Special Report

Global Credit Derivatives Survey: Indices Dominate Growth as Banks' Risk Position Shifts

Financial Institutions
Krishnan Ramadurai
+44 20 7417 3480
krishnan.ramadurai@fitchratings.com

Ian Linnell
+44 20 7417 4344
ian.linnell@fitchratings.com

Sharon Haas
+1 212 908 0362
sharon.haas@fitchratings.com

Insurance
Julie Burke
+1 312 368 3158
julie.burke@fitchratings.com

Financial Guarantors
Thomas Abruzzo
+1 212 908 0793
thomas.abruzzo@fitchratings.com

Credit Policy
James Batterman
+1 212 908 0385
james.batterman@fitchratings.com

Roger Merritt
+1 212 908 0636
roger.merritt@fitchratings.com

Credit Market Research
Eric Rosenthal
+1 212 908 0286
eric.rosenthal@fitchratings.com

Introduction

Fitch Ratings comments on the prospects for continued market growth, key trends, and opportunities and challenges facing the credit derivatives ("CDx") market in the fourth annual update of its "*Global Credit Derivatives Survey*". Fitch's survey found that the notional amount of outstanding credit derivatives contracts rose from USD5.3trn sold at year-end 2004 to nearly USD12.0trn at year-end 2005, an increase of 122%.

Fitch's benchmark survey of the credit derivatives market continues to be unique in that it captures credit derivatives usage and credit flows across geographic regions and specific sectors of the financial community, often operating under separate regulatory umbrellas.

This year's survey sought to focus on those financial institutions globally that play a major role in the credit derivatives market and account for the lion's share of this rapidly growing market. This survey covers 75 financial institutions (49 banks and broker-dealers, 18 insurance companies and reinsurers and eight financial guarantors) versus 120 in last year's survey. While the absolute number of institutions declined year-on-year, the institutions covered this year are believed to represent the major players in the CDx market, leading to results that are generally comparable with those of previous years.

Unique to this year's survey was a series of forward-looking questions. Specifically, for the first time Fitch attempted to gauge expectations regarding growth for the CDx market overall, as well as for specific product areas. Additionally, the survey focused on areas of challenge and opportunity. These forward-looking questions, posed in open-ended form, shed interesting insights into future expectations for the market.

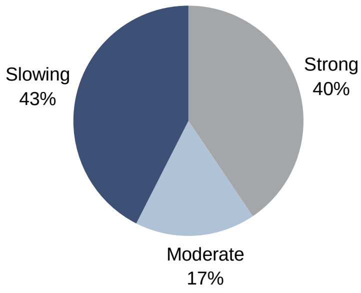
Another new feature involves Fitch disclosing not just the cumulative positions at year-end (year-end 2005 outstanding contracts on a notional amount basis), but also flow numbers representing trades established in 2005 specifically. The 2005 flow figures can be found in the appendix charts and are referred to throughout the report although not all institutions provided this information.

Survey Highlights

Indices drive the market: The credit derivatives market continues to grow rapidly in size and complexity. Driving growth were the indices and index-related products which grew by an astounding 900% and, at USD3.7trn, now constitute 31% of gross sold positions. Single-name credit default swaps ("CDS") grew at a slower pace yet still accounted for half of all gross sold positions.

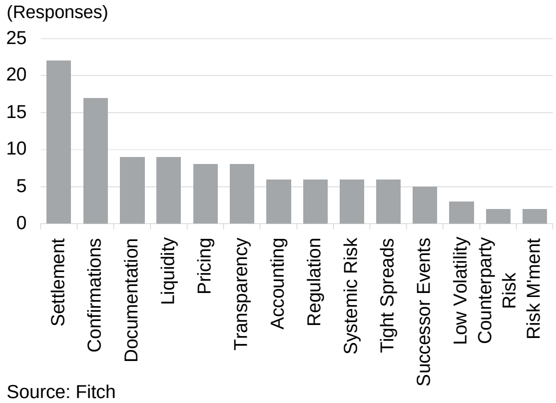
21 September 2006

Credit Derivative Growth – 2006



Source: Fitch

Challenges – 2006



Source: Fitch

- **Forward-looking view**: Continued strong growth in index-related products, and to a lesser extent in asset-backed credit default swaps ("ABCDS") and collateralised debt obligations ("CDOs"), is anticipated. However, there was little consensus on how robustly the market overall is likely to grow, although the vast majority of respondents do expect continued growth. Market concerns focused on settlement following a credit event and the backlog of trade confirmations.

- **Globally, banks begin to take on credit risk in 2005**: While on a cumulative basis, global banks remained net buyers of protection, with a reported net position of USD268bn of protection purchased at year-end 2005, this was down 37%, or USD159bn, from USD427bn recorded at year-end 2004. However, the industry did not move in concert, with many large European banks moving from net protection buyers to flat or even net protection sellers, particularly in the case of several UK/Swiss banks, while North American institutions were generally stable in terms of their net exposure. These results, in Fitch's opinion, indicate the growing importance of trading versus hedging positions plus an increased willingness among European banks to take on credit exposure as a means of revenue diversification in a yield-constrained environment.

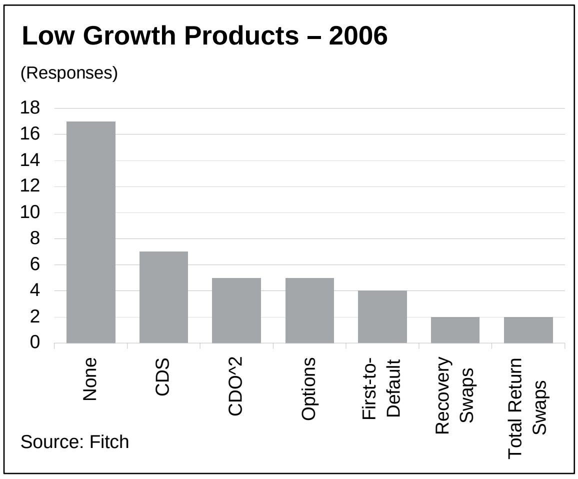
- **Hedge funds/new entrants increase tracking error**: The overall net difference of USD377bn (2004: USD128bn) between protection buyers (banks at USD268bn) and protection sellers (insurance and financial guarantors at USD645bn), was up by 194% and represents institutions not captured by the survey, including hedge funds, pension funds, asset management companies and a select few banks/insurance companies. Hedge funds, in particular, represent at least 20%-30% of CDx activity (reported to be as high as 50%-60% in some recent surveys) and are one of the primary drivers of market growth. Results indicate they may be an important source of protection selling for below investment-grade credits (see *Hedge Funds* on page 8).

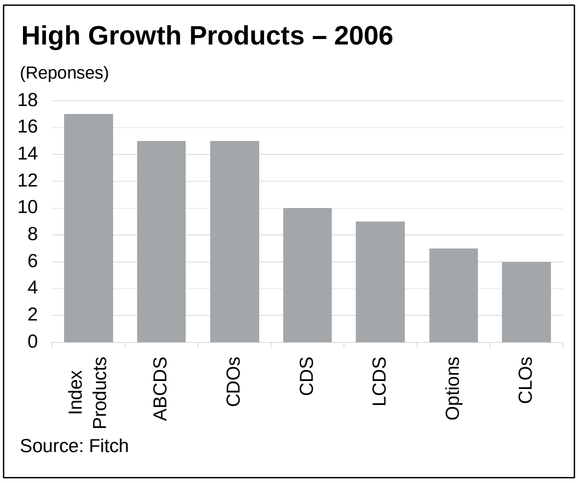
- **ABS CDS growth accelerates**: CDS of structured finance assets reached USD495bn sold, a 140% increase, reflecting standardisation and the success of the ABS CDS indices.

- **Primary motivations for CDx shifting**: The survey identifies banks' market-making activities to be one of the prime motivating factors driving activity in the CDx market. This represents a significant shift from the first global CDx survey, which identified risk mitigation as well as trading to be primary drivers of activity in the CDx market. Insurance companies identified the use of CDx as an alternative investment class and a risk management tool to be the prime motivating factors driving activity in the CDx market.

- **Infrastructure challenges remain**: Fitch's first global CDx survey in 2003 identified operational infrastructure and management information systems ("MIS") capabilities as a key issue. In the face of tremendous growth, the timeliness and quality of the latest responses may indicate the need for continued investment in enterprise-wide infrastructure and management information systems.

- **Down the credit curve**: Demand for higher-yielding investments by hedge funds and others resulted in the growth of speculative grade and unrated exposure to 31% of gross protection sold in 2005, compared with 24% in 2004.





- **Concentrated markets**: Market-making activities for credit derivatives products remain highly concentrated, with the top 15 global banks and broker-dealers responsible for approximately 83% of sold positions at year-end 2005 (2004: 75% of gross sold).

- **Financial guarantors/insurance**: Insurance companies and financial guarantors continued as large net sellers of protection at USD645bn (up 16% on 2004), reflecting the dominant footprint of AIG Financial Products Corp ("AIG") in this market. Excluding AIG, however, global net exposure was relatively stable at USD277bn sold.

- **To hedge or not to hedge**: The adoption of IFRS by a large number of countries has resulted in CDx exposures being marked-to-market (or marked-to-model) as many of these transactions fail to satisfy the stringent hedge accounting standards stipulated. This brings issues of valuation to the fore and may well influence the appetite of institutions to take on more exposures to CDx.

- **Maturity**: There was a healthy growth in the term structure , as tenors ranging from five to 10 years increased from 17% in 2003 to 38% in 2005 (see the chart on page 12).

Market Outlook

As part of the annual survey, Fitch asked institutions to answer several forward-looking questions. Specifically, Fitch attempted to gauge their expectations regarding growth for the CDx market overall, as well as in specific areas, both for those structures expected to grow strongly, as well as those that might stagnate. Fitch also asked which three issues in the market present the greatest challenge. These questions were all posed in open-ended form; Fitch endeavoured to group the responses in some logical fashion as described below.

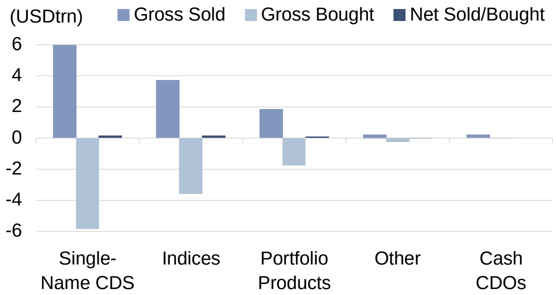
1. No Consensus on Broad Market Growth

Virtually all respondents expect the CDx market as a whole to keep growing, and many expect that growth to be robust. However, a large number of respondents expect growth to moderate or slow from recent levels. Fitch classified a response of an expected growth rate of 25% or less as "slowing", while an expected growth rate of 75% or more was considered "strong." Any response in between these levels was considered "moderate" growth. While under ordinary circumstances 50% growth in any structure would be considered quite strong, in the context of credit derivatives such growth in some instances might only be considered moderate. In any event, the labels given and cut-offs used are arbitrary, but a key point to note is that 43% of all respondents expect the rate of growth for the CDx market to slow considerably, to less than 25%, versus growth of 122% in 2005, according to Fitch's numbers. On the other hand, 40% of the respondents expect continued strong growth in the market. Clearly, there is no consensus on this issue.

