purpose entity (for example, in the Cayman Islands or the Bahamas) without entering the hotel's country (Mexico). These flows of funds are therefore not subject to T&C risk, but to repatriation risk, which is the risk that government authorities would force the hotel to repatriate offshore-generated cash flows back to Mexico.

Currency depreciation and devaluation

Fiscal and financial sector pressures, as well as sharp commodity price changes and other external shocks, often weaken a country's local currency. For cross-border transactions that have securities denominated in a foreign currency and underlying assets denominated in a local currency, this poses an immediate risk to investors: any depreciation or devaluation of the local currency increases the amount of local currency required to service the debt. This can quickly erode the foreign currency equivalent of the cash flow that services an ABS transaction. Particularly in emerging economies, the volatility of the domestic currency vis-à-vis another currency is present at all rating levels, reflecting the heightened probability of currency depreciation or devaluation even without a major economic crisis. This risk, however, is substantially higher for emerging market transactions rated higher than the sovereign's foreign currency, as the working assumption is that if the sovereign is in default, its currency is likely to have lost its value considerably.

For transactions with both underlying assets and securities denominated in the same currency, the risk posed by depreciation or devaluation of the local currency is less acute, although currency depreciation and devaluation are usually closely related to a more difficult economic environment (which may include higher inflation, slower economic growth, and other ill effects). This can affect the borrowers' ability to meet their debt obligations.

Inflation or hyperinflation

Inflation or hyperinflation may negatively affect a security's performance if governments adopt highly expansionary economic policies. For example, in 1989, Argentina experienced hyperinflation of almost 5,000%. Brazil's annual inflation rate reached over 900% in 1994, the year that it enacted its economic stabilization program known as the "Real Plan." Inflation and hyperinflation increase domestic costs, reduce disposable income, and erode a population's purchasing power. The effect of inflation on consumer and commercial loans

can be severe if the loans carry floating interest rates. If real income declines, borrowers may find it difficult to meet their debt obligations.

Like the risk of currency depreciation or devaluation, in many lower rated sovereigns the risk of inflation or hyperinflation is material even without an economic crisis. Consequently, our stress assumptions sometimes incorporate this risk even for ratings on structured securities that are lower than the country's ratings.

Economic recession and rising unemployment

The events that accompany a sovereign crisis often result in economic recession, including rising unemployment. Such circumstances tend to negatively affect the willingness and ability of obligors to repay their debts, as purchasing power is sapped and household income falls. The results for ABS backed by these assets tend to be increased defaults and delinquencies of the assets, and ultimately decreased cash flow to the structured transaction.

Financial system risk: credit shortage, frozen bank accounts, and bank defaults

In an economic crisis, the financial system usually is severely stressed. The government may freeze deposits if it anticipates capital flight, or there may be a "flight to quality" into safer investments such as government bonds. A difficult economic environment may impair lending and available credit. Borrowers seeking to refinance loans that are due for rollover may face difficulty even from their current lenders. Structured finance transactions backed by financial obligations may be severely affected. The effects of a credit shortage can be particularly harsh on mortgage-backed securities (MBS) because lenders have difficulty finding purchasers for foreclosed properties. This ultimately increases losses on the pool of mortgages backing the securities.

When a country or its banking sector is in distress, its government also may temporarily close the banking system. This action is often taken to minimize a run on banks and to prevent a collapse of the banking industry. Once banks are reopened it is not unusual for the government to freeze bank accounts, limit cash withdrawals, or convert deposits into long-term securities. When this occurs, borrowers' access to funds is limited, and their ability and willingness to service their obligations is reduced. When obligors have limited access to their bank accounts, they are often forced to use their scarce liquidity for more immediate needs than for debt repayment.

In a worst case, a financial system disruption that causes restrictions on the movement of local currency can also cause a default on a securitization of local-currency-denominated assets to the extent such restrictions coincide with a scheduled payment date. Credit enhancement in the form of overcollateralization or a domestic reserve account, in this case, offers no protection to investors against a missed payment because any cash flow is subject to the freeze.

