

Letter from the Editors

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Synthetic Collateralized Loan Obligations: Risk Distillation and Redistribution

Securitization offers managers of financial institutions a way to originate assets beyond their firm's ability and or willingness to fund the assets. Financial institutions originate home mortgages with the intention of exchanging them on the spot or forward market for mortgage backed securities, which are then underwritten in the capital markets or sold to investment used as collateral for collateralized mortgage obligations. Leasing companies originate leases and then sell them to a bankruptcy remote subsidiary that in turn sells undivided interests in the leases to a trust in exchange for asset backed securities which are composed of debt and equity interests. The debt will generally be underwritten and distributed in the capital and money markets while the equity interests are retained by the subsidiary. Industrial companies discount pools of revolving trade receivables to a bankruptcy remote subsidiary that in turn exchanges undivided interests in the pool for asset backed securities issued by a trust. The asset-backed securities are amortized with the liquidation of the receivable pool. Whether it is mortgages, leases or any other financial assets that are transformed through the process of securitization into marketable securities, capital that was needed to fund the assets can now be reallocated by the originator.

When a firm's balance sheet becomes congested due to limited availability of new capital, diminishing returns on equity or liquidity constraints, management can utilize securitization to liquidate short and long-term assets. Management can extract valuable servicing fees and residual interests from the securitized assets while significantly limiting the amount of capital that is needed to support the assets to the amount needed to fund any residual interests in the assets. Embedded in the residual interests are returns for underwriting loans that perform better than the capital and money markets expect. In other words it is a return on the human capital of the financial institution.

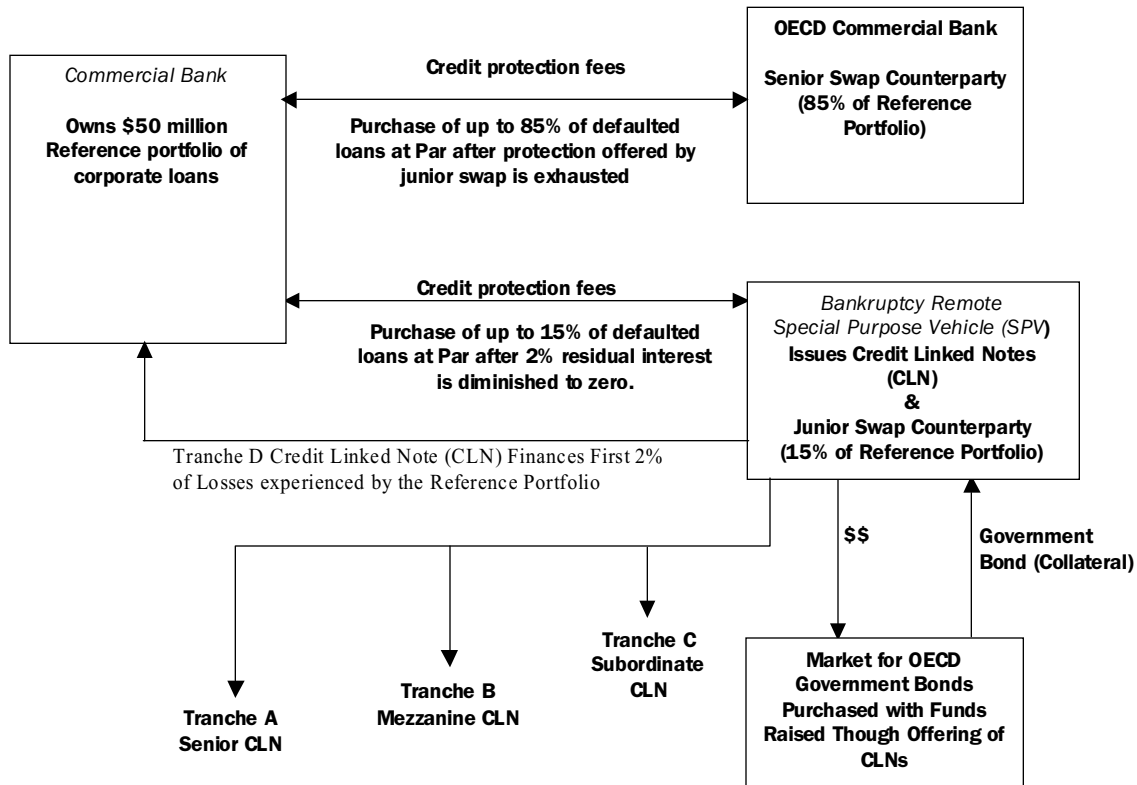
Being able to originate assets beyond the funding capacity of the institution's balance sheet gives managers the ability to remain active in a market without having to use

