Credit Market Research

Global Credit Derivatives Survey

Respondents Opine on Public Perceptions, Regulations, Sovereigns, and More

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Related Research

- *Credit Derivatives and Margin: Under the Radar?, Aug. 11, 2010*

Introduction

The rapid growth of the credit derivatives (CDx) market prior to 2007, its absolute size as measured by gross notional amounts, and its perceived role in the current global financial crisis have led to intense scrutiny and much debate among market participants, regulators and policy makers about the need for significant change in market practices and on ways to strengthen regulatory oversight. This year's survey was undertaken in the midst of significant and transformational changes taking place within the CDx market and therefore focuses on some of these key issues in addition to traditional themes such as:

- Surprises and challenges for the CDx market from the perspective of market participants.
- The current state of the market, including key growth trends.
- A brief sector review of banks and insurance companies.

This year's survey, which is the seventh conducted by Fitch, includes 29 banks from 10 countries. Note while these participants are a subset of the total number that comprises this market, the institutions covered represent many of the most significant players and underscore past and current trends.

Survey Highlights

- Regulation in general was one of the most often cited challenges, with commentary ranging from the prospects of dealing with regulatory perceptions of the market to being overregulated on several fronts.
- Ninety-six percent of market participants surveyed agree that central clearing is called for, and most believe it would reduce systemic risk. However, there was less of a consensus among survey respondents as to the desirability of having multiple clearing houses or the exchange trading of CDx.
- Some survey respondents were surprised at the extent to which the market meltdown or negative dynamics were attributed by market observers to the use of CDx.
- Hedging, basis trades, the traded indices, and sovereign strategies were all noted by market participants as those that grew over the last year. On the downside, CDOs and more leveraged structures were mentioned as laggards.
- At year-end 2009, single-name CDS and indices continued to dominate the market; while both products make up more than 90% of the total CDx market, it is notable that on a relative basis the use of indices has fallen for the first time.

- The development of the sovereign CDS market in terms of volumes and general relevance was noted by respondents, with 89% expecting sovereign CDS use to grow in the future.
- The top 10 counterparties comprised 78% of the total exposure in terms of the number of times cited, up from the 67% reported last year, reflecting the dominant role of banks and dealers as counterparties and the consolidation of counterparties post-crisis.
- While the banks surveyed by Fitch saw a decline in both sold and bought positions, they continued to have relatively balanced portfolios in the aggregate. Although some banks shifted from being net protection sellers to net protection buyers, there were no significant movements in the other direction.
- Sixty percent of survey respondents acknowledged the growing importance of the risk management function within banks and the role of the chief risk officer, compared with 40% in the previous year.
- Given the concentrated nature of the CDx market, the continued importance of counterparty risk management was highlighted by 53% of survey respondents. The most recent findings matched the results seen two years earlier.

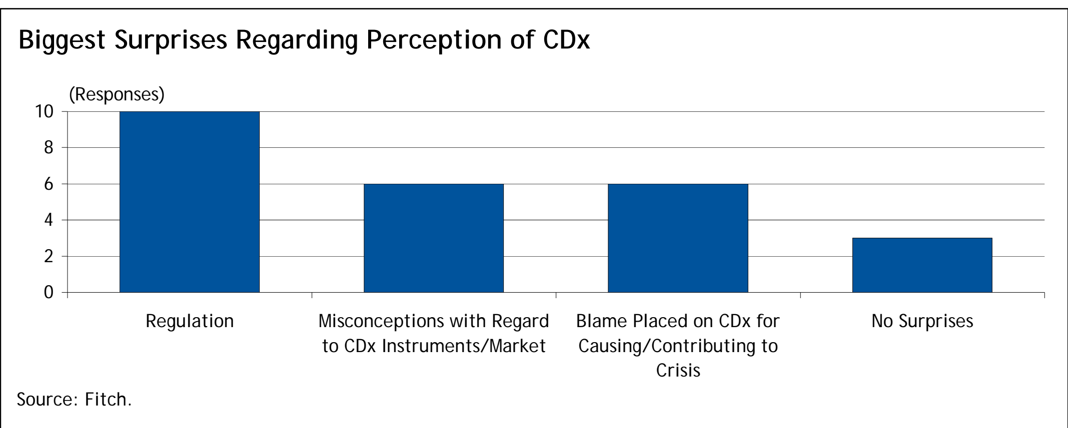
Top Surprises and Related Feedback

In the discussion below Fitch categorizes what market participants reported as some of their biggest surprises last year, weaving in related commentary. Note that the areas discussed below were generally mentioned by multiple survey respondents, but not necessarily a majority, except where stated.

Market Participants' View of the Public's Perceptions of CDx

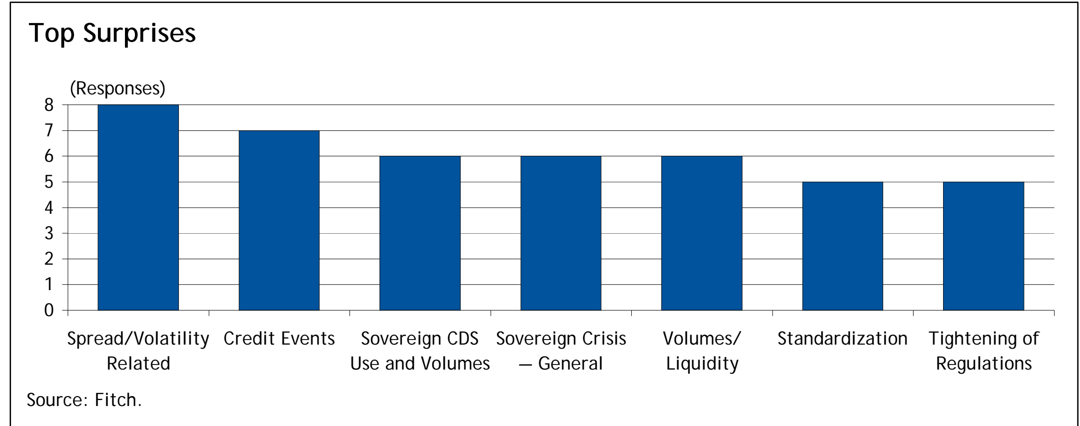
There has been no shortage of commentary regarding CDx from market observers such as politicians, regulators, the media, Internet blogs, and others. Fitch was interested in the reaction of market participants to this steady stream of commentary, specifically as it relates to their view of others' perceptions of the CDS market.

Among the bigger surprises noted by several respondents was the extent of blame attributed to CDx for either causing the market meltdown or otherwise negatively affecting market dynamics, and a seeming lack of understanding of the role/mechanics of CDS in general. One respondent commented on the apparent lack of distinction between structured finance products (e.g. RMBS securities) and CDS. Also noted were misconceptions regarding the impact of CDS price action on sovereign cash market spreads, as well as comments regarding George Soros' characterization of naked CDS



Source: Fitch.

positions as "toxic." That said, some market participants themselves did say that the use of credit derivatives did affect volatility — see below.



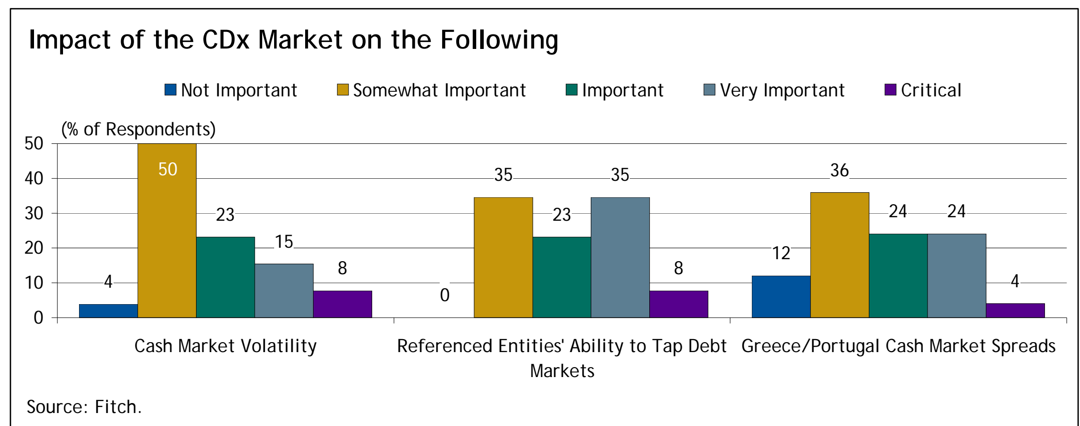
Source: Fitch.

