



13 February 2013

# The Random Walk

## Mapping the World's Financial Markets 2013

### Periodical

#### Author

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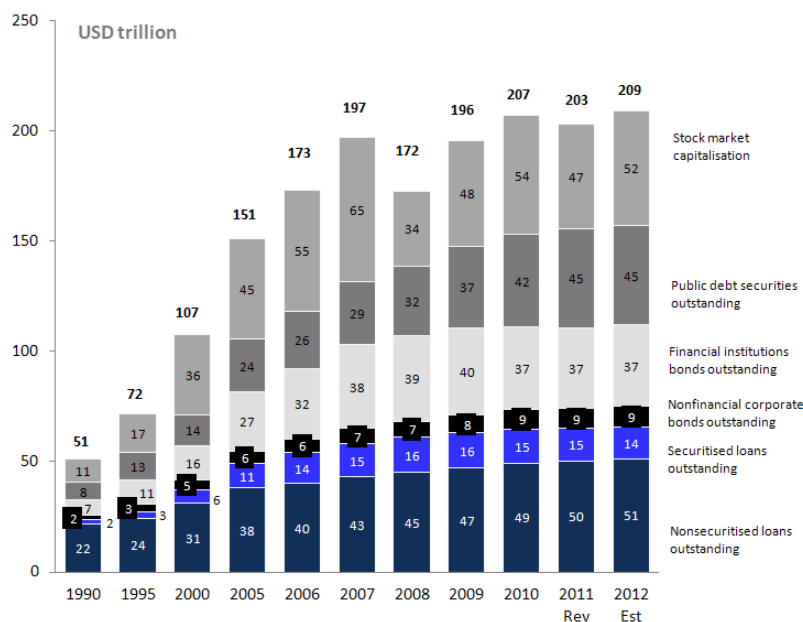
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A year ago, we published the first edition of "Mapping the World's Financial Markets". The idea was to put together the best available information on the broad contours of the world's financial markets in an easy-to-understand format. The publication proved to be very popular with clients as well as our own staff. Therefore, we have decided to publish an update and hope to do so every year in the future.

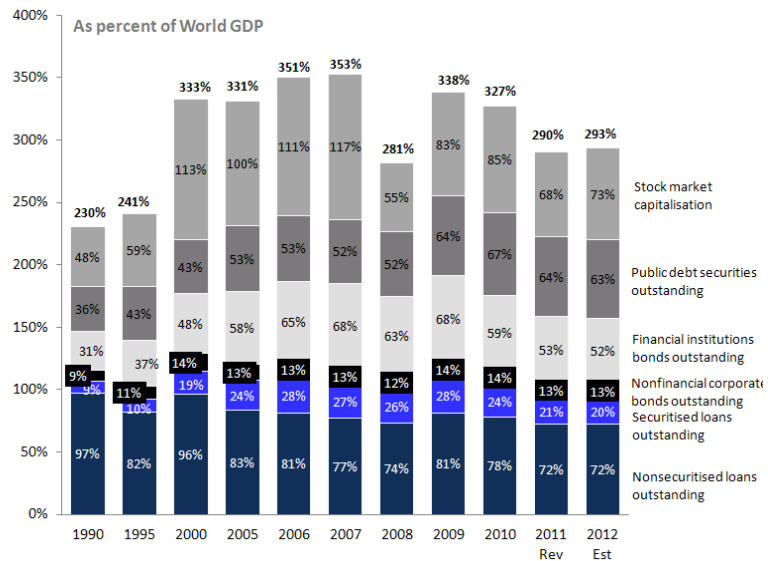
We have tried hard to update all the charts and tables that we presented last year as well as to maintain the same format. We succeeded in most cases but there were several market segments where new data is either unavailable or inconsistent with past data. Thus, we have used our judgment either to update the numbers with our own estimates or to leave out the table/chart altogether. Nevertheless, we hope to have compensated by introducing interesting new data on market segments that we had not covered last year.

Readers should be aware that the data presented in this report are derived from many different sources that may not always be consistent with each other. We have made every attempt to iron out inconsistencies where possible but problems with definitions and double-counting remain. Thus, the following numbers should not be treated as gospel truth but as an attempt to grasp the scales of magnitude of the world's financial markets.

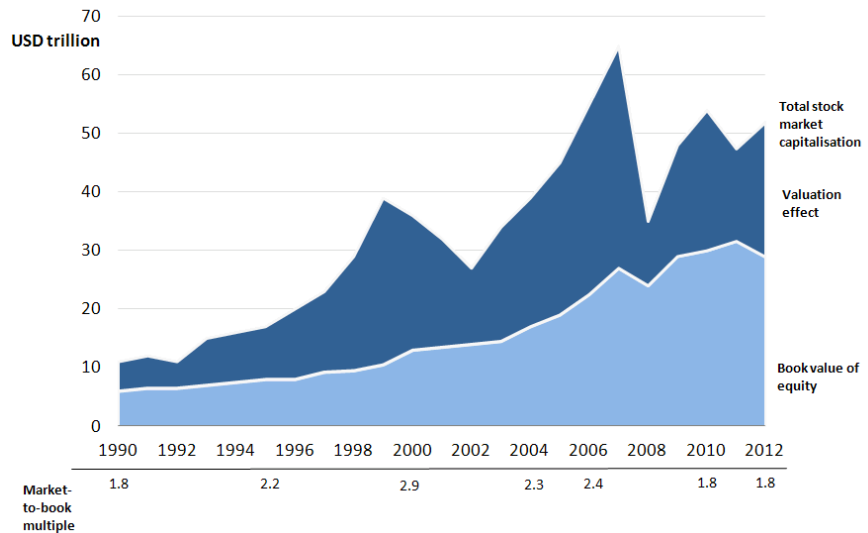
**Figure 1: Stock of Global Financial Assets**



Source: McKinsey Global Institute, Haver, BIS, DB estimates

**Figure 2: Global Financial Assets as percent of World GDP**

Source: McKinsey Global Institute, Haver, BIS, DB estimates, IMF

**Figure 3: Impact of Market Fluctuations on Global Equity Market Capitalisation**

Source: Source: McKinsey Global Institute, World Federation of Exchanges, Bloomberg, DB estimates

NOTE:

Market to book multiples till 2010 are sourced from McKinsey.

Market to book multiples for 2011 are a combination of about 50 stock market indices.

For 2012, market to book multiple of Bloomberg World Index is used as a proxy. Bloomberg World Index had a market capitalisation of USD 43 trillion in the end of 2012, which is more than 80% of total equity market capitalisation of the world.

