**2010 MID-YEAR MARKET SURVEY**

The total combined notional amount outstanding of interest rate, credit, and equity derivatives at June 30, 2010 was $466.8 trillion, an increase of less than 1 percent from the end of 2009. Of the total notional amount, the fourteen largest global derivatives dealers, known as the G14 group, reported $354.6 trillion or 82 percent. And the five largest US-based dealers reported a notional amount outstanding of $172.3 trillion, or 37 percent of the total. A total of [seventy-one](http://www.isda.org/statistics/pdf/Participants-MY10.pdf) ISDA Primary Member firms participated in the Mid-Year 2010 Survey.

The notional amount of interest rate derivatives outstanding was $434.1 trillion at mid-year 2010, an increase of 1.7 percent compared with $426.8  trillion at the end of 2009. For the year as a whole, interest rate derivatives notionals rose 4.8 percent from $414.1 trillion mid-year 2009.  Seventy firms provided interest rate derivatives data to the Mid-Year 2010 Survey.  Interest rate derivatives are 93.0 percent of the total of all derivatives reported to the ISDA Market Survey.

The notional amount outstanding of credit default swaps (CDS) was $26.3 trillion at mid-year 2010, a decrease of 13.7 percent from $30.4 trillion at year-end 2009.  CDS notional outstanding for the past twelve months was down 15.9 percent from $38.6 trillion at mid-year 2009.   As in past surveys, the $26.3 trillion notional amount was approximately evenly divided between bought and sold protection: bought protection notional amount was approximately $13.3 trillion and sold protection was about $13.0 trillion, with a net bought notional amount of $359.0 billion.  Sixty-two firms provided data on credit default swaps. Credit default swaps are 5.6 percent of the total of all derivatives reported to the ISDA Market Survey.

Notional amounts of equity derivatives fell 5.7 percent to $6.4 trillion from $6.8 trillion at year-end 2009. The notional amount of equity derivatives was down 27.3 percent for the full twelve months from mid-year 2009.  Sixty-one firms provided data on equity derivatives.  Restricting the sample to firms that responded to both the year-end 2009 and mid-year 2009 surveys, equity derivative notional amounts fell by 22 percent. Equity derivatives are 1.4 percent of the total of all derivatives reported to the ISDA Market Survey.

**2009 YEAR-END MARKET SURVEY**

Notional amount of interest rate derivatives outstanding was $426.8 trillion at year-end 2009, an increase of 3 percent compared to $414.1 trillion at mid-year 2009. For the year as a whole, interest rate derivatives notionals rose 6 percent from $403.1 trillion in 2008.  [Eighty-one firms](http://www.isda.org/statistics/pdf/Market-Survey-Firm-Lists.pdf) responded to the Year-End 2009 Survey, compared with eighty-six at mid-year 2009.  Restricting the sample to firms responding to both surveys, interest rate swap notionals increased by 4.0 percent.

The notional amount outstanding of credit default swaps (CDS) was $30.4 trillion at year-end 2009, down 3 percent from $31.2 trillion at mid-year 2009.  CDS notional outstanding for the whole of 2009 was down 21 percent from $38.6 trillion at year-end 2008.   The $30.4 trillion notional amount was approximately evenly divided between bought and sold protection: bought protection notional amount was approximately $15.4 trillion and sold protection was about $15.0 trillion, with a net bought notional amount of $451.3 billion.  Seventy-five firms provided data on credit default swaps.

Notional amounts of equity derivatives fell 23 percent to $6.8 trillion at year-end 2009. At mid-year 2009, equity derivatives notionals were $8.8 trillion. Equity derivatives notional amount for the year was down 23 percent from $8.7 trillion at year-end 2008.  Seventy firms provided data on equity derivatives.   Restricting the sample to firms that responded to both the year-end 2009 and mid-year 2009 surveys, equity derivative notional amounts fell by 22 percent.

**2009 MID-YEAR MARKET SURVEY**

Notional amount outstanding of interest rate derivatives grew by 2.7 percent to $414.09 trillion at the end of June 2009 from $403.07 trillion at the end of December 2008. Over the preceding twelve months, interest rate derivatives decreased by 11 percent. Some of the growth over the past six months is the result of increases in number of firms responding to the ISDA Market Survey: [Eighty-six firms](http://www.isda.org/statistics/pdf/RespondentsMY09.pdf) responded to the Mid-Year 2009 Survey, compared with seventy at the end of 2008. Restricting the sample to firms responding to both surveys, interest rate swap notionals fell by 2.0 percent.