Receiving several mentions in this category were surprises related to the perceptions of regulators. One positive response concerned the effort regulators were making to understand the CDx market despite the "superficial" public discourse. Other comments were wide-ranging, from those related to Basel II reforms, to calls for a central clearinghouse/exchange.

Sovereigns and Spread Volatility Generically

Of all surprises related to the past year's events, those related to sovereigns were among the most prominent. In particular, the growth of the sovereign CDS market in terms of volumes and general relevance was noted by a number of respondents. Other responses pointed to the sovereign crisis in a general sense, but without a specific tie-in to CDS. Beyond sovereign trading action, comments related to spread action in general garnered the most number of responses as being surprising, ranging from volatility that was greater than expected, to shifts in the basis between CDS and cash instruments, to the spread rally that followed the depths of the credit crisis.

Very much related to this theme, Fitch asked market participants specifically what the impact of CDS has been on the broader marketplace. While some survey respondents noted that various market observers have blamed CDS for exacerbating or significantly contributing to the recent credit crisis, what is the view of market participants themselves? As can be seen below, while respondents were largely split, just under half



Source: Fitch.

of all respondents did think that the impact of CDx on cash market volatility was at least "Important," with 23% viewing the impact as either "Very Important" or "Critical."

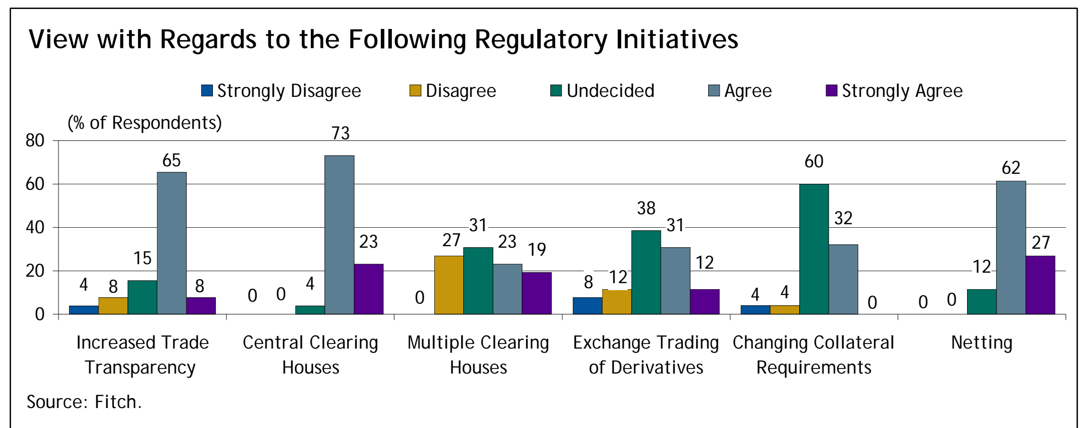
Given the increased volatility surrounding certain sovereigns at the time the survey was distributed, most notably Greece and Portugal, Fitch was curious as to the market's perception of the extent to which CDS trading was influencing cash market spreads for those specific sovereign names. The response in this case was marginally stronger, with a slight majority classifying the impact as at least "Important" with 28% viewing the impact as either "Very Important" or "Critical."

With regard to the impact of CDx trading (generically) on the ability of reference entities' ability to tap the debt markets, a significant majority believed that CDx trading could indeed influence market access, with 43% classifying the impact as "Very Important" or "Critical."

Regulatory Front

The credit meltdown prompted a call for regulatory action, and CDx were frequently under scrutiny with regard to transparency and counterparty/systemic risk. Some market participants noted that the degree of political pressure being exerted, the mandatory use of a central counterparty/exchange, and the movement to restrict trading in CDS were at least somewhat surprising.

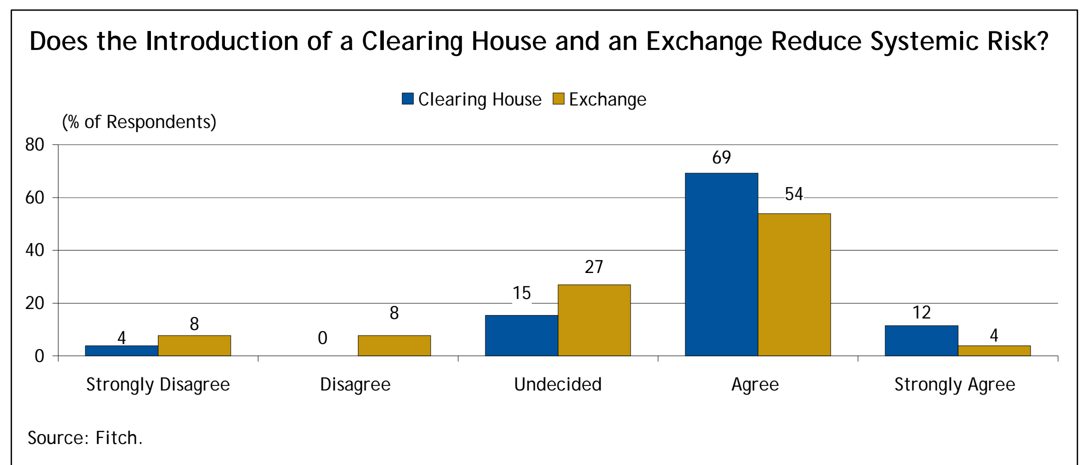
While transparency has improved following the release of Depository Trust & Clearing Corporation (DTCC) volume data, it is still generally not comparable to that of the corporate bond market, for example. The need for improved transparency was again confirmed by a significant majority of survey participants, with 73% stating that they either agree or strongly agree that transparency should be improved further.



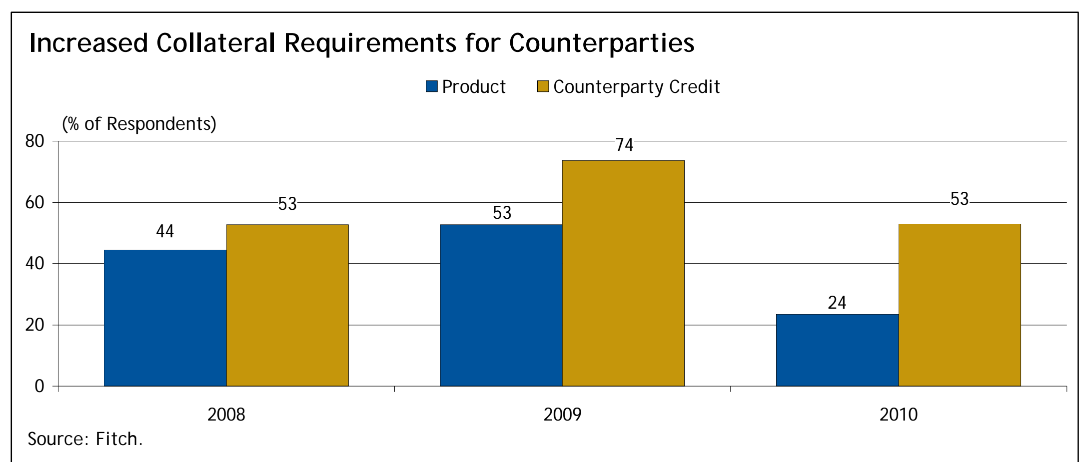
Source: Fitch.

The interconnected nature of the global financial system became very apparent during the credit crisis, highlighting counterparty risk faced by market participants broadly. The move to central clearing of CDx represents one of the more significant regulatory initiatives aimed at reducing systemic risk. Virtually all market participants surveyed (96%) either agree or strongly agree that central clearing is needed. A central counterparty clearing house (CCP) has the advantage of reducing counterparty risk from individual dealers and end-users and mitigating systemic risk through the application of multilateral netting.