2. Structures That May Stagnate

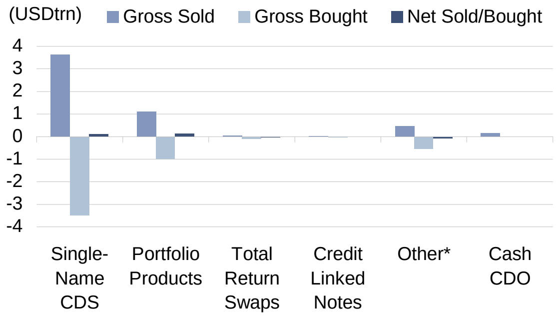
If, according to some, the market is not likely to grow as robustly as in the past, which areas are likely to stagnate? Reflecting the lack of consensus on this issue, the leading response was actually "none", although vanilla CDS, CDO squared transactions and options on CDS were reported to be some of the areas where growth might slow, followed by first-to-default baskets. The first two tables in Appendix 1 describe the results as reported to us, breaking down the responses both geographically and by institution type. Geographically, Fitch did not discern any significant trends, although when viewing the data by institution type it appears that both financial guarantors and insurance companies expect few if

Global Positions by Product – Year End 2005



CDO - Collateralised Debt Obligation CDS - Credit Default Swap
Source: Fitch

Global Positions by Product – Year End 2004



CDO - Collateralised Debt Obligation CDS - Credit Default Swap
* Indices are included in Other
Source: Fitch

any products to stagnate, compared with banks or broker-dealers.

3. Structures Poised for Strong Growth

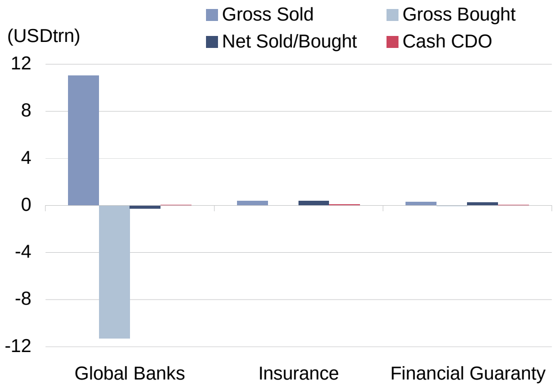
Not surprisingly, respondents named index products more than any other product as the one most likely to grow robustly this year. As reported in this survey, total contracts outstanding on a notional basis at year-end 2005 reached USD3.7trn, second only to single-name CDS. Index products, which allow investors to readily take-on or shed credit exposure to a basket of US, European, Asian, or Emerging Market corporate entities, as well as ABS tranches, exhibited by far the highest growth rate of all structures. Liquidity in many of the indices is probably among the highest of any spread product. Besides index products, a fair number of investors also expect to see growth in some of the newer structures in the market, including asset-backed CDS, and loan-only CDS (for more details, please see the following reports: "*Fitch Examines the Effect of Pay As You Go (CDO and Single-Name) Swaps*", published on 11 November 2005, and "*Loan-Only Credit Default Swaps*", published on 31 May 2006; both are available at www.fitchCDx.com). CDOs were also identified as a possible strong growth area, in particular in Asia. Interestingly, there was a lack of consensus with regard to single-name CDS, with several investors expecting continued high growth in this area, in opposition to others expecting growth in vanilla single-name CDS to slow.

4. Challenges

- **Settlement:** Confirming what Fitch believes to be some of the larger challenges facing the CDx market, namely settlement following a credit event and trade confirmations in general, far and away topped the list as the most worrisome concerns of the market place. Regarding the former, Delphi and Dana highlighted the impact that market technicals related to the settlement of derivatives contracts can have on deliverable pricing when physical settlement is specified, and when the amount of CDx notional outstanding dwarfs the amount of deliverables (See "*Delphi, Credit Derivatives, and Bond Trading Behavior After a Bankruptcy Filing*", published on 28 November 2005 and available on www.fitchCDx.com). The market is attempting to address some of these concerns. For example, the next index protocol (auction) is likely to allow for the cash settlement of single-name CDS, in addition to the cash settlement of index trades for which these auctions were designed. Another issue relating to settlement is standard documentation and market practices. For example, a recent decision by a US District Court Judge in New York ruled that Ambac, the protection seller in this case, was not obligated to pay the protection buyer the stipulated notional amount following Solutia's bankruptcy filing, as the protection buyer failed to produce deliverable obligations in the allotted time. The protection buyer claimed that it was following common industry practices.

- **Confirmations:** Regarding trade confirmations, in September 2005 banking regulators called 14 major broker-dealers in to discuss issues surrounding the backlog of unconfirmed derivatives trades that had been mounting at the time. The UK's Financial Services Authority followed shortly thereafter with its own letter to UK market participants. Earlier this year, the industry responded with a proposal that was welcomed by the regulators. Among other changes, the proposal called for a 70% reduction in the backlog of unconfirmed trades (outstanding for more than 30 days) by 30 June 2006 from those outstanding at 30 September 2005. Furthermore, the dealer proposal calls for the creation of an electronic marketplace, which

Global Positions by Sector – Year End 2005

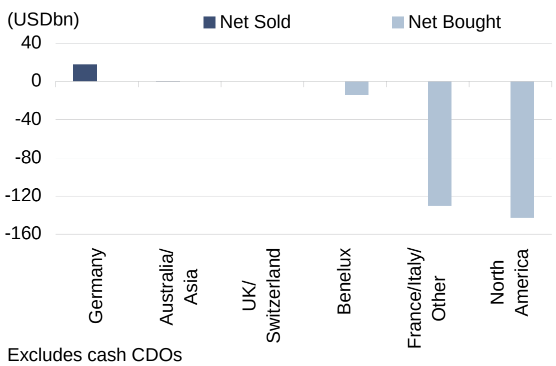


Source: Fitch

would not only allow for the electronic processing of most trades, but would also allow for greater transparency, and possibly for expedited settlement following a credit event. Under this proposal, most dealer clients would be required to use an electronic platform for processing, such as DTCC.

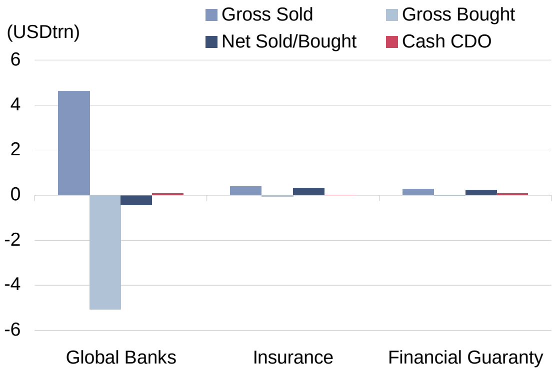
- **Successor events:** A relatively small number of respondents viewed the risk due to successor events (See "*Corporate Restructurings and LBOs Refocus Market on CDS Successor Language*", published on 21 April 2006 and available on www.fitchCDx.com) and the current tight spread/low volatility environment as potentially problematic. While five institutions listed successor issues as a concern, it is likely that many more would have identified this area as a challenge if more surveys were filled out more recently, given some recent activity whereby certain existing CDS contracts may be split between the succeeding corporate entities. Fitch will continue to track and report on these various issues.

Global Banks: Net Position by Region – Year End 2005



Excludes cash CDOs
Source: Fitch

Global Positions by Sector – Year End 2004



Source: Fitch

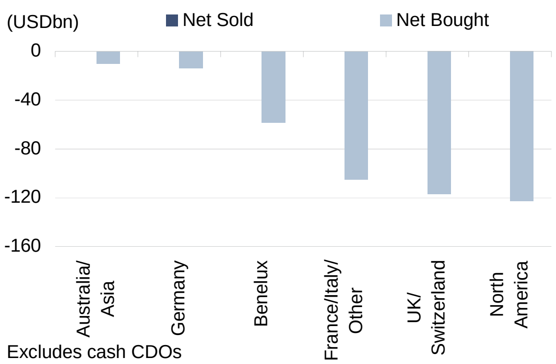
- **Pricing and liquidity:** Remaining significant concerns include market liquidity, which clearly for some structures and names is lacking, for others not, and market transparency. Related to both of these is concern on the part of some respondents related to pricing their portfolios, which can be a difficult task, particularly for very illiquid structures.

Overview of the Survey's Primary Results

Market Growth

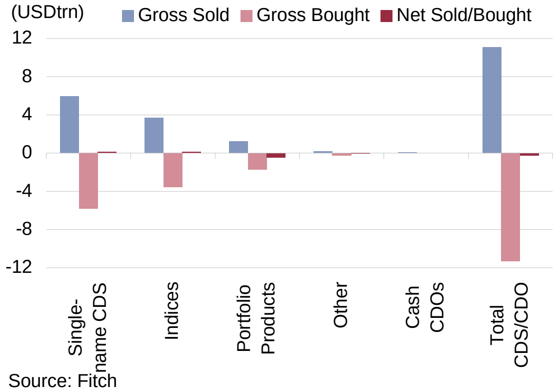
The CDx market continued to grow at a rapid rate, rising 122% yoy in absolute terms among survey respondents. This percentage increase exceeded the 86% and 71% yoy gains experienced in 2004 and 2003, respectively. Globally, Fitch identified USD11.8trn of gross protection sold and USD11.4trn of gross protection bought. Additionally, Fitch calculated USD216bn of cash CDO holdings. The 2005 survey revealed USD5.3trn of gross protection sold and USD5.2trn of gross protection bought, plus USD159bn in cash CDOs as of year-end 2004.

Global Banks: Net Position by Region – Year End 2004



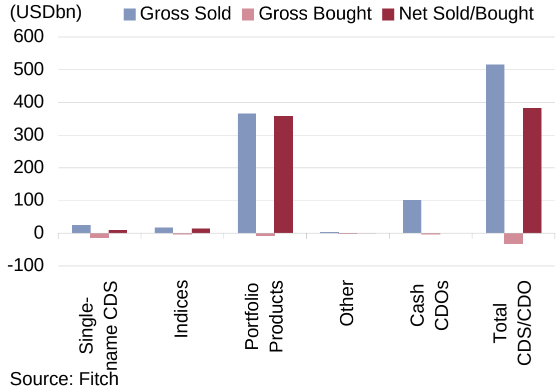
Excludes cash CDOs
Source: Fitch

Global Banks: Positions by Product – Year End 2005



Source: Fitch

Global Insurance: Positions by Product – Year End 2005

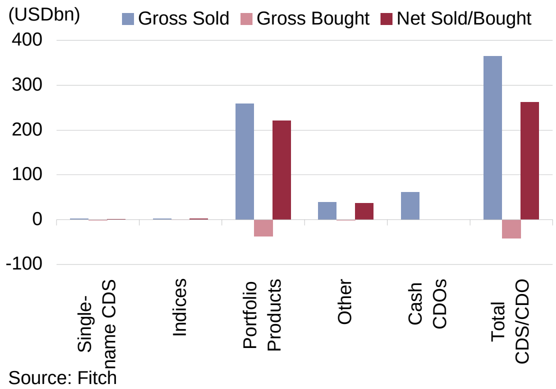


Source: Fitch

Growth in this market has been spurred by the demand for flexible trading and hedging tools, which has fostered the rapid development of indices and tranched products. It has also bolstered investor demand for portfolio diversification and increased yield in a low yield environment. Growth has also been influenced by a range of diverse market participants such as hedge funds, asset managers and pension funds. In this context it is important to highlight the role played by credit-oriented hedge funds in accelerating market development and credit-risk dispersion.