Notional amount outstanding of credit default swaps decreased by 19 percent in the first six months of the year to $31.22 trillion from $38.56 trillion. Over the preceding twelve months, CDS notional amounts decreased by 43 percent from mid-year 2008. The decrease in notional amounts reflects continuing efforts at portfolio compression at major dealers; among major dealers, CDS notional amounts declined by 21.2 percent. The $31.22 trillion notional amount was approximately evenly divided between bought and sold protection: bought protection notional amount was $15.79 trillion and sold protection was $15.40 trillion, with a net bought notional amount of $0.39 trillion (that is, $393.74 billion). Seventy-eight firms provided data on credit default swaps.

Notional amount outstanding of equity derivatives remained relatively flat at $8.82 trillion. This compares with a 27 percent decrease from $11.8 trillion during the second half of 2008. The annual growth rate for equity derivatives to mid-2009 decreased by 26 percent to $8.8 trillion from $11.8 trillion at mid-year 2008.  As with interest rate derivatives, the increase in the number of responding firms—seventy-six firms provided equity derivatives data to this survey compared with sixty-three at year-end 2008—had some effect on the results: Restricting the sample to firms that responded to both the mid-year 2009 and the year-end 2008 surveys, equity derivative notional amounts fell by 7.0 percent.

**2008 YEAR-END MARKET SURVEY**

The notional amount outstanding of credit default swaps (CDS) was $38.6 trillion at year-end, down 29 percent from $54.6 trillion at mid-year 2008.  CDS notional outstanding for the whole of 2008 was down 38 percent from $62.2 trillion at year-end 2007.  The $38.6 trillion notional amount was approximately evenly divided between bought and sold protection: bought protection notional amount was $19.5 trillion and sold protection was $19.1 trillion, with a net bought notional amount of $400 billion.

Notional amount of interest rate derivatives outstanding was $403.1 trillion at year-end, a decline of 13 percent compared to $464.7 trillion at mid-year 2008. For the year as a whole, interest rate derivatives notionals rose 5 percent over 2007.

Notional amounts of equity derivatives fell to $8.7 trillion at year-end 2008. At mid-year 2008, equity derivatives notionals were $11.9 trillion. Equity derivatives notional amount for the year was down 13 percent.

**2008 MID-YEAR MARKET SURVEY**

Notional amounts of interest rate derivatives outstanding grew 22 percent to $464.7 trillion in the first half of 2008. For the year as a whole, interest rate derivatives notionals rose 34 percent.

The notional amount outstanding of credit default swaps (CDS) dropped 12 percent to $54.6 trillion in the first half of 2008. CDS notional growth was 20 percent for the year as a whole.

Notional amounts of equity derivatives grew 19 percent to $11.9 trillion in the first half of 2008. The annual growth rate was 19 percent.

In this survey, 78 firms provided data on interest rate swaps, 69 provided responses on credit derivatives, and 68 provided responses on equity derivatives. All major dealers responded.

**2007 YEAR-END MARKET SURVEY**

Notional amounts of interest rate derivatives outstanding grew almost 10 percent to $382.3 trillion in the second half of 2007. For the year as a whole, interest rate derivatives notionals rose 34 percent.

The notional amount outstanding of credit default swaps (CDS) grew 37 percent to $62.2 in the second half of 2007. CDS notional growth was 81 percent for all of 2007.

Notional amounts of equity derivatives remained flat at approximately $10 trillion during the second half of 2007. The annual growth rate for all of 2007 was 39 percent.

In this survey, 91 firms provided data on interest rate swaps, 81 provided responses on credit derivatives, and 83 provided responses on equity derivatives. All major dealers responded.

**2007 MID-YEAR MARKET SURVEY**

Notional amount outstanding of interest rate derivatives grew by 21 percent to $347.09 trillion from $285.73 trillion. This compares with 14 percent growth during the second half of 2006. The annual growth rate for interest rate derivatives to mid-2007 is 38 percent from $250.83 trillion in mid-2006. In this survey, 88 firms provided data. All major dealers responded.

Notional amount outstanding of credit derivatives grew by 32% in the first six months of the year to $45.46 trillion from $34.42 trillion. The annual growth rate for credit derivatives is 75% from $26.0 trillion at mid-year 2006.

Notional amount outstanding of equity derivatives, which consist of equity swaps, options, and forwards, grew by 39 percent from $7.18 trillion to $10.01 trillion. This compares with 13 percent growth during the second half of 2006. The annual growth rate for equity derivatives to mid-2007 is 57 percent from $6.38 trillion at mid-year 2006.

**2006 YEAR-END MARKET SURVEY**

Notional amounts of interest rate derivatives outstanding grew almost 14 percent to $285.7 trillion in the second half of 2006. For the full year, interest rate derivatives notional amounts rose 34 percent over 2005, which is above the annual growth rate of recent years.