Notwithstanding this risk, in some situations government authorities have permitted electronic transfers of funds within the banking system despite a banking system freeze. For example, some debts were serviced in this manner during Argentina's economic crisis from 2001-2002. In markets with electronic forms of payment, our analysis incorporates this potential mitigating factor.

In addition to the risk of the sovereign interventions mentioned above, we consider it likely that, at a time of severe sovereign distress and, potentially, sovereign default, a high proportion of the banking system will itself become insolvent and in default. This may create individual or systemic risks that threaten the safety of the ABS transaction's reserve and liquidity accounts (if they are held onshore), as well as a risk of interruption of transfers of funds

through the financial system.

Legal and regulatory risks

Standard & Poor's analysis considers risks related to the legal and regulatory systems in the country in which the assets are securitized. Particularly in emerging market countries, legal and regulatory systems are underdeveloped and can be unpredictable. Laws and regulations are often not well defined, or are untested. In particular, securitization laws may be absent (in which case the transaction's documents are based on available commercial law) or undeveloped. In these countries, laws and regulations may be enforced arbitrarily, and may be imposed to the detriment of investors. Furthermore, some emerging market countries may not respect the decisions of international arbitration courts. During a financial crisis, when there are political incentives to provide debt relief to domestic borrowers, the propensity of governments to interfere in structured transactions tends to be highest, and these risks are especially acute.

Other sovereign interference risks

In addition to imposing T&C controls and freezing the payment system, sovereigns can take other direct actions that negatively affect ABS transactions. (See the related article, "Assessing The Political Risk When Sovereigns Meet Structured Finance," published Oct. 4, 2005, on RatingsDirect.) These actions include, but are not limited to:

- Modification of the terms and conditions attached to repayment of loans, for example, by extending the maturity of payments, reducing the interest payments, or, in the case of mortgaged properties, limiting or prohibiting lenders' ability to foreclose on properties;
- Redenomination of the currency of the obligations, such as what occurred in Argentina during the 2001-2002 crisis with the government's redenomination, or "pesification," of domestic loans and foreign currency obligations. Mortgages and MBS that had previously been denominated in U.S. dollars were converted to Argentine pesos at a devalued exchange rate. While easing repayment burdens for mortgagors, this action immediately left MBS investors holding paper worth a fraction of its pre-pesification value;
- Modification of the laws that regulate a sector (for example, the tourism or electrical power sector) in a way that reduces an obligor's ability and willingness to service debt;
- Expropriation, confiscation, or nationalization of certain assets, such as hotel properties; and
- Establishment of a tax or fiscal policy that is detrimental to obligors.

Political turmoil/social unrest

A sovereign crisis may also involve political turmoil, which creates numerous uncertainties. For example, there could be a lack of, or conflicting, decisions at the highest political levels. The economic consequences of a sovereign crisis may trigger social unrest. While the precise impact of such events on an ABS transaction is difficult to estimate, there are clear dangers to obligors' willingness and capacity to service their debts.

Relevant Risks Depend On Country, Target Rating, And Securitized Assets

The relevance of the above risks to a particular ABS transaction, as well as the level of stress applied to account for these risks, depends on the country in which the assets are located, the rating sought, and the assets being securitized. As these factors tend to be interdependent, we consider them collectively in our assessment of credit enhancement requirements.

Country

Countries differ in terms of the risks that could most immediately affect the underlying obligors of an ABS transaction. For countries with 'AAA' sovereign

ratings, these risks tend to be of limited relevance to our analysis, or not a factor at all, since their occurrence is highly unlikely. In non-'AAA' markets, our analysis focuses first on the sovereign risks most salient in the particular country. In some countries, indirect risks related to economic conditions, such as inflation, may be most pertinent, while in others our principal concern may relate to direct government interference with the assets underlying a structured transaction.

Even among countries with similar sovereign ratings, the risks that weigh into our analysis of ABS transactions may differ substantially. Mexico (foreign currency 'BBB'; local currency 'A') and Kazakhstan (foreign currency 'BBB-'; local currency 'BBB') demonstrate this contrast, despite our similar view of each government's ability and willingness to service its own debt obligations.

