# Results of the 2003 survey on credit derivatives and asset securitisation activity

by the Banking Policy Department

The HKMA's 2003 survey on credit derivatives and asset securitisation activity in the banking sector shows that local banks' participation in the credit derivatives market continues to increase, but their positions are still relatively small. This is similar to their positions in asset securitisations. Activity in both markets is highly concentrated on a few authorized institutions (Als). However, local Als' participation in these credit risk transfer markets is expected to grow further.

# INTRODUCTION

In recent years, the trading of credit derivatives and asset securitisation activities on the international capital markets has expanded significantly, with banks being key participants in these credit risk transfer markets. While credit derivatives and asset securitisation facilitate banks' management and diversification of the credit risk on their loan portfolios, the increasing use of these relatively new instruments may expose banks to higher legal and operational risks and complicate their monitoring of credit risk. It is, therefore, important for the participating banks to have the capacity and knowledge to assess and manage the risks associated with these instruments.

In order to monitor developments in the credit risk transfer markets and the involvement of Als in these activities, 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> The survey conducted in November 2003 was expanded to include asset securitisation transactions to provide a more complete picture of credit risk transfer activities. As in the previous year, the survey covered all licensed banks and restricted licence banks (RLBs), as at end-October 2003.

Details of credit derivatives and asset securitisation transactions were collected on the basis of both executions and booking in Hong Kong. Information was also sought from Als on the purpose of their transactions and their future plans for the surveyed operations.

# **MAJOR FINDINGS**

# **Credit derivatives positions in Als**

A total of 45 Als, comprising eight local banks and 28 branches, and nine RLB subsidiaries of foreign banks, reported that they had credit derivatives operations, the same number as the previous year. The aggregate gross positions of all surveyed Als amounted to HK\$229 billion at end-October 2003, 60% higher than the HK\$143 billion a year earlier. Table 1 provides a breakdown of the positions.

The survey revealed that market activity remained highly concentrated, with the top four Als accounting for more than 85% of the aggregate gross positions. The market continued to be dominated by foreign bank players, which constitute 94% of the aggregate gross positions reported. The transactions of the major foreign bank players were predominantly for trading purposes and most of their positions were not booked in Hong Kong.

<sup>&</sup>lt;sup>1</sup> The results of the 2002 survey are published in "Results of the 2002 Survey on Credit Derivatives Activity", *HKMA Quarterly Bulletin*, June 2003.

#### TABLE 1

	Buying pr	otection	Selling p	rotection	Total gros	s positions
	2003	2002	2003	2002	2003	2002
Trading Book	104,264	67,370	98,167	56,971	202,431	124,341
Banking Book	10,710	5,186	15,403	13,741	26,113	18,928
Total	114,974	72,557	113,571	70,712	228,544	143,269

Credit derivatives positions of all surveyed Als (in HK\$ Mn)<sup>2</sup>

There were eight local banks with outstanding credit derivatives positions (compared with nine in the 2002 survey). They reported an increase of 55% in their aggregate gross positions (in both the trading book and the banking book) compared with the positions surveyed in 2002. These results indicate that the local banks' level of interest and participation in the credit derivatives market has further increased, although their market share is still small. For most of the local banks, the percentage of their gross positions to capital base is generally below 10%. In contrast to the foreign bank players, the local banks' participation in the market is primarily for their banking books (i.e. non-trading) and to improve yields, mainly through the purchase of credit-linked notes.

# Product types of credit derivatives

Credit default swaps and credit-linked notes are still the most common instruments used by the surveyed Als (Table 2).

#### TABLE 2

#### Percentage share by type of credit derivatives product

Credit derivative products	All surveyed Als	
	2003	2002
Credit default swap	89.2%	85.7%
Total return swap	1.5%	0.1%
Credit spread product	0.7%	3.4%
Credit-linked note	7.2%	7.2%
Others	1.3%	3.6%

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

- (ii) The reported positions include those that were executed in Hong Kong but booked in other overseas centres.
- (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

The positions are predominantly medium term, i.e. one to five years, which are consistent with the 2002 results (Table 3).

#### TABLE 3

#### Percentage share by maturity

Maturity of gross positions	All surveyed Als	
	2003	2002
Within 1 year	14.7%	17.8%
From 1 to 5 years	72.9%	75.1%
Over 5 years	12.4%	7.2%

# **Reference entities of credit derivatives**

The distribution of reference entities of Als' credit derivatives products is also consistent with that in 2002, spreading over sovereigns, banks and corporates (Table 4).

#### TABLE 4

#### Percentage share by type of reference entity

Reference entities	All surveyed Als	
	2003	2002
Central governments & central banks	30.3%	33.9%
Public sector entities	1.1%	0.3%
Banks	17.8%	20.9%
Corporates	41.5%	44.1%
Others	9.2%	0.8%

 (iv) Collateralised debt/loan obligations (CDO/CLO) are included as credit derivatives in the 2002 survey, but asset securitisation in 2003 is in line with the BIS definition. Aggregate gross credit derivatives positions adjusted to include CDO/CLO amounted to HK\$231 billion, representing an increase of 62% over 2002. Most of the reference entities are located in Hong Kong and Asian countries, including South Korea, Japan and Mainland China (Table 5). This is similar to the observation in the 2002 survey.