The above notwithstanding, there was less agreement among survey respondents as to the desirability of having multiple clearing houses or exchange trading of CDx. The majority of respondents were undecided or against these two possibilities, although a significant minority of responses were in favor. These results were generally confirmed by a specific question as to whether a clearing house or exchange reduces systemic risk, to which 81% and 58%, respectively, either agreed or strongly agreed that the introduction of one of these would help in this regard. It is interesting to note that while a small majority of survey respondents (53%) took steps to strengthen their counterparty risk management in general, this is a decrease from last year, when 74% of participants responded affirmatively. Further, only 24% of respondents indicated the need to make further improvements to their operational infrastructure, down from the previous CDx surveys.



Collateral posting requirements are another area that has been and will be gaining scrutiny. Since collateral represents security held to protect against non-performance on the part of the counterparty, the greater the amount of collateral held, the relatively more protected is the other counterparty. Respondents reported that collateral requirements, which were increased across the board in the previous year, were maintained. While the amount of collateral required to be posted has generally increased over the past few years given market volatility (although this is not necessarily without consequences — see Related Research on page 1), the majority



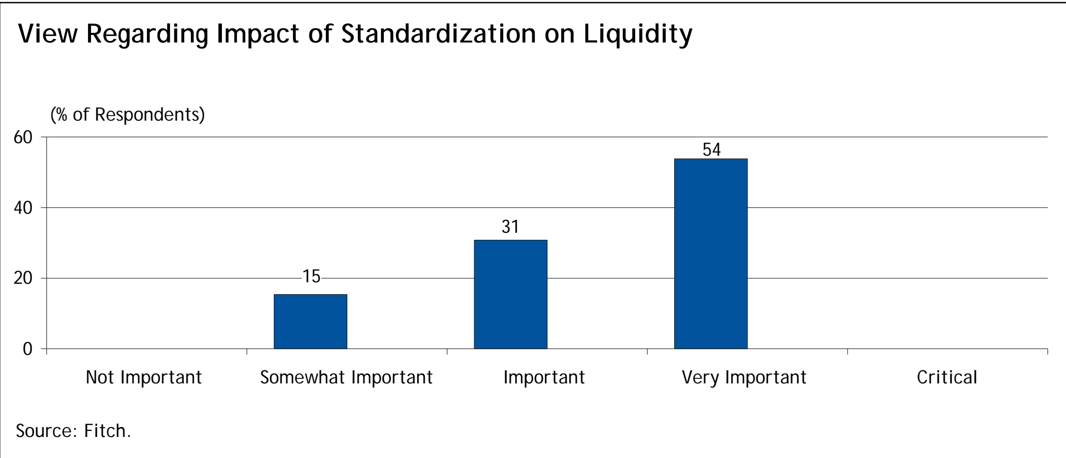
(60%) of survey respondents were undecided as to whether changing margin requirements further is advisable, with the balance tilted slightly toward "Agree."

Finally, one other area aimed at reducing risk is that of netting positions. Netting, in effect, compresses multiple offsetting trades, thereby simplifying trading books; while this does not change the underlying economics of the trades in the aggregate, it does simplify matters operationally, and aids in reducing systemic risk. Market participants were overwhelmingly (88%) in favor of the use of netting, with the balance being undecided.

Standardization

Last year a significant initiative was contract standardization, including the so-called "Big Bang" implementation of the new Standard North American Contract (SNAC), which among other things, fixed CDS coupons at either 100 or 500 basis points, eliminated restructuring as a credit event, hardwired cash settlement through an auction process should a credit event occur, and called for a market standard for determining credit events. Several participants noted surprise with regard to the ease with which the market adopted the new standard following the rollout, with a few others commenting as to specific language/term changes called for by the new standard contracts. The vast majority (85%) of market participants viewed contract standardization as having either an important or very important impact on liquidity.

View Regarding Impact of Standardization on Liquidity



Source: Fitch.

Liquidity Issues

Liquidity issues were noted by a number of survey participants, with comments mentioning how solid it was for certain indices, while liquidity for certain single-name entities, including various high yield names and CDS on structured finance, lagged. These findings are also echoed by survey respondents who were surprised by the availability of liquidity for sovereign CDS.

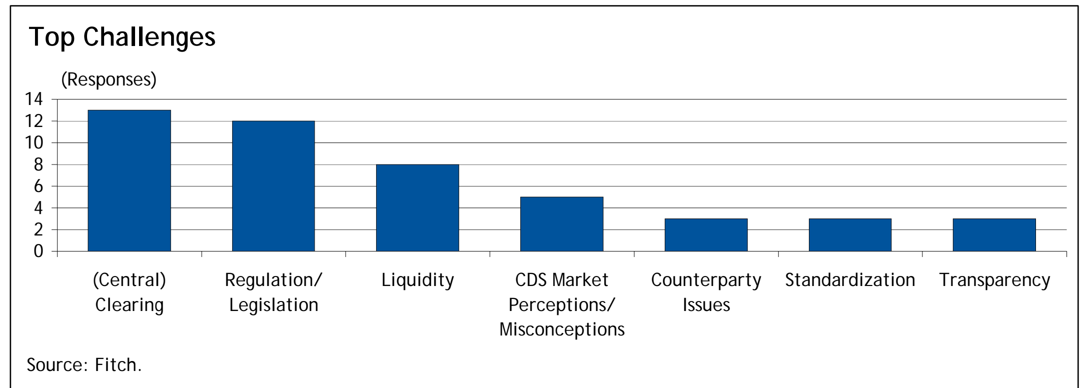
Credit Events

Credit events also received a significant number of mentions by respondents as having some surprising outcomes, although this was typically very entity-specific.

Top Challenges for the Credit Derivatives Market

Fitch also asked market participants what they perceived to be the top challenges going forward, and has categorized these responses as shown in the accompanying chart. Most responses were not that detailed, but the rationale for their mention seems obvious given all the attention being paid to the various areas discussed previously.

Regulation was one of the most often cited challenge, with respondent commentary ranging from the challenges of dealing with regulatory perceptions of the market, to the prospect of being overregulated, with one respondent expressing concern over a potentially damaging regulatory "overshoot" that could damage market liquidity. Yet another concern of potential overregulation dealt with increased capital requirements.



Source: Fitch.

There can be significant overlap with other responses, which were categorized as shown above. For example, the move to a central clearinghouse prompted numerous respondents to identify clearing in general, and central clearing in particular, as one of the top challenges going forward. Although the industry has certainly made progress in this regard, a number of issues need to be addressed and range from having multiple CCPs clear a single asset class, the concentration of risk within CCPs, initial and variation margin requirements. While a single global CCP would appear to be the most effective way of mitigating counterparty risk, given jurisdictional constraints and competing national economic interests, it is difficult to envisage the creation of a single entity. The use of multiple CCPs will require a high degree of coordination between regulators and the establishment of sound risk management and interoperability standards within CCPs.

General market liquidity was cited by some as being a challenge going forward, along with market transparency, as were concerns over various constituencies' perceptions (or perhaps misconceptions) regarding CDx. Contract standardization was also cited as a challenge by a few participants, as this might limit the ability of some participants to hedge in an efficient manner.

A number of other challenges, which could not be so neatly be categorized, were cited by survey respondents. These included comments regarding hedge accounting, credit line availability, dealing with a possible sovereign restructuring event, and others.

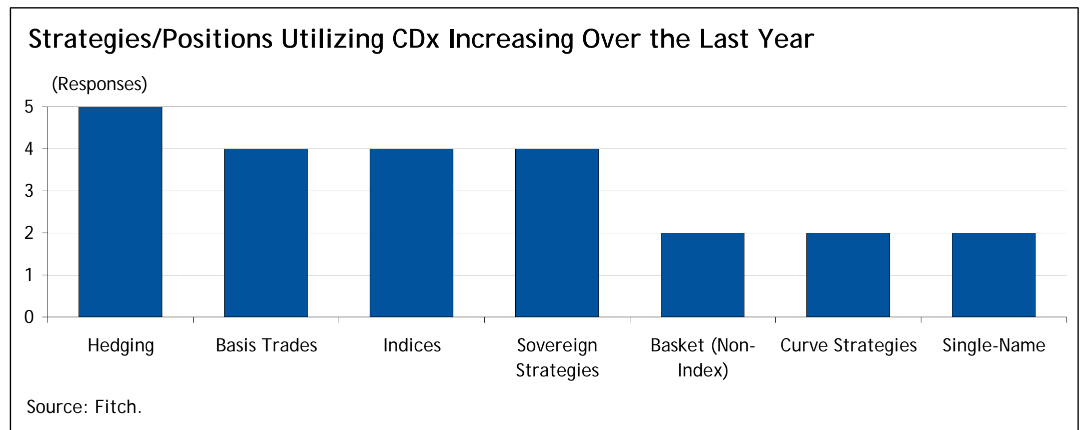
Strategies and Structures Expected to Increase or Decrease

Strategies

Fitch also queried market participants on which strategies increased or decreased over the past year. On the upside, a fair number of respondents noted that the use of negative basis trades increased as market participants attempted to capture the difference in trading levels between the two. This is not surprising given the number of entities that evidenced a negative basis during the most recent crisis (i.e. where the adjusted cash market spread is trading at a wider level than a CDS on the same underlying entity of a similar tenor). Hedging generically was mentioned by a number of market participants as increasing over the past year, while the use of sovereign CDS has been on the rise, as noted previously, and several market participants expect this

trend to continue. The use of indices (and macro strategies) was another area cited by several market participants as likely to grow. On the downside, no clear trend emerged, with various participants indicating structures and strategies employing loan CDS, municipal CDS, tranches, and more leveraged structures in general, as well as others, as losing favor.