The notional amount outstanding of credit default swaps (CDS) grew 32 percent in the second half of 2006, rising from $26.0 trillion at June 30, 2006 to $34.4 trillion at December 31, 2006. This compares with 52 percent growth during the first half of 2006. CDS notional growth for the whole of 2006 was 101 percent, compared with 103 percent during 2005. The survey monitors credit default swaps on single-names, baskets and portfolios of credits and index trades.

Notional equity derivatives amounts outstanding grew 12 percent from $6.4 trillion to $7.2 trillion in the 2006 second half. Annual growth was 29 percent, compared with 34 percent during 2005.   
The above notional amounts, which total $327.3 trillion across asset classes, are an approximate measure of derivatives activity, and reflect both new transactions and those from previous periods. The amounts do not, however, represent the risks associated with the activity; in order to determine risk, it is necessary to estimate net replacement cost, which ISDA does not collect.   
  
The Bank for International Settlements (BIS) collects both notional amounts and market values in its derivatives statistics and it is possible to use the BIS statistics to approximate the amount at risk in the ISDA survey results. As of December 2006, gross mark-to-market value reported to BIS was approximately 2.3 percent of notional amount outstanding. In addition, net credit exposure (after netting but before collateral) was reported as 0.49 percent of notional amount outstanding.  
  
Applying these percentages to the total ISDA Market Survey notional amount outstanding of $327.4 trillion as of December 31, 2006, gross credit exposure before netting is estimated to be $7.6 trillion and credit exposure after netting is estimated to be $1.6 trillion.

**2006 MID-YEAR MARKET SURVEY**

Notional amount outstanding of interest rate swaps and options and cross-currency swaps grew by 18 percent to $250.8 trillion from $213.2 trillion. The annual growth rate for interest rate derivatives to mid-2006 is 25 percent from $201.4 trillion in mid-2005. 101 primary member firms provided interest rate derivatives data.

Notional amount of credit default swaps grew by 52% in the first six months of the year to $26.0 trillion from $17.1 trillion. The annual growth rate for credit derivatives is 109% from $12.4 trillion at mid-year 2005. 88 firms provided credit default swap data.

Finally, notional amount outstanding of equity derivatives, which consist of equity swaps, options, and forwards, grew by 15 percent from $5.5 trillion to $6.4 trillion. This represents year-on-year growth of 32 percent from $4.8 trillion at mid-year 2005. 87 firms provided equity derivatives data.

**2005 YEAR-END MARKET SURVEY**

The notional principal amount outstanding of interest rate derivatives, which include interest rate swaps and options and cross-currency interest rate swaps, grew almost 6 percent to $213.2 trillion. This is a 16 percent increase from one year ago, and is in line with gradually decreasing growth rates for interest rate derivatives. A total of 98 ISDA Primary Member firms provided interest rate derivative data.

Credit default swaps grew 38 percent from $12.4 trillion to $17.1 trillion, compared with 48 percent growth during the first half of 2005. Growth during all of 2005 was 105 percent, compared with 123 percent during 2004. In all, 86 firms provided CDS data.

Finally, notional amount outstanding of equity derivatives, consisting of equity swaps, options, and forwards, grew 15 percent from $4.8 trillion to $5.6 trillion. Annual growth was almost 34 percent, compared with 28 percent during 2004; 83 firms provided equity derivatives data.

**2005 MID-YEAR MARKET SURVEY**

The notional amount outstanding volume of interest rate swaps and options and cross-currency swaps grew by almost 10 percent to $201.4 trillion from $183.6 trillion during the first six months of 2005. The annual growth rate for interest rate derivatives to mid-2005 is 22 percent from $164.49 trillion in mid-2004. A total of 101 primary member firms provided interest rate derivative data for this Survey.   
  
Notional amount of credit default swaps grew by almost 48% during the first six months of the year to $12.43 trillion from $8.42 trillion. This represents a year-on-year growth rate of 128% from $5.44 trillion at mid-year 2004; 86 firms provided credit default swap data.

Finally, notional amount outstanding of equity swaps, forwards, and OTC options grew by over 16 percent from $4.15 trillion to $4.83 trillion, an increase over the 10 percent growth in the second half of 2004. This represents year-on-year growth of 28 percent from $3.79 trillion at mid-year 2004; 81 firms provided equity derivatives data.

**2004 YEAR-END MARKET SURVEY**

The notional amount outstanding of interest rate swaps and options and cross-currency swaps grew by 12 per cent from $164.49 trillion to $183.6 trillion during the second half of 2004. The annual growth rate of interest rate derivatives was 29 per cent for 2004.

The notional amount outstanding of credit default swaps grew by almost 55 per cent in the second half of 2004 from $5.44 trillion to $8.42 trillion. This represents an annual growth rate of 123%.

