

## 2007

# Treasury International Capital (TIC) D Seminar

#### Debra Gruber, Stephanie Curcuru, Eric Darlow, Donnovan Surjoto, Michele Waldman and Thad Russell

FEDERAL RESERVE BANK of NEW YORK

Introduction Debra Gruber

FEDERAL RESERVE BANK of NEW YORK

	QUARTERLY REPORT TO FEDERAL RESERVE BANK OF NEW YORK	
Please type or print: Name of Reporting Entity:	<b>REPORT OF HOLDINGS OF,</b>	Form D
ID Number:	AND TRANSACTIONS IN, FINANCIAL DERIVATIVES	DEPARTMENT OF THE TREASURY Office of the Assistant Secretary for International Affairs
As of Date: Name of Contact if We Have	CONTRACTS	Revised June 2006 Form Approved OMB Control No. 1505-0199
Questions:	Legal basis and confidentiality statement:	Important notes:
Contact's Phone Number: Name and Title of Officer Authorized to Sign Report:	This report is required by law (22 U.S.C. 286f; 22 U.S.C. 3103; E.O. 10033; 31 C.F.R. 128.1 (a)). Failure to report can result in a civil penalty of not less than \$2,500 and not more than \$25,000. Willful failure to report can result in criminal prosecution and upon conviction a fine of not more than \$10,000; and, if an individual, imprisonment for not more than one year, or both. Any officer, director, employee, or agent of any corporation who knowingly	<ul> <li>Before preparing this report, please read the Instructions carefully.</li> <li>Additional copies of this form, the Instructions, and the answers to</li> </ul>
Please read carefully and sign below:	participates in such violation may, upon conviction, be punished by a like fine, imprisonment, or both (22 U.S.C. 3105 (a) and (b); 31 C.F.R. 128.4 (a) and (b)). Data reported on this form will be held in confidence by the Department of the Treasury, the Board of Governors of the Federal Reserve System, and the Federal Reserve Bank of New York acting	Frequently Asked Questions can be obtained at the following web site: www.ustreas.gov/tic/forms.html
I. (Signature of Officer Authorized to Sign Report) of the reporting entity do hereby declare that the Treasury International Capital D report for this report date has	as fiscal agent for the Treasury. The data reported by individual respondents will not be published or otherwise publicly disclosed; information may be given to other Federal agencies, insofar as authorized by applicable law (44 U.S.C. 3501 <i>et seq.</i> ; 22 U.S.C. 3101 <i>et seq.</i> ). Aggregate data derived from reports on this form may be published or otherwise disclosed only in a manner that does not specifically identify any individual respondent.	<ul> <li>This report should be filed no later than the sixtieth calendar day following the last day of the quarter.</li> <li>Amounts should be reported in millions of dollars.</li> </ul>
been prepared in conformance with the instructions and is true to the best of my knowledge and belief.	Note: No person is required to respond to any U.S. Government collection of information unless the form displays a currently valid control number assigned by the Office of Management and Budget (OMB).	

 This past June, a gap in the US balance of payments was closed when the Treasury began to publish cross-border derivatives data.

> SECTION V.—Holdings of, and Transactions in, Financial Derivatives Contracts with Foreigners Reported by Businesses in the United States

TABLE CM-V-1.—Gross Totals of Holdings with Positive and Negative Fair Values, by Type of Contract

	2005		2006					
	Dec.	Mar.	June	Sept.	Dec.			
Gross total of holdings with negative fair values	1,132,114	1,123,500	1,228,038	1,133,761	1,178,629			
Total over-the-counter (OTC) contracts	1,116,479	1,105,110	1,204,707	1,114,818	1,155,726			
Single-currency interest rate contracts	815,068	796,990	860,078	766,070	746,635			
Forwards	1,461	1,861	9,577	1,862	1,622			
Swaps	745,319	729,685	781,571	697,016	678,278			
Options	68,288	65,444	68,930	67,192	66,735			
Foreign exchange contracts	132,101	124,814	140,947	131,232	150,272			
Forwards	39,547	33,597	44,932	36,822	47,063			
Swans	60 121	67 000	71 1/0	71 606	77 601			

[Holdings at end of period in millions of dollars. Source: Treasury International Capital Reporting System]

#### http://www.fms.treas.gov/bulletin/index.html

 And the U.S. Department of Commerce used the data in compiling the U.S. balance of payments.

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0.3. Iteabury securities......
66 U.S. securities other than U.S. Treasury securities......
67 U.S. currency.....
68 U.S. liabilities to unaffiliated foreigners reported by U.S
69 U.S. liabilities reported by U.S. banks, not included elsew
70 Financial derivatives, net.....
71 Statistical discrepancy (sum of above items with sign reversed)...
Memoranda:
72 Balance on goods (lines 3 and 20).....
73 Balance on services (lines 4 and 21)....
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74 Balance on goode and earwiges (lines 2 and 10)
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http://www.bea.gov/international/index.htm

- To reach this milestone, before any data was collected, there was a long-running dialogue on how the report should be designed to meet government information needs as well as minimize reporting burden. These discussions included:
  - Treasury
  - Commerce
  - Board of Governors
  - FRBNY
  - Staff and officials of many market participants

 We also acknowledge the work of the officials and staff at reporting institutions who have designed systems to provide high quality cross-border derivatives data, without which the publication and release of the new data series would not have been possible.

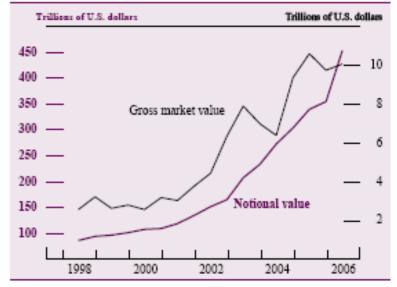
 The publication of the data is only one step in an ongoing process.

#### U.S. Cross-Border Derivatives Data: A User's Guide

Stephanie E. Curcuru, of the Board's Division of International Finance, prepared this article. Jonas J. Robison provided research assistance.

The global derivatives market has grown rapidly in the past decade. By one measure of market size—the notional value, which is used to determine the payments made on a derivatives contract—the derivatives market expanded from \$87 trillion in June 1998 to \$454 trillion in June 2006 (figure 1).<sup>1</sup> Measured by the price at which a derivatives contract can be purchased in a current transaction, or the market value, the derivatives market grew from \$3 trillion in June 1998 to \$10 trillion as of June 2006.

Available data suggest that cross-border derivatives deals—in which a resident of one country enters into a contract with a resident of another country make up a substantial share of derivatives transac Gross market value and notional value of global derivatives outstanding, 1998–2006



Note: The data are semiannual and extend through June 2006. Gross market value is the sum of the total gross positive market value of contracts with all counterparties and the absolute value of the total gross negative Purposes and Uses Stephanie Curcuru

#### Overview:

- Introduction to the U.S. balance of payments (BOP) and international investment position (IIP).
- Role of TIC Form D data and its impact on the U.S. BOP and IIP
- Comparison of TIC Form D data with crossborder derivatives data from other countries
- A big thanks

#### The U.S. BOP and IP:

- BOP: The record of the economic transactions between one country's residents and those of the rest of the world in a given period.
- The Bureau of Economic Analysis (BEA) publishes the U.S. BOP quarterly in three sections:
  - The current account
  - The capital account
  - The financial account

#### • The U.S. BOP :

- Transactions that generate a receipt of funds into the United States are each recorded with a credit (positive) entry. They have offsetting debit (negative) entries to reflect transactions that generate payments of funds to foreign residents.
- The international transactions accounts should always have a zero balance.
- Any remaining balance due to errors or omissions in the recorded international transactions is recorded as a statistical discrepancy.