**Table 1: Equity Market Capitalisations by Region (USD billion)**

Time zone	Dec 2010	Dec 2011	Jun 2012	Dec 2012 (Est)
Americas	22,173	19,587	21,361	22,334
Asia-Pacific	17,435	14,670	15,396	16,097
Europe Africa and Middle East	15,254	12,942	12,978	13,569
Total WFE	54,862	47,199	49,735	52,000

Source: World Federation of Exchanges

**Table 2: Equity Market Capitalisations by Exchanges (USD billion)**

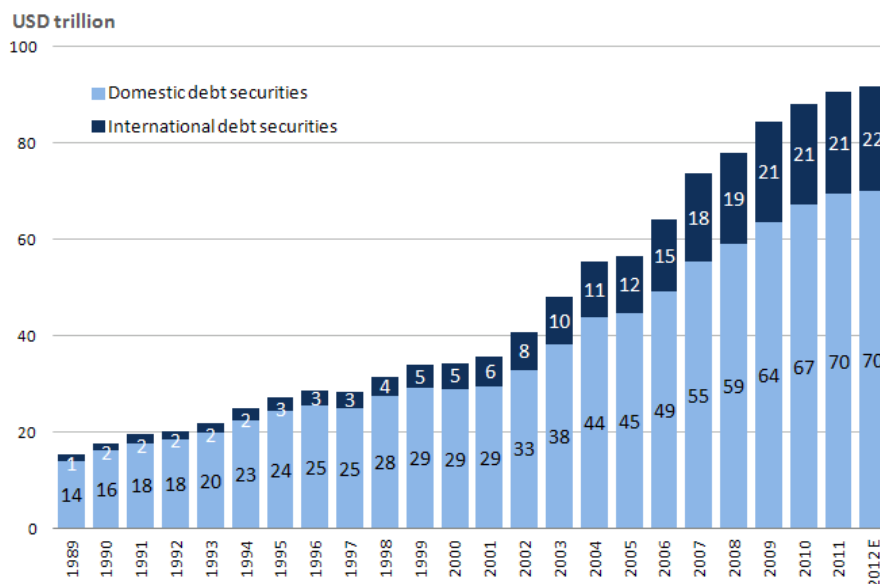
Exchange	Jun 2011	Dec 2011	Jun 2012
1. NYSE Euronext (US)	13,791	11,795	13,028
2. NASDAQ OMX (US)	4,068	3,845	4,475
3. Tokyo Stock Exchange Group	3,655	3,325	3,385
4. London Stock Exchange Group	3,849	3,266	3,332
5. NYSE Euronext (Europe)	3,248	2,447	2,460
6. Shanghai Stock Exchange	2,804	2,357	2,411
7. Hong Kong Exchanges	2,712	2,258	2,376
8. TMX Group	2,231	1,912	1,860
9. Deutsche Borse	1,622	1,185	1,212
10. Shenzhen Stock Exchange	1,283	1,055	1,149

Source: World Federation of Exchanges

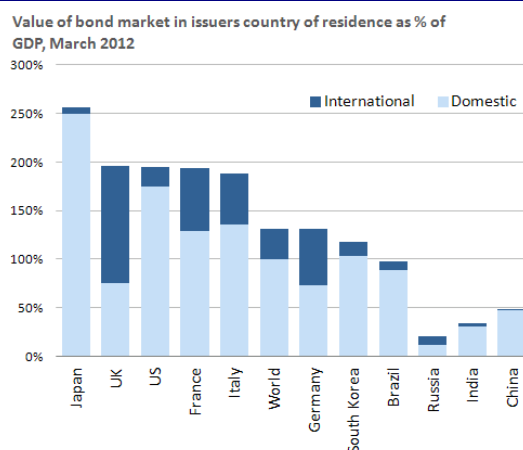
**Table 3: Largest Exchanges by Value of Share Trading in the Electronic Order Book (USD billion)**

Exchanges	2010	2011	H1 2011	H1 2012
1. NYSE Euronext US	17,796	18,027	8,731	7,151
2. NASDAQ OMX US	12,659	12,724	6,008	5,437
3. Tokyo Stock Exchange Group	3,788	3,972	2,202	1,810
4. Shanghai Stock Exchange	4,496	3,658	2,219	1,473
5. Shenzhen Stock Exchange	3,573	2,838	1,551	1,282
6. London Stock Exchange Group	2,741	2,837	1,531	1,190
7. NYSE Euronext Europe	2,018	2,134	1,129	853
8. Korea Exchange	1,607	2,029	1,014	797
9. Deutsche Borse	1,628	1,758	898	698
10. TMX Group	1,369	1,542	825	672

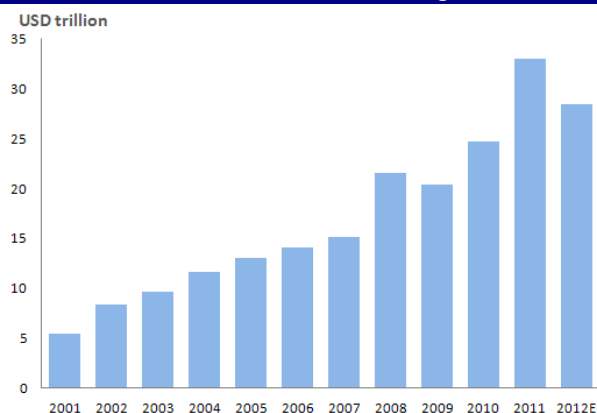
Source: World Federation of Exchanges

**Figure 4: World Bond Market by Outstanding Value**

Source: Bank for International Settlements

**Figure 5: Bond Markets by Country**

Source: Bank for International Settlements

**Figure 6: Turnover of Bonds Traded on World's Exchanges**

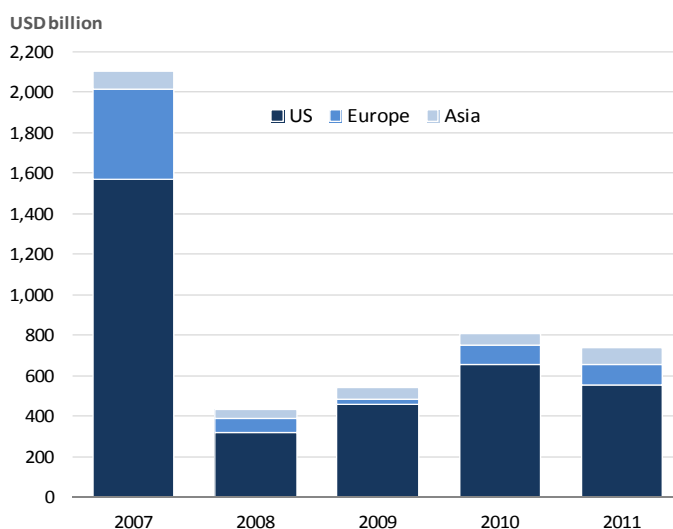
Source: World Federation of Exchanges

NOTE: 2012 figures are estimated by annualizing figures for the first six months of 2012