Finally, notional amount outstanding of equity swaps, options, and forwards grew by almost 10 per cent from $3.79 trillion to $4.15 trillion. The 2004 year-on-year growth rate was 21 per cent.

In the 2004 Year-End Survey, 109 firms provided data on interest rate derivatives; 91 provided responses on credit derivatives; and 87 provided responses on equity derivatives. All numbers are adjusted for double-counting.

**2004 MID-YEAR MARKET SURVEY**

Notional outstandings in interest rate derivatives grew almost 16 percent to $164.49 trillion, mirroring growth in the second half of 2003. For the purposes of the Survey, interest rate derivatives include interest rate swaps and options and cross-currency interest rate swaps. Credit derivatives notionals grew 44 percent in the first half of 2004 to $5.44 trillion, compared with 33 percent growth reported during the second half of 2003. Finally, outstandings for equity derivatives—consisting of equity swaps, options and forwards—grew 9.7 percent $3.79 trillion. A total of 120 firms responded to the 2004 Mid-Year Survey.

**2003 YEAR-END MARKET SURVEY**

The notional principal outstanding volume of interest rate derivatives, which include interest rate swaps and options and cross-currency interest rate swaps, grew by 15 per cent to $142.31 trillion during the second half of 2003. This is a slower rate of growth than in the first half of 2003, during which interest rate derivatives grew by 24 percent. For all 2003, the year-over-year growth rate from December 2002 to December 2003 was 43 percent. A record 120 firms responded to the Survey.

Credit derivatives, in contrast, grew at a stronger rate in the second half (41 percent) than in the preceding six months (25 percent); notional amounts now stand at $3.78 trillion (originally reported as $3.58 trillion). This represents a year-over-year growth of 76 percent. Credit derivatives, for the purposes of the Survey, consist of credit default swaps on individual names, baskets, and portfolios. 110 firms provided data on credit default swaps.

Finally, notional outstandings for equity derivatives, consisting of equity swaps, options, and forwards, grew 24 per cent, compared with 14 percent in the first half. Notionals now stand at $3.44 trillion. This represents year-over-year growth of 41 percent. 106 firms provided data on equity derivatives.

**2003 MID-YEAR MARKET SURVEY**

The notional principal outstanding volume of vanilla interest rate derivatives, which consist of interest rate swaps and options and cross-currency swaps, grew by 24 percent to $123.90 trillion. A total of 110 firms provided data on vanilla interest rate derivatives. Adjusting for sample growth by comparing only those firms that responded to both the Year-end 2002 and Mid-year 2003 Surveys, outstandings grew by about 21 percent.

Credit derivatives continued their strong growth at 25 per cent in the first six months of 2003 to $2.69 trillion, a similar rate of growth to the previous six months. Credit derivatives in the Survey, include credit default swaps, baskets and portfolio transactions. Adjusting for sample growth, outstandings grew by 28 percent.

Finally, notional outstandings for equity derivatives, consisting of equity swaps, options, and forwards, grew 14 per cent to $2.78 trillion. Adjusting for sample growth, equity derivatives were essentially flat at 1.4 percent growth over the Year-end 2002 results.

**2002 YEAR-END MARKET SURVEY**

Credit derivatives growth was the strongest of the three main product categories at more than 40% in the six months prior to year-end 2002. Total notional outstanding volume in this area grew to $2.19 trillion. Notional outstanding volume in interest rate derivatives, or ‘plain vanilla’ swaps and options totaled $101.32 trillion, an increase of over 22%, while the figure for equity derivatives outstanding amounts grew to $2.46 trillion, a 6.2% increase. A record number of ISDA member firms responded to the Survey, with 110 out of 201 primary members globally providing data.

Interest rate and currency derivatives, which consist of interest rate swaps and options and cross-currency swaps, increased over 22.46% in the last six months of 2002, which mirrors the increase among the top ten reporting firms at 20.68% growth. Among firms responding to both the Mid-year and Year-end Surveys, outstandings grew by 17.9%.

Credit derivatives, which consist of credit default swaps, baskets and portfolio transactions, grew 40.17% since the end of June 2002; among firms responding to both surveys, outstanding volumes grew 35.23%. Equity derivatives, which consist of equity forwards, swaps, and options, grew by 6.19%, as against 2.39% for those firms that responded to both surveys.

**2002 MID-YEAR MARKET SURVEY**

As of the end of June 2002, interest rate and currency derivative outstandings were $82.7 trillion, credit derivatives $1.6 trillion, and equity derivatives $2.3 trillion. Equity derivatives, which consist of equity forwards, swaps, and options, were the newest addition to the Market Survey.  
  
