

Results of the 2006 survey on credit derivative and securitization activities

by the Banking Policy Department

The overall level of activity of authorized institutions in the credit derivative and securitization markets surged markedly in 2006. The results of the HKMA's annual survey of these markets show credit derivative activity rose by 114% and securitization activity by 74%. The survey also reveals that local banks were making more use of credit derivative and securitization transactions for risk management or to improve yields.

Growth momentum is expected to continue in 2007, with both markets likely to be further stimulated by improving economic conditions which will generate more business and lending opportunities.

Introduction

Consistent with trends in global markets¹, credit derivative and securitization activities in the Hong Kong banking sector have shown significant growth in recent years. To facilitate supervisory monitoring of authorized institutions' (AIs') participation in these markets, the HKMA has conducted surveys on credit derivative activity since 1999. The survey became an annual exercise² in 2002 and was expanded in 2003 to include securitization transactions.

The latest survey covered the positions of all licensed banks and restricted licence banks (RLBs) at the end of October 2006, including the details of transactions that were executed or booked in Hong Kong. It also sought information from the surveyed AIs on their reasons for engaging in such transactions and on their future plans.

Highlights of major findings

The survey showed

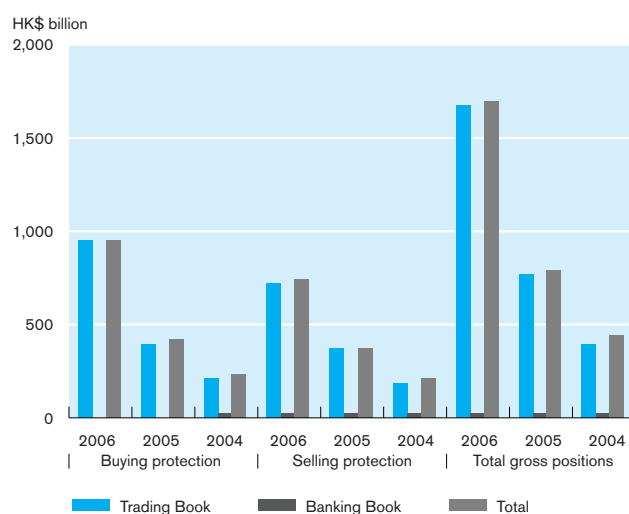
- (i) the overall level of activity in credit derivative transactions reported by the surveyed AIs surged 114% in 2006. Although the credit derivative activity of local banks (mostly as protection sellers) increased at a slightly faster pace, the market continued to be dominated by foreign banks, which were predominantly engaged in trading activities;
- (ii) there were no significant changes in the nature and type of credit derivative activity undertaken by the surveyed AIs in 2006, with credit default swaps continuing to be the most common product used. However, there was a notable shift in credit derivative positions from long-term (over five years) to medium-term (one to five years);

¹ According to statistics compiled by the BIS, the outstanding amount of credit derivative transactions doubled each year in the past five years.

² The results of the previous surveys were published in the *HKMA Quarterly Bulletin* in June of the following year.

- (iii) the overall level of activity in securitization transactions grew by 74% in 2006. The market share of local banks, most of which participated in such transactions as investors, decreased from 73% to 69%;
- (iv) traditional securitizations constituted the bulk of the reported transactions, but the share of synthetic securitizations started to pick up. Residential mortgage loans continued to be the most popular type of underlying asset in securitization transactions, followed by claims on central governments and central banks; and
- (v) many surveyed AIs indicated their intention to either expand or commence credit derivative and securitization activities in the future.

CHART 1
Credit derivative positions of all surveyed AIs



The survey revealed market activity was still highly concentrated on a few players, but the level of concentration declined slightly, with the top five AIs accounting for 93% of the aggregate gross positions (in 2005 the top four AIs accounted for 95% of positions). Foreign banks continued to dominate the market with 78% of the aggregate gross positions reported. They were mainly engaged in trading activities.

Details of major findings

Credit derivative transactions

In 2006, credit derivative operations were conducted by 43 AIs, comprising nine local banks and 29 branches and five RLB-sub-subsidiaries of foreign banks. The aggregate amount of gross positions of all surveyed AIs more than doubled to HK\$1,700 billion at the end of October 2006 from HK\$794 billion a year earlier, a rise of 114%. Table 1 provides a breakdown of the positions reported in the past three surveys (see also Chart 1).

TABLE 1

Credit derivative positions of all surveyed AIs³

(in HK\$ billion)

	Buying protection			Selling protection			Total gross positions		
	2006	2005	2004	2006	2005	2004	2006	2005	2004
Trading Book	946	405	212	730	363	188	1,676	768	400
Banking Book	7	8	12	17	18	19	24	26	31
Total	953	413	224	746	381	207	1,700	794	431

³ (i) The reported positions included those executed in Hong Kong, but booked overseas.