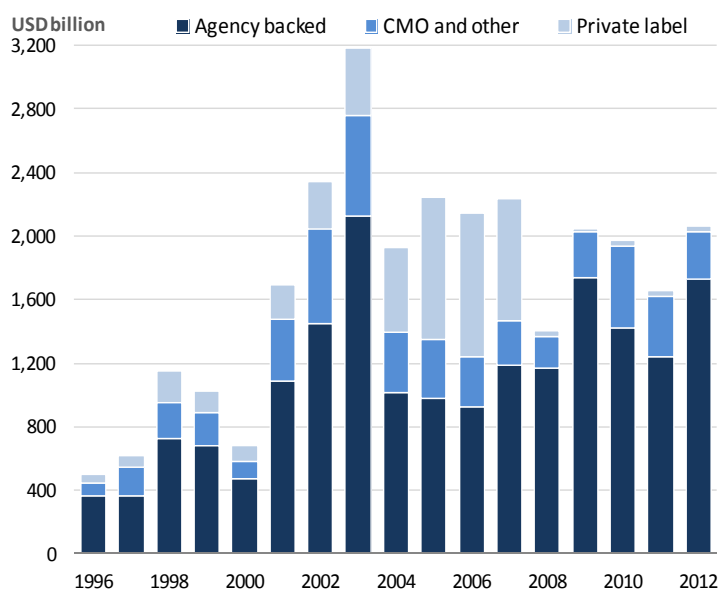
**Table 4: Domestic Bond Markets by Residence of Issuer (USD billion)**

	Total	Financial	Corporate	Government
United States	26,391	9,704	3,430	13,257
Japan	14,643	2,842	859	10,942
France	3,574	1,399	301	1,874
China	3,452	1,588	685	1,179
Italy	2,973	859	58	2,056
Germany	2,621	438	345	1,838
Brazil	2,208	653	137	1,418
United Kingdom	1,823	279	20	1,524
Canada	1,623	307	182	1,133
Spain	1,574	804	21	750
South Korea	1,158	356	422	381
India	NA	NA	NA	563
Russia	214	46	68	100
World	70,148	20,442	7,113	42,593

Source: Bank for International Settlements, TheCityUK

**Figure 7: Global Net Securitisation Issuance**

Source: TheCityUK estimates

**Figure 8: US Issuance of Mortgage Backed Securities in the US**

Source: Securities Industry and Financial Markets Association (SIFMA)

**NOTES:**

Mortgage backed issuances include GNMA, FNMA, and FHLMC mortgage-backed securities, CMOs, private-label MBS/CMOs.

ABS - Home Equity is not incorporated in mortgage-related totals.

Non-agency includes CMBS and RMBS, and include re-REMICs.

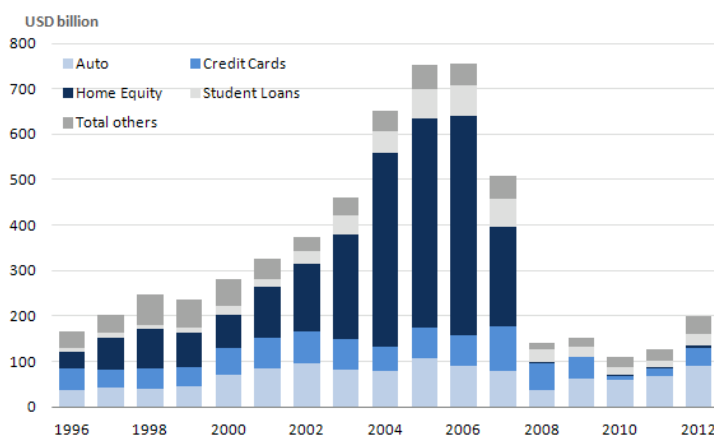
CMOs and others include the following:

- Agency backed CMOs

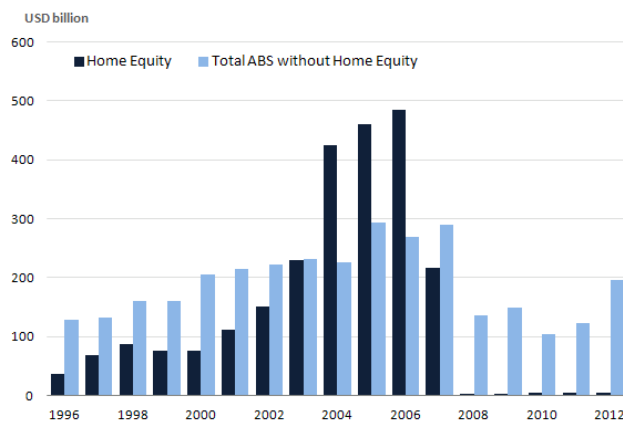
- FDIC transactions, which are structured transactions backed by assets of failed banks and may include non-mortgage related collateral;

- NCUA transactions, which are structured transactions backed by assets of failed credit unions and may include non-mortgage related collateral.

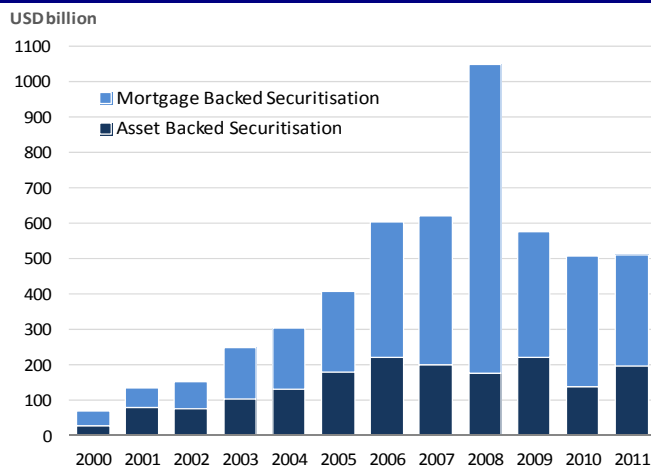
Agency transactions include both single and multifamily MBS and CMOs.