#### The U.S. IIP :

- Reports the value of U.S.-owned assets abroad and that of foreign-owned assets in the United States.
- In the IIP, the BEA decomposes each outstanding position at the end of each calendar year into three parts:
  - The position at the end of the previous year
  - Net transactions recorded in the U.S. BOP during the current calendar year
  - Valuation adjustments attributable to changes in exchange rates, prices, and other factors

#### Role of TIC Form D :

- Missing cross-border derivatives transactions result in an "imbalance" in the BOP because the associated cash flows are recorded.
- IMF BOP and IIP guidelines require reporting of financial derivatives.
- Other TIC reporting forms are ill equipped to capture cross-border derivatives transactions and positions.
- TIC Form D was designed specifically to capture financial derivatives transactions and holdings for inclusion in the U.S. BOP and IIP.

#### The 2006 BOP without Derivatives

U.S. Dollars, Billions	Q1 Flow	Q2 Flow	Q3 Flow	Q4 Flow
Current & Capital Accts	-202	-207	-218	-189
Financial Account	194	143	240	227
Sum w/o Derivatives	-8	-63	22	38
Memo:				
Statistical Discrepancy	8	63	-22	-38

#### Note: Numbers may not sum due to rounding.

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#### Note: Numbers may not sum due to rounding.

#### The 2006 BOP with Derivatives :

- Derivatives transactions are as much as 10% of financial account flows, can be volatile, and have a lot of growth potential.
- In 3 out of 4 quarters of 2006 inclusion of derivatives moves the sum of the international transactions accounts closer to zero.

#### • The 2006 IIP:

	2005		2006	
U.S. Dollars, Billions	Position	Flows	Val Adj	Position
U.Sowned assets abroad	10,386	1,055	1,075	12,517
Direct investment	2,535	235	85	2,856
Foreign securities	4,436	289	797	5,432
Deposit claims and other	3,505	530	194	4,230
Foreign-owned assets in the U.S.	12,683	1,860	574	15,116
Foreign official assets in the U.S.	2,306	440	24	2,770
Direct investment	1,868	181	51	2,099
U.S securities	4,997	556	270	5,823
Deposit liabilities and currency	3,511	683	230	4,424
Derivatives Claims	1,190	*	*	1,238
Derivatives Liabilities	1,132	-29*	30*	1,179
Net International Position of the U.S.	-2,238	-833	532	-2,540

# \* Only net flows are reported and are shown in the liabilities row.

#### The 2006 IIP :

- The U.S. gross positions in derivatives are sizable.
- Gross claims and liabilities positions are currently balanced.

#### • TIC D and Global Derivatives Data:

- If all countries were to report cross-border transactions accurately and on the same basis, then the summation of all cross-border flows in each asset class into and out of all countries would equal zero.
- The sum across countries of net cross-border positions in each asset class should equal zero.

#### Global Cross-Border Derivatives Flows:

U.S. Dollars, Billions

			S	Selected c	countries				All ex		
	UK	Fra	Ger	Lux	Net	Jap	HK	Kor	US	US	All
Q1	-10	1	-5	0	-3	0	0	0	-18	2	-16
Q2	-5	3	3	-1	0	2	2	-3	-1	14	13
Q3	-8	2	-1	6	-2	0	1	-2	-2	15	13
Q4	-3	-2	-4	5	-2	1	2	1	4	-2	-2
2006 Total	-26	4	-8	10	-7	2	5	-4	-17	29	12

**Note:** Global derivatives data from the IMF. 'All' includes countries not shown.

#### Global Cross-Border Derivatives Flows:

U.S. Dollars, Billions

	Selected countries										
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Q2	-5	3	3	-1	0	2	2	-3	-1	14	13
Q3	-8	2	-1	6	-2	0	1	-2	-2	15	13
Q4	-3	-2	-4	5	-2	1	2	1	4	-2	-2
2006 Total	-26	4	-8	10	-7	2	5	-4	-17	29	12

**Note:** Global derivatives data from the IMF. 'All' includes countries not shown.

#### Global Cross-Border Derivatives:

- Total U.S. transactions in 2006 reported on Form D were larger in absolute value than those reported by any other country.
- In 2006, on net other countries recorded a derivatives outflow.
- The recorded net derivatives inflow into the United States in 2006 is roughly similar in magnitude to the sum of the outflows reported by all other countries.
- Including the U.S. position fills a gap in our understanding of global derivatives flows.

#### Global Cross-Border Derivatives Positions:

#### U.S. Dollars, Billions

		Selected Countries							
		U.K.	Fra	Lux	Net	Jap	US	US	All
Assets	2005	1,761	226	18	70	26		1,132	
	2006	2,191	n.a.	12	n.a.	n.a.		1,238	
Liabs	2005	1,780	243	13	28	33		1,190	
	2006	2,253	n.a.	12	n.a.	n.a.		1,179	
Net	2005	-19	-17	5	42	-7	-55	58	3
	2006	-62	n.a.	0	n.a.	n.a.	-66	59	-7

**Note:** Global derivatives data from the IMF and U.K Office of National Statistics. 'All' includes countries not shown.

#### Global Cross-Border Derivatives Positions:

U.S. Dollars, Billions

	Selected Countries								
		U.K.	Fra	Lux	Net	Jap	US	US	All
Assets	2005	1,761	226	18	70	26		1,132	
	2006	2,191	n.a.	12	n.a.	n.a.		1,238	
Liabs	2005	1,780	243	13	28	33		1,190	
	2006	2,253	n.a.	12	n.a.	n.a.		1,179	
Net	2005	-19	-17	5	42	-7	-55	58	3
	2006	-62	n.a.	0	n.a.	n.a.	-66	59	-7

**Note:** Global derivatives data from the IMF and U.K Office of National Statistics. 'All' includes countries not shown.

#### Global Cross-Border Derivatives Positions:

- In 2005 U.S. derivatives claims and liabilities, approximated using the gross positive and gross negative fair values on Form D, were each greater than those reported by all countries except the United Kingdom.
- This U.S. net claim is similar in magnitude to the net derivatives liabilities position reported by all other countries.
- Including the U.S. fills a gap in our understanding of global derivatives positions.

#### Conclusion:

- The inclusion of derivatives data collected on TIC Form D substantially improves the U.S. BOP and IIP.
- These data increase compliance with IMF reporting guidelines.
- These data are consistent with cross-border derivatives data from other countries.
- Enables us to start monitoring something that could grow to a large risk.

# TIC D Essentials Eric Darlow

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#### Who Must Report:

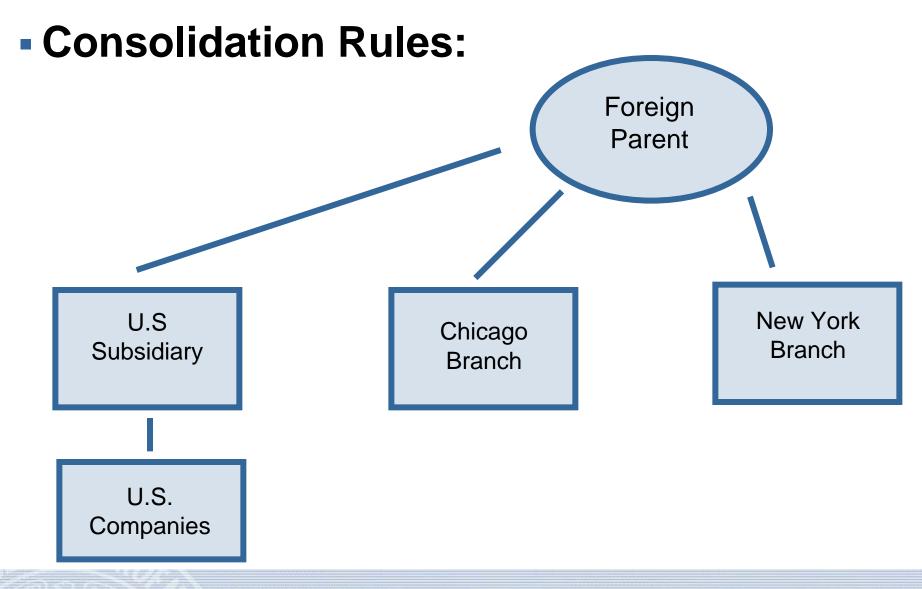
 All financial and commercial entities legally established in the United States that have derivatives contracts that exceed the exemption level should complete all parts of TIC Form D.