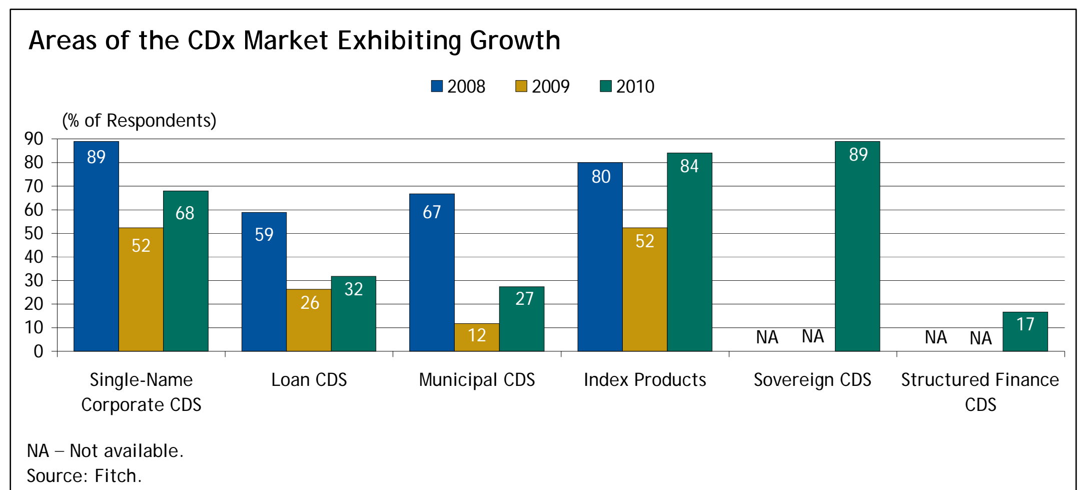
Structures



Source: Fitch.

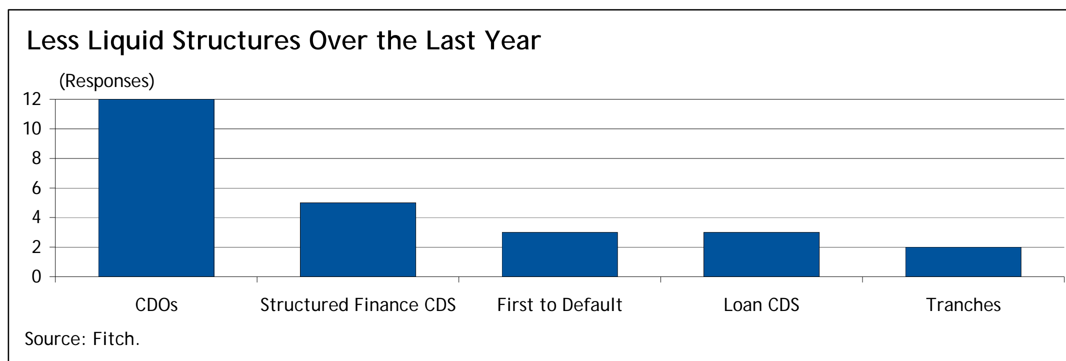
Related to the above question, Fitch also asked market participants which structures were likely to evidence greater liquidity going forward relative to others, with the responses being largely consistent with the prior question. CDS referencing indices and single-name and sovereign CDS in particular, were most cited as falling in this camp. Further, 89% of survey respondents expect the use of sovereign CDS to grow in the future, while an overwhelming majority of survey respondents also (68% for single-name CDS and 84% for indices) continue to expect growth for single-name corporate CDS and indices.

On the downside, those structures most mentioned by respondents as having faced declining liquidity included CDOs, which were by far the most cited, as well as structured finance CDS, loan CDS, and first-to-default baskets. Eighty-three percent of survey respondents expect more complex products to not only continue to decline but



NA – Not available.
Source: Fitch.

also unlikely to return in their present form. In contrast to the previous year when negative market sentiment was pervasive, survey responses overall were somewhat more positive, particularly regarding simpler products like single-name CDS and the traded indices.



Source: Fitch.

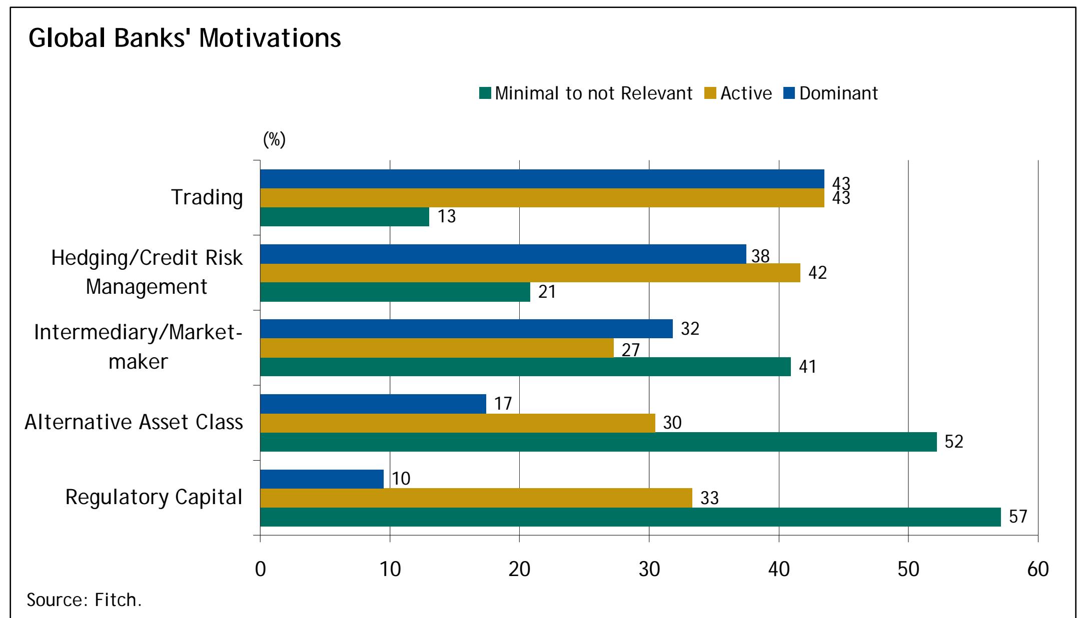
Market Trends

Growth

The 29 banks surveyed by Fitch had a notional sold volume of CDx contracts totaling $10.6 trillion at year-end 2009, and a notional bought volume of $10.9 trillion at year-end 2009. The notional amount refers to the par amount of credit protection bought and sold. The decline in both sold and bought (24% for sold, 22% for bought) notional amounts as compared to 2008 reflects a combination of factors:

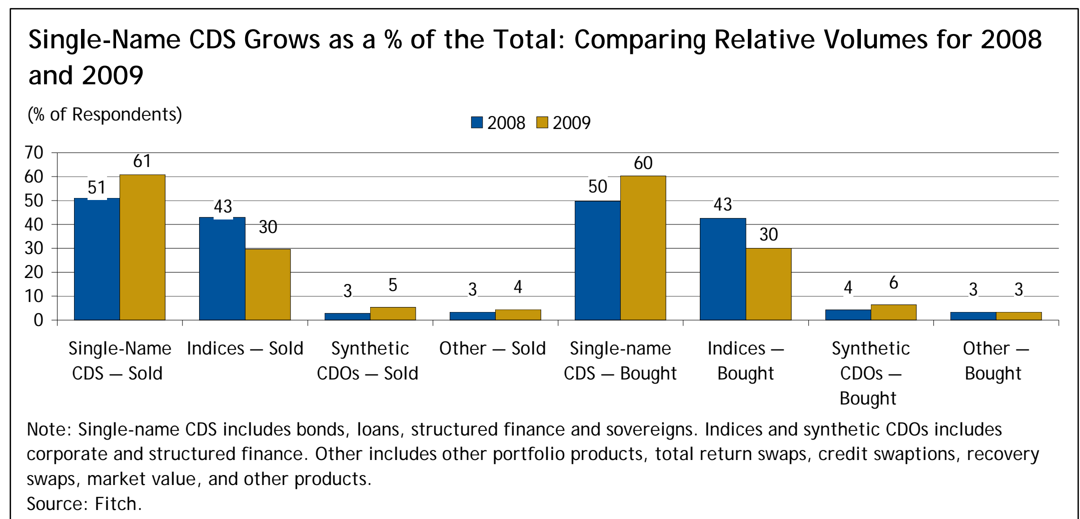
- Industry initiatives to 'compress' and 'tear up' CDx transactions that eliminate redundant offsetting contracts (while compressions replace offsetting redundant contracts with a smaller number of replacement contracts, tear-ups eliminate them).
- A reduction in overall trading activity which is partially attributable to risk aversion, deleveraging within the broader financial sector, and a cautious approach to the CDx market in the face of heightened regulatory uncertainty.
- Increased use of collateral and netting agreements.
- The fact that Fitch's survey sample for the two years differed somewhat.

Note that while Fitch targets a number of significant institutions in the CDx market, it does not cover the entire universe of active banks, nor does it cover hedge funds, asset managers, and pension funds. Therefore, the bought positions will not equal sold positions. However, the buying and selling of CDx contracts by surveyed banks continues to generally be well balanced and is a significant reflection of their trading activities and their role as financial intermediaries and market-makers. This is confirmed by survey responses, with 87% respondents citing trading to be dominant/active and 59% stating that their role as market-makers and intermediaries was dominant/active.



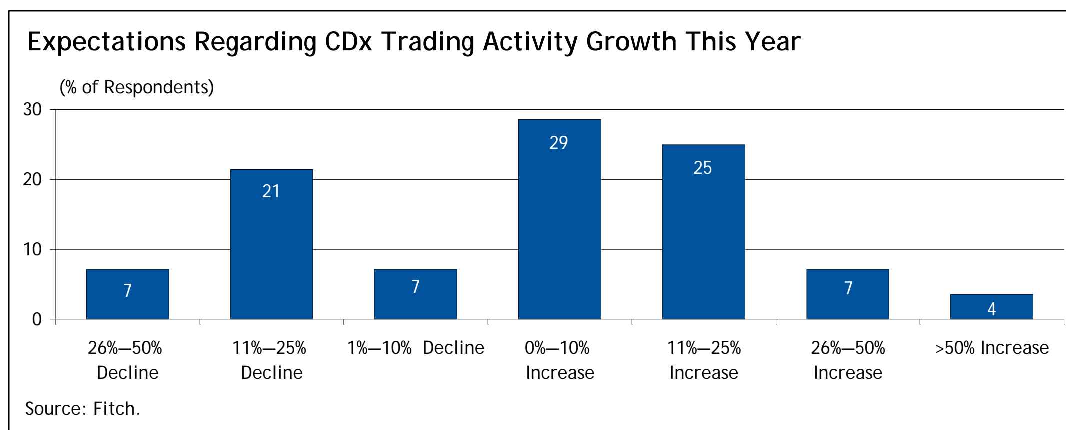
The inferences drawn on market trends are borne out by the Bank of International Settlements' (BIS) semiannual statistics on over-the-counter derivative market activity. The BIS numbers indicate that the notional amount of outstanding CDS contracts actually declined by 22% to $32.6 trillion at year-end 2009 from $41.9 trillion in the previous year (including both protection bought and protection sold). Factors influencing this decline in activity are similar to those identified above. Note although notional numbers are a simple and consistent measure of the size of the market and the level of activity, it is difficult to gauge true market exposure using gross notional values.

At year-end 2009, single-name CDS and indices continued to dominate the market with the former totaling 61% of total sold positions (2008: 51% of total sold positions) and the latter recording 30% of total sold positions (2008: 43% of total sold positions). While both products make up 90% of the total CDx market, it is notable that in relative terms the use of indices has fallen for the first time which may partially be attributable to the growth of the sovereign CDS market and perhaps diminished trading on the part of the



hedge funds, among other things.

Expectations regarding CDx trading activity growth for 2010 are mainly positive, with 64% of those surveyed predicting an increase. Most of the favorable responses had expectations ranging in the 0%–10% and 11%–25% bands. Those forecasting a decline in CDx trading activity anticipated an 11%–25% drop.



Source: Fitch.

Market Values

In contrast to the previous year, gross market values actually declined by 64% at year-end 2009 to $1.8 trillion (year-end 2008: $5.1 trillion), according to BIS statistics. This was attributable to spread tightening for virtually all cash and derivative credit products and structures following the various policy measures taken to normalize financial markets. Consequently, in a reversal of fortunes, net protection sellers benefited from this repricing while net buyers lost out, particularly those with exposures to lower rated corporate names. The semblance of a return to normality in market conditions also resulted in improving liquidity across various asset classes. This is partially reflected in lower bid-offer spread levels. Given the inconsistencies in gross market values reported in the survey, Fitch has chosen to use the BIS estimates and would like to highlight them due to the possibility of institutions misstating losses or gains when valuations are driven by model assumptions or hard-to-obtain market prices in an illiquid market for certain products. The uncertainty surrounding valuation issues also highlights the need for improving transparency and disclosure of CDx exposures.

Further, gross market values have several limitations which dictate that caution must be exercised when using these numbers. Gross market values are likely to overestimate counterparty exposure values to the extent they do not take into consideration close-out netting or collateral values posted. By contrast, gross market exposures may underestimate exposure values to the extent that CDx positions are exposed to 'jump-to-default risks' when a credit is deteriorating and their increased exposure to counterparty risk.

Reference Entities

Similar to the prior year's survey, automotive and telecommunications companies remained the most frequently cited corporate reference entities. Daimler AG captured the top spot on both a sold and bought basis; however, the telecommunication sector dominated the lists, with five of the top eight names originating from that industry. Deutsche Telekom, British Telecommunications, France Telecom, Telecom Italia, and

Telefonica all finished high on both the sold and bought rankings. Within the corporate segment, activity was heavily concentrated at the top five levels, as the sold and bought sides accounted for 21% and 19% of the provided total, respectively. From a volume perspective, many of these same entities appear, although OAO Gazprom emerged in the leading position while ArcelorMittal and Wells Fargo & Company generated increased interest.

Top 10 Corporate Reference Entities Year-End 2009: Gross Sold and Bought Protection

Rank	Protection Sold — Times Cited	Rank	Protection Bought — Times Cited	Rank	Protection Sold — Volume	Protection Bought — Volume
1	Daimler	1T	Daimler	1	Gazprom	Gazprom
2	Deutsche Telekom	1T	Telecom Italia	2	Daimler	Daimler
3T	British Telecommunications	3T	France Telecom	3	France Telecom	France Telecom
3T	France Telecom	3T	Gazprom	4	ArcelorMittal	ArcelorMittal
3T	Telecom Italia	3T	Telefonica	5	Telecom Italia	Telecom Italia
6	Gazprom	6T	Deutsche Telekom	6	Deutsche Telekom	Telefonica
7T	Telefonica	6T	Koninklijke	7	Wells Fargo	Wells Fargo
7T	Volkswagen	8T	British Telecommunications	8	British Telecommunications	British Telecommunications
9T	ArcelorMittal	8T	Vodafone	9	AIG	AIG
9T	Hutchison Whampoa	8T	Volkswagen	10	Telefonica	Volkswagen
9T	Koninklijke					

T – Tied.
Source: Fitch.