**Figure 9: Issuances of Asset Backed Securities in the US**

Source: Securities Industry and Financial Markets Association (SIFMA)

**Figure 10: Issuances of Home Equity ABS vis-à-vis Other ABS in US**

Source: Securities Industry and Financial Markets Association (SIFMA)

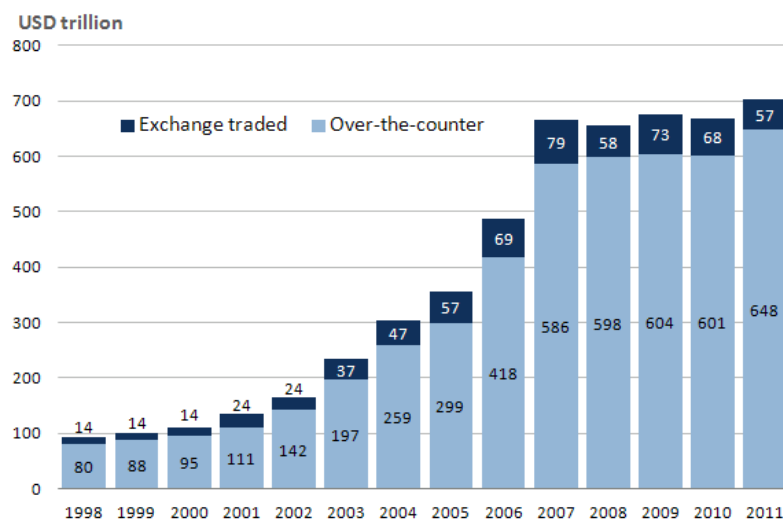
**Figure 11: Securitisation Issuances in Europe**

Source: TheCityUK estimates

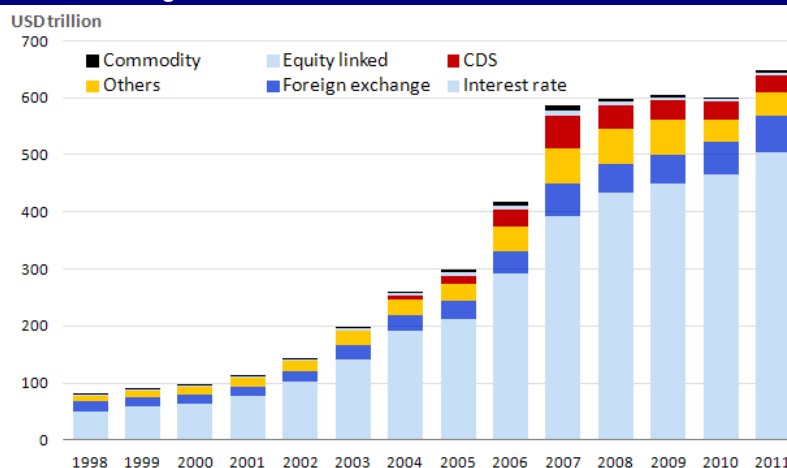
**Table 5: Gross Securitisation Issuance in Main Markets (USD billion)**

	2007	2008	2009	2010	2011
US	3,171.6	1,605.0	2,196.3	2,090.9	1,797.9
Australia	67.5	17.7	21.4	27.0	28.0
Japan	76.4	38.6	28.0	26.7	42.3
Canada	44.3	77.4	56.8	23.5	38.6
South Korea	21.3	18.7	28.2	24.2	29.3
UK	236.7	400.4	123.2	136.1	138.6
Spain	83.8	118.8	87.0	72.8	86.0
Netherlands	55.9	106.9	61.0	183.7	119.2
Italy	36.1	121.0	94.6	21.2	60.3
Germany	25.5	73.8	31.5	17.8	18.0
Portugal	14.8	21.8	17.8	22.4	13.8
Ireland	14.3	59.9	19.4	8.8	0.0
Belgium	5.6	51.4	38.2	23.5	26.5
France	5.3	20.9	9.6	11.9	22.8
Pan European*	131.9	53.5	58.0	3.4	4.2
Other Europe	12.2	18.7	36.8	6.2	22.2
Europe total	622.1	1,047.2	577.0	507.8	511.5
World total	4,003.2	2,804.5	2,907.8	2,700.0	2,447.7

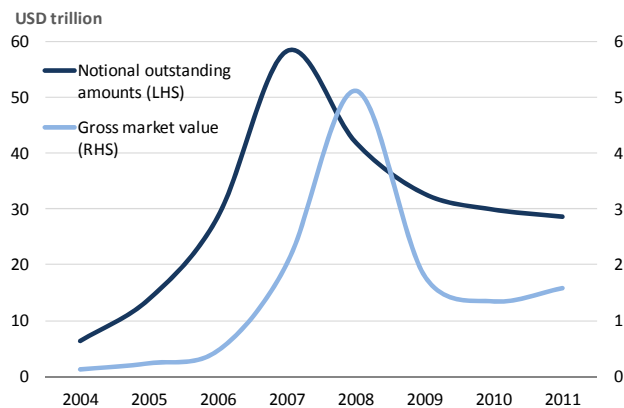
Source: TheCityUK estimates

**Figure 12: International Derivatives Market**

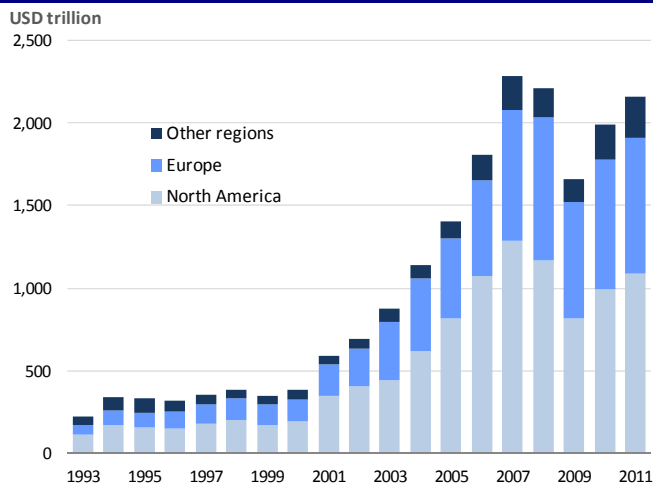
Source: Bank for International Settlements

