



Financing development through future-flow securitization

Securitizing future receivables can allow developing country borrowers with good credit to overcome sovereign credit ceilings and raise financing in international capital markets.

Most developing countries lack ready access to international capital markets, while those with access are prone to crises. Moreover, the foreign currency ratings of developing country borrowers are often constrained by sovereign credit ceilings. As a result even companies with better local currency ratings than their governments face credit rationing or exorbitant terms on foreign borrowing.

Securitizing future hard currency receivables—that is, converting them into tradable securities—can enable such borrowers to break through sovereign credit ceilings and access international capital markets, obtaining lower interest rates and longer maturities than on unsecured bonds or government eurobonds. For example, in late 1998 Pemex, Mexico's state-owned oil and gas company, issued oil export-backed securities that received higher ratings from international credit rating agencies than Mexico's sovereign debt. Relative to unsecured debt, securitization lowered interest rates on Pemex borrowing by 50–338 basis points (0.50–3.38 percentage points).

Securitization structures are not without risks, however. Pledging scarce foreign exchange to a specific creditor leaves less for others. This is especially relevant for multilateral lenders, including the World Bank, that have preferred creditor status.

How and why

In a typical future-flow securitization a developing country borrower sells its future pro-

duction to an offshore special purpose entity, which then issues the debt instrument (box 1). Through a legal arrangement between the borrower and major international customers, payments for the products are deposited in an offshore account managed by a trustee. The debt is serviced from this account, with any excess collections transferred to the borrower.

This transaction structure mitigates several elements of default risk. Offshore payment arrangements significantly reduce government's ability to interfere with debt servicing. Excess collateralization mitigates the market risk arising from price and volume volatility. The risk that products will be sold to customers other than those designated depends on the choice of collateral.

BOX 1 BANCO DE CREDITO DEL PERU'S SECURITIZATION OF CREDIT CARD RECEIVABLES

After a credit card sale the merchant presents the resulting voucher to a voucher-acquiring bank and receives cash. The bank is then reimbursed by the credit card company. In 1998 Banco de Credito del Peru raised \$100 million by issuing seven-year bonds backed by future Visa card receivables. The bank established Banco de Credito Overseas Ltd., a special purpose entity in the Bahamas, and issued structured notes. Visa International was instructed to transfer all future payments on credit card vouchers to the BCOL Master Trust, an offshore account. The trust makes principal and interest payments to the bondholders and forwards excess collections to Banco de Credito del Peru. To increase investor confidence, the amount of future-flow receivables transferred to the trust was set at 2.5 times debt service requirements. In 1998 this transaction setup received a AAA credit rating from Standard & Poor's—higher than Peru's BB sovereign credit rating.

Future-flow securities attract a wide range of investors

Such risk tends to be low for crude oil (because a limited number of buyers have the capacity to refine crude oil) and credit card receivables (because there are only a handful of major credit card companies). In contrast, diversion risks are high for agricultural staples.

Future-flow securitization is attractive to investors because of its good credit rating and stellar performance in good times as well as bad. The investment grade ratings of future-flow securities allow them to attract a wide range of investors—including, for example, insurance companies that face limits on buying sub-investment grade paper. Though these securities are traded less often—investors tend to hold them to maturity—the prices of some more liquid future-flow securities (such as Pemex 18-year oil export-backed notes) appear to be less volatile than unsecured securities from the same issuers.

Debt defaults are rare on rated future-flow, asset-backed securities issued by developing country entities, despite repeated crises of liquidity, solvency, or both. For example, in 1999 Pakistan selectively defaulted on its sovereign debt but continued to service bonds backed by the future receivables of its state telephone company.

More recently, deals backed by future exports have continued to perform in Argentina. (Though some deals by Argentine provinces that used future co-participation tax revenue as collateral, using onshore trusts, have defaulted.)

Trends

The first important future-flow securitization in a developing country occurred in 1987 with the securitization of telephone service receivables owed to Mexico's Telmex. By the end of 2001 the three main credit rating agencies—Fitch IBCA Duff and Phelps, Moody's, and Standard & Poor's—had rated more than 230 future-flow securitizations with principal exceeding \$44 billion (figure 1). Issues of future-flow securities jumped after Mexico's 1994–95 crisis, with borrowers from Argentina, Brazil, Mexico, and Venezuela dominating the market. But new borrowers and new types of future receivables continue to emerge.

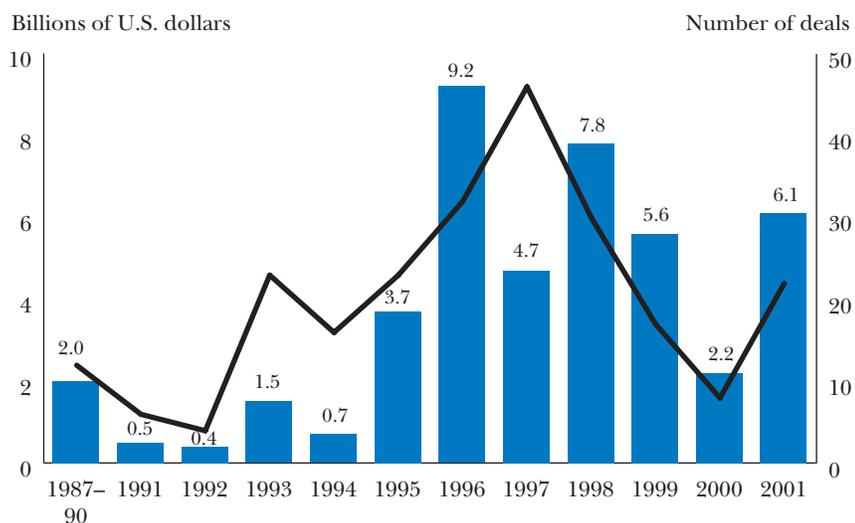
During 1987–99 oil and gas export receivables accounted for 45 percent of rated future-flow transactions in U.S. dollar terms, and for 17 percent of the number of deals (table 1). Other receivables that have been securitized include credit card transactions, telephone services, worker remittances, and even future export receivables to be generated by new investment projects. In 2001 public entities raised nearly \$3 billion through future-flow transactions, or about half the total in emerging markets.

