Worldwide Securities Services Risk Review

Directors Risk Policy Committee

September 18, 2007
Executive Summary

- **Focus:** Review of risks associated with five Worldwide Securities Services (WSS) businesses:
  
  - Commercial Paper - Issuing and Paying Agent - the bank facilitates the settlement and redemption of Commercial Paper
  
  - Fixed Income Tri-Party Repo - the bank, as agent, administers securities and cash collateral on behalf of borrowers and lenders

- **Impact of Current Market Disruption:** No financial loss to date; however business lines have experienced:
  
  - Increased processing volumes
  - Increased payment and settlement risk
  - Difficulty in obtaining accurate mark-to-market values for certain asset backed securities

- **Risks are Well Identified and Controlled**
Commercial Paper - Issuing and Paying Agent

Product Definition

- As Commercial Paper (CP) Issuing and Paying Agent (IPA), we act in an agency capacity to facilitate the settlement and redemption of CP.
- Commercial Paper is a core Treasury/Cash Management function in most corporations and is associated with the cash concentration business. Our client base is predominantly Global 500 companies that have multi-faceted relationships with JPMorgan.
- We also serve as IPA for Asset Backed CP (ABCP) programs, whereby bankruptcy-remote special purpose entities issue CP to finance trade, credit card, mortgage or other receivables.

Key Stats / Market Leadership

- JPMorgan is the market leader in IPA Services:
  - Total IPA: 734 programs with outstanding program balances of $1.1tn. Market Share of 38% (#1).
  - Asset-Backed CP: 118 Programs with outstanding program balances of $226bn. Market Share of 23%.
  - CP at JPMorgan has a 95% straight through processing rate.
  - The CP Operating System - PDR Connect - is a web based platform that provides real time client reporting and DTCC settlement statuses.
  - JPMorgan is the only IPA that operates dual live processing locations in Chicago and Dallas - which is tested in live production quarterly.

Market Disruption Issues / Risks

- Recent market concerns over sub-prime mortgages have resulted in an erosion of investor confidence in the Asset-Backed Commercial Paper Market.
- A number of ABCP Programs have been forced to draw on back-up liquidity facilities in order to pay maturing CP.
- ABCP outstandings in the market have reduced $176bn or 15% since July 31st (as of Aug 31st Federal Reserve data).
- The market has also dictated shorter maturities which has resulted in increased daily maturities.

Risk Mitigants

- Daily cash funding monitoring of ABCP by Client Service Managers and Corporate Bankers to obtain projected cash shortfalls by 2pm EST.
- Constant intra-day communication with Credit Risk on funding status.
- Daily DTCC Communication for market defaults & extensions.
- Intraday monitoring of rating agency downgrades.
- “Refusal to pay” option at DTCC - allows IPAs to refuse to pay any maturing CP program if it has not been fully funded by the issuer.
- Market self leveling - ABCP Programs that have not been able to place their paper have begun drawing on back-up liquidity facilities and have been paying down their balances to close their program.
U.S. Broker Dealer Clearance & Fixed Income Tri-Party Repo

**Product Definition**

**Broker Dealer Clearance:** Acts on a fully secured basis as clearing agent for broker dealers. Broker Dealer Clearance maintains automated links with the Federal Reserve Bank of NY and the Depository Trust and Clearing Corporation to process these book entry securities.

**Fixed Income Tri-Party Repo:** An overnight investment vehicle utilized by borrowers (typically broker dealers) and lenders (typically mutual funds or institutional investors) whereby lenders provide cash to borrowers who collateralize the cash loan with securities. JPM plays the role of collateral agent in between the lender and the borrower.

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**Key Stats / Market Leadership**

**Broker Dealer Clearance:**
- Market share information is not publicly available, but it is commonly accepted that JPM and BONY approximately split the U.S. Government Clearance & Collateral Management market.
- JPM clears, on average, 150,000 fixed income trades daily.

**Fixed Income Tri-Party Repo:**
- JPM has $850bn in its tri-party book.
- Twenty Broker Dealers and 75 investors participate in our triparty program.
- JPM processes approximately $300bn in cash movements daily.

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**Market Disruption Issues / Risks**

**Broker Dealer Clearance:**
- We have experienced an increase in volumes (August had highest volumes of 2007, 17.8% above July). Additionally, "flight to quality" has driven higher activity in treasury instruments.
- Requests for bank loans/funding have not materially changed. Should tri-party lenders decide no longer to finance a particular Broker Dealer or type of asset, JPM could be asked to provide short term funding while the Broker Dealer finds other financing sources or liquidates assets.

**Fixed Income Tri-Party Repo:**
- A large percentage (65%) of collateral consists of Asset Backed Securities
- Tri-party lenders have requested:
  - increased margins on certain securities/counterparties,
  - a reduction in time before considering pricing to be stale,
  - distinction between prime and sub-prime asset types and
  - change in ownership of principal and interest at the DTCC.

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**Risk Mitigants**

**Broker Dealer Clearance:**
- Credit exposure is fully secured, highly liquid, perfected collateral subject to daily mark to market. Margin is established at appropriate levels commensurate with the underlying collateral.
- JPM has the ability to adjust both margin levels and loan pricing.

**Fixed Income Tri-Party Repo:**
- The Broker Dealer system, BDAS, enables appropriate flow of information to satisfy our contractual obligation.
- The current primary pricing source (IDSI), is being compared selectively with other sources to achieve a greater level of confidence. A reduced timeframe is being introduced to mitigate stale pricing concerns.
- Throughout the market turbulence, the amount of the Tri-Party book has remained stable.