**Figure 13: Outstanding Over-the-Counter Derivatives**

Source: Bank for International Settlements

**Figure 14: Credit Default Swaps Markets**

Source: Bank for International Settlements

**Figure 15: Exchange Traded Derivatives Turnover by Region**

Source: Bank for International Settlements

**Table 6: Single Currency Interest Rate Derivatives**

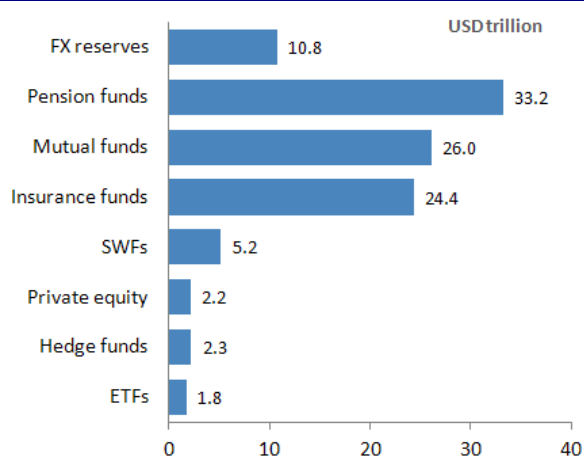
USD trillion		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Euro	EUR	26.2	38.4	55.8	76.2	81.4	111.8	146.1	161.4	175.8	177.8	184.7
US Dollar	USD	27.4	34.4	46.2	61.1	74.4	97.4	129.8	148.7	153.4	151.6	161.9
Japanese Yen	JPY	11.8	14.7	19.5	24.2	25.6	38.1	53.1	61.6	53.9	59.5	66.8
Pound Sterling	GBP	6.2	7.4	9.9	15.3	15.1	22.2	28.4	29.2	34.3	37.8	43.4
Swedish Krona	SEK	1.1	1.1	1.5	2.2	2.6	3.6	5.2	5.1	4.7	5.1	5.8
Canadian Dollar	CAD	1.4	1.7	2.4	3.2	3.3	3.5	4.1	5.1	4.8	5.1	5.4
Swiss Franc	CHF	1.4	1.7	2.4	3.2	3.3	3.5	4.1	5.1	4.8	5.1	5.4
Other		2.7	3.1	5.3	6.8	7.8	12.7	23.5	18.9	19.7	24.1	29.7
<b>All currencies</b>		<b>77.6</b>	<b>101.7</b>	<b>142.0</b>	<b>190.5</b>	<b>212.0</b>	<b>291.6</b>	<b>393.1</b>	<b>432.7</b>	<b>449.9</b>	<b>465.3</b>	<b>504.1</b>
% share		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Euro	EUR	33.8	37.8	39.3	40.0	38.4	38.3	37.2	37.3	39.1	38.2	36.6
US Dollar	USD	35.4	33.8	32.5	32.1	35.1	33.4	33.0	34.4	34.1	32.6	32.1
Japanese Yen	JPY	15.2	14.4	13.8	12.7	12.1	13.1	13.5	14.2	12.0	12.8	13.3
Pound Sterling	GBP	8.0	7.3	7.0	8.0	7.1	7.6	7.2	6.8	7.6	8.1	8.6
Swedish Krona	SEK	1.4	1.1	1.1	1.2	1.2	1.2	1.3	1.2	1.0	1.1	1.2
Canadian Dollar	CAD	1.8	1.7	1.7	1.7	1.5	1.2	1.0	1.2	1.1	1.1	1.1
Swiss Franc	CHF	1.8	1.7	1.7	1.7	1.5	1.2	1.0	1.2	1.1	1.1	1.1
<b>Other</b>		<b>3.5</b>	<b>3.0</b>	<b>3.8</b>	<b>3.6</b>	<b>3.7</b>	<b>4.4</b>	<b>6.0</b>	<b>4.4</b>	<b>4.4</b>	<b>5.2</b>	<b>5.9</b>
<b>All currencies</b>		<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source: Bank for International Settlements

**Table 7: Largest Derivatives Exchanges (millions of contracts annually)**

Exchange	2010	2011	2012E
1. CME Group	3,080	3,387	3,110
2. Korea Exchange	3,749	3,928	2,788
3. Eurex	2,642	2,822	2,525
4. NYSE Euronext	2,155	2,283	2,050
5. National Stock Exchange of India	1,616	2,200	1,944
6. BM&FBovespa	1,414	1,500	1,731
7. CBOE Group	1,124	1,217	1,211
8. Nasdaq OMX	1,099	1,296	1,136
9. Micex-RTS	624	1,083	1,012
10. Multi Commodity Exchange of India	1,082	1,196	979

Source: Futures Industry Association

**Figure 16: Global Pool of Funds – 2012 Estimates**

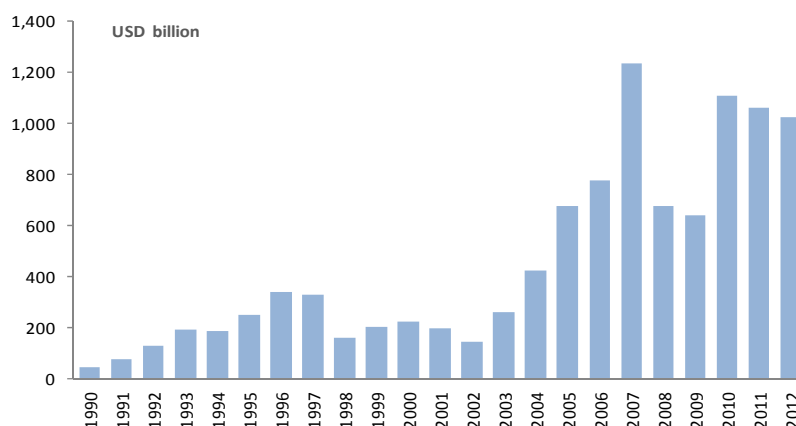
Source: Deutsche Bank, TheCityUK, HedgeFundsReview, IMF

**Table 8: Largest Global Investment Management Centres**

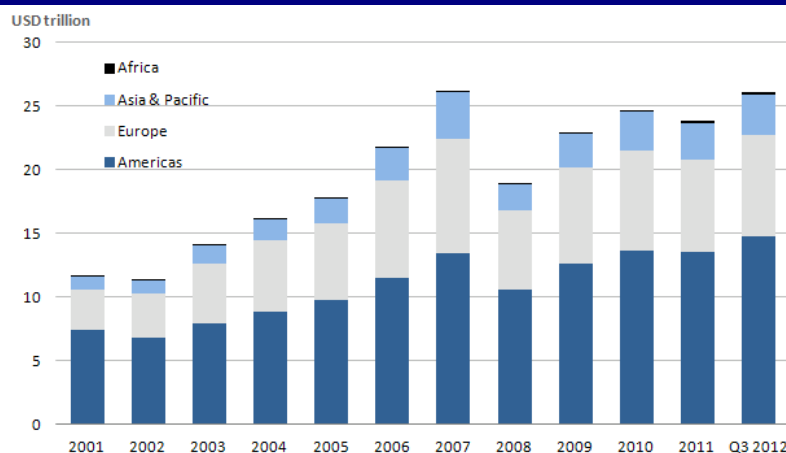
Region	Pension funds	Insurance assets	Mutual funds	Total	% share
	USD bn	USD bn	USD bn	USD bn	
United States	17,575	7,100	11,622	36,297	46%
United Kingdom	3,050	2,755	817	6,622	8%
Japan	1,470	3,878	745	6,093	8%
France	219	656	1,382	2,257	3%
Germany	195	1,384	293	1,872	2%
Netherlands	1,157	297	69	1,523	2%
Switzerland	704	359	273	1,336	2%
Other	7,130	8,006	8,590	23,726	30%
Total	31,500	24,435	23,791	79,726	100%