(ii) There is an element of double counting in the aggregate gross positions. If the protection buyer and the protection seller of a credit derivative transaction are both surveyed AIs, the same transaction is reported under "buying protection" and "selling protection" respectively.

The aggregate gross positions of local banks' credit derivative activity surged 124% in 2006. Four of the local banks had gross credit derivative positions above 10% of their respective capital base. Apart from a few local banks that used credit derivatives for trading purposes, most took positions in the banking book, mainly for hedging or to improve yields.

The reported credit derivative transactions had a number of key features:

- Type of product : predominantly credit default swaps (97%⁴);
- Type of counterparty : predominantly overseas financial institutions, including mainly banks (81%) and securities companies (14%);
- Type of reference entity : mostly corporates (52%) and sovereigns (30%);
- Location of reference entity : mostly in Hong Kong (12%) and other Asia Pacific countries (for example, South Korea and Australia) (68%); and
- Maturity : mostly medium-term positions (from one to five years) (73%).

Credit derivative positions by type of product

Credit default swaps remained the most common type of credit derivative products used by the surveyed AIs (Table 2 and Chart 2). While other credit derivative products, such as credit spread products and credit-linked notes, showed a downward trend, credit default swaps continued to grow, as they have in all previous surveys.

TABLE 2

Percentage share by type of product

Credit derivative product	All surveyed AIs		
	2006	2005	2004
Credit default swap	97.2%	92.6%	90.7%
Total return swap	1.0%	2.8%	1.8%
Credit spread product	0.1%	0.4%	2.1%
Credit-linked note	1.7%	2.0%	4.6%
Others	0.0%	2.2%	0.9%

CHART 2

Percentage share by type of product



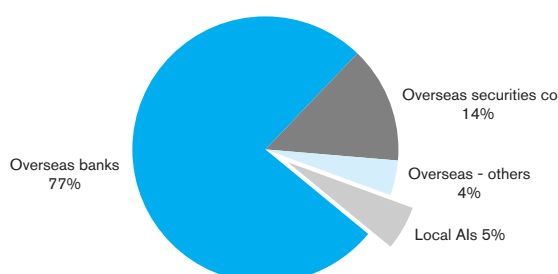
⁴ Figures shown in brackets are percentages of total gross credit derivative positions reported by the surveyed AIs at the end of October 2006.

Credit derivative positions by type of counterparty

Overseas financial institutions, covering mainly banks and securities companies, continued to be the most common type of counterparties reported by the surveyed AIs (Table 3 and Chart 3). The level of credit risk transfer between the banking and insurance sectors remained insignificant (less than 0.05%).

CHART 3

Percentage share by type of counterparty (2006)



Credit derivative positions by type of reference entity

The distribution of reference entities of credit derivative transactions entered into by the surveyed AIs was consistent with that for 2005, spreading over sovereigns, banks and corporates (Table 4 and Chart 4), notwithstanding a moderate shift from banks to corporates.

CHART 4

Percentage share by type of reference entity (2006)

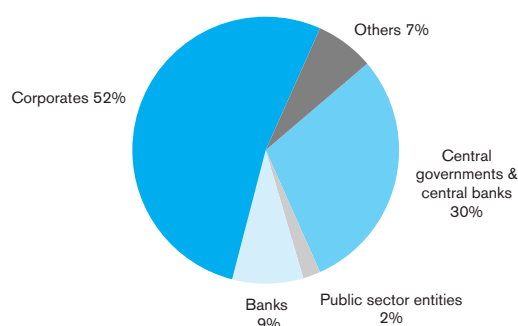


TABLE 3

Percentage share by type of counterparty

Counterparties	All surveyed AIs		
	2006	2005	2004
Local financial institutions	5.4%	2.7%	2.7%
<i>of which</i> AIs in Hong Kong	5.4%	2.5%	2.6%
securities companies	0.0%	0.2%	0.1%
insurance companies	0.0%	0.0%	0.0%
Others	0.2%	0.8%	1.2%
Overseas financial institutions	90.3%	88.5%	89.0%
<i>of which</i> banks	76.1%	75.2%	65.2%
securities companies	14.2%	12.5%	23.2%
insurance companies	0.0%	0.8%	0.6%
Others	4.1%	8.2%	7.1%

TABLE 4

Percentage share by type of reference entity

Type of reference entity	All surveyed AIs		
	2006	2005	2004
Central governments & central banks	29.5%	29.8%	32.1%
Public sector entities	2.1%	3.0%	1.3%
Banks	8.8%	11.9%	15.1%
Corporates	52.4%	51.2%	41.9%
Others	7.2%	4.2%	9.6%

Most of the reference entities (around 80%) were located in the Asia Pacific region, such as South Korea, Hong Kong and Australia, but those located in Europe increased notably (Table 5 and Chart 5).

