

# Results of the 2004 survey on credit derivatives and asset securitisation activity

by the Banking Policy Department

The survey results show that participation in the credit derivatives market by all surveyed authorized institutions (AIs) increased considerably in 2004. The AIs' positions in asset securitisation grew at a more moderate rate compared with that in credit derivatives. Local AIs' share in both the credit derivatives and asset securitisation markets continued to increase in 2004, but their overall positions were still not high. While there was clearly a strong growth in these activities in 2004, it remains to be seen whether the local banking sector will continue to increase its credit derivatives and securitisation activities at such a pace in 2005, given that the improving economic conditions may generate more business and lending opportunities. Furthermore, with interest rates trending upward, there may be more uncertainties regarding the risks associated with credit derivatives and securitisation activities that would need to be managed carefully.

## Introduction

In recent years, it has become increasingly common for banks and other financial institutions to use credit derivatives and asset securitisation instruments to transfer credit risks, manage risk concentrations or improve credit availability. Along with the growth in the respective global markets, many AIs in Hong Kong have increased their credit derivatives and asset securitisation activities. Given the sheer complexity of these relatively new instruments, it is important that AIs possess the necessary knowledge and expertise to assess and manage the risks associated with these activities.

As part of its monitoring of AIs' participation in the credit risk transfer market, the HKMA has conducted

surveys on the credit derivatives activity in the banking sector since 1999. Starting from 2002, this has become an annual exercise.<sup>1</sup> In 2003, the coverage of the annual survey was expanded to include asset securitisation transactions with a view to enhancing the monitoring of developments in the credit risk transfer markets and AIs' participation in them. The 2004 survey covered all licensed banks and restricted licensed banks (RLBs) at the end of October 2004.

The survey collected details of transactions on the basis of whether they were executed or booked in Hong Kong. It also sought information from AIs on the purposes of their transactions and future plans for the surveyed activities.

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<sup>1</sup> The respective results of the 2002 and 2003 surveys were published in "Results of the 2002 Survey on Credit Derivatives Activity" and "Results of the 2003 Survey on Credit Derivatives and Asset Securitisation Activity", *HKMA Quarterly Bulletin* (June 2003 and June 2004).

## Major findings

### Credit derivatives positions in Als

A total of 46 Als, comprising 10 local banks, 27 branches and 9 RLB subsidiaries of foreign banks, reported that they had credit derivatives operations. The aggregate amount of gross positions of all surveyed Als increased to HK\$431 billion at the end of October 2004, 88% higher than that of a year ago (HK\$229 billion). Table 1 provides a breakdown of the positions.

The results of the survey reveal that market activity remained highly concentrated, with the top four Als accounting for 92% of the aggregate gross positions. The market continued to be dominated by foreign banks, which constituted 91% of the aggregate gross positions reported. The transactions of the major foreign banks were predominantly for trading purposes.

Ten local banks reported that they had outstanding credit derivatives positions (compared with eight in the 2003 survey). They reported an increase of 179% in their aggregate gross positions (in both the trading book and the banking book) from the positions surveyed in 2003. These results indicate

that the local banks' level of interest and participation in the credit derivatives market had further increased, although their market share was still small. For most of the local banks, the percentage of their gross positions to capital base was generally below 10%. In contrast to the foreign banks, the local banks' participation in the market was primarily in the form of banking book transactions (that is, non-trading) and for yield-enhancement purposes, mainly through the purchase of credit-linked notes.

### Product types of credit derivatives

Credit default swaps continued to be the most common type of instruments used by the surveyed Als (Table 2).

TABLE 2

Percentage share by type of credit derivatives product

Type of credit derivative products	All surveyed Als	
	2004	2003
Credit default swap	90.7%	89.2%
Total return swap	1.8%	1.5%
Credit spread product	2.1%	0.7%
Credit-linked note	4.6%	7.2%
Others	0.9%	1.3%

TABLE 1

Credit derivatives positions of all surveyed Als<sup>2</sup>

(in HK\$ million)

	Buying protection		Selling protection		Total gross positions	
	2004	2003	2004	2003	2004	2003
Trading Book	212,231	104,264	188,357	98,167	400,587	202,431
Banking Book	11,747	10,710	18,807	15,403	30,555	26,113
Total	223,978	114,974	207,164	113,571	431,142	228,544

<sup>2</sup> (i) Because of rounding, the figures in the tables in this article may not add up.

(ii) The reported positions include those executed in Hong Kong but booked overseas.

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

### Maturity of outstanding credit derivatives positions

As shown in Table 3, medium-term positions (that is, one to five years) remained dominant. There was, however, an increase in the proportion of long-term positions (that is, over five years).

TABLE 3

#### Percentage share by maturity

Maturity of gross positions	All surveyed AIs	
	2004	2003
Within 1 year	8.1%	14.7%
From 1 to 5 years	57.2%	72.9%
Over 5 years	34.7%	12.4%

### Reference entities of credit derivatives

The distribution of reference entities of AIs' credit derivatives products was consistent with that in 2003, spreading over sovereigns, banks and corporates (Table 4).

TABLE 4

#### Percentage share by type of reference entity

Type of reference entities	All surveyed AIs	
	2004	2003
Central governments & central banks	32.1%	30.3%
Public sector entities	1.3%	1.1%
Banks	15.1%	17.8%
Corporates	41.9%	41.5%
Others	9.6%	9.2%

Most of the reference entities were located in Hong Kong and Asian countries including South Korea and Mainland China (Table 5).