#### TABLE 5

Percentage share by geographical location of reference entity

Geographical locations of reference entities	All surveyed Als	
	2003	2002
Hong Kong	19.1%	20.0%
Mainland China	9.4%	13.1%
Japan	14.9%	2.4%
South Korea	28.3%	32.8%
Other Asian countries	24.3%	28.8%
Others	4.0%	3.0%

# **Counterparties in credit derivatives transactions**

As in 2002, overseas financial institutions, covering banks, insurance companies and securities firms, are the most common type of counterparties to the surveyed Als (Table 6). However, the credit derivatives transactions indicate that cross-sector credit risk transfer mainly occurs between the banking and securities sectors, as transactions with insurance counterparties are immaterial (only about 1.4%).

### **Securitisation positions in Als**

Twenty-eight Als reported participation in the securitisation market, either as investing or originating banks. Their aggregate positions amounted to HK\$39 billion (Table 7).

#### TABLE 6

Percentage share by type of counterparty

Counterparties:	All surveyed Als		
	2003	2002	
Als in Hong Kong	6.5%	5.2%	
Other non-Al counterparties in Hong Kong	0.6%	6.2%	
of which securities firms insurance firms	0.0% 0.0%	5.2% 0.0%	
others	0.6%	1.1%	
Overseas financial institutions	86.0%	85.9%	
of which banks securities firms insurance firms	53.7% 30.9% 1.4%	No such breakdowns	
Others	6.8%	2.8%	

Twelve local banks reported securitisation positions, accounting for 64% of the total gross positions of all surveyed Als. About 63% of the positions are for investing purposes. Similar to the credit derivatives market, the securitisation market is also dominated by a few key players. The top three players accounted for 74% of the total positions of the surveyed Als.

### **Product types of securitisations**

By product types, 83% of the reported securitisation transactions were traditional products and 17% were synthetic securitisations<sup>4</sup>. The most popular securitised assets are residential mortgage loans (about 57% of the outstanding positions) (Table 8).

More than 90% of the securitised products reported in the survey were of investment grade.

#### TABLE 7

#### Securitisation positions of all surveyed Als (in HK\$ Mn)<sup>3</sup>

Form of securitisation	Originating bank	Investing bank	Total outstanding positions
Traditional securitisation	11,262	21,401	32,663
Synthetic securitisation <sup>4</sup>	3,214	3,545	6,759
Total	14,475	24,946	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 "originated bank" and "investing bank" respectively.

<sup>4</sup> Synthetic securitisation refers to transactions where credit risk is transferred through the use of funded and unfunded credit derivatives or guarantees that serve to hedge the credit risk of the portfolio.

#### TABLE 8

Percentage share by type of underlying asset

Underlying asset	All surveyed Als
Claims on central governments and	
central banks	0.1%
Claims on public sector entities	2.3%
Claims on banks	3.7%
Claims on insurance companies	0.1%
Claims on securities companies	0.0%
Claims on corporates	1.9%
Residential mortgages	57.0%
Commercial mortgages	1.3%
Credit card receivables	10.0%
Other personal lending	5.2%
Car loans	3.4%
Taxi and public light bus loans	6.9%
Non-performing obligations	-
Others	8.1%

# Purpose and future plan on credit derivatives and securitisation operations

As in the 2002 survey, the main purpose of Als' credit derivative operations is to take on credit exposures. However, alongside the increase in their market participation, the purpose has slightly diversified into hedging, trading and marketing, instead of solely taking credit risk in the banking book.

The surveyed Als, in particular the local banks, were more active in investing than originating activities so far as asset securitisations are concerned. This is a reflection of the local banks seeking investment opportunities for improving yields or diversifying portfolios. Many surveyed Als have indicated their interest in either expanding or commencing credit derivatives operations in the future, mostly for taking credit exposures in the banking book. Similarly, many Als plan to expand or commence securitisation operations, both as investing or originating banks.

# CONCLUSION

While the survey results show that the participation of local banks in the credit derivatives market continued to increase in 2003, their positions were still relatively small, which was much the same as their positions in securitisations in general. However, in view of the current low interest rate environment and sluggish domestic loan demand, local banks may further increase their exposures to credit derivatives or securitised products for yield enhancement or portfolio diversification purposes. Many of the surveyed Als have already indicated plans to increase, or commence, operations in these activities. The HKMA will continue to monitor developments in the credit risk transfer markets and Als' participation in them. The aim is to ensure that banks participating or having plans to participate in the markets have the ability to understand and manage properly the credit risk and other risks associated with these activities. The HKMA also intends to improve its guidelines on the regulatory treatment for securitisations, especially for those products with complex structures, as part of the implementation of the Basel New Capital Accord in Hong Kong.