#### Who Must Report:

- Contracts are reportable on TIC D if they meet the three criteria of FASB Statement No. 133's definition of a derivative contract.
  - 1) The contract has one or more underlying and one or more notional value.
  - 2) The contract requires little to no initial net investment.
  - 3) The contract requires or permits a net settlement.

#### Consolidation Rules:

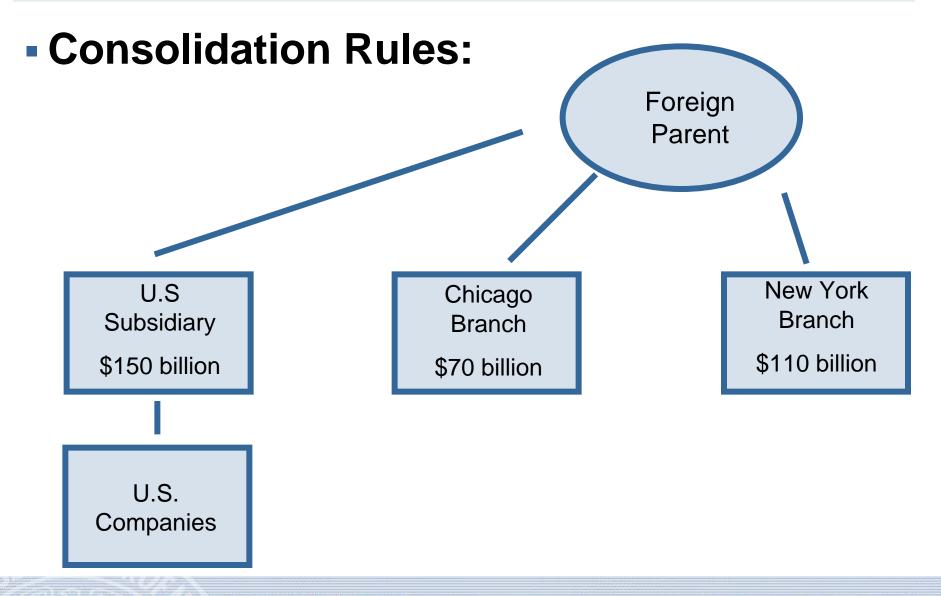
- The top-tier U.S. entity should report the TIC Form D.
- U.S. resident subsidiaries should be consolidated on the same basis as annual reports and in accordance with GAAP.
- U.S. resident subsidiaries or branches of foreign entities who own more than one legal entity in the U.S. should report separately for each toptier U.S. entity.



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#### Exemption Level:

- Reporting is required if the total notional value of worldwide derivative contract holdings with both domestic and foreign counterparties exceeds \$100 billion as of the end of a calendar quarter.
- Only the contracts held on the books of U.S. offices and branches should be reported.



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#### Notional Value:

- The specified principal amount of a derivatives contract on which payments are based and calculated. The nature of the notional value differs according to the type of derivative.
- For a foreign currency option, the notional is the amount of currency that could be purchased or sold at a specified price.
- For an interest rate swap, the notional is the predetermined dollar principal on which the exchanged interest rate payments are based.

#### Who's Foreign:

- Individuals, corporations, subsidiaries, or other organizations incorporated, licensed, or otherwise organized outside the United States.
- Derivatives contracts should be reported on TIC Form D opposite the country of residence.

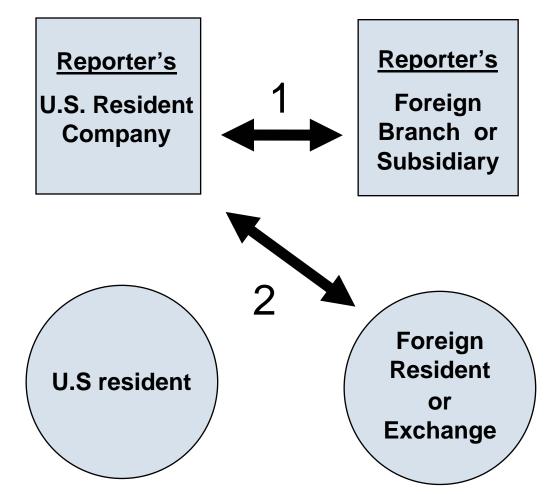
#### Who's Foreign:

- Corporations and subsidiaries are residents of the country in which they are incorporated, not the country of the parent company or ultimate guarantor.
- Branches are residents of the country in which they are licensed.
- Individuals are residents of the country of their tax domicile.

Report contracts with foreign residents, either affiliated or unaffiliated.

The two arrows are examples of contracts that should be reported.

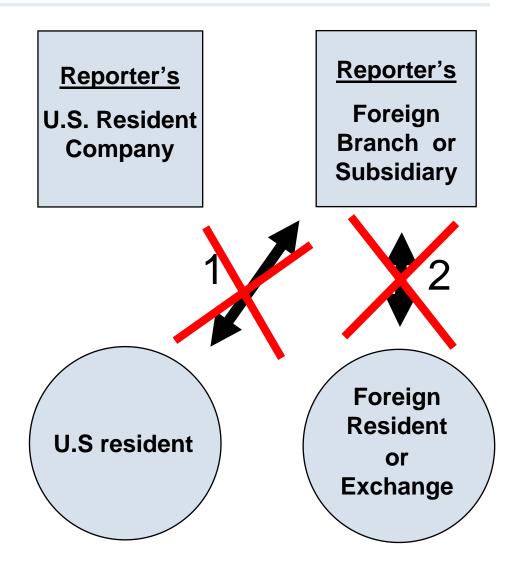
- 1. The first is a contract between one of the reporter's U.S. companies and a foreign affiliate.
- 2. The second represents a contract between the U.S. company and an unaffiliated foreign resident or exchange.



<u>Do not</u> report contracts of foreign affiliates.

The two arrows are examples of contracts that should <u>not</u> be reported.

- 1. The first is a contract between one of the reporter's foreign affiliates and another foreign resident or foreign exchange.
- The second represents a contract between the foreign affiliate and another U.S. resident.



#### When to Report:

- Positions should be the outstanding balances as of the close of business on the last business day of the calendar quarter covered by the report.
- Net Settlements should be the accumulated net cash flows over the course of the calendar quarter.
- TIC Form D is due to FRBNY no later than 60 days after the calendar quarter.
- The time designated as the close of business should be reasonable and applied consistently.

#### How to Report:

 All positions and net settlements from the perspective of the U.S. institution, U.S. client, or U.S. exchange. Thus, positions of your foreign customers on U.S. exchanges should be reported from the perspective of the U.S. exchange.

#### How to Report:

- In millions of U.S. dollars. Report the U.S. dollar equivalent of foreign currency amounts.
- Whole values (no decimals).
- Negative values allowed in Net Settlements only.