TABLE 5

#### Percentage share by geographical location of reference entity

Geographical location of reference entities	All surveyed AIs	
	2004	2003
Hong Kong	23.1%	19.1%
Mainland China	8.1%	9.4%
Japan	1.1%	14.9%
South Korea	31.9%	28.3%
Other Asian countries	27.3%	24.3%
Others	8.5%	4.0%

### Counterparties in credit derivatives transactions

Overseas financial institutions including banks, securities companies and insurance companies were the most common type of counterparties of the surveyed AIs (Table 6). As in 2003, the survey results of credit derivatives transactions indicate that cross-sector credit risk transfer mainly occurred between the banking and securities sectors. The level of credit risk transfer between the banking and insurance sectors remained insignificant (only about 1%).

TABLE 6

#### Percentage share by type of counterparty

Type of counterparty	All surveyed AIs	
	2004	2003
AIs in Hong Kong	2.6%	6.5%
Non-AIs in Hong Kong	1.3%	0.6%
<i>of which securities companies</i>	0.1%	0.0%
<i>insurance companies</i>	1.0%	0.0%
<i>others</i>	1.2%	0.6%
Overseas financial institutions	89.0%	86.0%
<i>of which banks</i>	65.2%	53.7%
<i>securities companies</i>	23.2%	30.9%
<i>insurance companies</i>	0.6%	1.4%
Others	7.1%	6.8%

## Securitisation positions in Als

Thirty-one Als reported participation in the securitisation market, either as investing or originating banks. Their positions in aggregate amounted to HK\$44 billion, 11% higher than the HK\$39 billion reported a year ago. Table 7 provides a breakdown of the positions.

On the whole, the surveyed Als were more active in investing than in originating activities. About 74% of the positions were for investing purposes, compared with 63% a year ago. While the number of local banks reporting securitisation positions remained the same as the previous year at 12, their share in the gross positions of all surveyed Als increased from 64% to 75% during the year. The survey reveals that market activity remained concentrated, albeit at a lower level than that in 2003, with the top three Als accounting for 68% of the total positions of the surveyed Als.

### Product types of securitisations

Eighty-nine per cent of the reported securitisation transactions were traditional products and 11% were synthetic securitisations. Residential mortgage loans remained the most popular type of securitised assets (about 58% of the outstanding positions) (Table 8).

Eighty-eight per cent of the securitised products reported in the survey were of investment grade, compared with 94% in 2003.

TABLE 7

### Securitisation positions of all surveyed Als<sup>3</sup>

(in HK\$ million)

Form of securitisation	Originating bank		Investing bank		Total outstanding positions	
	2004	2003	2004	2003	2004	2003
Traditional	8,773	11,262	30,203	21,401	38,976	32,663
Synthetic <sup>4</sup>	2,401	3,214	2,297	3,545	4,698	6,759
Total	11,174	14,475	32,501	24,946	43,674	39,421

<sup>3</sup> If the originating bank and investing bank of a securitisation transaction are both surveyed Als, the same transaction is reported under "originating bank" and "investing bank" respectively.

TABLE 8

### Percentage share by type of underlying asset

Type of underlying assets	All surveyed Als	
	2004	2003
Claims on central governments and central banks	0.8%	0.1%
Claims on public sector entities	7.4%	2.3%
Claims on banks	1.1%	3.7%
Claims on insurance companies	0.3%	0.1%
Claims on securities companies	0.0%	0.0%
Claims on corporates	3.6%	1.9%
Residential mortgages	58.3%	57.0%
Commercial mortgages	6.7%	1.3%
Credit card receivables	4.8%	10.0%
Other personal lending	6.5%	5.2%
Car loans	1.5%	3.4%
Taxi and public light bus loans	6.1%	6.9%
Non-performing obligations	-	-
Others	2.9%	8.1%

### Purpose and future plan on credit derivatives and securitisation operations

As in the 2003 survey, the main purpose of Als' credit derivative operations was to take on credit exposures, but some diversification into the other purposes (that is, hedging, trading and marketing) was also noted. Many of the surveyed Als indicated their interest in either expanding or commencing credit derivatives operations in the future, mainly for hedging or taking credit exposures in the banking book.

The surveyed Als, in particular local banks, were more active in investing than in originating asset securitisations. This reflects that local banks were seeking investment opportunities for yield enhancement or portfolio-diversification purposes. As in the case of credit derivatives, many of the surveyed Als indicated their interest in either expanding or commencing securitisation operations in the future as investing or originating banks.

## Conclusion

The survey results show that local banks' overall activities in credit derivatives and securitisation businesses continued to exhibit strong growth in 2004, although their overall positions were not high. The growth trend in global credit transfer markets is still on the rise, and many of the surveyed Als have indicated their plan to increase or commence their operations in credit derivatives and securitisation activities. However, it remains to be seen whether the local banking sector will continue to expand these activities at such a strong pace in 2005 as in 2004, given that the improving economic conditions may generate more business and lending opportunities.

Furthermore, with interest rates trending upwards, there may be more uncertainties regarding the risks associated with credit derivatives and securitisation activities that would need to be managed carefully.<sup>5</sup> The HKMA will continue to monitor the developments in the credit risk transfer markets and Als' participation in them. The aim is to ensure that Als participating or having plans to participate in the markets are capable of understanding and manage properly the credit and other risks associated with the activities. The HKMA is also drawing up guidelines on the capital adequacy treatment for securitisation exposures as part of the implementation of Basel II in Hong Kong.

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<sup>5</sup> Sources of risks come mainly from the higher credit risk of the reference entities and underlying assets (particularly for those that are interest rate sensitive, such as mortgages, credit card receivables) with interest rate trending upward, which in turn also increases the market risk of the credit derivatives and securitisation activities.