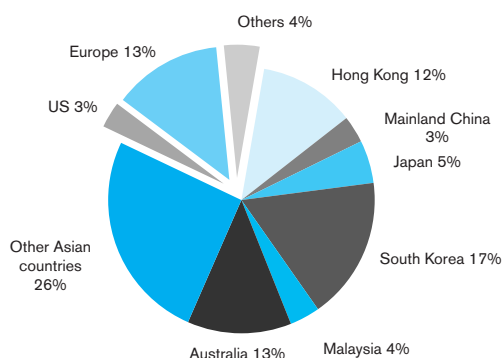
TABLE 5

Percentage share by geographical location of reference entity

Geographical location of reference entity	All surveyed AIs		
	2006	2005	2004
Hong Kong	11.6%	18.3%	23.1%
Mainland China	3.3%	4.8%	8.1%
Japan	5.4%	3.6%	1.1%
South Korea	17.1%	23.7%	31.9%
Malaysia	3.8%	n.a.	n.a.
Australia	12.7%	n.a.	n.a.
Other Asian countries	25.4%	28.3%	27.3%
US	3.3%	1.8%	2.1%
Europe	13.0%	6.4%	2.8%
Others	4.4%	13.1%	3.6%

CHART 5

Percentage share by geographical location of reference entity (2006)



Maturity of outstanding credit derivative positions

In relation to the tenor of outstanding transactions, medium-term positions (from one to five years) became more significant in 2006, whereas long-term positions (over five years) have fluctuated considerably over the past three surveys (Table 6 and Chart 6).

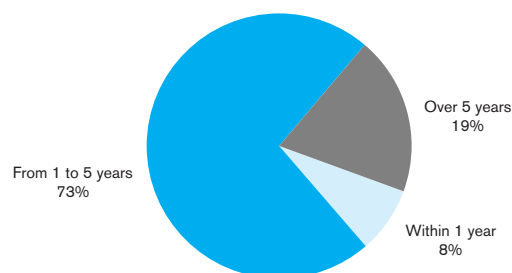
TABLE 6

Percentage share by maturity

Maturity of gross positions	All surveyed AIs		
	2006	2005	2004
Within 1 year	8.1%	4.4%	8.1%
From 1 to 5 years	72.8%	44.7%	57.2%
Over 5 years	19.1%	50.9%	34.7%

CHART 6

Percentage share by maturity (2006)



Securitization transactions

In 2006, 33 AIs participated in the securitization market, either as investing or originating banks, compared with 34 in the 2005 survey. Their aggregate positions amounted to HK\$157 billion,

TABLE 7

Securitization positions of all surveyed AIs⁵ (in HK\$ billion)

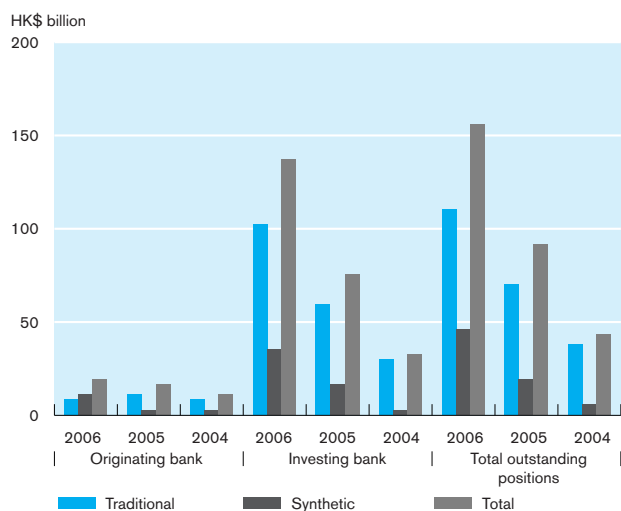
Form of securitization	Originating bank			Investing bank			Total outstanding positions		
	2006	2005	2004	2006	2005	2004	2006	2005	2004
Traditional	8	12	9	102	59	30	110	71	39
Synthetic	11	4	2	36	16	3	47	20	5
Total	19	16	11	138	75	33	157	91	44

⁵ If the originating bank and investing bank of a securitization transaction are both surveyed AIs, the same transaction is reported under "originating bank" and "investing bank" respectively.