#### • Where to Report:

- TIC D reports should be filed with the International Reports Division, Federal Reserve Bank of New York.
  - Electronically. Reports may be submitted over the Internet. Internet Electronic Submission (IESUB), either with online data entry or spreadsheet file transfer.
  - By mail to: 33 Liberty Street, 4<sup>th</sup> Floor

NY, NY 10045

By Fax: (212) 720-8028

#### Internet Electronic Submission (IESUB)

- ☑ Data entry
- ☑ Spreadsheet file transfer
- ☑Convenient and user friendly
- ✓Eliminates paper and fax
- ✓Validity checks
- ☑Confirmation of receipt

For more information about electronic filing, go to http://www.reportingandreserves.org/iesub.html

# Row-by-Row and Column-by-Column

Donnovan Surjoto

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- On a column level, the report is separated into 3 types of information.
  - Gross Positive Fair Value
  - Gross Negative Fair Value
  - U.S. Net Settlements

PART 1 - HOLDINGS OF, AND TRANSACTIONS IN, DERIVATIVES CONTRACTS WITH FOREIGN-RESIDENTS				
DERIVATIVES CONTRACTS BY MAJOR RISK CATEGORY	FAIR VALUE OF DERIVATIVES CONTRACTS WITH FOREIGN RESIDENTS AT END OF REPORTING QUARTER		U.S. NET SETTLEMENTS DURING THE QUARTER WITH	
	GROSS POSITIVE	GROSS NEGATIVE	FOREIGN RESIDENTS	
	1	2	3	

#### Fair Value:

 Holdings of derivatives should be reported at fair (market) value.
 Fair value is generally defined as the amount for which the contract could be exchanged in a current transaction between willing parties, other than in a forced or liquidation sale.

- Fair Value:
  - If a quoted market price is available for a contract, calculate the fair value as the number of trading units of the contract multiplied by the market price.
  - If a quoted market price is not available, report your institution's best estimate of fair value based on the quoted market prices of similar contracts or on valuation techniques such as discounted cash flows.

#### Fair Value:

 See FASB Statement No. 133, Appendix F, paragraph 540 for additional information on estimating fair (market) values.

#### http://www.fasb.org/pdf/fas133.pdf

#### Fair Value:

#### Gross Positive Fair Value:

 The aggregate fair (market) value of all outstanding derivatives contracts between U.S. residents and foreign-resident counterparties with a positive fair (market) value.

#### Fair Value:

#### Gross Negative Fair Value:

 The aggregate fair (market) value of all outstanding derivatives contracts between U.S. residents and foreign-resident counterparties with a negative fair (market) value.

- On a row level, the report is separated into two parts.
- Part 1, the information is broken down by Major Risk Category:

PART 1 - HOLDINGS OF, AND TRANSACTIONS IN, DERIVATIVES CONTRACTS WITH FOREIGN-RESIDENTS				
DERIVATIVES CONTRACTS BY MAJOR RISK CATEGORY	FAIR VALUE OF DERIVATIVES CONTRACTS WITH FOREIGN RESIDENTS AT END OF REPORTING QUARTER		U.S. NET SETTLEMENTS DURING THE QUARTER WITH	
	<b>GROSS POSITIVE</b>	GROSS NEGATIVE	FOREIGN RESIDENTS	
	1	2	3	

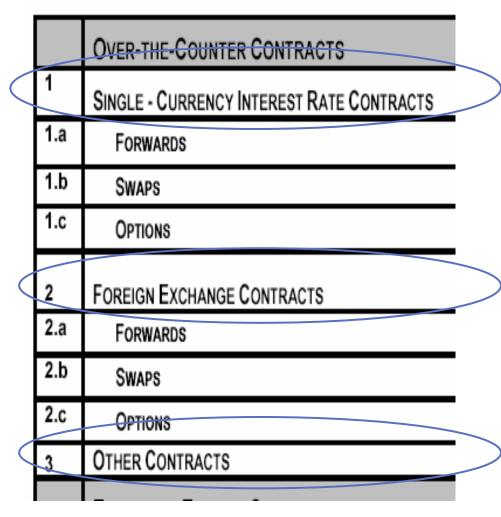
- On a row level, the report is separated into two parts.
- Part 2, the information is broken down by Foreign Economies and Organizations.

PART 2 - HOLDINGS OF, AND TRANSACTIONS IN, DERIVATIVES CONTRACTS WITH FOREIGN-RESIDENTS BY COUNTRY			
FOREIGN ECONOMIES AND ORGANIZATIONS	FAIR VALUE OF DERIVATIVES CONTRACTS WITH FOREIGN RESIDENTS AT END OF REPORTING QUARTER		U.S. NET SETTLEMENTS DURING THE QUARTER WITH
	<b>GROSS POSITIVE</b>	<b>GROSS NEGATIVE</b>	FOREIGN RESIDENTS
	1	2	3

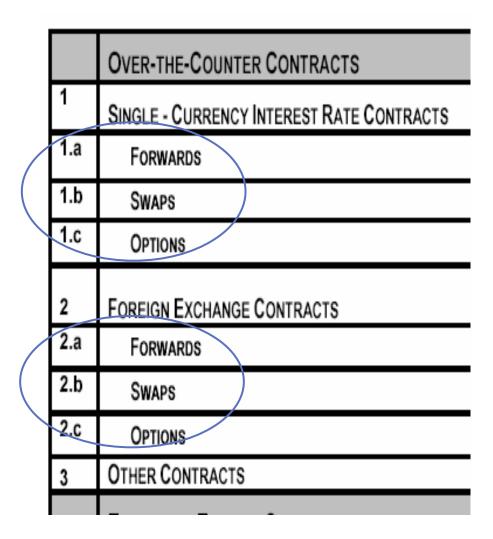
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- Part 1, Major Risk Category consists of:
  - Over-the-Counter Contracts.
  - Exchange Traded Contracts.
  - Memorandum Items.

- Over-the-Counter Contracts (OTC) are reported by major risk type
  - Single-currency interest rate
  - Foreign exchange
  - Other contracts



- Interest Rate and Foreign Exchange Contracts are broken out by type of derivative
  - Forwards
  - Swaps
  - Options



#### Forwards:

 Contracts that represent agreements for delayed delivery of financial instruments or commodities in which the buyer agrees to purchase and the seller agrees to deliver, at a specified date and price or yield.

#### Example of Forwards:

 On 3/15/2007, ABC Inc. (TIC D reporter) has a year forward contract to buy \$100MM Australian (ASD) with an Australian counterparty for \$80mm USD. On 09/28/2007, the fair value of the forward contract is -\$1 MM.

#### What is Reportable?

 ABC Inc. will report the absolute value of -\$1 MM in Column 2 in the forward row of Foreign Exchange contracts and opposite Australia.

PART 1 - HOLDINGS OF, AND TRANSACTIONS IN, DERIVATIVES CONTRACTS WITH FOREIGN-RESIDENTS				
	DERIVATIVES CONTRACTS BY MAJOR RISK CATEGORY	FAIR VALUE OF DERIVATIVES CONTRACTS WITH FOREIGN RESIDENTS AT END OF REPORTING QUARTER		U.S. NET SETTLEMENTS DURING THE QUARTER WITH
		GROSS POSITIVE	GROSS NEGATIVE	FOREIGN RESIDENTS
			millions	
Forwards			1	

PART 2 - HOLDINGS OF, AND TRANSACTIONS IN, DERIVATIVES CONTRACTS WITH FOREIGN-RESIDENTS BY COUNTRY			
FOREIGN ECONOMIES AND ORGANIZATIONS	FAIR VALUE OF DERIVATIVES CONTRACTS WITH FOREIGN RESIDENTS AT END OF REPORTING QUARTER		U.S. NET SETTLEMENTS DURING THE QUARTER WITH
	<b>GROSS POSITIVE</b>	GROSS NEGATIVE	FOREIGN RESIDENTS
millions			

Australia

1

#### Swaps:

 Contracts in which two parties agree to exchange payment streams based on a specified notional amount for a specified period

#### Example of Swaps:

 On 06/01/2007, ABC Inc. (TIC D reporter) entered into a one-year swap with a UK counterparty to receive fixed (7%) and pay floating quarterly on a notional \$400 million. On 09/28/2007, the fair value of the swap contract is \$4 MM.