Source: TheCityUK

NOTE: Figures are for domestically sourced funds regardless where they are managed

**Figure 17: Net Private Capital Inflows to Emerging Market Economies**

Source: Institute of International Finance

**Figure 18: Global Mutual Funds Net Assets**

Source: Investment Company Institute

**Table 9: Total Mutual Fund Net Assets by Type**

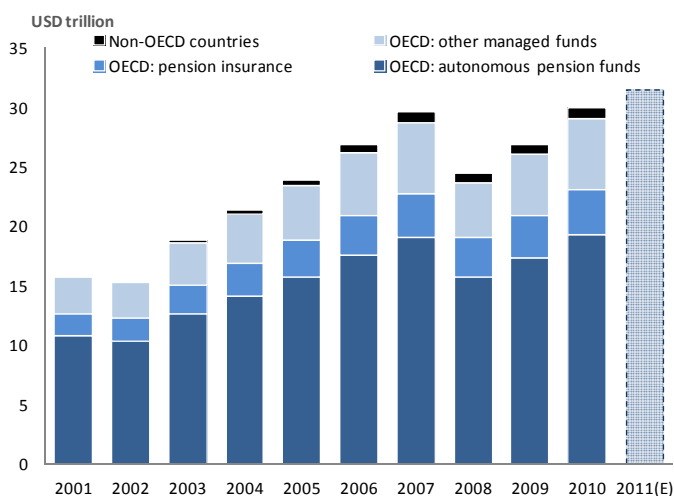
Type of investment style	2010	2011	Q3 2012	
	USD bn	USD bn	USD bn	% of total assets
Equity	10,249.9	9,472.5	10,492.4	40.3%
Bond	5,231.1	5,841.5	6,753.3	25.9%
Money Market	4,530.7	4,695.3	4,638.6	17.8%
Balanced	2,671.9	2,736.9	3,028.6	11.6%
Others	1,001.5	1,033.6	1,132.4	4.3%
<b>Total</b>	<b>23,685.1</b>	<b>23,779.9</b>	<b>26,045.3</b>	<b>100.0%</b>

Source: Investment Company Institute

**Table 10: Total Mutual Fund Net Assets by Selected Countries**

Region/ country	2010	2011	Q3 2012	
	USD bn	USD bn	USD bn	% of total assets
United States	11,820.7	11,621.6	12,754.3	49.0%
United Kingdom	854.4	816.5	938.8	3.6%
Japan	785.5	745.4	753.6	2.9%
Germany	333.7	293.0	314.0	1.2%
France	1,617.2	1,382.1	1,440.0	5.5%
China	365.0	339.0	373.5	1.4%
India	111.4	87.5	110.0	0.4%
Brazil	980.4	1,008.9	1,052.0	4.0%
Russia	3.9	3.1	2.9	0.0%
Rest of the World	6,812.9	7,482.7	8,306.1	31.9%
<b>Total</b>	<b>23,685.1</b>	<b>23,779.9</b>	<b>26,045.3</b>	<b>100.0%</b>

Source: Investment Company Institute

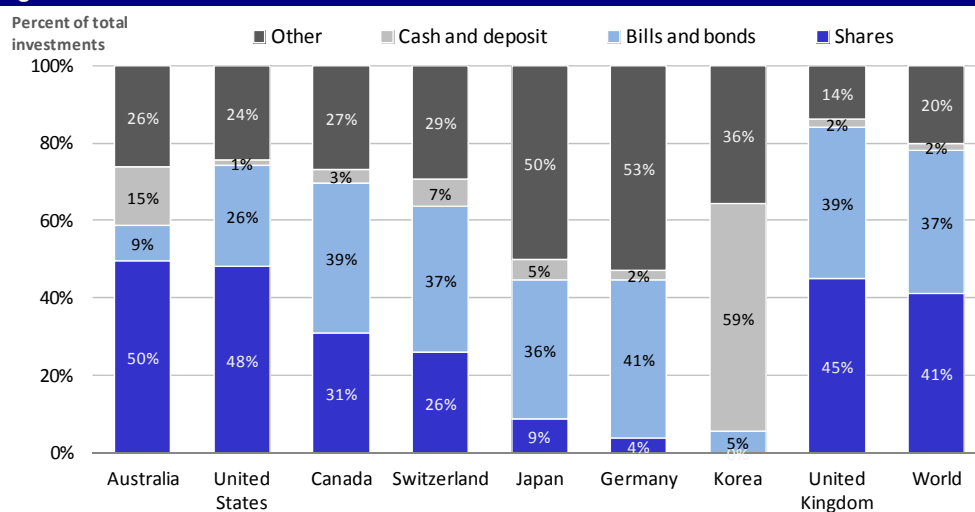
**Figure 19: Global Pension Assets**

Source: TheCityUK estimates

**Table 11: Pension Assets in Selected Countries (USD billion)**

	2001	2011
Australia	270	1,301
Brazil	71	321
Canada	481	1,303
France	81	129
Germany	183	468
Hong Kong	31	84
Ireland	45	101
Japan	2,116	3,363
Netherlands	433	1,046
South Africa	48	227
Switzerland	276	693
UK	1,054	2,394
US	9,723	16,080

Source: Towers Watson

**Figure 20: Pension Fund Asset Allocation in Selected OECD Countries, 2011**

Source: OECD, TowersWatson

**NOTES:**

The "Other" category includes loans, land and buildings, unallocated insurance contracts, hedge funds, private equity funds, structured products, other mutual funds (i.e. not invested in cash, bills and bonds, shares or land and buildings) and other investments.

For Australia, The high value for the "Other" category is driven mainly by net equity of pension life office reserves (15% of total investment).