In examining the financial reference entities, JPMorgan Chase & Co. (JPMorgan, ‘AA–’) and Morgan Stanley (‘A’) again held the highest slots as most cited on a respective sold and bought basis. The names found at or near the top on both lists are essentially identical, with six of the first seven sold financial obligors also appearing on the bought side. On a volume basis, JPMorgan and General Electric Capital Corp. occupied the top two positions for both protection sold and bought, while Bank of America Corp. (‘A+’), MBIA Inc., and Citigroup, Inc. (‘A+’) rounded out the top five in a slightly different order. Similar to the corporates, the financial reference entities were highly concentrated in the top five names, with 24% and 25% deriving from the sold and bought sides, respectively.

Top 10 Financial Reference Entities Year-End 2009: Gross Sold and Bought Protection

Rank	Protection Sold — Times Cited	Rank	Protection Bought — Times Cited	Rank	Protection Sold — Volume	Protection Bought — Volume
1	JP Morgan Chase	1	Morgan Stanley	1	JP Morgan Chase	JP Morgan Chase
2T	Bank of America	2	Merrill Lynch	2	General Electric Capital	General Electric Capital
2T	General Electric Capital	3	JP Morgan Chase	3	Bank of America	MBIA
2T	Goldman Sachs	4	Goldman Sachs	4	MBIA	Bank of America
2T	Merrill Lynch	5T	Bank of America	5	Citigroup	Citigroup
2T	Morgan Stanley	5T	Commerzbank	6	Goldman Sachs	GMAC
7	Deutsche Bank	5T	Deutsche Bank	7	GMAC	Morgan Stanley
8T	Citigroup	8	Allianz	8	Unicredit	Merrill Lynch
8T	Commerzbank	9T	Citigroup	9	Merrill Lynch	Barclays
10T	Allianz	9T	General Electric Capital	10	Morgan Stanley	Ford Motor Credit
10T	Credit Suisse	9T	GMAC			
10T	GMAC	9T	SLM Corp			
10T	MBIA					
10T	Royal Bank of Scotland					
10T	Unicredit					

T – Tied.
Source: Fitch.

Heightened market perception of sovereign failure risk due to stretched sovereign balance sheets and the lack of collateral provided by sovereigns when transacting with banks has resulted in the increasing use of the CDS market as a means for mitigating sovereign exposures as well as for trading purposes. In this regard, Italy occupied the No. 1 spot for both number of times cited and volume. A large, active debt market coupled with widespread fears of problems in Western and Central Europe caused Italy to be an attractive CDx name again, followed closely by Greece. In the prior survey, Italy was the most frequently cited sovereign name; however, Turkey was ranked first for volume. In this survey, Turkey finished No. 2 on the sold and No. 4 on the bought volume lists. In total, there were more than 30 countries that received at least two mentions from survey respondents. Nevertheless, a heavy concentration remains in the top five cited names, with 31% and 30% coming from the sold and bought lists, respectively. Since the survey was based on end-2009 numbers, it is not surprising that countries like Portugal and Ireland, are cited infrequently as commonly referenced entities while Spain is not higher in the rankings. In all probability, these countries will figure near the top of the list as commonly referenced entities for 2010.

Top 10 Sovereign Reference Entities Year-End 2009: Gross Sold and Bought Protection

Rank	Protection Sold — Times Cited	Rank	Protection Bought — Times Cited	Rank	Protection Sold — Volume	Protection Bought — Volume
1	Italy	1	Italy	1	Italy	Italy
2	United Mexican States	2	Greece	2	Turkey	Brazil
3	Greece	3T	Brazil	3	United Mexican States	United Mexican States
4	Brazil	3T	Russian Federation	4	Russian Federation	Turkey
5T	Russian Federation	3T	Turkey	5	Spain	Russian Federation
5T	Turkey	3T	United Mexican States	6	Greece	Greece
5T	Ukraine	7T	Spain	7	Hungary	Spain
5T	Venezuela	7T	Ukraine	8	Brazil	Hungary
9T	Philippines	7T	Venezuela	9	Ukraine	Ukraine
9T	Spain	10T	Hungary	10	Venezuela	Venezuela
		10T	Korea			
		10T	Philippines			

T – Tied.
Source: Fitch.

Counterparties

For better or worse, dependence on a limited number of counterparties looks to be a permanent feature of the market; this is underscored by the fact that the top 10 counterparties comprised 78% of total exposure in terms of the number of times cited, up from the 67% reported last year. The top five institutions that provided volume figures accounted for 95% of total notional amount bought and sold. This concentration is a reflection of the dominant role of banks and dealers as counterparties, particularly after the collapse of a limited number of financial institutions who were important intermediaries in this market.

Top 10 Counterparties Year-End 2009

Rank	Times Cited	Rank	Volume
1T	Goldman Sachs	1	JP Morgan Chase
1T	JP Morgan Chase	2	Goldman Sachs
3T	Barclays	3	Bank of America
3T	Deutsche Bank	4	Morgan Stanley
5	Morgan Stanley	5	Barclays
6	Credit Suisse	6	Deutsche Bank
7T	BNP Paribas	7	UBS
7T	UBS	8	Credit Suisse
9T	Bank of America	9	Merrill Lynch
9T	Royal Bank of Scotland	10	BNP Paribas

T – Tied.
Source: Fitch.

Credit Events

As expected, there was a significant increase in the number of credit events in 2009, to 38 versus 13 in 2008. More recently the number has tailed off significantly. In contrast to the previous year, banks and financial institutions accounted for three of the year's reported credit events. Surprisingly, recoveries in the case of CIT Group were as high as 68.25 cents on the dollar, while in the case of emerging market bank JSC Alliance they were as low as 16.75 cents. In the case of Bradford & Bingley, recoveries on subordinated debt were as low as 5 cents on account of the losses imposed on subordinated debt

Credit Events

Year	Name	Final Price as %
2009	Abitibi	3.250
2009	Aleris	8.000
2009	Bowater	15.000
2009	Bradford & Bingley CDS — Senior	94.625
2009	Bradford & Bingley CDS — Subordinated	5.000
2009	British Vita [11] — First Lien	15.500
2009	British Vita [12] — Second Lien	2.875
2009	Capmark	23.375
2009	Charter Communications CDS	2.375
2009	Charter Communications LCDS	78.000
2009	Chemtura	15.000
2009	CIT CDS	68.250
2009	CIT Group Inc.	68.125
2009	Edshcha	3.750
2009	EquiStar	27.500
2009	Ferretti	10.875
2009	General Growth Properties	44.250
2009	General Motors CDS	12.500
2009	General Motors LCDS	97.500
2009	Georgia Gulf LCDS	83.000
2009	Great Lakes	18.250
2009	Hellas Telecommunication CDS	1.375
2009	HLI Operating Corp LCDS	9.500
2009	Idearc CDS	1.750
2009	Idearc LCDS	38.500
2009	JSC Alliance Bank CDS	16.750
2009	Lear CDS	38.500
2009	Lear LCDS	66.000
2009	Lyondell CDS	15.500
2009	Lyondell LCDS	20.750
2009	LyondellBasell	2.000
2009	Metro-Goldwyn-Mayer Inc. LCDS	58.500
2009	MGM Ltd. LCDS	58.500
2009	Millennium America Inc.	7.125
2009	NJSC Naftogaz CDS	83.500
2009	Nortel Corporation	12.000
2009	Nortel Ltd.	6.500
2009	Republic of Ecuador	31.375
2009	R.H. Donnelley Corp. CDS	4.875
2009	R.H. Donnelley Inc. LCDS	78.125
2009	Rouse	29.250
2009	Sanitec [10] — Second Lien	4.000
2009	Sanitec [9] — First Lien	33.500
2009	Six Flags CDS	14.000
2009	Six Flags LCDS	96.125
2009	Smurfit-Stone CDS	8.875
2009	Smurfit-Stone LCDS	65.375
2009	Station Casinos	32.000
2009	Syncora	15.000
2009	Thomson — Bankruptcy CDS	77.750
2009	Thomson — Restructuring 2.5 Years CDS	96.250

Continued on next page.
Source: Markit, ISDA.

Credit Events (Cont.)