#### What is Reportable?

 ABC Inc. will report \$4 MM in Column 1 for Single-Currency Interest Rate Contracts and in Part 2 opposite the UK.

PART 1 - HOLDINGS OF, AND TRANSACTIONS IN, DERIVATIVES CONTRACTS WITH FOREIGN-RESIDENTS				
	DERIVATIVES CONTRACTS BY MAJOR RISK CATEGORY	FOREIG	FAIR VALUE OF DERIVATIVES CONTRACTS WITH FOREIGN RESIDENTS AT END OF REPORTING QUARTER	
		GROSS POSITIVE	GROSS NEGATIVE	FOREIGN RESIDENTS
		millions		
Swaps		4		

PART 2 - HOLDINGS OF, AND TRANSACTIONS IN, DERIVATIVES CONTRACTS WITH FOREIGN-RESIDENTS BY COUNTRY				
FOREIGN ECONOMIES AND ORGANIZATIONS	FOREIGN	FAIR VALUE OF DERIVATIVES CONTRACTS WITH FOREIGN RESIDENTS AT END OF REPORTING QUARTER		
	GROSS POSITIVE	GROSS NEGATIVE	FOREIGN RESIDENTS	
United Kingdom	millions 4			

#### Options:

 Contracts that convey a right or obligation to buy or sell a financial instrument at a specified price and date.

#### • Example of Options:

On 3/15/2007, ABC Inc. (TIC D reporter) owns an FX call option to buy 400 MM euros on 10/15/2007 from a counterparty located in Germany. On 09/28/2007, the fair value of the option contract is \$5 MM

#### What is Reportable?

 ABC Inc. will report \$5 MM in Column 1 opposite Germany for the Foreign Exchange contracts.

PART 1 - HOLDINGS OF, AND TRANSACTIONS IN, DERIVATIVES CONTRACTS WITH FOREIGN-RESIDENTS				
	DERIVATIVES CONTRACTS BY MAJOR RISK CATEGORY	FOREIGN	FAIR VALUE OF DERIVATIVES CONTRACTS WITH FOREIGN RESIDENTS AT END OF REPORTING QUARTER	
		GROSS POSITIVE	GROSS NEGATIVE	FOREIGN RESIDENTS
		millions		
Options		5		

PART 2 - HOLDINGS OF, AND TRANSACTIONS IN, DERIVATIVES CONTRACTS WITH FOREIGN-RESIDENTS BY COUNTRY				
FOREIGN ECONOMIES AND ORGANIZATIONS	FOREIGN	FAIR VALUE OF DERIVATIVES CONTRACTS WITH FOREIGN RESIDENTS AT END OF REPORTING QUARTER		
	GROSS POSITIVE	GROSS NEGATIVE	FOREIGN RESIDENTS	
	millions			
Germany	5			

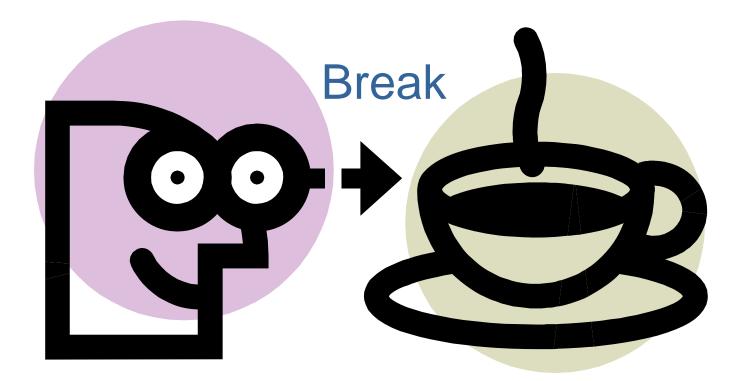
#### Fair Value for Futures:

- Can be obtained when there is any residual balance in the account where it is settled each day by cash payment (variation margin).
- Generally, the clearing broker net settles all receipts and payments each day, but these amounts sometimes are not credited or debited to customer accounts until the next day. Therefore, the variation margin debits or credits for the last trading day of the quarter is what should be reported.

 Exchange-Traded Contracts information is collected based on the location of the exchanges on Rows 4, 5 and 6.

3	UTHER CONTRACTS	86030
	EXCHANGE-TRADED CONTRACTS	
4	OWN DERIVATIVES CONTRACTS ON FOREIGN EXCHANGES	86041
5	U.S. CUSTOMERS' DERIVATIVES CONTRACTS ON FOREIGN EXCHANGES	86042
6	FOREIGN COUNTERPARTY DERIVATIVES CONTRACTS ON U.S.	
	EXCHANGES	86043
7	GRAND TOTAL (SUM OF ROWS 1-6)	86099

- For contracts traded on Foreign Exchanges, report gross fair values for :
  - U.S. reporter's Own Derivatives Contracts on Row 4.
  - U.S. Customers' Contracts on Row 5.
  - Report gross fair values for Foreign Counterparty Contracts traded on U.S. Exchanges on Row 6.



FEDERAL RESERVE BANK of NEW YORK

# Net Settlements Thad Russell

FEDERAL RESERVE BANK of NEW YORK

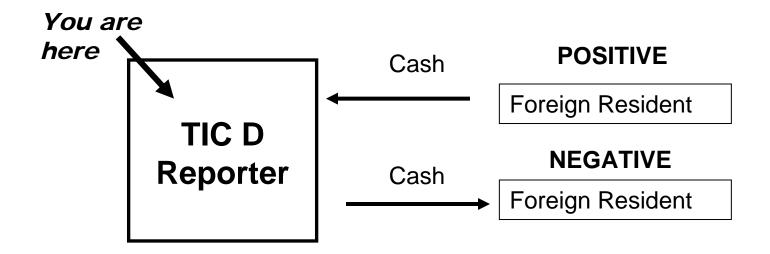
### 4. Net Settlements

#### Net Settlements:

- Include all cash receipts and payments made during the quarter for the acquisition, sale, or final closeout of derivatives.
- <u>Except</u>: Do not report payments in the case of physical delivery – when the underlying commodity or security is delivered.

#### 4. Net Settlements

- U.S. receipts of cash from foreign residents should be treated as a positive amount (+)
- U.S. payments of cash to foreign residents should be treated as a negative amount (-)



### 4. Net Settlements

#### • Examples:

- Cash settlement of a derivatives contract, such as a forward.
- Periodic payments under the terms of a contract, such as a swap agreement.
- Daily payments or receipts (variation margin) of an exchange-traded contract.

#### Forwards:

 Report cash received or paid on maturity or settlement.