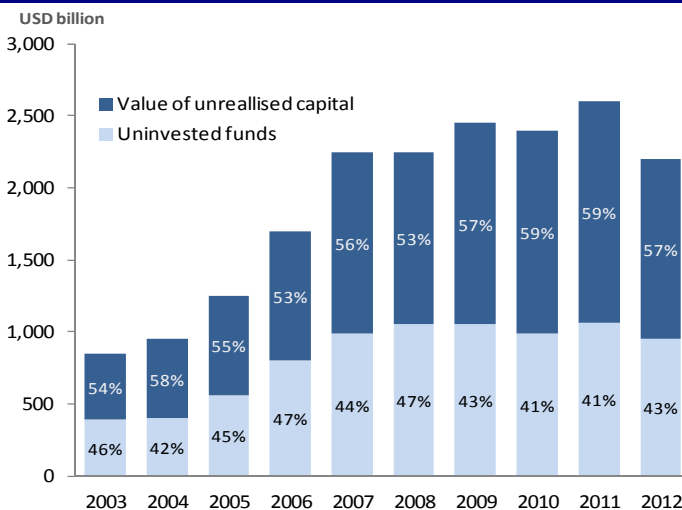
Canada The high value for the "Other" category is driven mainly by other mutual funds (14% of total investment).

Germany: The high value for the "Other" category is driven mainly by other mutual funds (18% of total investment).

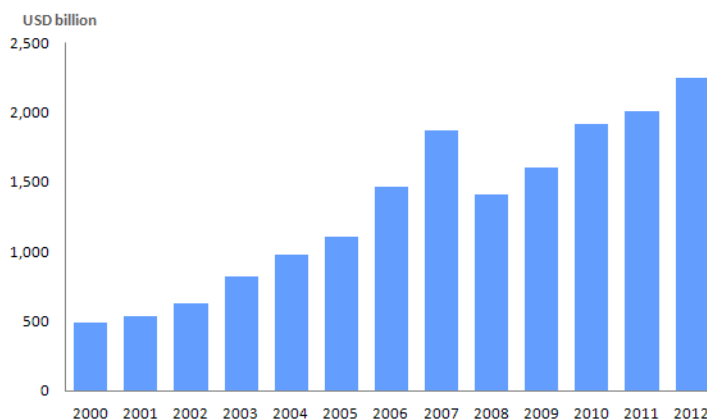
Korea: The high value for the "Other" category is driven mainly by unallocated insurance contracts (31% of total investment).

For UK calculations exclude personal and stakeholder Defined Contribution assets

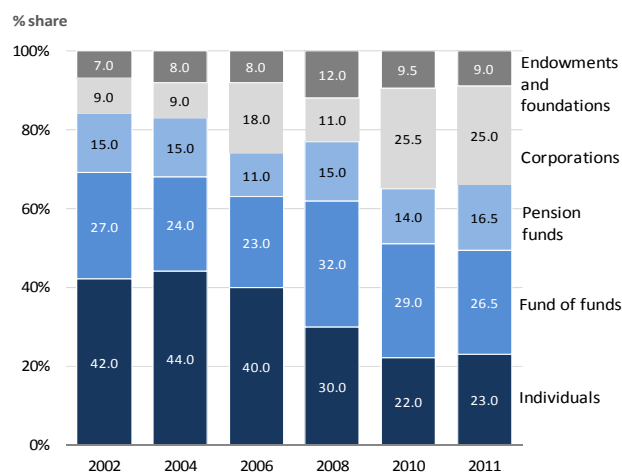
Defined Contribution assets in Switzerland are for cash balance plans

**Figure 21: Private Equity Global Assets under Management**

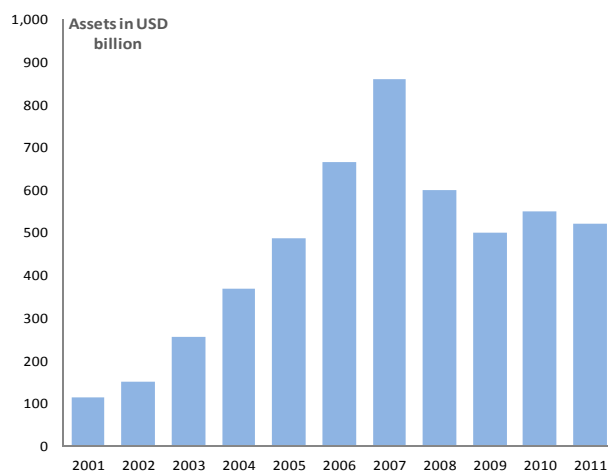
Source: The CityUK estimates

**Figure 22: Hedge Funds Global Assets under Management**

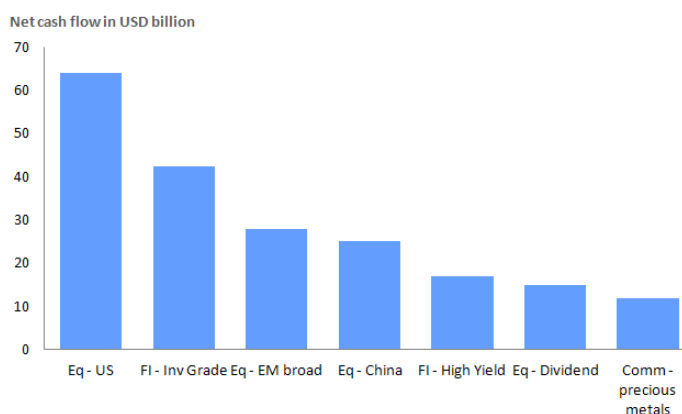
Source: Hedge Fund Research

**Figure 23: Global Hedge Funds by Source of Capital**

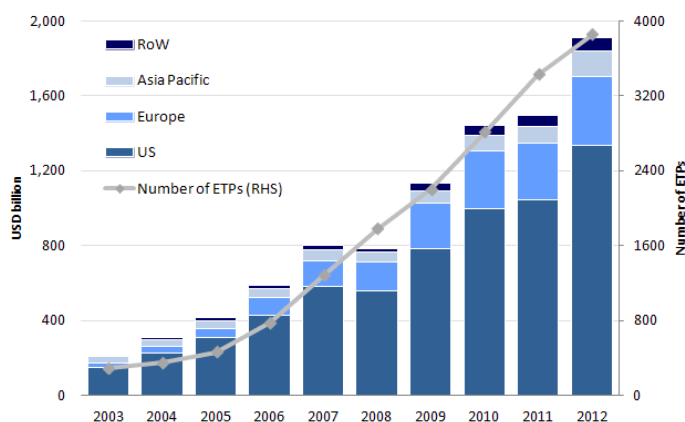
Source: TheCityUK estimates

**Figure 24: Global Fund of Funds Industry**

Source: TheCityUK estimates

**Figure 25: Investment Trend Highlights in ETFs in 2012**

Source: Deutsche Bank, Bloomberg, Reuters

**Figure 26: Global ETP Regional Assets Growth**

Source: Deutsche Bank, Bloomberg, Reuters

**Table 12: ETF and ETP Assets (USD billion)**

Region	ETF assets		ETP assets	
	2011	2012	2011	2012
United States	938.8	1,214.2	1,045.9	1,333.5
Europe	269.9	333.3	297.9	368.3
Asia	90.0	136.0	90.7	136.7
RoW	55.6	71.8	57.6	74.2
Total	1,354.3	1,755.3	1,492.1	1,912.7