Interest rate and currency derivatives, which consist of interest rate swaps and options and currency swaps, increased over 19% since the end of 2001. Among firms responding to both the Year-End and Mid-Year Surveys for interest rate and currency derivatives, outstandings grew 16%; and among the top ten reporting dealers, outstandings grew nearly 18%.   
  
Credit derivatives, which consist of credit default swaps, grew 44% since the end of 2001; among firms responding to both the 2001 Year-End and the 2002 Mid-Year Surveys, outstandings grew 35%. In order to reflect an increase in estimates of the relatives percentage of end-users and dealer activity, ISDA adopted a new adjustment for double counting of credit default swap dealer transactions in the Mid-Year 2002 Survey; the new adjustment factor is 18.5% higher than the old factor. The reported outstandings of $1.6 trillion consequently reflect both the growth in outstandings of 44% and the increase in the adjustment factor of 18.5%, giving a total increase in the reported numbers of 70%. This is a one-time adjustment, which will not affect future growth estimates.

**2001 YEAR-END MARKET SURVEY**

Notional principal outstanding amounts for interest rate swaps and options and currency swaps were $69.2 trillion at the end of 2001 compared with $57.3 trillion at mid-year and $63.0 trillion at the end of 2000. These numbers represented a 20% increase since the Mid-Year Survey and a 10% increase on the year. Among the top dealers, volume increased 20% from $34.7 trillion at the end of 2000 to $43.0 trillion at the end of 2001; virtually all of the increase occurred during the second half. Eighty ISDA member institutions participated in the Survey.

Credit default swaps, which ISDA began to survey at mid-year 2001, grew 45% to $918.9 billion from the $631.5 billion reported in June. "The credit derivative numbers show impressive growth during a difficult period," said Keith Bailey, Chairman of the Board of ISDA. "This is testimony to the value that these products bring to market participants in managing risk in times of volatility and uncertainty."

**2001 MID-YEAR MARKET SURVEY**

Total notional principle of interest rate swaps, interest rate options and currency swaps fell 9.05% for all surveyed firms in the first six months of 2001. Notional principal outstanding for the transactions was $57.305 trillion at the end of June 2001, compared with $63.009 trillion at the end of 2000. Among top ten dealers, there was a less significant decrease in volume from $35.648 trillion to $35.532 trillion.

Polling member firms for the first time on credit derivatives transactions, ISDA surveyed total notional outstanding volumes for single name credit default swaps, default swaps on baskets of up to ten credits, and portfolio transactions of ten credits and more. 83 ISDA member firms supplied data on these products. The results for the first half of 2001 show that global notional outstanding volume of credit derivatives transactions was $631.497 billion.

While still modest in relation to interest rate products, credit swaps are expected to remain on a strong upward trend compared to more mature derivative product areas. “Shifting product use is a reflection of a more uncertain global market environment,” said Thomas K. Montag, Vice-Chairman of ISDA and Chair of the Association’s Market Survey Committee. “The market for credit protection has an obvious appeal during times of economic downturn,” said Mr Montag, a Managing Director of Global Interest Rate Products and Asia FICC, and Co-President of Goldman Sachs (Japan), Ltd.

**2000 YEAR-END MARKET SURVEY**

Global OTC derivatives volumes increased by 8.14% in the year ending December 31, 2000, according to the latest survey conducted by the International Swaps and Derivatives Association (ISDA).

Volumes globally totaled $63.009 trillion at year-end, from $60.366 trillion reported for the first half of the year, representing a 4.38% growth rate in the second half of 2000. Among the top ten firms, the market grew by 5.01% from $32.440 trillion to $34.064 trillion between mid-year and year-end 2000.

Measured in notional principal outstanding amounts, the survey tracks market growth in interest rate swaps, interest rate options and currency swaps, as reported by ISDA’s member organizations.

“Continuing growth in interest rate and currency products demonstrates the need for effective tools to manage potentially adverse economic movements,” said Thomas K. Montag, vice-chairman of ISDA and chair of the Association’s Market Survey Committee. Mr. Montag is a managing director and global head of interest rate products at Goldman Sachs, based in Tokyo. “As many of the world’s economies slow down and we experience major market volatility, the benefits of OTC derivatives are even more evident.”

The survey, which is compiled twice yearly by Arthur Andersen LLP, is performed on a confidential basis and produces a headline statistic. This is complemented by the more comprehensive survey produced quarterly by the Bank for International Settlements. Figures in the ISDA survey represent the outstanding notional volumes of 105 member institutions, of which, 72 were participants in the previous semi-annual survey.

**2000 MID-YEAR MARKET SURVEY**

Global OTC derivatives use grew by 3% in the first half of 2000, reveals the semi-annual market survey sponsored by the International Swaps & Derivatives Association (ISDA). But among the top ten reporting institutions, volume was up 10% to $33.48 trillion.