#### Example:

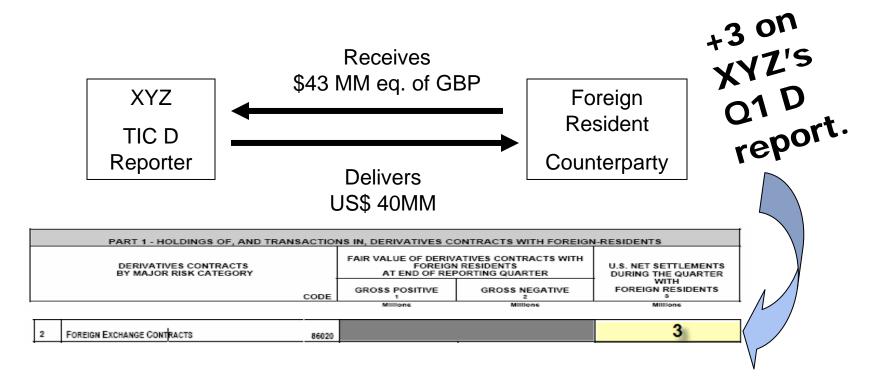
 On 9/15/2007, XYZ, a TIC D reporter, contracts to buy 20MM GBP six months forward at a rate of \$2.00.

- Forwards Example (cont.):
  - Then, on March 15, 2008 . . .



#### • Forwards Example (cont.):

The GBP spot rate closes at \$2.15 on March 15, making the dollar equivalent value of XYZ's sterling \$43 MM.



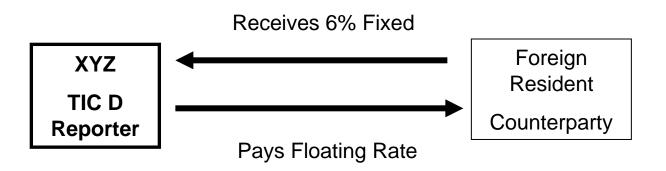
FEDERAL RESERVE BANK of NEW YORK

#### Swaps:

Report net cash payments or receipts.

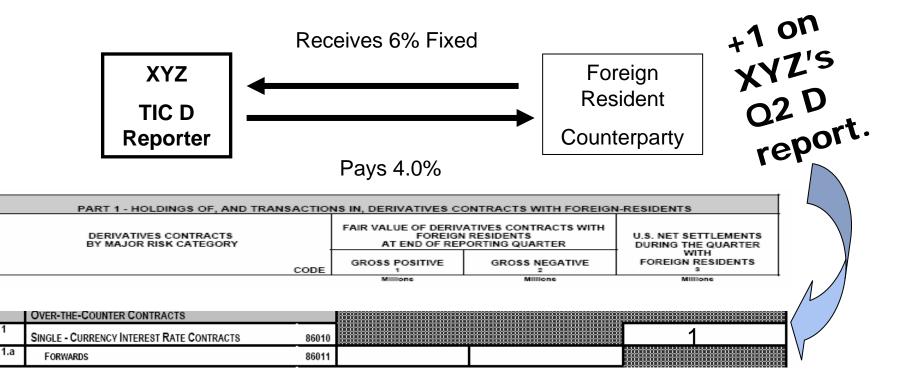
#### Example:

 XYZ, a TIC D reporter, has a two-year swap with a foreign counterparty to receive 6% and pay a floating rate quarterly on a notional \$200 million.



#### • Swaps Example (cont.):

On 4/15/2007, XYZ's floating rate on the swap is 4.0%.

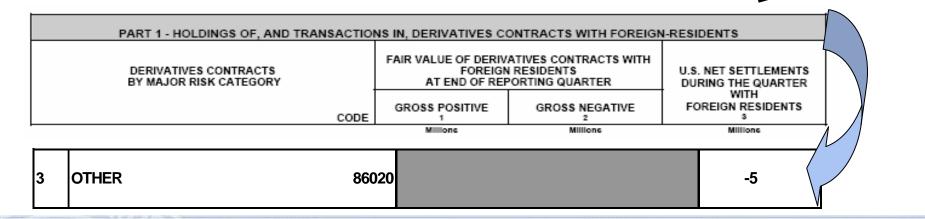


#### Options:

- Report premiums paid or received.
- For exercised options where settlement is only in cash, report the net payment of cash upon exercise.

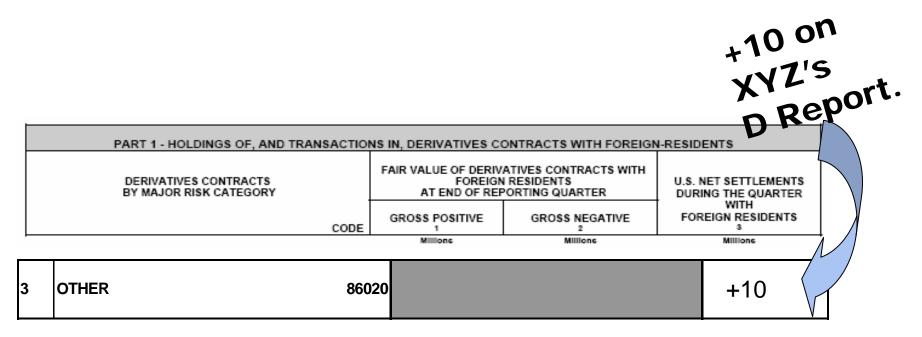
#### Options Example:

- XYZ, a U.S. resident, purchases call options on 400,000 shares (GOOG) for \$5 million from a foreign resident.
- The cash premium payment should be reported as a negative \$5 million in U.S. Net Settlements.
   .5 on .5 on XYZ'S ZYZ'S Deport.



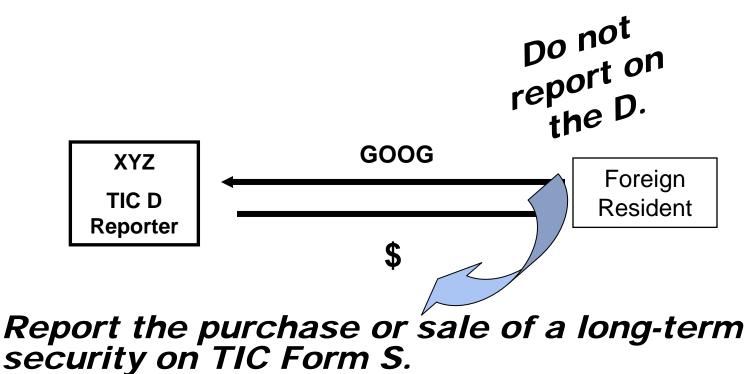
#### • Options Example (cont.):

 Google's price rises \$25 above the strike price. XYZ net settles with the options writer and receives \$10 million.



#### Options (cont.):

 Do not report the exercise (physical settlement) of an option where securities, commodities, or other assets are delivered.



#### Futures:

 Report the cumulative periodic (usually daily) payment or receipt from an exchange as a result of the daily change in value of the futures contracts (variation margin).

#### Futures Example:

 On September 15<sup>th</sup>, a foreign resident bond fund opens an account, purchases \$20 million of CME Eurodollar futures with an initial margin payment of \$1 million.

Do not report initial margin on the TIC D.

 Note: Initial margin in the form of a cash balance is reportable on your TIC B report.

#### Futures Example:

 On September 30<sup>th</sup>, the foreign resident bond fund has an open position in CME Eurodollar futures reflecting net variation margin receipts of \$500 thousand.

Include a negative \$500 thousand in net variation margin payments credited to the account of the foreign resident bond fund.

Remember to include variation margin payments for positions that were closed out during the quarter, and only those amounts credited or paid during the quarter.

#### Examples (What to Exclude):

- Purchase of commodities, securities or other assets (delivery of the underlying).
- Changes in value with no payment.
- Commissions and fees.
- Collateral such as initial margin.

# Michele Waldman

FEDERAL RESERVE BANK of NEW YORK

 Part 1 has three Memoranda rows. These are all subsets of data already included in the Grand Totals reported on Row 7.