Clearly, in the global CDx market, the amount of bought positions should equal the amount sold. However, the figures give a net sold position of USD377bn at year-end 2005, versus a more modest USD128bn at year-end 2004. This net increase can partially be attributed to Fitch somewhat narrowing the scope of those institutions surveyed, and the fact that hedge funds, asset managers and pension funds who form a significant part of the market were not included in the survey.

Financial Guarantors: Positions by Product – Year End 2005



Source: Fitch

Market Values

Although market values clearly add to a better understanding of risk than outstanding contracts on a notional basis alone, given the inconsistencies and the difficulties in collating and interpreting this data, Fitch has not published any specific market values. Nevertheless, Fitch would like to highlight that the continuing rapid growth in the structured credit market has only increased dependence on model-driven valuations for pricing. Given that the accuracy and consistency of these valuations have yet to be tested in times of crises and may well not reflect realisable market prices, institutions may be understating losses or overstating gains (see "*A Primer on Valuing Synthetic CDOs of Corporates*", published on 26 July 2006 and available on www.fitchCDx.com).

Product Innovation and Mix

While the CDx market overall grew at a rapid rate in 2005, the increase paled in comparison with that experienced by the traded indices. This product started making an impact in 2004 and last year easily accounted for the greatest percentage growth in 2005, which Fitch estimates to be over 900%. In fact, indices and index-related products' exposure tallied USD3.7trn on a gross sold basis at year-end 2005. Even more impressive when looking at the sample of banks who provided trades executed in 2005, specifically; the sold volume for index products approximately matched that of single-name CDS and portfolio products combined, at USD2.6trn. This confirms some of the findings from a Fitch paper published on 10 April 2006 (See "*2005 CDS Market Roundup: A Tale of Uneven Growth?*", available on www.fitchCDx.com), which revealed that index product growth was surpassing that of single-name CDS.

Top 25 Counterparties*

2005	2004	2003	2002
Morgan Stanley	Deutsche Bank	JP Morgan Chase	JP Morgan Chase
Deutsche Bank	Morgan Stanley	Deutsche Bank	Merrill Lynch
Goldman Sachs	Goldman Sachs	Goldman Sachs	Deutsche
JP Morgan Chase	JPMorgan Chase	Morgan Stanley	Morgan Stanley
UBS	UBS	Merrill Lynch	CSFB
Lehman Brothers	Credit Suisse First Boston	Credit Suisse First Boston	Goldman Sachs
Barclays	Lehman Brothers	UBS	UBS
Citigroup	Merrill Lynch	Lehman Brothers	Lehman Brothers
Credit Suisse First Boston	Citigroup	Citigroup	Citigroup
BNP Paribas	Bear Stearns	Bear Stearns	Commerzbank
Merrill Lynch	Barclays	Commerzbank	Toronto Dominion
Bear Stearns	BNP Paribas	BNP Paribas	BNP Paribas
Bank of America	Bank of America	Bank of America	Bank of America
Dresdner	Dresdner Bank	Dresdner Bank	Bear Stearns
ABN Amro	HSBC	ABN Amro	Societe Generale
HSBC	Commerzbank	Societe Generale	Royal Bank of Canada
Societe Generale	Royal Bank of Scotland	AIG	Barclays
Calyon	Societe Generale	Barclays	Dresdner
Royal Bank of Scotland	ABN Amro	Toronto Dominion	Royal Bank of Scotland
AIG	Toronto Dominion	Calyon	ABN AMRO
Commerzbank	Wachovia	HSBC	CIBC
HVB	Calyon	Ambac	Rabobank
IXIS	KfW	CDC IXIS Financial Guaranty	West LB
CIBC	Royal Bank of Canada	KfW	HVB
Royal Bank of Canada	WestLB	Royal Bank of Scotland	AIG

* This is on a count basis (i.e. how many times an institution was cited)
Source: Fitch

With a yoy growth rate of 65% in 2005, and total notional exposure of USD6.0trn, there is no doubt that single-name CDS grew robustly last year. However, over the past few years, this growth rate has been steadily declining, from 100% in 2003, to 88% in 2004, while the use of traded index products has skyrocketed. While single-name CDS still has the greatest notional value outstanding of any credit derivative structure, and remains a very important vehicle, it appears that more and more investors are now taking on and shedding exposure using traded index products rather than single-name CDS, although the latter continued to expand nonetheless. This represents a significant change in the market in a short period of time, and is reflective of the evolution of bank behaviour in the CDx market: from hedging (via single name CDS) to trading (via index products).

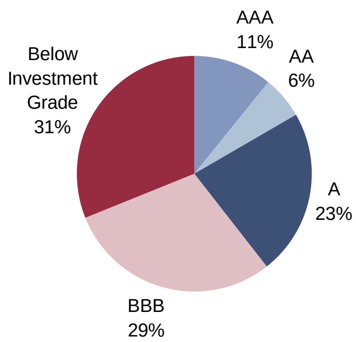
Portfolio products grew at 65% yoy, an increase from the 48% growth tallied in 2004. Although the ‘other’ category declined 54% yoy, this was due mainly to the removal of indices into a separate category. That said, there are a couple of new products that could have more prominent roles in the future. For example, the ISDA recently released a trade template for loan-only CDS (“LCDS”), which allows investors to either go long or short credit exposure to the most senior part of a company’s capital structure. Deliverables are senior syndicated secured loans, as opposed to vanilla CDS, in which deliverables are typically unsecured bonds.

Counterparty Concentration

Once again, there was little change in the degree of concentration with respect to market-making activities, with the top 10 institutions making up 66% of the total exposure on a count basis (down slightly from the 70% seen in 2004). The concentration is even more apparent from a volume standpoint, as the top 10 counterparties represent 86% of the sold and bought volume totals provided (up from 84% in 2004). Morgan Stanley (‘AA-’), Deutsche Bank (‘AA-’), Goldman Sachs (‘AA-’), JPMorgan Chase (‘A+’), and UBS (‘AA+’) were the top five counterparties for the second straight year. In terms of deal count and volume, eight and nine, respectively, of the top 10 counterparties were the same as in 2004. There were four new entrants: AIG, HVB, IXIS, and CIBC, at the lower end of the top 25 counterparty list, replacing Toronto Dominion, Wachovia, KfW, and WestLB, demonstrating that there is still room for new entrants. The concentration of market-making activity within a limited number of banks raises concerns about liquidity being maintained in the event one of these banks exiting the market either for idiosyncratic or exogenous reasons. However, Fitch considers this to be unlikely, given the infrastructure commitment and revenue contribution of the CDx market to these banks, as well as the potential damage to their reputation.

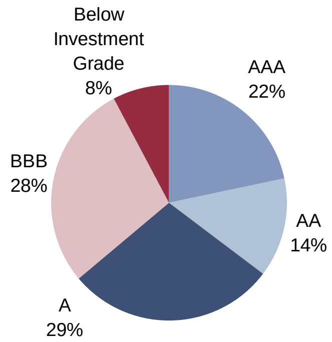
The relative concentration of market makers and counterparties also heightens the potential for

Global Credit Derivatives Exposures by Rating Sold – Year End 2005



Source: Fitch

Global Credit Derivatives Exposures by Rating Sold – Year End 2002



Note: Numbers may not add due to rounding
Source: Fitch

liquidity disruptions across the industry. For example, the market could be susceptible to a sharp unwinding or de-leveraging of positions across multiple firms. The use of common strategies and reliance on untested assumptions within pricing models could exacerbate any instability resulting from a so-called "rush to the exits".

CDOs

Investor demand for portfolio diversification, structural complexity and increased yield in a spread constrained environment were the principal factors driving CDO (cash and synthetic) growth. Growth was up by 58% at USD1.3trn, of which USD1.1trn was synthetic and USD216bn cash (2004: USD826bn, with USD667bn and USD159bn in synthetic and cash CDOs respectively). Given the continuing demand for customised credit exposures, the growth achieved by CDOs as an asset class is expected to be sustained in the years to come.

Unrated Exposures

Year-on-year unrated exposures relating primarily to synthetic portfolio trades grew over threefold in 2005, reaching nearly USD1.6trn. Although precise numbers are not available, it is safe to surmise that a significant portion of unrated exposures relate to true "first loss" positions that tend to be retained by originators, as they are more difficult to place with third-party investors. Dealers often delta hedge the exposures to retained portfolios, which may serve to mitigate the residual risk. Still, it is interesting to note the sharp yoy growth which in part probably relates to growth in the indices. Disruptions in liquidity and/or mark-to-model assumptions could be particularly problematic for these risk layers.

Hedge Funds

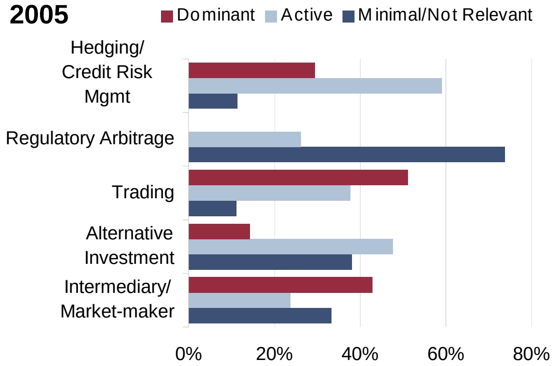
Each year, Fitch's survey specifically seeks to understand how significantly hedge funds are participating in the CDx market, both as drivers of growth and as counterparties to the larger dealer institutions. While in-depth data remains elusive, compared with years past, more firms were able and willing to provide some breakdown of the percentage of CDx trading volume that relates to hedge funds. As might be expected, hedge fund trading in CDx remains concentrated among a small handful of dealers. For the larger and most important dealers, hedge funds typically represent 20%-30% of CDx trading activity on average. However, in some instances, hedge funds conducted nearly 50% of CDx activity. Interestingly, the recent Greenwich Associates' survey revealed hedge funds accounted for as much as 50%-60% of credit derivative trading activity.

Compared with last year, there was no real change in the collateralisation terms or margin requirements, with reported collateral requirements being typically 90% of market values. Of course, the adequacy of these margin requirements will need to be tested during a period of real credit stress and/or market dislocation and may be susceptible to errors in stress testing and valuation assumptions (for more information on the role of hedge funds in the CDx market and credit markets in general see "*Hedge Funds: An Emerging Force in the Global Credit Markets*", published on 18 July 2005 and available at www.fitchCDx.com).