Measured in notional principal outstanding amounts, the survey tracks market growth in interest rate swaps, interest rate options and currency swaps, as reported by member organizations. For the six months ending June 30, 2000, these totaled $60.366 trillion, compared with $58.265 trillion at the end of 1999. For the period ending June 30, 1999, the total stood at $52.711 trillion.

“These figures reflect the continuing appeal of OTC derivatives as a risk management mechanism, and demonstrate that consolidation among institutions has not slowed the growth of product use,” said Thomas K. Montag, vice-chairman of ISDA and chair of the Association’s Market Survey Committee. Mr Montag is a managing director and global head of derivatives trading at Goldman Sachs, based in Tokyo. “While the rate of growth at the top ten firms outstrips the headline figure, the results also show an increasing number of smaller member firms participating in these markets.”

The survey, which is compiled twice yearly by Arthur Andersen, is performed on a confidential basis and produces a single headline statistic. This is complemented by the more comprehensive survey produced quarterly by the Bank for International Settlements. Outstandings in the ISDA survey represent notional volumes of 100 member institutions, of which 78 were also participants in the previous semi-annual survey.

**1999 YEAR-END ISDA MARKET SURVEY**

The International Swaps and Derivatives Association (ISDA) reported that the combined total of outstanding interest rate swaps, currency swaps and interest rate options stood at $58.265 trillion in notional principal at Dec. 31, 1999 compared with $50.997 trillion one year earlier.

The year-to-year increase was 14.3% compared with 1998's record 76%. The preponderance of 1999's gain, 10.5%, took place in the second half compared with 3.4% in the first six months. Outstanding contracts in the three swap categories totaled $52.711trillion at mid-year and $50.997 trillion at the close of 1998.

Compiled by Arthur Andersen, the year-end 1999 result represents the transactions of 104 ISDA members. Counting data only from the 71 institutions that participated in both the mid-year and year-end surveys indicated a slightly larger second-half increase of 12.2%.

**1998 YEAR-END ISDA MARKET SURVEY**

The International Swaps and Derivatives Association reported that outstanding interest rate swaps, currency swaps and interest rate options grew 38% in the second half of 1998 to $50.997 trillion in notional principal at year-end.

On a year-to-year basis the increase measured 76%. Outstanding contracts amounted to $36.974 trillion notional at midyear 1998 and $29.035 trillion at the close of 1997. The 1998 yearend figures represent the transactions of 102 ISDA members as compiled by Arthur Andersen. When looking at the data for institutions that reported in both surveys, 84 in total, the increase in the notional principal outstandings for that group was 35%, consistent with the overall increase.

"Despite the reduction in risk taking positions by major financial institutions and hedge funds at the end of 1998, the survey results reflect the surge in demand for derivatives for hedging purposes," commented Thomas Montag, ISDA vice chairman and chair of its market survey committee, who is a managing director at Goldman Sachs & Co.

ISDA officials said that, in the future, ISDA will report only summary notional principal outstanding information semiannually since the Bank for International Settlements has begun to collect detailed global derivatives statistics semiannually.

**1997 YEAR-END ISDA MARKET SURVEY**

The International Swaps and Derivatives Association (ISDA) reported that privately negotiated derivatives contracts outstanding worldwide at December 31, 1997 stood at $29.035 trillion in notional principal, or 14.1% higher than at the close of 1996, and that activity over the full year grew 24.8% to $22.181 trillion notional despite a second-half downturn.

The notional principal of outstanding transactions gained 1.1% in the second half of 1997 as compared with a 12.9% increase in the first six months. Although the use of swaps to hedge currency volatility surged in the last six months of 1997, aggregate activity for all transaction types in the last half of the year dropped 39.5% below the first half.

"Strong increases in both activity and outstandings that characterized the first half of 1997 were offset in the second half, reflecting the sharp decline in Asian business," said Thomas K. Montag, co-chairman of ISDA's market survey committee who is a managing director at Goldman, Sachs & Co. in London.

Compiled by Arthur Andersen LLP from data on transactions submitted by 77 ISDA member dealers around the world, the survey covered three major categories of customized derivatives that are transacted by institutional investors on the wholesale financial markets - interest rate swaps, currency swaps and interest rate options. The average contract of an outstanding interest rate swap was $37 million in notional principal; $36 million for an average outstanding currency swap agreement.

Notional principal, the base amount for calculating the exchange of payments between counterparties in swaps and interest rate options contracts, is the yardstick used by ISDA to track market behavior. Financial risk amounts to a small fraction of the notional principal, typically from around 2% on gross to 1% on net, based on ISDA studies of replacement value.