		000000
	OF WHICH:	
M.1	CONTRACTS WITH OWN FOREIGN OFFICES	86050
M.2	CONTRACTS WITH FOREIGN OFFICIAL INSTITUTIONS	86052
M.3	CONTRACTS OF U.S. DEPOSITORY INSTITUTIONS WITH FOREIGNERS	86054

#### • M.1 Contracts with Own Foreign Offices:

- Reporter's own non-U.S. offices
- Foreign resident parent/head office
- Non-U.S. branches or agencies of foreign parent
- Investigation (Net Settlement data are not collected for Own Foreign Offices.)

		000000
	OF WHICH:	
M.1	CONTRACTS WITH OWN FOREIGN OFFICES	86050
M.2	CONTRACTS WITH FOREIGN OFFICIAL INSTITUTIONS	86052
M.3	CONTRACTS OF U.S. DEPOSITORY INSTITUTIONS WITH FOREIGNERS	86054

#### • M.2 Contracts with Foreign Official Institutions:

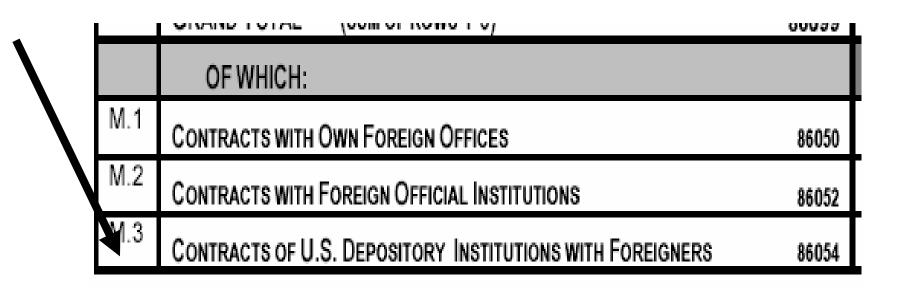
 Report the fair value <u>and</u> net settlements of all contracts with Foreign Official Institutions.

		00000
	OF WHICH:	
M.1	CONTRACTS WITH OWN FOREIGN OFFICES	86050
M.2	CONTRACTS WITH FOREIGN OFFICIAL INSTITUTIONS	86052
M.3	CONTRACTS OF U.S. DEPOSITORY INSTITUTIONS WITH FOREIGNERS	86054

#### **Foreign Official Institutions**

http://www.treas.gov/tic/foi506list.html

- M.3 Contracts of U.S. Depository Institutions with Foreigners:
  - Report the fair values of contracts with foreign residents on the books of U.S. depository institutions. Net settlement data are not collected.



#### Contracts of U.S. Depository Institutions (Row M.3):

- U.S. depository institutions include:
  - Commercial banks
  - Branches and agencies of foreign banks
  - Trust companies that conduct commercial banking business
  - Industrial banks, private or unincorporated banks
  - Banking Edge Act and Agreement corporations
  - New York State Article XII corporations
  - Non-deposit and limited purpose trust companies
  - Non-bank banks

Michele Waldman

FEDERAL RESERVE BANK of NEW YORK

	PART 2 - HOLDINGS OF, AND TRANSACTIONS IN, DERIVATIVES CONTRACTS WITH FOREIGN-RESIDENTS BY COUNTRY					
	FOREIGN ECONOMIES AND ORGANIZATIONS		FAIR VALUE OF DERIVATIVES CONTRACTS WITH FOREIGN RESIDENTS AT END OF REPORTING QUARTER		U.S. NET SETTLEMENTS DURING THE QUARTER	
			GROSS POSITIVE	GROSS NEGATIVE	WITH FOREIGN RESIDENTS 3	
			M one	Millions	Millions	
Euro Albar		1510-5				
Ando	orra	1010-3				
Arme	enia	1651-9				
Aust	ria	1018-9				
Azer	baljan	1652-7				
Bank	for International Settlements	1330-7				
Bela	795	1620-9				
Belgi	lum	1025-1				
Bosn	ila and Herzegovina	1410-9				
Bulga	arla	1520-2				
Croa	tia	1421-4				
Cypr		1040-5				
Czec	th Republic	1528-8				
Denr	mark	1050-2				
Estor		1540-7				
Euro	pean Central Bank	1350-1				

GRAND TOTAL	9999-6		

- The gross fair (market) value and net settlement payments of derivatives reported in the Grand Total Row (Row 7) of Part I should be allocated to each row of Part II, based on the residence of the direct counterparty.
- Part I & II should prove (although very small differences due to rounding are permitted).

# Example:

 A TIC D reporter has a derivatives contract denominated in yen with a British-owned company resident in Italy. The position should be reported opposite the country in which the direct counterparty resides (Italy), not the country of the currency or the parent.

## Exceptions:

 Positions with branches or agencies of foreign official institutions should be treated as if conducted with the FOI directly.

 Positions with international and multi-national regional organizations, should be reported opposite the classification "International" or one of the "Regional" categories (International and Regional Organizations section).

#### • Examples:

Organization	Reporting Classification
The World Bank (Consists of IBRD and IDA)	International
International Monetary Fund (IMF)	International
Asian Development Bank	Asia Regional

# Data Quality Reviews Thad Russell

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## 5. Data Quality Reviews

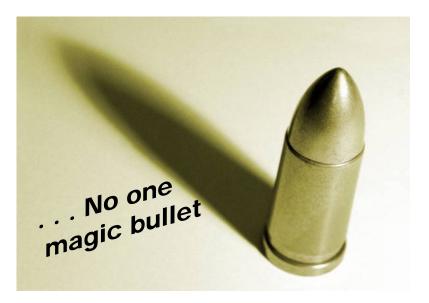
What we do and what you can do to assure data quality.



## 5. Data Quality Reviews

- Data Review
- Watch Out For . . .
- Data Limitations
- Sources of Derivatives Data

- Data Review:
  - Peer Review
  - Time Series
  - Inter-Series
  - Intra-Series



And does it make sense from a market and business standpoint?

#### Peer Review:

 Comparison data may prompt FRBNY questions.

#### Time Series:

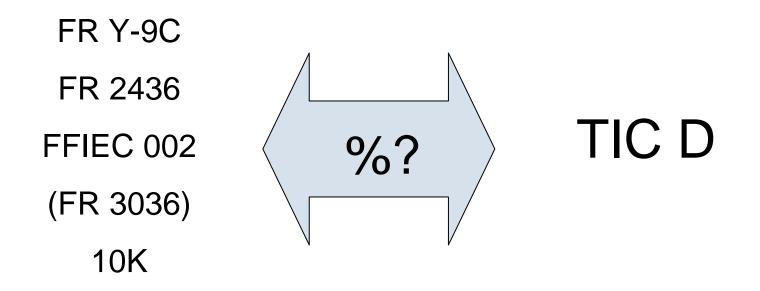
 The series can be volatile but we can identify and understand the sources and reasons for variances.

#### • Time Series:

#### Review data over several quarters.

Report Date	Gross Positive Fair Value	Gross Negative Fair Value	Net Settlements
2007-06-30	10,629	12,067	361
2007-03-30	7,225	8,548	-28
2006-12-29	6,904	7,269	125
2006-09-29	6,800	7,026	85

Inter-Series:



 Review, compare other reports with derivatives fair values, and understand the differences.

#### Inter-Series:

- Principal sources for differences between cross border and global consolidated reports:
  - Trading/booking centers outside the U.S.?
  - Trades with foreign affiliates?
  - Centralized risk management vs. autonomous regional centers?