Ratings Quality

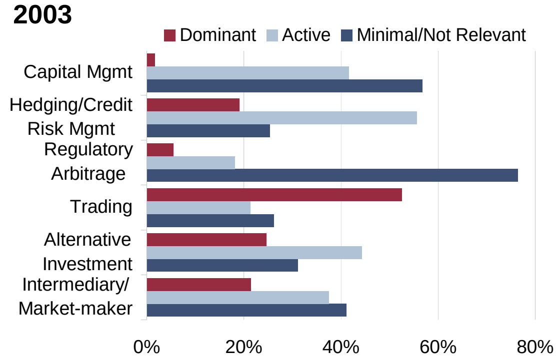
A low default environment coupled with tight spreads pushed investors even farther down the credit curve last year, with speculative grade and unrated exposures representing 31% of the gross notional sold at year-end 2005. Since Fitch began its CDx survey, the speculative grade segment of the CDx market has grown each year, starting at 8% in 2002, and climbing to 18% and 24% in 2003 and 2004, respectively. Along with the shift towards speculative grade and unrated exposures has been an

Global Banks Motivations – Year End 2005



Description of credit derivatives' relative importance in terms of these predefined categories
Source: Fitch

Global Banks Motivations – Year End 2003



Description of credit derivatives' relative importance in terms of these predefined categories
Source: Fitch

offsetting decline in the number of 'AAA' and super-senior rated issues, which fell to 11% at year-end 2005 on a gross notional sold basis from 14% the previous year and from 22% in 2002.

Of interest, during 2005, below investment-grade protection bought was 39% of the total whereas protection sold on non-investment grade credits was 33%. One possibility is that at least some of the net 6%, or roughly USD700bn, represents protection sold by hedge funds and others not captured in the survey.

Additional Survey Findings

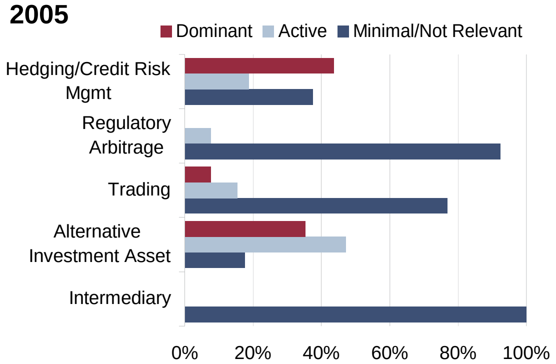
Response Quality

In line with past trends, the quality of survey responses varied by sector and respondent. Given the considerable amount of time and effort being invested in clearing the backlog of trade confirmations, it was surprising to find some institutions still struggling to aggregate CDx information across different business units. Again, the rapid growth of the market, both in terms of volumes and products, was an additional factor impinging on the quality of responses from banks. Nevertheless this may indicate the need for them to continue to invest in back office processes and systems. Not surprisingly, as credit derivative activity is the primary line of business for the financial guarantors, the quality of responses continued to be good and consistent. By contrast, the responses from insurance and reinsurance companies were mixed.

Motivation for Credit Derivatives

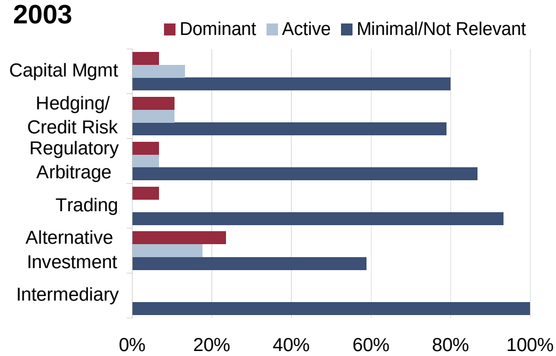
Survey respondents ranked by relevance the motivations for using CDx, including (1) hedging/ credit risk management, (2) regulatory arbitrage, (3) trading, (4) alternative investment asset class, and (5) intermediary/market-maker. The results for the global banking and insurance sections can be found in the graphs above and below, respectively. Of note, the percentage of bank respondents who claimed trading was a dominant or active motivation climbed to 89% from 77% a year earlier. Additionally, 43% (2004: 23%) of global banks also identified their role as intermediary/market-maker as growing in

Global Insurance Motivations – Year End 2005



Description of credit derivatives' relative importance in terms of these predefined categories
Source: Fitch

Global Insurance Motivations – Year End 2003



Description of credit derivatives' relative importance in terms of these predefined categories
Source: Fitch

Top Reference Entities Year End 2005: Gross Sold and Bought Protection by Count*

	Protection Sold	Protection Bought
1.	General Motors/GMAC	General Motors/GMAC
2.	DaimlerChrysler	Ford Motor Corp./Ford Motor Credit Co.
3.	Ford Motor Corp./Ford Motor Credit Co.	DaimlerChrysler
4.	France Telecom	France Telecom
5.	General Electric/GECC	Telecom Italia
6.	Telecom Italia	Volkswagen
7.	Volkswagen	Brazil
8.	Italy	General Electric/GECC
9.	Deutsche Telekom	Italy
10	Brazil	Deutsche Telekom
11.	Russia	United Mexican States
12.	Turkey	Russia
13.	Fannie Mae	Telefonica
14.	AT&T Corp.	AT&T Corp.
15.	France	AIG
16.	Portugal	Philippines
17.	United Mexican States	Turkey
18.	Altria Group	Bank of America
19.	Deutsche Bank	Eastman Kodak
20.	Morgan Stanley	Goldman Sachs
21.	Eastman Kodak	JP Morgan Chase
22.	Freddie Mac	Suez
23.	Gazprom	Time Warner
24.	Germany	BBVA
25.	Japan	Bombardier

* Commonly quoted reference entities, based on frequency of occurrence
Source: Fitch

importance. Perhaps less surprisingly, insurance companies' primary motivation for using CDx was as an alternative investment class.

Reference Entitites

The top five most frequently cited reference entities were nearly identical to last year. General Motors, DaimlerChrysler, Ford Motor, and France Telecom occupied the top four slots on each list. Clearly this primarily reflects the ongoing concerns surrounding the US auto industry. General Electric and Telecom Italia occupied fifth place on the respective sold and bought tables (see count and volume tables listed above). By contrast, Deutsche Telekom, a regular in the top five the previous two years, fell a few places in 2005, while Brazil edged higher on both lists. Greater demand for buying and selling protection on Brazil may reflect the country's large weighting of approximately 22% of the JPM-EMBI (Emerging Markets Bond Index) index. Another possible explanation is the use of Brazilian sovereign CDx as a natural hedge by investors looking to hedge their exposure to Brazilian non-sovereign debt. Other notables moving up included Turkey and United Mexican States. Overall four sovereigns (Brazil, Italy, Russia and Turkey) earned places on the top 10 list compared with three in 2004.

Top Reference Entities Year End 2005: Gross Sold and Bought Protection by Volume*

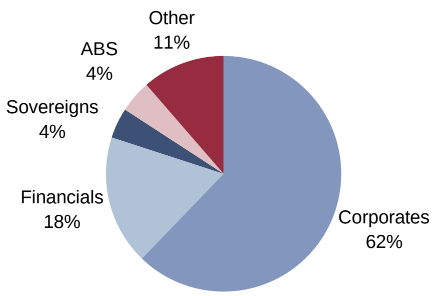
	Protection Sold	Protection Bought
1.	General Motors/GMAC	General Motors/GMAC
2.	Ford Motor Corp./Ford Motor Credit Co.	Ford Motor Corp./Ford Motor Credit Co.
3.	Brazil	Brazil
4.	DaimlerChrysler	DaimlerChrysler
5.	Italy	Italy
6.	France Telecom	General Electric/GECC
7.	Russia	Russia
8.	General Electric/GECC	France Telecom
9.	Turkey	Telecom Italia
10.	United Mexican States	Turkey
11.	Telecom Italia	United Mexican States
12.	Volkswagen	Volkswagen
13.	Deutsche Telekom	Gazprom
14.	AT&T Corp.	AIG
15.	Gazprom	AT&T Corp.
16.	France	Deutsche Telekom
17.	Fannie Mae	France
18.	Hutchison Whampoa	Hutchison Whampoa
19.	Japan	Japan
20.	AIG	Fannie Mae
21.	Spain	Goldman Sachs
22.	British American Tobacco	Boots Group
23.	Portugal	Philippines
24.	Boots Group	JP Morgan Chase
25.	Countrywide	PCCW-HKT Telephone

Excludes Indices
* Based on notional volumes
Source: Fitch

In terms of concentration, the top five reference entities on a sold basis accounted for 18% of the total reference entities cited (up from 15% in 2004) and on a bought basis accounted for 21% of the total reference entities cited (up from 17% in 2004). This increased concentration among the top reference entities is not only confined to the top five names. Comparing the top 20 mentioned bought names only over the past two surveys, Fitch found that those reference entities constituted 41% of the total cited entities in 2005, versus 33% in 2004 (note that the top 20 sold names exhibited the same trend, reaching 38% in 2005, compared with 33% in 2004).

By sector, non-financial corporate instruments comprised 62% of the volume, followed by financial institutions at 18%, others at 11% and sovereigns at 4%. Although ABS CDS represent just 4% of the underlying reference entities, this statistic masks strong underlying growth of 140% in CDS written on structured finance assets, which reached USD495bn in 2005 (2004: USD206bn). This growth was influenced by the introduction of standardised documentation, the launch of new products and expansion of market liquidity.

Global Reference Entity by Type Sold – Year End 2005



Numbers may not add due to rounding
Source: Fitch

Credit Events

2005 saw a significant increase in the number of credit events versus 2004. Two depressed sectors, autos and airlines, accounted for a significant majority of all reported credit events. The US auto sector has been under pressure for the last few years, which not only weighed on the likes of Ford and GM, but also their suppliers, several of which are entirely dependent on them for their business. As noted previously, the bankruptcy of Delphi, an auto supplier, was particularly noteworthy, in that it highlighted the impact that technicals related to the settlement of credit derivatives contracts can have on deliverable (i.e., bonds and loans) pricing following a credit event. The Delphi bankruptcy was preceded by auto supplier Collins & Aikman, and was followed in March 2006 by supplier Dana. Increased competition from low-cost airline carriers and higher fuel prices have been squeezing traditional carriers in the last few years, with Delta and Northwest Airlines finally succumbing last year. Power company Calpine, struggling for years, and retailer Winn Dixie, complete the list of top credit events last year.

The development of an ad hoc auction protocol to deal with credit events suffered by any of the entities within one or more of the traded indices was a significant and positive development in the market, especially considering the explosion in notional value experienced over the last few years, and the finite amount of deliverable securities available. The protocol essentially allows for the cash settlement of the indices or index tranches which are nominally physically settled, thereby relieving pressure from the need to source bonds or loans to deliver. While to date this protocol has been limited to the settlement of index trades, it is expected that the next such protocol will be opened up to allow for the settlement of single-name CDS contracts, which are still the largest part of the credit derivatives market.