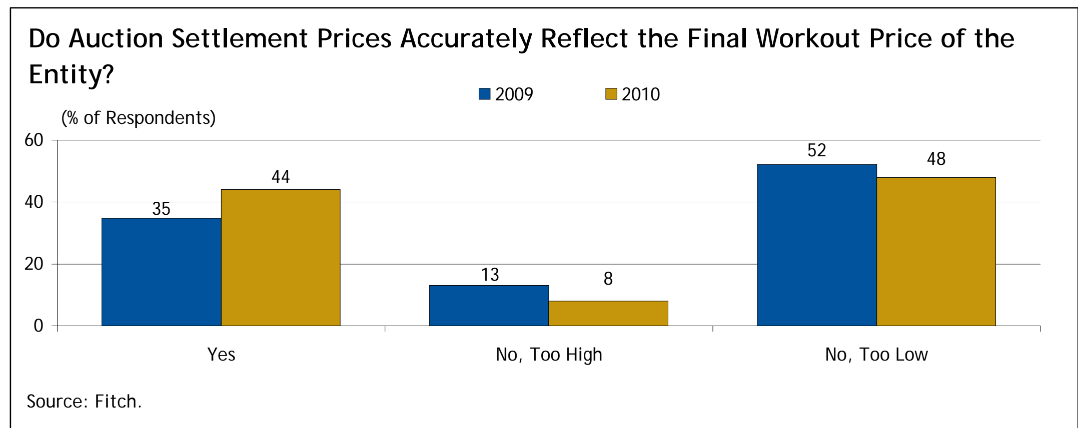
Year	Name	Final Price as %
2009	Thomson — Restructuring 5 Years CDS	65.125
2009	Thomson — Restructuring 7.5 Years CDS	63.250
2009	Tribune CDS	1.500
2009	Tribune LCDS	23.750
2009	Visteon CDS	3.000
2009	Visteon LCDS	39.000
2010	Aiful Corporation CDS	33.875
2010	Ambac Insurance Corporation CDS	20.000
2010	Cemex CDS	97.000
2010	Financial Guaranty Insurance Co (FGIC) CDS	26.000
2010	Japan Airlines Corporation CDS	20.000
2010	Lafrage Roofing LCDS	TBD[a]
2010	McCarthy and Stone — First Lien LCDS	70.000
2010	Truvo (World Directories) LCDS	TBD[a]
2010	Truvo Subsidary Corporation CDS	3.000

[a]Auction to settle the credit derivative trades is to be held.
Source: Markit, ISDA.

holders following a government-engineered takeover of the bank, while senior debt recovered 94.625 cents. It was not surprising to see companies ranging from General Motors Corp. (GM) in the automobile sector to LyondellBasell Industries in the chemicals sector defaulting due to a combination of factors ranging from depressed market conditions, to the highly leveraged nature of some corporate balance sheets and inherent structural problems in certain industries (like automobiles). Recoveries ranged from a high of 97.5 cents on the dollar on GM loan CDS, to a low of 1.375 cents on the dollar on a second lien loan to Hellas Telecommunications. In general, loan CDS recoveries across the board were higher than CDS recoveries given the senior, typically secured, position of the referenced security in the capital structure.

In 2010, defaults have fallen across the board. To date there have been eight recorded credit events. Defaults include two Japanese companies — Aiful, a non-bank financial institution, and Japan Airlines. Recoveries in both cases were low and ranged between 20 cents (Japan Airlines) and 33.875 cents (Aiful). The problems of the monoline industry have become well known, and both Ambac Financial Group, Inc. and Financial Guaranty Insurance Co. defaulted this year with recoveries in the region of 20 cents. In general, 48% of the respondents believed that the auction prices were too low in contrast to 52% in the previous year, while 44% felt they reflect the final workout price of the entity, in contrast to 35% last year.

The adoption of the new auction settlement and protocol involves hardwiring cash settlements as part of the documentation and met its first test in Europe with the

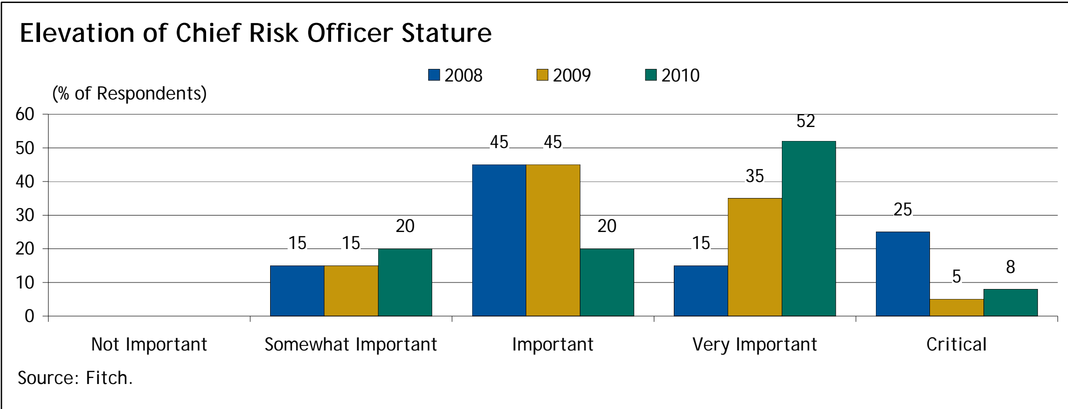


default of French media firm Thomson Group (Thomson). The default triggered by a restructuring of its debt raised two cumbersome issues; one was the optionality over who triggers the CDS and the second was the maturity deliverable limitation. Consequently, there was a low volume of deliverable debt at shorter maturities, which skewed the outcome for deliverable bonds within the 2.5-year bucket with an auction price of 96.25 being realized, in contrast to prices of 65.125 for the five-year maturity bucket and 63.25 for the 7.5-year maturity bucket. The Thomson default also highlighted the broader issue of a very liquid name from a CDS perspective but a very illiquid name from a bond point of view. Survey respondents cited the variance in auction prices between the various buckets on the Thomson auction as a significant surprise.

Risk Management

Given the depth and breadth of the current financial crisis, 60% of survey respondents acknowledged the growing importance of the risk management function within banks and the role of the chief risk officer, compared with 40% in the previous year. In Fitch's opinion, the greater weight given to the risk management function is a welcome shift from past practices; however, the success of the risk management function depends on it becoming an integral part of an institution's business practices.

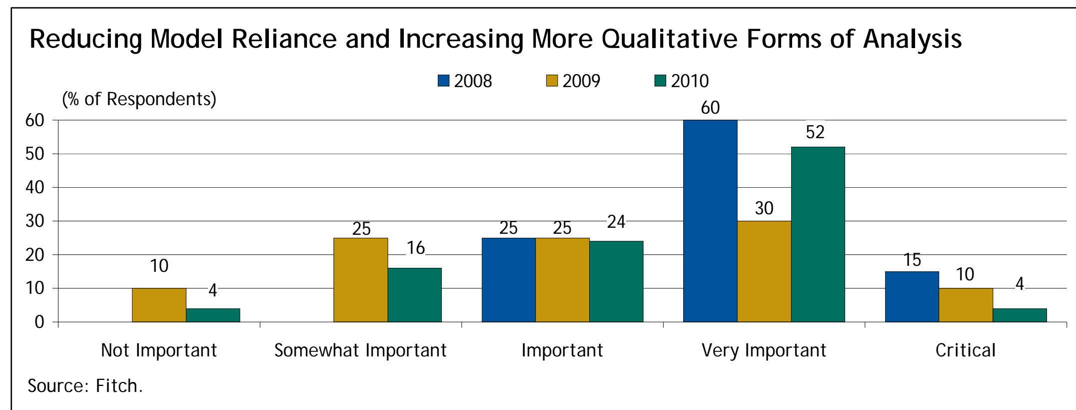
Elevation of Chief Risk Officer Stature



Source: Fitch.

