

# SIVs: An Oasis of Calm in the Sub-prime Maelstrom

## Structured Investment Vehicles

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## SIVS – AN OVERVIEW

SIVs are high-grade, highly diversified structured credit vehicles that raise funds through the issuance of **Prime-1** rated Commercial Paper, **Aaa**-rated Medium Term Notes and Capital Notes typically rated low investment grade. The sector is amongst the high growth areas of Structured Finance with US\$ 370 billion of assets managed across 28 vehicles, 10 of which were launched in the last 18 months. SIV CDOs (or “SIV-lites”) and SLVs (Structured Loan Vehicles) are hybrids of SIVs that typically invest in US RMBS and leveraged loans, respectively. In total, Moody’s rates 36 SIVs or SIV hybrids that currently manage US\$ 395 billion of assets.

SIVs engage in maturity transformation through the purchase of long-term assets to support senior short-term liabilities, engendering asset-liability maturity gaps in the range of 2.4 to 4.8 years. The vehicles must therefore mark portfolios to market on a frequent basis to gauge value should it become necessary to de-lever following an inability to roll liabilities or unexpected downgrades or defaults in the portfolio.

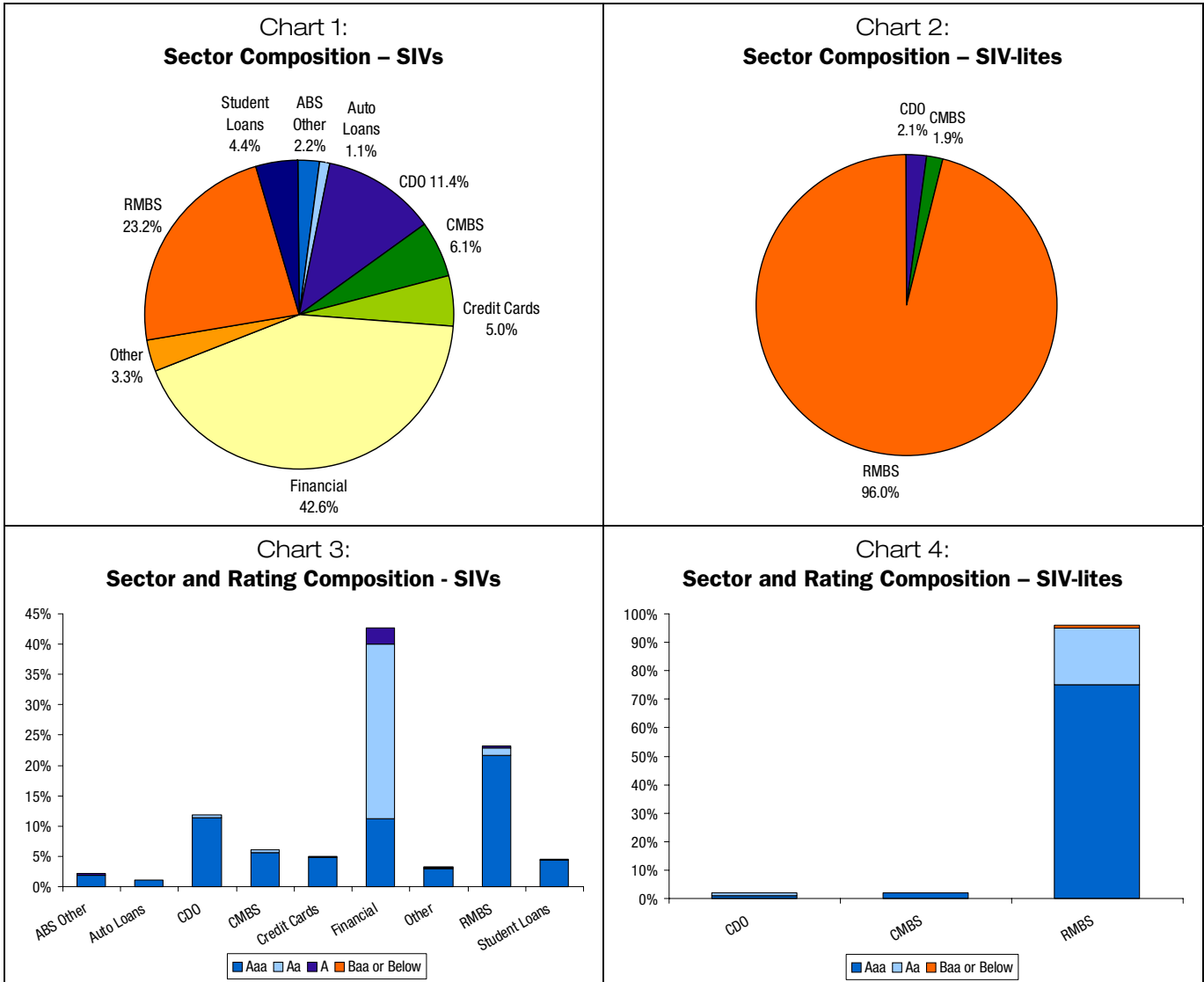
## SECTOR COMPOSITION

Following the recent wave of downgrades and watchlistings of securities backed by US sub-prime mortgages, market participants, including managers of SIVs and related hybrids, have conducted re-underwriting exercises across their portfolios to ensure that there are no hidden pockets of sub-prime exposures within the vehicles.

As shown in Chart 1, the SIV sector has 23% exposure to RMBS, which includes mortgages sourced globally. About half of this exposure is to US RMBS, both prime and sub-prime, although the majority of vehicles have no direct exposure to US sub-prime RMBS. Some SIVs also take exposure to sub-prime mortgages through investments in CDOs of ABS, although here again, the majority of vehicles have historically shunned CDOs of ABS. Overall SIV exposure to CDOs stands at 11%. RMBS and CDO exposures are typically taken at the **Aaa** and **Aa** levels (Chart 3). In fact, Chart 3 shows that SIV exposures to Structured Finance assets are predominantly **Aaa**-rated.



SIV-lites invest primarily in US RMBS (Charts 2 and 4), with the majority of these vehicles holding some US sub-prime exposures. Since these exposures are typically rated **Aaa** or **Aa** (Chart 4), and managers are incentivised to observe a strict pricing discipline owing to the rated nature of liabilities, the mark-to-market impact on the vehicles is limited. Net asset values<sup>1</sup> (NAVs) currently average 95.4% across the SIV-lite sub-sector (see Chart 6). The SIV capital model (also employed by SIV-lites) sizes capital adequacy dynamically; deteriorations in NAV are therefore immediately reflected in capital requirements.