Top Credit Events in 2005

Name Sold	Count	Name Bought	Count
Delphi	27	Delphi	21
Calpine	15	Calpine	12
Delta Airlines	14	Northwest Airlines	10
Northwest Airlines	14	Collins & Aikman	9
Collins & Aikman	13	Delta Airlines	9
Winn Dixie	6	Winn Dixie	4

Source: Fitch

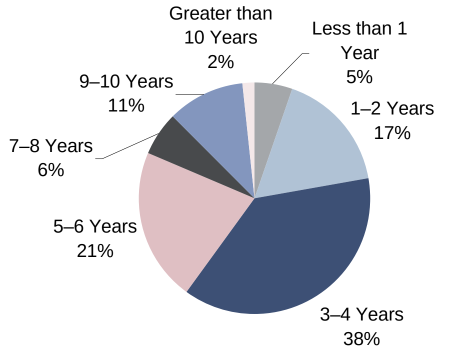
Financial Reporting and Disclosure

As highlighted in the agency's past surveys, the accounting treatment of CDx exposures and related disclosures in annual reports often do not give adequate insight into whether risk has been transferred from the balance sheet of an institution, or indeed assumed via protection selling. Fitch continues to believe that separate disclosures outlining the use of CDx and their impact on the credit risk profile of the reporting bank are essential if readers of annual reports are to understand the use of CDx for credit risk mitigation (see "*Global Credit Derivatives: Risk Management or Risk*", published on 10 March 2003 and available on www.fitchCDx.com).

Fitch's previous surveys highlighted that when CDx are being used for hedging credit risk in the loan book, institutions will struggle to meet requirements to achieve hedge-accounting treatment for CDx transactions even if intended as an economic hedge. This leaves these institutions with no choice but to record an accounting mismatch between the fair value of CDS and the underlying loan exposures reported on an accrual accounting basis. With the recent introduction of loan-only CDS it remains to be seen whether proving and documenting hedge effectiveness for a loan will be easier than is the case with other CDx instruments.

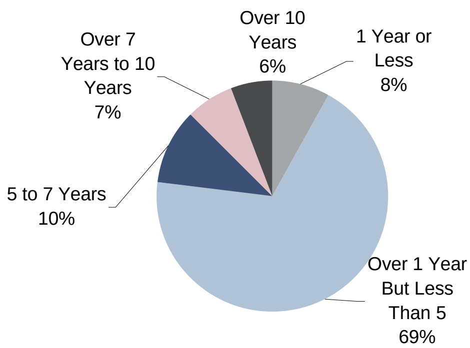
The introduction of a "fair value option" for measuring financial assets and liabilities into accounting standards (in IFRS since March 2004 and in the process of being implemented into US GAAP) enables institutions to report assets such as loans and bonds whose risks are being hedged with CDS at fair value. Fitch is already seeing some European banks making use of this for new loans that are being hedged and, in the agency's opinion, this option will be used by an increasing number of institutions as a way to avoid having to record an accounting mismatch. The underlying loan and the CDS contract will both be marked-to-market, enabling these institutions to lower earnings volatility in reported financial statements.

Global Credit Derivatives Exposures by Tenor Sold – Year End 2005



Source: Fitch

Global Credit Derivatives Exposures by Tenor Sold – Year End 2003



Source: Fitch

Finally, internal models are also the basis of measurement and mark-to-market carrying values, for many CDSs (those not generally traded) in institutions' accounts. Disclosure of assumptions made in calculating these values or "room for error" is poor. That said, standard setters are working at boosting requirements around this for all model-based derivatives values, which Fitch sees as a positive development.

Global Sector Reviews

Global Banking

Globally, banks and broker-dealers reported a 138% increase in gross sold positions to USD11.0trn versus USD4.6trn in 2004. A 123% increase in gross bought positions to USD11.3trn versus USD5.1trn in 2004 was also posted. This effectively represents transfer of USD268bn (2004: USD427bn) of notional credit risk to other institutions by the global banking industry. While banks collectively may be net buyers of protection, the fact that total protection bought by banks was down USD159bn is significant, and highlights the fact that banks use derivatives for other purposes beyond the simple hedging of loan portfolios. The relative increase in gross sold positions was partly a manifestation of the increasing use of credit derivatives by banks as a means of achieving portfolio diversification and enhanced yield. This is further substantiated by the increase in exposures further down the rating spectrum. An additional factor supporting this growth was the increasing use of CDx indices and index-related products (indices exposures constitute 33% of total bank exposures by products at year-end 2005) by all market participants. Feedback from the market indicates that indices have helped to improve liquidity in the market and provide a mechanism by which broad-based credit risk can be hedged and traded.

There were also notable swings in the net sold and bought positions within the banking sector, particularly in Europe, as some of the larger banks shifted from being net protection buyers to net protection sellers or sharply reduced their net protection bought positions. The yoy shift among some of the banks is partly a reflection of the reduced demand for credit protection due to a relatively benign credit environment and the search for yield, which has driven banks to structure credit products with a higher degree of complexity and leverage (CDOs and CDO-squared).

Overall, on a cumulative net basis, the European banks bought USD126bn of protection, North American banks and broker-dealers bought USD142bn of protection, and Australian and Asian banks were roughly in balance, with the amount of protection bought and sold being approximately the same. As illustrated on page 5, this overall picture however, masks differences at the country level within the various regions. One further conclusion reached from the data submitted is that the smaller regional banks continue to use CDx as an additional means of originating credit.

In line with the evolution and the increasing sophistication of the credit derivatives market, the data indicates that banks increasingly tend to trade across the entire ratings spectrum. This move down the credit curve is partially a reflection of investors' demand for more yield in a yield-constrained environment.

Global Insurance

This year's survey focused on the larger insurance industry participants in the CDx market. Therefore, the number of companies surveyed declined. However, the response rate to the survey improved, particularly from Asian/Australian insurers. For these reasons, Fitch believes that the aggregate global insurance results are comparable with those of previous years.

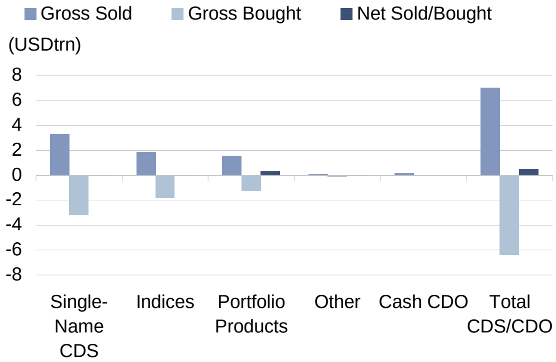
The global insurance/reinsurance sector (excluding financial guarantors) continued as a growing seller of protection, recording an aggregate gross sold position of USD514bn, up 30% from USD397bn in 2004 and USD258bn in 2003. By product, synthetic CDOs represented 71% of the total and cash CDOs made up an additional 20%. In terms of quality, of the total global gross sold position by insurers, 91% was in the super-AAA segment.

However, as in the past, these results are distorted by AIG Financial Products' dominant "footprint" in this market and their focus on synthetic CDOs. Excluding AIG Financial Products, the global insurance/reinsurance global net sold exposures actually fell 71% to USD15bn (USD29bn gross sold), a continuation of a trend started in 2004 and discussed further below. By product, positions were more evenly distributed, with synthetic CDOs at 29%, cash CDO's at 24%, indices at 24% and single-name CDS at 17%. Similarly, the credit profile of the rest of the global industry was more varied, with 'A' representing 33%, 'AA' at 16%, 'BBB' at 15%, equity/unrated at 14%, 'AAA' at 10% and super-'AAA' at only 5%.

Financial Guarantors

The eight financial guaranty companies surveyed had an aggregate of USD365bn gross sold protection outstanding as of year-end 2005 (net position of USD262bn) either in credit derivative form ("CDS", USD303bn) or financial guaranty form on funded CDOs (USD62bn). The USD365bn of credit protection outstanding represents a growth rate of 6% yoy, coming in slightly below last year's growth rate of 7% on an annualised basis based on prior survey results, and is representative of the persistent lower-spread environment that has curtailed new business opportunities. Positively, however, the weighted average rating has remained at 'AA+', while the percentage of 'AAA' exposures has actually increased from 81% for 2004 to 87% in 2005.

North American Positions by Product – Year End 2005



Source: Fitch

Regional Sector Reviews

North American Banks and Broker-Dealers

A handful of banks and securities firms continue to dominate the credit derivatives activity of North American institutions. Thus, as was true for other sectors, Fitch focused its survey this year on only the largest and most active financial institution participants. Among all derivative instruments, as measured by notional amounts outstanding, credit derivatives remain the fastest-growing component of the market. In particular, US banks, which represent a significant portion of the global credit derivatives market, reported USD5.8trn in notional amounts of credit derivatives as of year-end 2005 (per the US Comptroller of the Currency, which derives its information from bank regulatory reports). While this still represents less than 6% of total notional derivative amounts reported by US banks, it has more than doubled compared with the USD2.3trn comparable figure for US banks' notional credit derivatives at year-end 2004. These trends are reflected in Fitch's survey, with the 11 US banks and broker-dealers covered recording a gross sold position of USD6.2trn, up 136% from the 15 US banks and broker-dealers which tallied USD2.6trn in 2004. For US banks, notional credit derivative amounts continued to escalate in early 2006, although not at a uniformly strong pace and a reporting change at one of the major players caused aggregate notional volume for the industry to decline as of Q106.

In North America, the financial institution participants in the credit derivatives market continue to fall into two broad categories – those institutions that primarily purchase protection against their banking book and dealers that carry out huge notional amounts of credit derivatives trading both buying and selling protection, with only a nominal net position in the instrument class. Among the US banks, 99% of credit derivatives volume is carried out by the subset of banks that fall into the latter group of 'dealer banks'. As a result, five banks (JPMorgan Chase, Citibank, Bank of America, Wachovia and HSBC Bank USA) – whose derivatives activities are included within its corporate umbrella and excluded from the North American figures throughout all other sections of this report – house the vast majority of the notional exposure and virtually all of the 'protection sold' volume. The major securities firms and, to a lesser extent, a few major Canadian banks, represent the bulk of the remaining notional volume in North America and have shared in the robust increases in volume. The other US and Canadian banks that use credit derivatives employ them primarily as a risk mitigant against exposures in their banking book. As the market has deepened and broadened, more banks have found credit derivatives to be valuable risk-reduction tools. A look at the one-sided nature of their notional volume, with much lower volume and virtually all of their activity in 'protection bought' category, underscores the limited scope of their activities relative to the dealer banks.

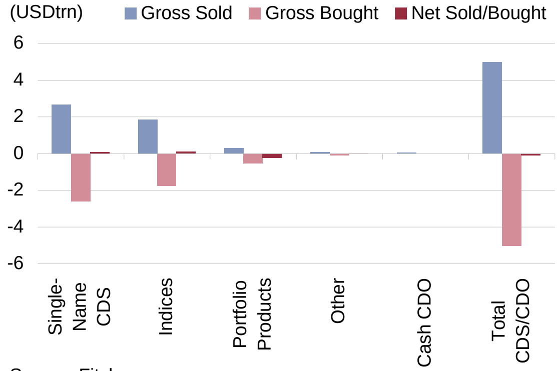
Single-name credit default swaps and the traded indices remain the predominant instrument in this market, although other products are growing quickly. To date, credit losses have been minimal; however, the rapid growth of the credit derivative market has translated into operational stress for the major market participants, so much so that the Federal Reserve and other bank supervisors have held special meetings with the major participants to explore ways to improve the processes behind the trade and settlement of these securities, as discussed previously. While many believe that progress has been made, backlogs still exist in areas such as trade confirmations and continued improvement is clearly necessary.

European, Asian and Other Banks

Fitch has included in its survey all of the major banks and investment banks of western Europe and several prominent banks in Asia and Australia.