In 2005, two cross-border Mexican ABS transactions backed by existing assets were rated 'BBB+'. Credit enhancement, which included a currency swap, focused principally on risks that could affect economic conditions in the country, including depreciation and inflation, and their potential impact on the transaction's obligors, at a 'BBB+' stress level. Risks related to adverse legal or regulatory actions, although present in Mexico at certain stress levels, did not require third-party credit enhancement for a transaction rated 'BBB+'. In Kazakhstan, on the other hand, untested (and, in some instances, ill-defined) laws, weaknesses in the financial sector, and potential sovereign interference may render a similar rating for an ABS issuance more difficult to achieve.

Transaction target rating

A transaction's target rating is also important in determining which sovereign risks are relevant to an ABS deal. Generally, the higher the rating sought, the more weight sovereign and county risks tend to have in the stress assumptions we use to size loss coverage requirements. As the target rating approaches or exceeds the government's ratings, stress assumptions tend to increase significantly, since we assume that the deal could survive the fallout of a government default.

As already discussed, ABS transactions may be rated higher than the sovereign as long as credit enhancement is sufficient (and takes the appropriate form) for the rating sought and the risk of sovereign interference, including T&C controls or a freeze on local currency transfers, is remote to a degree consistent with the rating or is otherwise mitigated. Several existing ABS transactions in Japan ('AA-'), for example, are rated 'AAA', higher than the country's ratings. Stress assumptions for these transactions have already factored in severe recession-type scenarios, including the impact of a government default, and overcollateralization is built into these deals accordingly, enabling them to achieve ratings higher than those on the sovereign.

Notably, if a transaction's target rating does not exceed the sovereign ratings it does not necessarily preclude its vulnerability to—and our severe stress assumptions for—major economic crises. Particularly in emerging markets, there may be economic trauma even without a sovereign default. For example, during Mexico's "Tequila" crisis from 1994-1995, the peso lost 71% of its value vis-à-vis the U.S. dollar; high interest rates caused mortgage rates to reach 100%, prompting many mortgagors to default on their loans; the government redenominated mortgage loans; and the banking system collapsed. Many citizens lost a significant portion of their life savings and net worth. Yet, despite these events, Mexico's government did not default throughout the Tequila crisis. Had a domestic ABS market existed in Mexico at the time, securitized asset pools likely would have suffered with the rest of the economy. This illustrates why we often incorporate the impact of major sovereign stress events in estimating loss coverage requirements even for issuances rated lower than the sovereign.

Underlying assets being securitized

The relevance of particular country-related risks and the amount of protection required to mitigate these risks also differ depending on the nature of the assets being securitized. For instance, at identical rating levels, a residential mortgage-backed transaction and a commercial mortgage-backed deal located in the same country may be affected by country-related risks differently, resulting in different loss coverage requirements. Residential mortgages may be more prone than commercial mortgages to government actions to protect mortgagors at the expense of residential mortgage-backed securities investors. For example, during a crisis, the government may forbid foreclosures by a foreign entity for an extended period to prevent domestic unrest, as was the case in Argentina during the 2001-2002 crisis. The government could also decide to amend the terms of its citizens' mortgages to alleviate their financial burden, such as by extending the maturity, reducing the interest basis, or changing the currency of the underlying loans, particularly if the sovereign is experiencing severe economic difficulties. A CMBS transaction in the same market, on the other hand, may face a higher probability of government expropriation of the property (such as a tourist hotel, a substantial generator of hard currency) or repatriation of funds.

Mitigating Sovereign Risks

Internal credit enhancement techniques such as subordination, overcollateralization, excess spread, and reserve accounts can mitigate some sovereign risks to ABS transactions (see sidebar, "Argentine Crisis Illustrates How The Structure Itself May Also Help Mitigate Certain Sovereign Risks"). This ability to build internal structural mechanisms into a transaction so that the cash flow generated by the securitized assets is channeled to mitigate risks is a major advantage of securitization.