The undue reliance on risk management systems underpinned mainly by VaR models was acknowledged by 56% of the survey respondents, in comparison to 40% in the previous year. The need to supplement these models with stress tests and scenario analysis was acknowledged by 64% of survey respondents (2009: 65%) while 44% of respondents thought it important to also take into account the assumptions under

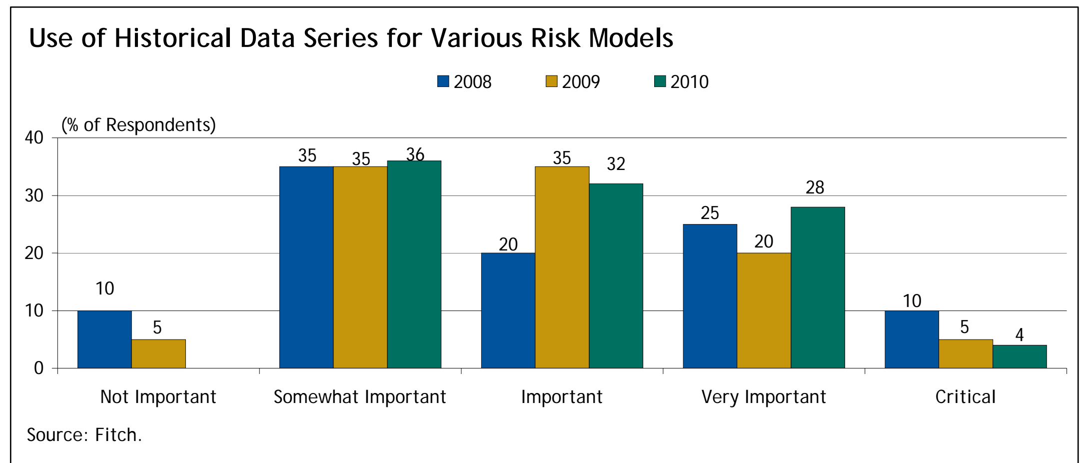
Reducing Model Reliance and Increasing More Qualitative Forms of Analysis



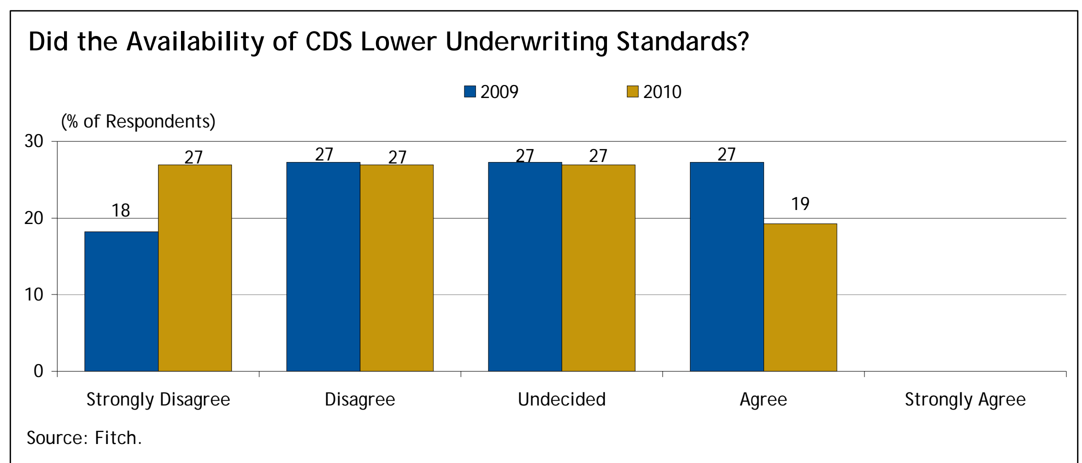
Source: Fitch.

which these models were built; this was in comparison to 55% of respondents in the previous year.

The need to recalibrate VaR models by incorporating historical data series to include the period of stressed market conditions was highlighted as being very important/critical by 32% of the respondents, in comparison to 25% in the previous year. Significantly, none of the survey respondents indicated that it was 'not an important' factor.



Interestingly, 54% of the respondents either disagreed or strongly disagreed with the view that the availability of CDS had lowered loan underwriting standards; this was in comparison to 45% in the previous year. This is in line with central bank surveys that point to an across-the-board tightening of lending standards by banks in response to the recessionary market conditions they face, irrespective of the collateral posted.



Global Banks

Of the 29 banks surveyed, only 18 reported a detailed break-up of their exposures for both 2008 and 2009, the latter of which forms the basis for Fitch's analysis of reported bank CDx exposures. While this is certainly not the entire universe of banks, it includes some of the major players that are active in the CDx market. Given the continued dominance of a select few banks in this market, any inference drawn will generally be applicable to a broader cross section of banks.

The 18 banks surveyed continue to have relatively well balanced portfolios, reporting $10.2 trillion of protection sold and $10.6 trillion of protection bought. The identified trend of aggregate bought and sold positions being in balance is greatly reflective of the fact that CDS activity has largely been dominated by trading and market-making activities, as well as the general preference of these dealer banks to run matched trading book positions as part of their risk mitigation strategies. This is also reflected in 75% of survey respondents reporting that their motivation for undertaking CDS activities is dominated by trading strategies and their role as intermediaries and market-makers.

It is also worth noting that current CDx positions are a partial reflection of an institution's view of credit markets and the possible use of this market to offset positions in other markets, which implies that exposures and positions can theoretically switch reasonably quickly. Further, it is not enough to know at an aggregate level whether a financial institution is net long or short credit exposure, as more specific information is actually needed to adequately determine how an institution is positioned at an aggregate level. Although collectively the surveyed banks remain net buyers of protection, with $334 billion (2008: $107 billion) of notional credit being transferred to other banks, sectors, and institutions, it is difficult to conclude that banks are using CDx instruments to actively mitigate default risk arising from their loan exposures. This inference, which was first made in last year's survey, remains valid as net CDS exposures as a percentage of total loans are still not significant. Within individual bank portfolios it is not surprising that single-name CDS and CDx indices make up on average 92% of exposures, with the share of CDO and other complex products making up the balance. Interestingly, the bought and sold positions of sovereign CDS were relatively well balanced across all the reporting entities and, although sovereign CDS exposures went up to 7% of total bought and sold positions (2008: 4%), they were still relatively small in relation to the banks' total CDS positions. It should also be mentioned that as it is normal market practice for sovereigns not to post collateral when entering into derivative transactions with banks, banks have used the CDx market as a means of mitigating sovereign counterparty risk.

While some banks shifted position from being net protection sellers to net protection buyers, there were no significant movements the other way from net buyers to net sellers of protection. This is possibly attributable to a cautious approach taken by the surveyed banks in the face of heightened regulatory uncertainty and volatile markets.

Insurance Companies

Fitch excluded the insurance industry from this year's survey due to its materially lower exposure to CDx than the banks. Previous surveys received limited responses and the collapse of AIG removed the largest single transactor of CDx in the insurance space. Although AIG is generally viewed as an insurance organization, its CDx activities were conducted outside of regulated insurance operations.

Many of the insurance groups that have made use of CDx in the past have substantially reduced their exposure to these instruments as part of de-risking processes, including Swiss Re and Aegon. Few, if any, companies have materially increased their positions. Insurance companies continue to have exposures to CDOs, which recovered in value sharply during 2009. However, many insurers also sought to reduce their holdings in this area to avoid perceived volatility as well as increasing balance sheet transparency.

Insurance companies are active derivatives players, using interest rate, currency, and equity derivatives to hedge economic exposures of very long dated liabilities. Hedge strategies and target levels are extremely varied due to differences in regulatory credit and accounting effectiveness.

Insurance companies have not typically been active users of single-name or index-based derivatives and their use has generally been limited to the larger, more sophisticated players. It remains to be seen if the development of a CCP will increase the likelihood of active credit management. In most cases, counterparty risk management is relatively unsophisticated, with insurance companies relying on traditional limits of exposure through credit limits and collateral management.

Appendix

Respondents

Aozora Bank
Banco Bilbao Vizcaya Argentaria
Banco Santander Central Hispano
Bank of America Corp.
Barclays plc
Caja de Ahorros y Monte de Piedad de Madrid (Caja Madrid)
Chuo Mitsui
Citigroup Inc.
Commerzbank
Credit Suisse Group
Deutsche Bank AG
Dexia
Goldman Sachs Group, Inc.
HSBC Holdings plc
ING Bank NV
Intesa SanPaolo
JPMorgan Chase & Co.
KBC Bank
La Caixa
Landesbank Baden Württemberg
Landesbank Berlin
Lloyds Bank
Morgan Stanley
Nordea
Rabobank Group
Royal Bank of Scotland Group plc
Shinsei Bank, Limited
Sumitomo Mitsui Financial Group, Inc.
Unicredit

Source: Fitch.

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