Potential

Developing countries could raise up to \$77 billion a year by securitizing exports of fuels, ores and metals, international tourism receipts, and worker remittances (table 2). There is also further potential for securitizing telephone service receivables.

Several constraints have inhibited future-flow securitization from reaching its potential. One of the main constraints is the scarcity of good collateral in developing countries. Most developing countries have sub-investment grade foreign currency ratings or are not rated at all. In addition, the specialized skills needed to structure asset-

FIGURE 1 FUTURE-FLOW SECURITIZATIONS IN EMERGING MARKETS, 1987–2001



Source: Ketkar and Ratha 2001, updated using data from Standard & Poor's, Fitch IBCA Duff & Phelps, and Ambac.

TABLE 1 FUTURE-FLOW SECURITIZATIONS IN EMERGING MARKETS BY TYPE OF RECEIVABLE, 1987–99

<i>Type of receivable</i>	<i>Value of transactions</i>		<i>Number of transactions</i>	
	<i>Millions of U.S. dollars</i>	<i>Share of total (percent)</i>	<i>Number</i>	<i>Share of total (percent)</i>
Oil and gas exports	16,362	45	25	17
Other exports	7,537	21	40	27
Credit card transactions	4,314	12	37	25
Project finance	2,467	7	6	4
Telephone services	2,519	7	15	10
Worker remittances	1,731	5	14	9
Other	1,443	4	11	7
Total	36,372	100	148	100

Source: Fitch IBCA Duff & Phelps, Moody's, and Standard and Poor's data.

backed deals, together with long preparation times, imply large fixed costs—legal costs are often \$2–3 million a transaction. Unclear bankruptcy procedures further impede these deals in many developing countries. And in some cases policymakers are simply not familiar with future-flow securitization. Finally, many borrowers do not want to assume the burden of complete, timely disclosure of information.

Policy issues

Public policy to facilitate future-flow securitization should focus on easing the above constraints. Transaction costs can be cut by arranging a series of issues by the same borrower (the so-called master trust arrangement). Establishing and using local credit rating agencies to provide domestic credit ratings can also reduce transaction costs, though care has to be taken in mapping local ratings to international scales. Certain segments of this asset class—such as securitization of oil receivables—may be amenable to a standardized approach. Clarifying bankruptcy laws is helpful for all financial deals, including securitization. In addition, policymakers and potential issuers should be educated about the benefits and risks of this approach.

As noted, future-flow securitization is not without risks. For example, it increases borrowers' inflexible debt. Moreover, pledging a large volume of hard currency receivables can worsen the terms of unsecured borrowing (though the use of excess

collateralization in future-flow securitization contracts tends to limit excess pledging). In developing countries such pledging reduces the authorities' access to foreign exchange.

Although future-flow debt is nowhere near a dangerous level in any country, such debt—combined with debt owed to other preferred creditors—can reduce flexibility in servicing debt and jeopardize sovereign creditworthiness. (Because of the Enron crisis, the use of special purpose entities has recently come under scrutiny. But that may not affect investor perceptions of risk about future-flow securitization, because the risks and rewards associated with securitization deals are thoroughly scrutinized in conjunction with the issuer's other exposures.) In addition, the use of such deals by public entities undermines the preferred creditor status of multilateral lending institutions.

TABLE 2 POTENTIAL ANNUAL REVENUE FROM FUTURE-FLOW SECURITIZATION IN DEVELOPING COUNTRIES
(billions of U.S. dollars)

<i>Type of receivable</i>	<i>Low-income countries</i>	<i>Low- and middle-income countries</i>
Fuel exports	6.5	43.1
Ore and metal exports	1.0	12.4
International tourism receipts	1.3	10.2
Worker remittances	1.7	5.1
Total	11.7	76.9

Note: Calculations are based on a conservative 5:1 excess collateralization ratio for 1998 receivables.

Source: Ketkar and Ratha 2001.

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Still, this asset class can provide useful access to international capital markets during liquidity crises. Moreover, for many developing countries securitization backed by future flows of receivables may be the only way to begin accessing such markets. Given the long lead times involved in such deals, however, issuers need to keep securitization deals in the pipeline and investors engaged during good times so that such deals remain accessible during crises.

An equally important incentive for governments to promote this asset class lies in the externalities associated with future-flow deals. Relative to unsecured transactions, these deals involve much closer scrutiny of a country's laws and institutions. Indeed, preparation of a future-flow transaction

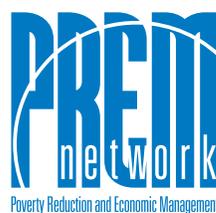
often involves legal and institutional reforms. These reforms facilitate domestic capital market development and encourage international placements.

Further reading

Ketkar, Suhas, and Dilip Ratha. 2001. "Development Financing during a Crisis: Securitization of Future Receivables." Policy Research Working Paper 2582. World Bank, Washington, D.C.

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