space on the balance sheet to support lending to the sector. For example a manager may forecast profitable future lending opportunities in the commercial real estate market, but at present, allocating space on the balance sheet to this market can not be justified.

By developing a securitization program, management can actively participate in the commercial real estate market by originating and servicing loans while using securitization to liquidate the loans net of a residual interest. If the time should come when value can be added by funding commercial mortgages on balance sheet the securitization program can be idled. In the mean time management has sustained an active presence in a competitive market without sacrificing clients or personnel, while conserving valuable equity. Rather than simply retreat from a market, securitization offers management an exit strategy that does not sacrifice servicing income, origination fees or future investment opportunities.

With enough regulatory heat, financial, legal and accounting engineers have been motivated to develop the process and set up the apparatus that enables financial institutions to distill and transfer credit risk embedded in a portfolio of corporate loans without having to transfer the loans themselves to a bankruptcy remote entity. The process is known as synthetic securitization. A better term than synthetic securitization may be risk distillation or risk securitization. Credit risk is distilled from a reference portfolio of loans and commitments then channeled to the credit markets where it is financed with an issue of credit linked notes. Credit linked notes may be issued directly by the financial institution that owns the loans or may be issued by a bankruptcy remote special purpose vehicle. In both cases the credit-linked notes will be collateralized by AAA rated securities that are pledged as security for the benefit of the credit linked notes. When a SPV is used to issue the credit linked notes, investors have considerably less exposure to the credit risk of the bank since the credit linked notes are the obligations of a fully collateralized third party. Credit risk is shifted from the bank's balance sheet either by issu-

Exhibit 1



ing credit-linked notes directly from the bank's balance sheet or entering into a credit default swap with an SPV which in turn funds its commitment by issuing credit-linked notes. In both cases the bank is made whole for credit losses on the reference portfolio, at the expense of the credit linked-notes. Credit events defined by the transaction documentation may include but are not limited to bankruptcy, default, debt restructuring or a downgrade of the reference entity. When a credit event takes place such as the downgrade of a reference entity, valuation of a reference obligation is used to price the amount of compensation due to the bank.

Synthetic securitization offers financial managers a way of changing the risk profile of the bank by channeling credit risk to the market and reducing the economic and regulatory capital necessary to support the loan portfolio without having to actually sell loans. Distilling the credit risks from the reference portfolio gives managers a way of leveraging the returns on the reference portfolio. Once liquidated, the credit risk can be reallocated and redistributed. The bank can invest in securities that represent some specified level and ordering of the credit risk such as a first loss position. Funding a portfolio of first loss positions rather than second and third loss positions may offer the bank a higher return on its information, under-

writing, and loan pricing technologies.

Exhibit 1 lays out the basic synthetic CLO structure. There are variations on the structural theme of synthetic securitizations. Common to all designs is the transfer of risk off the balance sheet of the bank without the transfer of the loans in which the risk is embedded.

Returns on the credit linked notes are tied to the credit performance of the underlying reference portfolio. Proceeds from the sale of the credit-linked notes are used to collateralize the commitments of the investors or the SPV to make the bank whole for credit losses on the reference portfolio.