The total sold-and-bought notional outstanding CDx position from these banks was USD10.0trn, compared with USD4.4trn in 2004. This represents a 124% increase in exposures and once again underlines the rapid growth in the CDx market. It is Fitch's opinion that such rapid rates of growth

Europe/Asian Positions by Product – Year End 2005

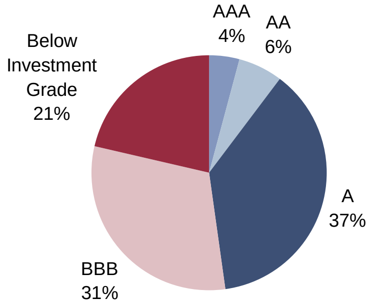


Source: Fitch

cannot be sustained over the medium-term and Fitch expects growth rates to moderate. Single-name CDSs and indices remained the most widely used of these instruments, representing approximately 90% of notional bought-and-sold volumes. The growing importance of indices is reflected in the 36% share of notional bought-and-sold volumes compared with approximately 10% in 2004.

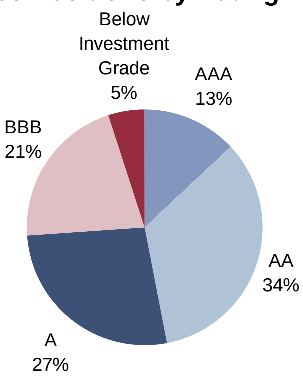
On a consolidated basis, the European and Asian banks continued to use the CDx market to transfer and reduce risk, and this is reflected in their net bought position of USD126bn. However, this was down 59% on the USD304bn figure reported for 2004 due primarily to a number of the large global European banks moving from net buyers to net sellers of protection. Although in previous years a number of European banks have always been net sellers of protection, this change in a number of larger banks has had a disproportionate impact. In addition, on a like-for-like basis, the number of net sellers in 2004 versus 2005 increased by five institutions to 15 (sample of 33). Of the total 38 European and Asian banks covered, 16 were sellers

European Banks as Net Sellers: Credit Derivatives Positions by Rating – Year End 2005



Note: Numbers may not add due to rounding
Source: Fitch

European Banks as Net Sellers: Credit Derivatives Positions by Rating – Year End 2002



Source: Fitch

of protection. Possible explanations for this reduced net protection position include the relative importance in nominal terms of increased trading positions versus credit hedges and the search for revenue diversification in a spread-constrained environment.

This trend is illustrated by the regional breakdown of net CDx positions. For example, on an aggregate basis, the UK and Swiss banks have shifted from being net buyers to net sellers of protection, with this shift triggered primarily by three globally large banks. Germany also has moved from being a net buyer to a net seller of protection due primarily to one large and one medium-sized bank taking on significantly larger net sold positions. That said, by number of institutions, the German banks were actually evenly divided between net sellers and buyers of protection. Landesbank respondents continue to be sellers of protection despite their diminishing attractiveness (ending of state guarantees from July 2005) as CDx counterparties. The French banks continue to be the biggest players in the European CDx market, although on an aggregate basis they remain protection buyers. The limited number of responses from Asian and Australian banks indicates that on an aggregate basis they are sellers of protection. However, given the limited sample size and small exposures, no further conclusions should be drawn.

A total of 14 European banks feature among the top 25 counterparties identified in the 2005 survey; this compares with a similar number in 2004.

North American Insurance and Reinsurance

Since many of the insurance and reinsurance companies surveyed in past studies do not actively participate in the CDx marketplace, Fitch decided to focus this year on the largest CDx players. Fitch received completed survey responses from eight North American companies. These included six life insurers, one non-life insurer and AIG Financial Products, a non-insurance subsidiary of AIG.

AIG Financial Products is a major provider of credit protection on designated portfolios of loans and debt securities. The magnitude of its business dwarfs that of traditional insurance companies. Therefore, the overall North American insurance and reinsurance survey results are dominated by this company.

Fitch focused the questions on areas where insurance companies most often participate in this market. This includes detailed information requests on synthetic and cash CDO holdings. Synthetic CDO investing is the primary CDx activity of US insurance companies, particularly life insurers, and represented 72% of total gross notional sold at year-end 2005. Cash CDOs made up most of the rest at 20%.

While investing in CDOs is considered "selling credit protection" in Fitch's survey, most traditional insurance companies do not think of it in those terms. They think of CDOs as a fixed-income asset category, like corporate bonds, commercial mortgage loans and residential mortgage-backed securities. This view is consistent with past studies. As spreads tighten in the traditional corporate bond market, insurers look for ways to gain additional yield. CDOs have been one of the instruments insurers have added to their portfolios in the tightened spread environment. At year-end 2005, corporate exposure represented 57% of total gross notional sold and asset-backed exposure made up 42%.

Insurers generally invest in the higher-rated senior CDO tranches. This strategy is expected to protect them somewhat during deteriorating credit cycles. Structured securities, including CDOs, have capital charges determined by rating level. Therefore the highly rated tranches require minimal capital allocation.

In the recent survey, super-'AAA' tranches dominated the total gross notional sold exposure at 93% and 'AAA' tranches represented 4%. Equity or unrated tranches comprised only 1% of total gross outstanding sold contracts on a notional amounts basis. These percentages are significantly skewed by the relative size of AIG Financial Products' book, which focuses on the super-'AAA' tranches. Excluding AIG Financial Products, the distribution of total gross outstanding sold contracts on a notional amounts basis sold was super-'AAA' at 9%, 'AAA' at 5%, 'AA' at 5%, 'A' at 26%, 'BBB' at 18%, 'BB-CCC' at 11% and equity/unrated at 26%. For regulatory capital purposes, the 45% of exposure in super-'AAA' down to 'A' tranches would receive the same capital charge of four basis points while the equity tranche would garner a charge of 30%.

US insurance companies are precluded by state regulation from writing unfunded CDSs. Insurers have to replicate a cash position by matching a CDS with a cash instrument, such as US Treasury securities. Capital charges are the same for a replication transaction and for directly holding the bond. Therefore, insurers will write CDSs only when the pricing is more attractive in the derivative market than the cash market. Several large insurers participate in replication transactions.

Interestingly, the risk-based capital formula does not recognise CDSs as a means to offset risk in an existing cash position. Therefore, insurers receive no "credit" in the regulatory capital model for buying credit protection. Some companies do buy risk protection as a means of reducing economic risk despite the lack of regulatory capital credit. Fitch views this practice as a proactive way to manage risk exposures.

Life insurers' allocation to CDO investing has been declining for several years. Reasons for this include an increased focus on this asset class by regulators and rating agencies, as well as accounting changes for some sponsored transactions. Non-life insurance companies have also reduced their exposure to the CDx market as pricing and opportunities improved in their core business. Generally, Fitch believes that North American insurance organisations' appetite to provide credit protection via CDx, including CDOs, will continue to wane, although clearly this will partly depend on spread trends in other asset classes and pricing.

European/Asian Insurance and Reinsurance

As with the North American insurance and reinsurance companies surveyed this year, Fitch found a decreasing involvement by European and Asian insurance and reinsurance companies in the CDx markets. Despite a refocusing of the survey towards those groups which Fitch believed had remained active in these markets, completed surveys were received from only 10 European and Asian insurers/reinsurers. However, the absence of responses from several of the larger groups accounts to some extent for the observed reduction in the recorded total scale of engagement in these markets.

Generally, where involvement has persisted, these European and Asian respondents have indicated that they view this activity as providing an 'alternative investment asset class' rather than for the purpose of engaging in hedging, arbitrage or trading activities. The nominal net sold position totalled USD14bn at year-end 2005, compared with USD34bn at year-end 2004. The majority of the gross sold exposure (67% of the total) was in indices and portfolio products, with cash CDOs and single-name CDSs accounting for a further 16% and 9% respectively. At year-end 2005, corporate exposure represented 69% of total gross notional amounts sold, with exposure to sovereign reference entities accounting for a further 25% of the total.

As regards the ratings of the CDO tranches, the European and Asian insurance and reinsurance companies appear to be much less active in the 'AAA' tranches than the North American respondents, but nevertheless over 83% of the sold positions related to tranches rated 'A' and higher.

Overall, the gross bought position was only 1.9% of the gross sold position of the European/Asian insurance and reinsurance sector, a very different relationship from that recorded at year-end 2004, when the gross bought position was 58% of the gross sold position. Overall, the European and Asian insurers surveyed this year appeared to have reduced very significantly their bought positions, having been large buyers of single-name CDSs and basket product protection.

While the major European reinsurance companies represented an important part of the CDx market's early growth, in recent times several reinsurance groups have significantly reduced their appetite for credit risk, retrenching from the CDx market and allowing their portfolios to run off over time. This appears to have been due to a revised view of the relative attraction presented by alternative investment opportunities versus traditional asset classes. In addition, Fitch believes that the improved pricing environment for insurance risks has continued to drive both insurers and reinsurers to deploy capital into core underwriting activities.

Global Financial Guarantors

In addition to providing information for the purposes of measuring credit derivative market activity, the surveys allow Fitch to assess the monitoring and surveillance capabilities of the financial guarantors. Through this year's and past credit derivative surveys, industry participants have demonstrated sufficient internal risk monitoring capabilities allowing for aggregation of synthetic CDO and funded CDO exposure by vintage, transaction type, ratings, and a variety of other criteria. That said, reporting and surveillance capabilities among financial guarantors differ from company to company, although Fitch does not believe that any deficiencies witnessed in the financial guarantors' financial reporting systems will have any immediate credit implications for any of the companies that are rated. However, as the size of the CDO portfolios grows, Fitch believes financial guarantors will need to build more robust data management systems to help maintain and track their CDO portfolios, particularly as the level of complexity in the CDO market accelerates. In contrast to last year, this analysis focuses mainly on synthetic CDOs and excludes cash-funded CDO exposures except for the totals quoted in the summary section. Although funded CDO exposures make up a sizable portion of the financial guarantors' books, the main theme of Fitch's credit derivatives survey with respect to financial guarantors is their synthetic exposures.

Aggregate industry exposure to synthetic CDOs has grown to USD303bn, which represents 14% of industry gross par in force as of 31 December 2005 (up from 13% of gross par in force from a year earlier). The majority of this exposure, 85%, is in the form of synthetic CDOs that reference corporate and structured finance transactions, of which approximately 52% is due to mature within the next five years. The amount of long-dated synthetic exposures with legal final maturities stretching beyond 20 years has decreased to 8%, or USD23bn (down from 11% or USD30bn during the previous year). Although these exposures have much shorter weighted average expected lives, their long-dated nature can create greater mark-to-market volatility relative to shorter-dated CDS exposure. While a majority of the synthetic CDO portfolios are composed of CDOs, there is a small percentage of ABS and MBS deals that are executed via CDS. The financial guarantors almost exclusively insure pooled exposures due to the diversification and first-loss protection benefits that these instruments provide, while corporate single-name credit default swaps have become virtually nonexistent in the industry, with the exception of some legacy business still present at one financial guarantor. Additionally, much of the gross corporate single-name credit default swap protection sold by the industry participants has been ceded to parties outside of the financial guaranty industry.