74% higher than the HK\$91 billion recorded a year earlier (Table 7 and Chart 7).

CHART 7

Securitization positions of all surveyed AIs



In 2006, 88% of the positions were for investing, compared with 82% the previous year. The number of local banks reporting securitization positions remained at 11 in both 2006 and 2005, but their market share dropped from 73% to 69% due to a reduction in originating activities. Market activity was still concentrated with the top five AIs accounting for 81% of the total positions reported.

TABLE 8

Percentage share by type of underlying asset

Type of underlying asset	All surveyed AIs		
	2006	2005	2004
Claims on central governments and central banks	16.9%	3.3%	0.8%
Claims on public sector entities	2.7%	5.1%	7.4%
Claims on banks	1.2%	1.8%	1.1%
Claims on insurance companies	0.4%	0.5%	0.3%
Claims on securities companies	–	0.1%	0.0%
Claims on corporates	6.5%	5.8%	3.6%
Residential mortgages	47.4%	45.5%	58.3%
Commercial mortgages	2.9%	2.3%	6.7%
Credit card receivables	4.7%	11.2%	4.8%
Other personal lending	2.0%	4.0%	6.5%
Car loans	5.0%	3.5%	1.5%
Taxi and public light bus loans	1.4%	2.8%	6.1%
Non-performing obligations	–	–	–
Others	8.9%	14.1%	2.9%

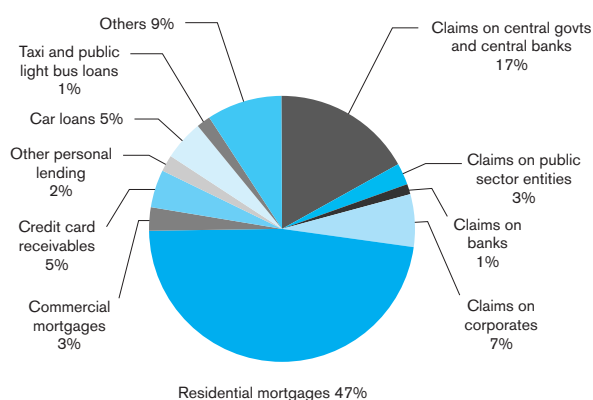
⁶ Synthetic securitizations refer to transactions where credit risk is transferred through the use of credit derivative products such as credit default swaps and credit-linked notes.

Securitization positions by type of product

Of the reported transactions, 70% were traditional securitizations. The share of synthetic securitizations⁶ (30%) continued to increase, from 11% in 2004 and 22% in 2005. Residential mortgage loans remained the most popular type of underlying asset (Table 8 and Chart 8). There were no major changes in the share of different underlying assets, except for a notable decrease in the share of credit card receivables from 11% to 5%, and a surge in claims on central governments and central banks from 3% to 17%.

CHART 8

Percentage share by type of underlying asset (2006)



Investment grade positions constituted 78% of the securitization positions reported in the survey, down from 89% in 2005. Of the unrated positions, no material exposure was reported under ABCP programmes⁷. By the type of interest rate payments, there was an apparent shift from floating rate transactions to fixed rate transactions, which accounted for 53% (0.2% in 2005) of the synthetic securitizations reported and 41% (16% in 2005) of the traditional securitizations.

Future plan for credit derivative and securitization operations

Many surveyed AIs continued to indicate their interest in either expanding or commencing credit derivative operations in the future, mainly for hedging or taking credit exposures in the banking book. A few AIs have plans to commence credit derivative operations in both the banking book and the trading book. A few others have, however, indicated their intention to gradually reduce their credit derivative activity.

Many of the surveyed AIs also expressed an interest in expanding or starting securitization operations in the future as investing or originating banks.

Conclusion

In line with the trend in global credit risk transfer markets, it is expected credit derivative and securitization activities in Hong Kong's banking sector will continue to grow in 2007. And, with the implementation of Basel II in Hong Kong, there may be an incentive for local banks to make more use of credit derivative and securitization transactions, given the expanded recognition of credit risk mitigation and the more favourable capital adequacy treatment for certain securitization transactions (such as investments in highly rated senior tranches) that are available under the revised capital adequacy framework.

With the emergence of new and distinctive products in credit derivative and securitization transactions, the HKMA will continue to monitor developments in the credit risk transfer markets and AIs' participation in them. The aim is to ensure they have the ability to understand and manage properly the risks associated with these activities.

⁷ An ABCP programme is one under which a bankruptcy-remote special purpose entity (SPE) in a securitization transaction issues debt securities with (i) an original maturity of not more than one year and (ii) payments which are secured by a pool of underlying assets acquired from third parties and held by, or to the order of, that SPE.