The bank pays a fee to the counterparty and in exchange the counterparty is obligated to make the bank whole for any credit losses experienced by the reference portfolio over the term of the transaction. The swap counterparty might be a financial institution or a bankruptcy remote special purpose vehicle. Some deals will lay-off certain portions of the credit risk to a junior swap counterparty and the remaining portion to a senior swap counterparty. The senior swap counterparty is expected to fund losses on the reference portfolio above and beyond that which the junior swap counterparty is committed to fund. The SPV issues credit linked notes and uses the proceeds to buy AAA rated collateral. The fees paid by the bank to

the SPV plus the interest earned on the collateral will fund the interest on the credit-linked notes. Amortization of the collateral principal finances the amortization of the CLN. Credit losses on the reference portfolio are borne by the investors in the CLN. The swap counterparty will liquidate collateral to compensate the owner of the reference portfolio for credit losses. Liquidation of the collateral reduces the value of the assets available to repay the CLN. Credit risk has been transferred from the bank's balance sheet to the capital markets.

The following excerpt from Merrill Lynch's year 2000 10-K spells out the value synthetic CLO transactions offer. Merrill Lynch Bank USA and Merrill Lynch Bank & Trust have used synthetic CLO transactions to increase tier one and tier two regulatory capital. This has been accomplished by refinancing credit risk in the capital markets to reduce risk-weighted assets.

"MLBUSA and MLB&T have entered into a synthetic securitization of specified reference portfolios of asset-backed securities ("ABS") owned by each institution totaling in aggregate up to \$20 billion. MLBUSA has also entered into a second synthetic securitization of a specified reference portfolio of ABS owned by the institution of up to \$20 billion. All the ABS in the reference portfolios are rated AAA and all are further insured as to principal and interest payments by an insurer rated AAA. The synthetic securitizations have allowed MLBUSA and MLB&T to reduce the credit risk on the respective reference portfolios by means of credit default swaps with bankruptcy-remote special purpose vehicles ("SPV"). In turn, each of the SPVs has issued a \$20 million credit linked note (\$40 million in total) to unaffiliated buyers. These transactions have resulted in reductions in each institution's risk-weighted assets. MLBUSA has retained a first risk of loss equity tranche of \$1 million in each of these transactions (\$2 million in total).

As a result of these transactions, MLBUSA has been able to reduce risk-weighted assets by \$20, 186 million at September 28, 2001, thereby increasing its Tier I and Total RBC ratios by 431 and 458 basis points, respectively. MLB&T has been able to reduce risk-weighted assets by \$2,091 million at September 28, 2001, thereby increasing its Tier I and Total RBC ratios by 259 basis points. These structures have not resulted in a material

change in the distribution or concentration of risk in the retained portfolio."

J.P. Morgan Chase is one of the most active issuers of synthetic CLOs and J.P. Morgan has been an innovator in this type of financial transaction. J.P. Morgan pioneered the technique with its BISTRO transactions. The following excerpt from the year 2000 10-K of J.P. Morgan Chase & Co. sheds light on the value banking organizations can derive from the distillation and liquidation of credit risk.

"Since December 1997, the Firm has entered into several CLOs with exposures totaling approximately \$11.3 billion at December 31, 2000. These instruments allowed the Firm to reduce the credit risk on loans, loan commitments and derivatives. This reduction was accomplished using credit default swaps and securities, which transfer the credit risk into the capital markets. The structures provide protection on all exposures to a referenced counterparty. In some transactions, the Firm retained the first risk of loss tranche totaling \$194 million, while in other transactions, the Firm sold the first loss tranche and retained the senior loss tranche. As a result of these structures, the Firm was able to reduce economic capital by approximately \$216 million as of December 31, 2000. These structures also reduced risk-adjusted assets by approximately \$2.3 billion as of December 31, 2000, thereby increasing the Firm's Tier I and Total risk-based capital ratios by 4 basis points (0.04%) and 6 basis points (0.06%), respectively." (J.P. Morgan Chase & Co. 10-K, December 31, 2000.)

J.P. Morgan Chase also states that the synthetic CLO structure enabled them to change industry and geographic concentrations of their loan portfolios.

To the extent that synthetic securitization makes the balance sheets of banking institutions more liquid it is a valuable funding technique. The exact value will fluctuate across economic cycles and the specifics of each bank's financial constraints. Amendments to the current risk based capital regulations will also change the value of this type of financial transaction.

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