One trend that is particularly noteworthy is the increasing participation, albeit moderate for the industry as a whole, of financial guarantors in mezzanine-layered tranches of CDOs. Fitch categorises an exposure as mezzanine if there is any layer or exposure senior to the insured layer, irrespective of the rating. By nature, such transactions are more susceptible to a greater degree of loss given default than traditional insured exposures in which the financial guaranty company insures an exposure from the attachment point up to the top of the capital structure. In addition, participation in such exposures may require financial guarantors to adopt additional surveillance metrics in order to properly track the risks of mezzanine exposures. Of the total industry's synthetic CDO exposure, 21% (or USD63bn) is within mezzanine-layered tranches, which makes up roughly 3% of the industry-wide gross par outstanding. That said, 92% of the mezzanine exposures insured to date have been underwritten at or above the 'AAA' level.

Other issues of significance to the financial guaranty industry that arise from the participation in the credit derivatives market are collateral posting requirements and contract settlement structures. With respect to the former, the guarantors have indicated that virtually all but a few legacy transactions do not have collateral posting requirements and that in the future, new business written will not incorporate collateral posting requirements. Fitch has noticed, however, in a few instances, the presence of early termination triggers embedded in certain credit derivative contracts. In the event that the company is downgraded beyond a certain ratings threshold, these would require a financial guaranty company to settle negative mark-to-market positions up to a predetermined limit and terminate the related contract. These triggers create many of the same liquidity risks that collateral posting requirements create, and in the light of that, Fitch will monitor the extent to which financial guarantors include such triggers in their contracts and assess the potential risk to the business from their ratings triggers in the agency's analysis.

With respect to contract settlement structures, one key difference between credit derivative contracts and traditional financial guaranty insurance contracts is that the former generally requires immediate settlement of the notional amount upon the occurrence of each individual credit event in excess of available subordination, whereas the latter normally requires only that debt service be maintained with the financial guarantor having the option to accelerate principal repayment. As such, on a relative basis, standard credit derivative contracts carry relatively more liquidity risk than traditional financial guaranty insurance policies.

As mentioned earlier, the financial guarantors insure mostly pooled exposures at very high attachment points. This is evidenced by the current ratings breakdown of the industry's aggregate exposure, of which approximately 98% is rated 'A' or better. This year, there are few exposures that have experienced significant deterioration. Of the total industry exposure, 1% is rated 'BBB' or lower, which is approximately the same as last year. At 31 December 2005, the ratings breakdown for the aggregate synthetic CDO exposure was distributed as follows: 'AAA' (94.3%); 'AA' (3.8%); 'A' (0.9%); 'BBB' (0.9%); and below investment grade (0.1%), which translates to a weighted-average credit quality of 'AA+'. Of the reported USD303bn of gross credit default swap exposure, the financial guarantors had ceded 14% to various monoline and multiline reinsurance companies. Reinsurance allows the financial guarantors to share the risk of these transactions with third parties, which gives them the ability to continue underwriting new business in the sector. It is worth noting that two years ago, the guarantors had ceded about 20% of the then current gross exposure outstanding; however, the ceded amount dropped to 14% in 2004 and has remained constant in 2005. This indicates that the financial guarantors have elected to retain a greater percentage of their new business for two years in a row in order to counter the effects of slower new business volume.

Appendix 1: Forward Looking View

Low Growth Products (Number of Responses and % of Total by Region and Globally)

Region		None	CDS	CDO^2	Options	First-to-Default	Recovery Swaps	Total Return Swaps
Europe	Responses	7	4	4	1	2	0	2
	% Europe	35.0	20.0	20.0	5.0	10.0	0.0	10.0
US	Responses	8	3	1	3	2	2	0
	% US	42.1	15.8	5.3	15.8	10.5	10.5	0.0
Asia	Responses	2	0	0	1	0	0	0
	% Asia	66.7	0.0	0.0	33.3	0.0	0.0	0.0
Global	Responses	17	7	5	5	4	2	2
	Total	40.5	16.7	11.9	11.9	9.5	4.8	4.8

Source: Fitch

Low Growth Products (Number of Responses and % of Total by Institution Type)

Institution Type		None	CDS	CDO^2	Options	First-to-Default	Recovery Swaps	Total Return Swaps
Banks	Responses	10	7	5	4	4	1	2
	% Banks	30.3	21.2	15.2	12.1	12.1	3.0	6.1
FG	Responses	2	0	0	0	0	0	0
	% FG	100.0	0.0	0.0	0.0	0.0	0.0	0.0
Insurance	Responses	5	0	0	1	0	1	0
	% Insurance	71.4	0.0	0.0	14.3	0.0	14.3	0.0

Source: Fitch

High Growth Products (Number of Responses and % of Total by Region and Globally)

Region		Index Products	ABCDS	CDOs	CDS	LCDS	Options	CLOs	Index Tranches	Bespoke	Recovery Swaps
Europe	Responses	10	8	6	5	3	3	3	2	1	2
	% Europe	23.3	18.6	14.0	11.6	7.0	7.0	7.0	4.7	2.3	4.7
US	Responses	5	7	4	5	6	4	2	4	3	1
	% US	12.2	17.1	9.8	12.2	14.6	9.8	4.9	9.8	7.3	2.4
Asia	Responses	2	0	5	0	0	0	1	0	0	0
	% Asia	25.0	0.0	62.5	0.0	0.0	0.0	12.5	0.0	0.0	0.0
Global	Responses	17	15	15	10	9	7	6	6	4	3
	% Total	18.5	16.3	16.3	10.9	9.8	7.6	6.5	6.5	4.3	3.3

Source: Fitch

High Growth Products (Number of Responses and % of Total by Institution Type)

Institution Type		Index Products	ABCDS	CDOs	CDS	LCDS	Options	CLOs	Index Tranches	Bespoke	Recovery Swaps
Banks	Responses	13	10	10	7	7	6	3	4	3	3
	% Banks	19.7	15.2	15.2	10.6	10.6	9.1	4.5	6.1	4.5	4.5
FG	Responses	1	3	2	2	0	0	2	0	0	0
	% FG	10.0	30.0	20.0	20.0	0.0	0.0	20.0	0.0	0.0	0.0
Insurance	Responses	3	2	3	1	2	1	1	2	1	0
	% Insurance	18.8	12.5	18.8	6.3	12.5	6.3	6.3	12.5	6.3	0.0

Source:

Challenges (Number of Responses and % of Total by Region and Globally)

Region		Settlement	Confirmations	Documentation	Liquidity	Pricing	Transparency	Accounting	Regulation	Systemic Risk	Tight Spreads	Successor Events	Low Volatility	Counterparty Risk	Risk Management
Europe	Responses	13	6	3	3	3	3	3	4	1	2	4	1	0	0
	% Europe	28.3	13.0	6.5	6.5	6.5	6.5	6.5	8.7	2.2	4.3	8.7	2.2	0.0	0.0
US	Responses	7	9	6	1	4	3	2	2	4	3	0	2	2	1
	% US	15.2	19.6	13.0	2.2	8.7	6.5	4.3	4.3	8.7	6.5	0.0	4.3	4.3	2.2
Asia	Responses	2	2	0	5	1	2	1	0	1	1	1	0	0	1
	% Asia	11.8	11.8	0.0	29.4	5.9	11.8	5.9	0.0	5.9	5.9	5.9	0.0	0.0	5.9
Global	Responses	22	17	9	9	8	8	6	6	6	6	5	3	2	2
	% Total	20.2	15.6	8.3	8.3	7.3	7.3	5.5	5.5	5.5	5.5	4.6	2.8	1.8	1.8

Source: Fitch

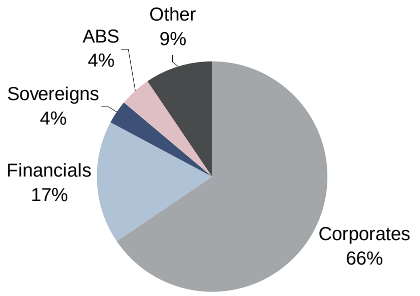
Challenges (Number of Responses and % of Total by Institution Type)

Institution Type		Settlement	Confirmations	Documentation	Liquidity	Pricing	Transparency	Accounting	Regulation	Systemic Risk	Tight Spreads	Successor Events	Low Volatility	Counterparty Risk	Risk Management
Banks	Responses	18	14	3	7	4	5	3	5	2	4	5	3	0	2
	% Banks	24.0	18.7	4.0	9.3	5.3	6.7	4.0	6.7	2.7	5.3	6.7	4.0	0.0	2.7
FG	Responses	1	1	4	0	1	2	1	0	1	1	0	0	1	0
	% FG	7.7	7.7	30.8	0.0	7.7	15.4	7.7	0.0	7.7	7.7	0.0	0.0	7.7	0.0
Insurance	Responses	3	2	2	2	3	1	2	1	3	1	0	0	1	0
	% Insurance	14.3	9.5	9.5	9.5	14.3	4.8	9.5	4.8	14.3	4.8	0.0	0.0	4.8	0.0