#### Inter-Series:

TIC D vs. FR Y-9C Comparison Report

TIC D As Of Date: 09/29/2006

Comparison Series Date: 09/30/2006

Restricted-Controlled FR

Respondent RSSD # XYZ Bank Holding Company

Description	TIC D Value (in Millions)	FR Y-9C Value (in Millions)	Ratio of D to Y-9C (Percent)
Interest Rate Contracts (GPMV)	###	###	###
Interest Rate Contracts (GNMV)	###	###	###
Foreign Exchange Contracts (GPMV)	###	###	###
Foreign Exchange Contracts (GNMV)	###	###	###

What are the factors that contribute to the wide-ranging ratios among reporters between TIC D fair values and global, consolidated data?

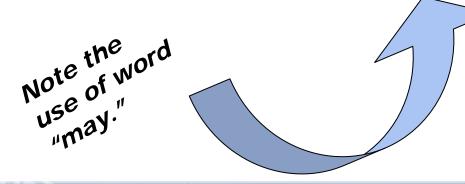
## Intra-Series:

Are your data internally consistent?

#### 5. Data Quality – Data Review

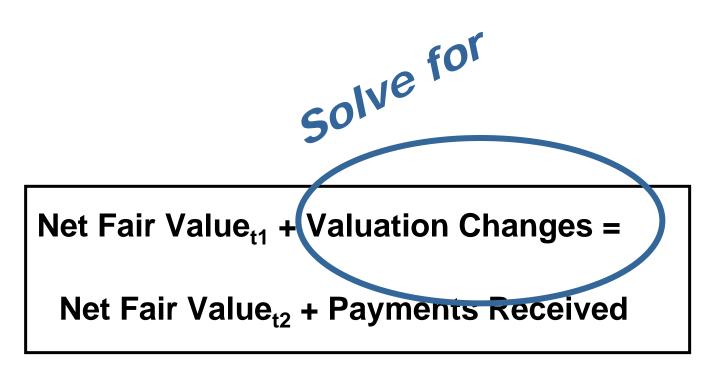
#### Intra-Series:

- Fair values are the net present values of expected cash flows.
- Changes in fair values result from price movements in the underlying, time decay, or cash flows that should be reflected in Net Settlements.
- If quarter-to-quarter changes in net fair values together with net settlement payments imply a very large change in valuation, there may be a problem.



#### 5. Data Quality – Data Review

Intra-Series:



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Watch out for . . .

# Things that have caused more than their fair share of problems.

- Net Settlements:
  - Be sure to catch both sides, receipts and payments for Column 3.
  - Remember, a dollar payment to a foreign resident account in New York is a reportable, cross border flow.
  - Do not include payments for initial margin (collateral).

#### Forex Conversions:

- Use spot exchange rates on the *as-of date* to convert foreign currency amounts to U.S. dollar equivalents.
- These rates should be applied to the fair value amounts reported in Columns 1 and 2 for the report date.
- For net settlements in Column 3, the preferred method is to convert payments to U.S. dollars using the closing dollar exchange rates on the day of each transaction.

- Cash vs. Physical Delivery:
  - In Columns 1 and 2 report the fair (market) values of all types of derivatives contracts regardless of whether they are to be settled by cash payments or physical delivery of the underlying.
  - Column 3, report receipts and payments to settle financial derivatives contracts when ONLY cash is paid or received.

- Fair values of exchange traded contracts:
  - At end quarter, the fair value of a futures contract that is settled each day by cash payments (variation margin) is any residual amount in the account through which the payments are paid and disbursed.

- Who Reports?
  - Reporters should submit one TIC D report, consolidating all of their U.S.-resident subsidiaries. This is on the same basis as employed in the annual reports to the SEC, other regulatory reports, or GAAP financial statements.

- Contracts of U.S. Depository Institutions (Row M.3):
  - Report the contracts of U.S. commercial banks, U.S. branches of foreign banks, trust companies, etc. with foreign residents.

# 5. Data Quality – Data Limitations



# 5. Data Quality – Data Limitations

- The TIC D report provides important information for the U.S. balance of payments, but not about the derivatives market or the role of U.S. institutions in that market.
- Global financial institutions can choose to trade and serve their clients from many locations.

#### 5. Data Quality – Data Limitations



If you or others in your organization are interested in information about the derivatives market, the Federal Reserve, the BIS, the NY Foreign Exchange Committee, collect and publish additional information you will find helpful.



#### http://www.newyorkfed.org/markets/foreignex.html

Turnover in the United States 2004

-1

#### The Foreign Exchange and Interest Rate Derivatives Markets: Turnover in the United States

Background The Federal Reserve Bank of New York together with 51 other central banks surveyed turnover in the over-the-counter (OTC) foreign exchange and interest rate derivatives markets during the month of April 2004. This worldwide, cooperative effort is undertaken every three years and is coordinated by the Bank for International Settlements (BIS).

> The "Triennial Survey" is a comprehensive source of information on the size and structure of the OTC foreign exchange and derivatives markets. These markets trade private, bilateral contracts so no turnover statistics are available as there are for the organized exchanges. (Data for exchange-traded futures and options are excluded from the survey.)

http://www.newyorkfed.org/markets/triennial/fx\_survey.pdf



http://www.newyorkfed.org/fxc/

▶ BIS home ▶ Statistics ▶ Derivatives

#### Semiannual OTC derivatives statistics at end-December 2006

#### May 2007

The objective of the Semiannual Over-The-Counter (OTC) Derivatives Markets Statistics is to obtain comprehensive and internationally consistent information on the size and structure of derivatives markets in the G10 countries and Switzerland. They provide data on notional amounts outstanding and gross market values and permit the evolution of particular market segments to be monitored. In conjunction with the banking and securities statistics, they provide a more comprehensive picture of activity in global financial markets as well.

Following the initiative from the Committee on the Global Financial System (CGFS), central banks of the G10 countries started in June 1998 reporting to the BIS semiannual OTC derivatives statistics on forwards, swaps and options of foreign exchange, interest rate, equity and commodity derivatives. As of

http://www.bis.org/statistics/derstats.htm

BIS home Statistics Derivatives

#### Statistics on exchange traded derivatives

#### June 2007

The main purpose of the Exchange Traded Derivatives statistics is to obtain extensive information of the size, structure and developments of the futures and options markets so as to complement and reinforce other more traditional sets of financial statistics compiled by the BIS; In conjunction with the semiannual OTC derivatives statistics they provide a more comprehensive monitoring of the international financial market activity.

The statistics, compiled since 1986 and derived from various market sources, mainly cover turnover and open interest in both number of contracts and notional amounts. The value added by the BIS consists of aggregating highly detailed contract-level information according to specific standard criteria such as market risks categories, instrument types and location of trade. In addition, the BIS also calculates the notional amounts of the contracts which, in the case of the equity instruments, require tracking and maintaining a growing list of stock indexes.

The data are updated and published every quarter and are available in electronic form on the BIS website from 1986 onwards.

#### http://www.bis.org/statistics/extderiv.htm

BIS home Statistics Foreign exchange

#### Triennial Central Bank Survey of Foreign Exchange and Derivatives Market Activity

#### December 2005

Every three years, the BIS coordinates a global central bank survey of foreign exchange and derivatives market activity on behalf of the Markets Committee and the Committee on the Global Financial System. The objective of the survey is to provide comprehensive and internationally consistent information on turnover and amounts of contracts outstanding in these markets. The exercise also serves as a benchmark for the semiannual OTC derivatives market statistics, which are limited to banks and dealers in the most important financial centres.

The first three surveys were limited to the foreign exchange markets (1989, 1992, 1995). Subsequently both the foreign exchange and the derivatives markets have been surveyed (1998, 2001, 2004). For the survey, each participating central bank collects data from the banks and dealers in its jurisdiction and calculates aggregate national data. These are provided to the BIS, which compiles global aggregates. The number of participating countries has increased over time.

http://www.bis.org/triennial.htm

#### 5. Data Quality



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#### 6. Q's & A's



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