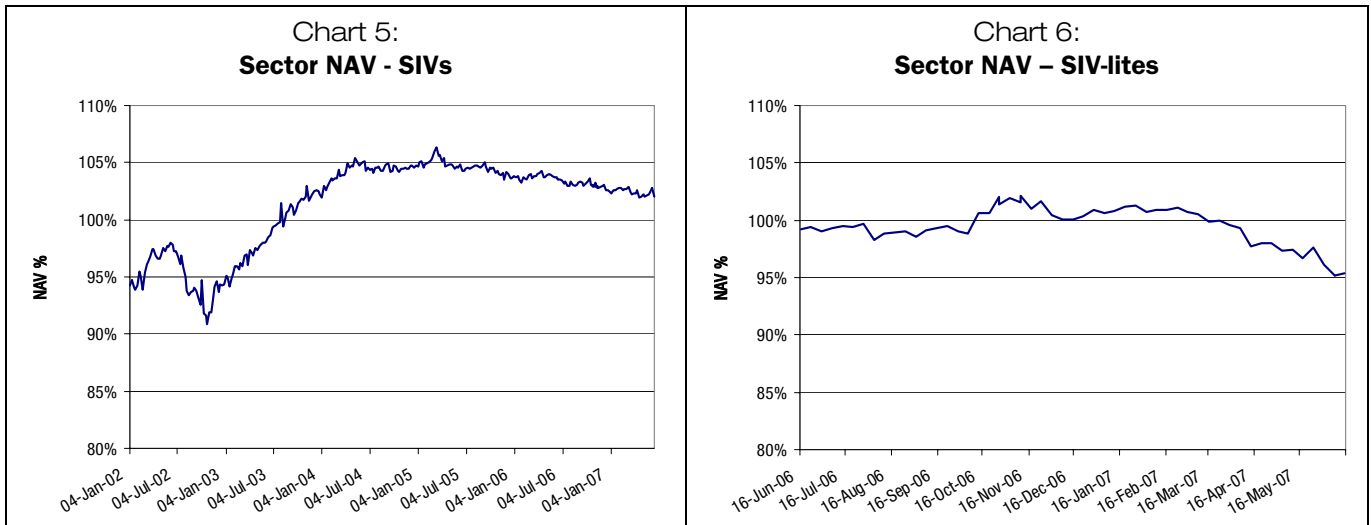
## MARK-TO-MARKET PROCEDURES AND NAV EVOLUTION

The SIV manager marks the vehicle’s portfolio to market at least weekly. The manager’s operations team has sole responsibility for obtaining prices from sources specified in the vehicle’s operations manual (which include Bloomberg, IDC, and broker/dealers). Front office portfolio managers, traders and credit analysts have no material input in the process. Moody’s considers the integrity of the mark-to-market process as part of our operations review, incorporating our findings in the SIV’s Manager Quality rating.

Prices and other asset characteristics are reported to Moody’s weekly, with agreed-upon procedures (AuPs) performed by auditing firms monthly or quarterly. In each of these AuPs the auditors perform, amongst other tests, random checks on assets, comparing prices against those they source independently. The auditors also check the managers’ reported prices against those quoted by the relevant sources on the valuation date, reporting any exceptions to Moody’s.

<sup>1</sup> The difference between the market value of assets and liabilities, expressed as a percentage of paid-in capital

The NAV of SIVs has generally improved since 2002 following a protracted period of spread compression, as shown in Chart 5. NAVs reached their zenith in July 2005 but are now pulling back towards par. This is in part due to spread widening, but perhaps a more important factor is the rapid growth in assets under management experienced over the last two years (during which sector AuM more than doubled).



## CONCLUSION

SIVs and SIV-lites, like most market value based structured credit funds, invest in **Aaa** and **Aa** US RMBS and CDOs of ABS. Exposures to these asset classes are limited in SIVs owing to the inherent diversity of their portfolios. The strict pricing and reporting discipline observed by SIVs and SIV-lites ensures that NAVs are reflective of asset market values within the funds. Furthermore, the vehicles are not structured to forcibly liquidate assets in times of crisis. Even in the face of a rapid and dramatic deterioration in NAV that results in an inability to roll liabilities, SIVs and SIV-lites may, prior to liquidating the portfolio, draw down on committed liquidity, withdraw breakable deposits and extract asset-based liquidity (e.g., through the sale of short-maturity prime **Aaa** credit card and auto loan ABS). This obviates the need to liquidate large buckets of assets at potentially the worst period in the life of the vehicle. Moody's therefore expects ratings in the SIV and hybrid SIV sectors to remain stable amid the current maelstrom surrounding the US sub-prime housing market.

## RELATED RESEARCH

For a more detailed explanation of Moody's approach to SIVs please refer to the following reports:

### Rating Methodology

- An Introduction to Structured Investment Vehicles, January 2002 (SF11961)
- The Moody's Capital Model, January 2004 (SF27525)
- SIV Management Quality Ratings, January 2006 (SF66229)

### Special Report

- Moody's Review of SIV Capital Note Ratings, May 2005 (SF54643)

*To access any of these reports, click on the entry above. Note that these references are current as of the date of publication of this report and that more recent reports may be available. All research may not be available to all clients.*

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