Source: Fitch

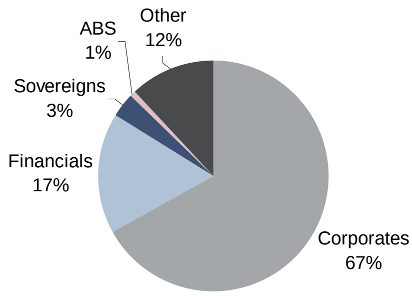
Appendix 2: Flow During 2005

Global Reference Entity by Type Sold During 2005



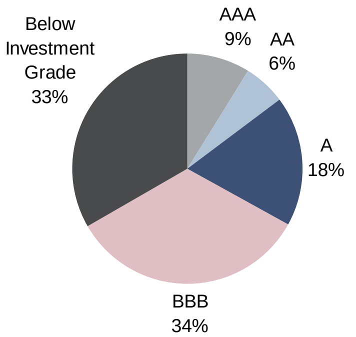
Source: Fitch

Global Reference Entity by Type Bought During 2005



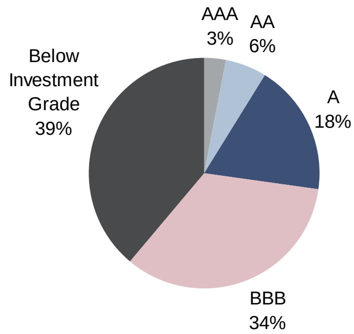
Source: Fitch

Global Credit Derivatives Exposures by Rating Sold During 2005



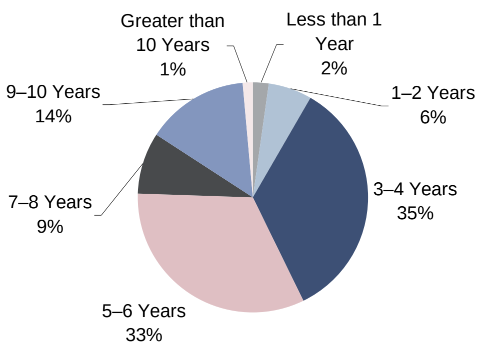
Source: Fitch

Global Credit Derivatives Exposures by Rating Bought During 2005



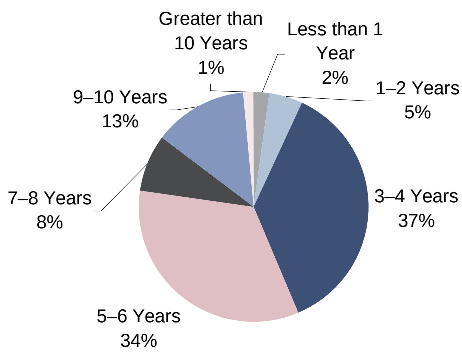
Source: Fitch

Global Credit Derivatives Exposures by Tenor Sold During 2005



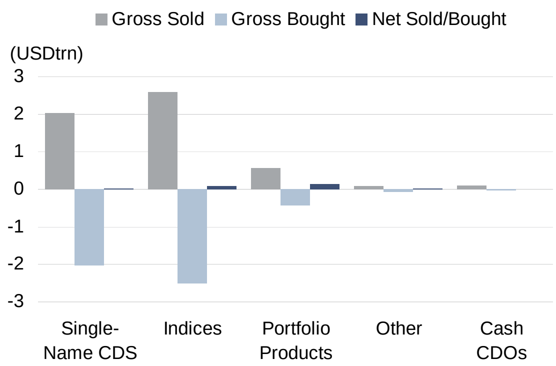
Source: Fitch

Global Credit Derivatives Exposures by Tenor Bought During 2005



Source: Fitch

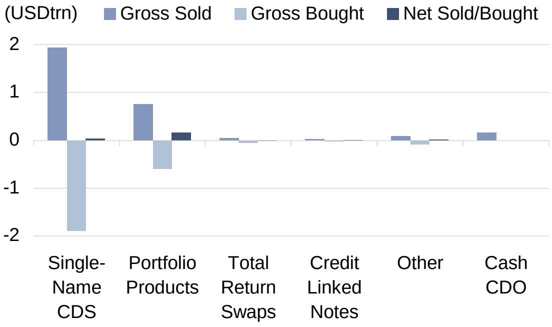
Global Positions by Product During 2005



CDO - Collateralised Debt Obligation CDS - Credit Default Swap
Source: Fitch

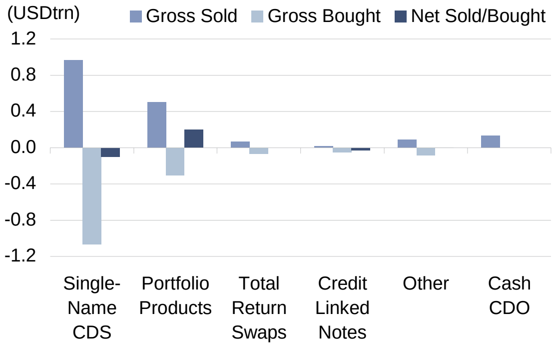
Appendix 3: Year-End Cumulative Totals

Global Positions by Product – Year End 2003



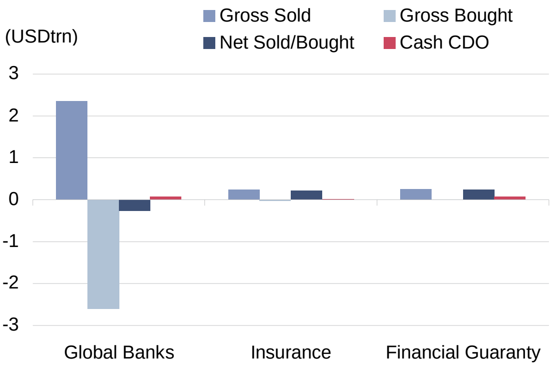
CDO - Collateralised Debt Obligation CDS - Credit Default Swap
Source: Fitch

Global Positions by Product – Year End 2002



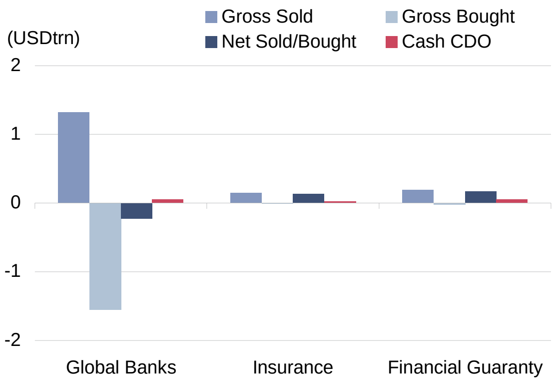
CDO - Collateralised Debt Obligation CDS - Credit Default Swap
Source: Fitch

Global Positions by Sector – Year End 2003



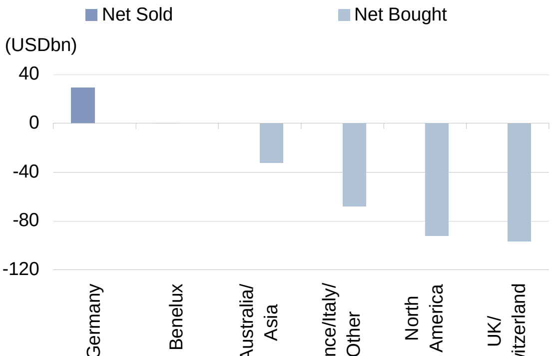
Source: Fitch

Global Positions by Sector – Year End 2002



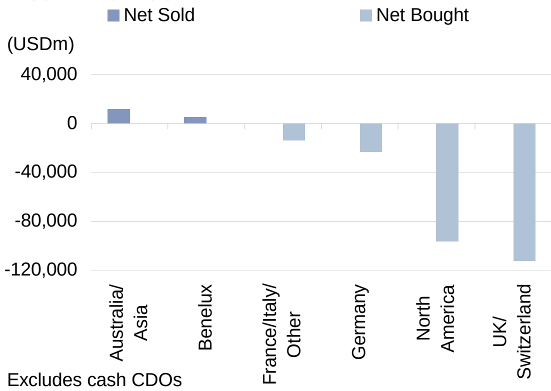
Source: Fitch

Global Banks: Net Position by Region – Year End 2003



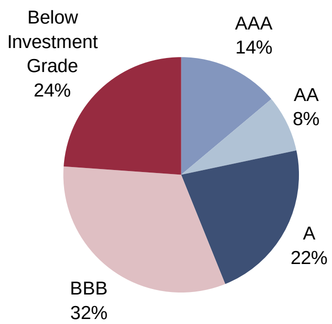
Excludes cash CDOs
Source: Fitch

Global Banks: Net Position by Region – Year End 2002



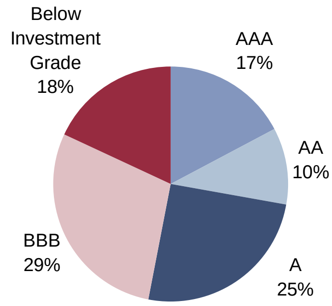
Excludes cash CDOs
Source: Fitch

Global Credit Derivatives Exposures by Rating Sold – Year End 2004



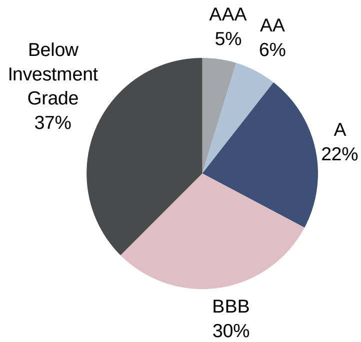
Note: Numbers may not add due to rounding
Source: Fitch

Global Credit Derivatives Exposures by Rating Sold – Year End 2003



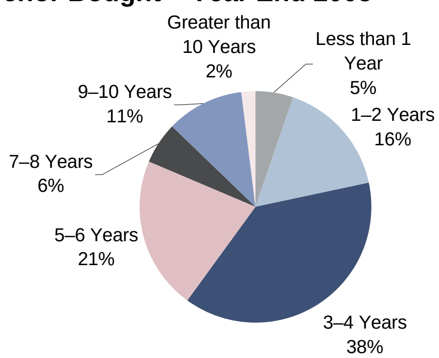
Note: Numbers may not add due to rounding
Source: Fitch

Global Credit Derivatives Exposures by Rating Bought – Year End 2005



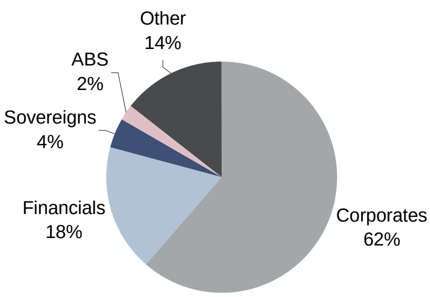
Note: Numbers may not add due to rounding
Source: Fitch

Global Credit Derivatives Exposures by Tenor Bought – Year End 2005



Note: Numbers may not add due to rounding
Source: Fitch

Global Reference Entity by Type Bought – Year End 2005



Source: Fitch

Appendix 4

Survey Respondents

ABN Amro Holding N.V.	KBC Bank
Ambac Assurance Corp.	Landesbank Baden-Württemberg
American International Group, Inc.	Landesbank Hessen-Thüringen
Ameriprise Financial Inc.	Landesbank Rheinland-Pfalz
ANZ Banking Group	Landesbank Sachsen
Asahi Mutual Life Insurance Company	Lehman Brothers Holdings Inc.
Assured Guaranty Corp.	Massachusetts Mutual Life Insurance Co.
AXA SA	MBIA Insurance Corp.
Banco Bilbao Vizcaya Argentaria	Meiji Yasuda Life Insurance Company
Banco Santander Central Hispano	Merrill Lynch & Co., Inc.
Bank of America Corp.	MetLife, Inc.
Bankgesellschaft Berlin	Mitsui Life Insurance Company Limited
Barclays plc	Morgan Stanley
The Bear Stearns Companies Inc.	Munich Reinsurance Company
BNP Paribas	Nippon Life Insurance Company
Caixa Catalunya	Nordea
Caja de Ahorros y Monte de Piedad de Madrid (Caja Madrid)	Northwestern Mutual Life Insurance Company
Calyon Corporate & Investment Bank	Principal Financial Services, Inc.
Chubb Corp.	Rabobank Group
CIFG Guaranty	Radian Asset Assurance Inc.
Citigroup Inc.	Royal Bank of Scotland Group plc
Commerzbank	Royal London Mutual Insurance Society
Credit Suisse Group	Sanpaolo IMI
Deutsche Bank AG	Shinsei Bank, Limited
Deutsche Zentral-Genossenschaftsbank	Sompo Japan Insurance Inc.
Dexia	Sumitomo Mitsui Financial Group, Inc.
Dresdner Bank AG	SunTrust Banks, Inc.
Financial Guaranty Insurance Company	Taiyo Life Insurance Company
Financial Security Assurance Inc.	Teachers Insurance & Annuity Association
Goldman Sachs Group, Inc.	The Bank of Tokyo-Mitsubishi UFJ, Limited
HSBC Holdings plc	The Mitsubishi UFJ Trust & Banking
HSH Nordbank	The Sumitomo Trust and Banking Company, Ltd.
HVB Group	UBS AG
IKB Deutsche Industriebank	UniCredito Italiano
ING Bank NV	Wachovia Corporation
Banca Intesa	Wells Fargo & Company
JPMorgan Chase & Co.	Winterthur Group
	XL Capital Assurance Inc.

Source: Fitch