Nevertheless, certain risks, when relevant at a given rating level, require third party, or "external" credit enhancement, which may include a letter of credit, servicer advance, liquidity line, partial credit guarantee, or political risk insurance. These risks do not fit into a single category, but include events (such as expropriation, frozen bank accounts, and, for cross-border deals, T&C) that make the securitized assets or underlying cash flow unavailable and therefore prevent full or timely payment on the securities. Unless the structure enables investors to access the transaction's cash flow despite these events (for example, by funding an appropriately sized offshore reserve account through the transaction waterfall), no level of overcollateralization or subordination can suitably mitigate these risks, since the collateral itself or its cash flow becomes inaccessible. For this reason, third-party enhancement is generally required.

While internal enhancement techniques such as subordination and/or overcollateralization are acceptable mitigants for many sovereign risks, they are not always the most practical or cost-effective form of credit enhancement. In some countries, loss coverage requirements for a cross-border ABS transaction may incorporate a severe currency depreciation scenario (for example, depreciation of 50% or more, depending on the rating target). Although subordination or overcollateralization could conceivably be "sized" to address this risk, a currency swap—although also difficult to attain—may be more optimal (see table 3).

Table 3. Credit Enhancement To Mitigate Sovereign Risks

	--Transfer and convertibility*--	--Repatriation--	--Frozen bank accounts--		--Depreciation/ devaluation or inflation/ hyperinflation/ recession--	
	Cross-border market	Cross-border market	Domestic market	Cross-border market	Domestic market	Cross-border market
Internal credit enhancement						
Subordination	No	May provide limited protection, depending on extent of repatriation	No	No	Yes	Yes
Overcollateralization/ excess spread	No	May provide limited protection, depending on extent of repatriation	No	No	Yes	Yes
Reserve account	No	May provide limited protection, depending on extent of repatriation	No	Only if account is held offshore	Yes	Yes
External credit enhancement						
Full financial guarantee	Yes	Yes	Yes	Yes	Yes	Yes
Letter of credit	Yes	May provide protection, depending on the terms of the letter of credit	May provide protection, depending on the terms of the letter of credit	May provide protection, depending on the terms of the letter of credit	May provide protection, depending on the terms of the letter of credit	May provide protection, depending on the terms of the letter of credit
Transfer and convertibility policy	Yes	No	No	No	No	No
Partial credit guarantee	Yes	Yes	Yes	Yes	Yes	Yes
Note: These risks and mitigants are a sample and do not represent an all-inclusive list. *Generally, transfer and convertibility risk is only relevant for cross-border transactions.						

Argentine Crisis Illustrates How The Structure Itself May Also Mitigate Certain Sovereign Risks

Argentina's economic crisis from 2001-2002 illustrates the importance of a transaction's structure for cross-border ABS transactions in which the securities are denominated in foreign currency. A major effect of the crisis was a reduction in the value of the Argentine peso of approximately two thirds, which, before the crisis, was pegged to the U.S. dollar at a 1:1 exchange rate. What caused the ABS defaults was not only the government's redenomination ("pesification") of the underlying loans, but also of the foreign currency-denominated securities themselves. Had pesification only been applied to the underlying loans, but not to the bonds, internal credit

enhancement (overcollateralization and subordination) might have been sufficient to enable the senior tranches of some transactions to withstand the effects of the devalued peso and the increased delinquencies and defaults on the securitized loan pools that resulted from the crisis. If a structure had been in place in which the securities themselves had been subject only to the laws of an offshore jurisdiction, the government may not have been able to pesify the bonds, and some cross-border ABS transactions might have weathered the crisis. This experience serves as an important lesson for future emerging market issuances.

Effects Becoming Easier To Measure

As securitization markets grow worldwide, a more refined analytical approach to sovereign risk, based on country-specific criteria, is taking hold. Particularly in lower rated countries, as well as those with underdeveloped ABS markets, country-related risks pose unique challenges. The difficulty in predicting actions of government authorities, especially when under severe economic stress, is compounded by limited data about the securitized assets and, in some countries, an unstable legal environment. Nevertheless, as an ABS market matures and information becomes more available, enhancement requirements will become easier to assess and quantify. As this occurs, and provided that political and economic conditions remain stable, transaction ratings higher than those on the sovereign can be expected to become more common.

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