For interest rate swaps, the outstandings were $22.291 trillion notional at the end of 1997, up 16.3% from 1996 and 1.0% higher than $22.115 trillion at midyear. Activity totaled $17.067 trillion notional for the full year, 24.8% above 1996. Second-half activity declined 41.9% to $6.275 trillion from $10.792 trillion in the first half.

For interest rate options, comprising caps, collar, floors and swaptions, year-end outstandings amounted to $4.920 trillion, up 4.2% from $4.723 trillion at the end of 1996. The outstandings declined 2.3% in the second half of 1997 from $5.033 trillion at June 30 to $4.920 trillion at December 31. Activity in interest rate options for the full 12 months increased 19.2% to $3.978 trillion from $3.337 trillion the previous year despite a second-half fall of 45% to $1.412 trillion from $2.567 trillion in the first half.

For currency swaps, adjusted for both sides of transactions, year-end 1997 outstandings grew 16.9% to $1.824 trillion from $1.560 trillion in 1996 and 15.1% over $1.585 trillion at midyear. Activity totaled $1.135 trillion, a 49.5% year-to-year increase. Activity transacted in the second half of 1997 amounted to $672.3 billion compared to $463.1 billion in the first half, a 45.2% increase in the second half of 1997.

**1996 YEAR-END ISDA MARKET SURVEY**

The International Swaps and Derivatives Association's (ISDA) market survey for 1996 year-end showed that the notional volume of transactions reported by ISDA members in all of the major categories of privately negotiated derivatives as outstanding at the close of 1996 rose 43.7% to $25.453 trillion. New business activity in the 12-month period grew 59.1% over the previous year to $17.774 trillion.

From June 30 to December 31, 1996, transactions outstanding in interest rate swaps, currency swaps and interest rate options increased 21% and new business activity rose 14%.

"Aside from specific situations in certain regions and generally tighter spreads, advances in risk management techniques and greater understanding of how to use them continued to sustain the growing market for these instruments," said Thomas K. Montag, chairman of ISDA's market survey committee and a London-based partner at Goldman, Sachs & Co.

For interest rate swaps, the year-end 1996 outstandings amounted to $19.171 trillion, up 49.6% from $12.811 trillion a year earlier and 23% higher than $15.584 trillion at midyear. The notional volume of new business activity increased to $13.678 trillion in 1996 from $8.699 trillion in 1995, $7.158 trillion of it in the second half and $6.520 trillion in the first half.

The notional volume of outstanding interest rate options -- caps, collars, floors and swaptions -- totaled $4.723 trillion at Dec. 31, 1996 against $4.190 trillion at June 30 and $3.704 trillion at the end of 1995, a year-to-year increase of 27.5% with 12.7% of it in 1996's second half. Activity totaled $3.337 trillion for the year, up 65.6%, of which $1.922 trillion was transacted in the second half and $1.416 trillion in the first six months.

For currency swaps, the outstanding notional volume at the end of 1996 stood at $1.560 trillion, a gain of 30.3% from $1.197 trillion at the end of 1995 and 20.5% higher than $1.295 trillion at June 30, 1996. Activity for the full 12 months was $759.1 billion (repeat billion) compared with 1995's $455.1 billion, a 66.8% increase. Activity amounted to $385.1 billion in the second half and $374 billion (repeat billion) in the first half.

Notional principal, the base amount for calculating the exchange of payments in swaps and interest rate options contracts, is the yardstick that ISDA uses to track market behavior. The financial risk in these transactions amounts to a small fraction of the notional principal, typically ranging from approximately 2% on gross to 1% on net, based on ISDA studies of replacement value.

The Arthur Andersen accounting firm compiled the survey from data provided by 83 ISDA member dealers in Asia, Australia, Europe and North America. They reported 633,316 transactions outstanding at year-end 1996 compared with 430,842 at the close of 1995. Analysis showed that adjusting the dollar conversions for fluctuations in exchange rates would not materially change the reported results.

The survey covers privately negotiated contracts for interest rate swaps, currency swaps and interest rate options under which two parties agree to exchange cash flows. Not included are securities with embedded derivative characteristics such as mortgage-backed obligations or futures and options traded on exchanges.

Interest rate swaps accounted for 75.3% of the reported outstandings and 77% of the year's new business activity. Of the interest rate swaps outstanding, transactions in U.S. dollars accounted for 30.4% compared with 34% the previous year. Japanese yen represented 23.2%, Deutschemarks 13% and French francs 8.1%.

**1995 YEAR-END ISDA MARKET SURVEY**

In July 1996 ISDA announced the findings of its market survey of swaps and other privately negotiated derivatives transactions in 1995. Compiled by the Arthur Andersen accounting firm from data provided by 71 ISDA member dealers around the world, the results indicated strong gains in all sectors of the business.

Transactions outstanding in interest rate swaps, currency swaps and interest rate options at the close of 1995 stood at $17.713 trillion in notional principal, up 56.7 % from $11.303 trillion at year-end 1994. The survey found that the total of outstandings in the second half climbed 27.2% from the first half -- 18.4% for interest rate swaps, 15.2% for currency swaps and 79.3% for interest rate options. The aggregate notional principal of new business activity in 1995 rose 37.3% to $11.169 trillion from the previous year's $8.133 trillion.

For interest rate swaps, which dominate activity in privately negotiated derivatives, year-end outstandings increased 45.3% to $12.811 trillion from $8.816 trillion at the close of 1994 and 18.4% from $10.817 trillion at midyear 1995. The notional volume of new business for the year grew 39.4% to $8.699 trillion from 1994's $6.241 trillion. Second-half activity amounted to $5.270 trillion, up 53.7% from $3.429 trillion in the preceding six months.

Interest rate options -- caps, collars, floors and swaptions-- that were outstanding at year-end 1995 stood at $3.704 trillion compared with $2.066 trillion at mid-year and $1.573 trillion a year earlier, a gain of 136% for the full year and 79.3% for the second half. New transactions in interest rate options grew 33.2% to $2.015 trillion from $1.513 trillion. Activity in the second half amounted to $1.340 trillion, almost double the $675.8 billion volume of activity in the first six months.

Currency swaps also registered gains. Contracts outstanding at the close of 1995 amounted to $1.197 trillion, up 15.1% from $1.040 trillion at mid-year and up 30.9% from $914.8 billion at the close of 1994. Activity in currency swaps for the full 12 months of 1995 totaled $455.1 billion, a 20% increase over $379.3 billion in the previous year. Second-half activity nearly doubled to $301.3 billion from $153.8 billion in the first half.

Notional principal, the yardstick that ISDA uses to track market behavior, is the base amount for calculating cash flows in swaps and interest rate options contracts. The financial risk involved in these transactions amounts to a small fraction of the notional principal, between 1% to 2% in ISDA's studies of replacement value.

"The growing market clearly reflects recognition that privately negotiated derivatives have become a major risk management tool to hedge financial uncertainty in business and investment portfolios," said Gay Evans, chairman of ISDA and a managing director of Bankers Trust International.

Regarding interest rate options, Tom Montag, vice chairman of ISDA who co-chairs the market survey committee and is a partner at Goldman, Sachs & Co., said, "The robust activity in these options can largely be attributed to increased mortgage hedging, increased market volatility and the general pickup in business."

To realize the effects of translating the survey's results into U.S. dollars for reporting purposes, ISDA analyzed historical survey data results, applying constant exchange rates. This analysis eliminates the portion of the reported increase due to a change in exchange rates and indicates the growth attributable to the increased volume in that particular transaction type in the currency. Based on constant exchange rates and using year-end 1995 exchange rates, the outstandings reported by ISDA for interest rate and currency swaps totaled $13.657 trillion versus the outstandings for interest rate and currency swaps of $14.008 trillion. The difference between the total outstanding numbers for 1995 was 2.57%.

However, the results reported by individual currencies between 1991 and 1995 differed substantially when analyzed individually. Outstanding currency and interest rate swap transactions in Japanese yen were reported as having grown 369.8% between 1991 and 1995. In constant exchange rate terms, however, the growth was 278.9%. Other currencies where the reported growth rates and the constant exchange rate growth rates differed included Deutsche mark currency and interest rate swap outstandings which grew 363.8% in constant exchange rate terms (versus the reported 400.9% growth) between 1991 and 1995. Transactions in other currencies also showed differences but did not impact the overall reported numbers because they represented a small percentage of the market.

"We are pleased to see that the total reported outstandings are representative of the market when viewed in U.S. dollar terms and in constant exchange rate terms," commented Robert Schwartz, executive vice president at Republic National Bank and co-chairman of the ISDA market survey committee.

Based on information provided by participating swaps dealers in Asia, Australia, Europe and North America, there were 430,842 swaps transactions of all types outstanding at the close of 1995 compared with 306,197 at the same point a year earlier.

The ISDA survey covers privately negotiated contracts under which two parties agree to exchange cash flows. Not included are securities with imbedded derivative characteristics such as mortgage-backed obligations and structured notes. Also not part of the survey are exchange-traded futures and options contracts.

Interest rate swaps transactions in U.S. dollars accounted for 34% of the year-end outstandings and 33% of the full year's activity. Currencies other than the U.S. dollar accounted for the remaining two-thirds of the world's interest rate swaps activity and outstandings. Japanese yen came next with 26% of all activity in interest rate swaps followed by the French franc (13%) and the Deutschemark (11%).