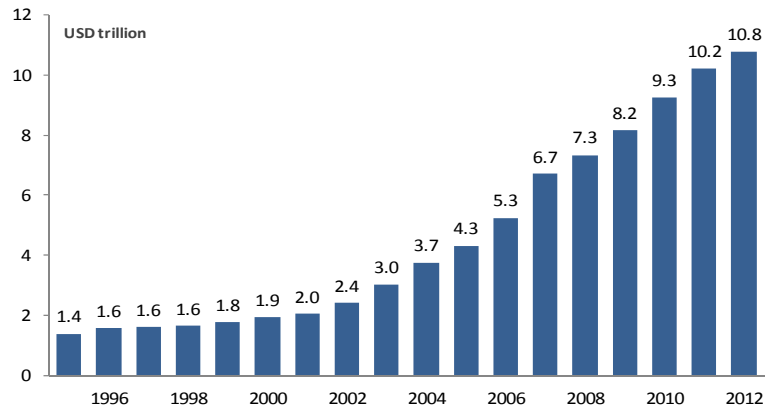
Source: Deutsche Bank, Bloomberg, Reuters

NOTE: ETP= Exchange Traded Products, ETF= Exchange Traded Funds. ETFs are subset of ETPs.

**Table 13: Top 5 Exchanges by Value of ETFs Traded (USD billion)**

	2010	2011	2012 Est
NASDAQ OMX US	4,246	4,309	4,183
NYSE Euronext US	4,164	4,496	4,372
London Stock Exchange Group	243	314	583
Deutsche Börse	225	307	571
Korea Exchange	24	97	137

Source: World Federation of Exchanges, Deutsche Bank estimates

**Figure 27: Official Foreign Exchange Reserves**

Source: IMF, Bloomberg

**Table 14: Largest Central Bank Foreign Exchange Reserves**

Country	Reserves	As on	% of world
	USD billion		
1. China (including SAFE, but not CIC)**	2,872.0	31-Dec-12	30.34%
2. Japan	1,193.1	31-Dec-12	10.94%
3. Saudi Arabia**	634.8	30-Nov-12	5.83%
4. Russia	473.1	26-Oct-12	4.37%
5. Switzerland	458.7	31-Oct-12	4.22%
6. Taiwan	403.2	31-Dec-12	3.70%
7. Brazil	378.9	15-Jan-13	3.47%
8. South Korea	327.0	31-Dec-12	3.00%
9. Hong Kong**	317.3	31-Dec-12	2.91%
10. India	261.1	4-Jan-13	2.39%
11. Singapore	259.3	31-Dec-12	2.38%
12. Eurozone	221.1	30-Nov-12	2.03%
13. Algeria	187.0	31-Oct-12	1.71%
14. Thailand	171.1	31-Dec-12	1.57%
15. Mexico	163.4	11-Jan-13	1.50%
16. Malaysia	126.4	31-Dec-12	1.16%
17. Indonesia	105.3	31-Dec-12	1.03%
18. Libya	107.6	30-Jun-12	0.99%
19. Turkey	101.7	4-Jan-13	0.93%
20. Poland	97.2	31-Oct-12	0.88%
21. Philippines	84.3	31-Dec-12	0.64%
22. Denmark	82.8	31-Oct-12	0.76%
23. Israel	75.9	31-Dec-12	0.70%
24. United Kingdom	65.8	30-Nov-12	0.60%
25. Peru	64.1	31-Dec-12	0.53%
26. Canada	55.0	30-Nov-12	0.63%
27. Norway	51.9	30-Nov-12	0.42%
28. United States	50.5	28-Dec-12	0.46%
29. Czech Republic	44.8	31-Dec-12	0.41%
30. Hungary	43.1	30-Nov-12	0.40%
31. Others	1,456.2	17-Jan-13	9.14%
<b>World total</b>	<b>10,933.6</b>	<b>17-Jan-13</b>	<b>100.0%</b>

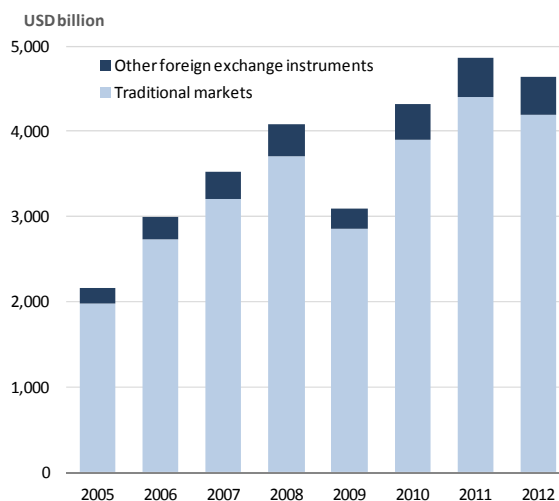
Source: Bloomberg, Haver Analytics, Deutsche Bank

**\*\* NOTES:**

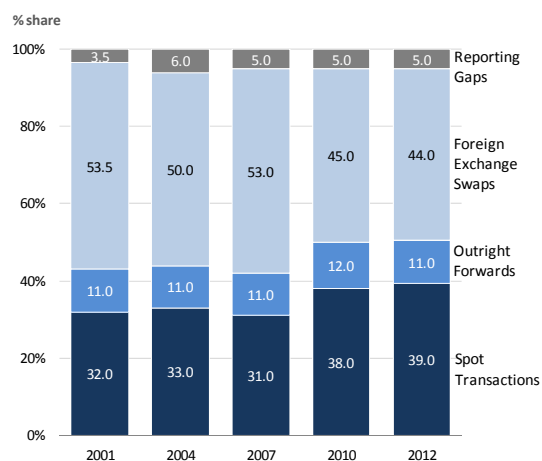
For China, The State Administration of Foreign Exchange (SAFE) is responsible for managing China's foreign exchange. Therefore we have not included in the SWF but only in the FX reserves table. The China Investment Corporation is a Sovereign Wealth Fund as such and therefore has not been included in the table for Foreign Exchange Reserves, but only in the SWF table.

For Saudi Arabia, SAMA Foreign Holdings is counted as part of FX Reserves as well as a SWF. Therefore this is included in both the tables for SWF and FX Reserves respectively.

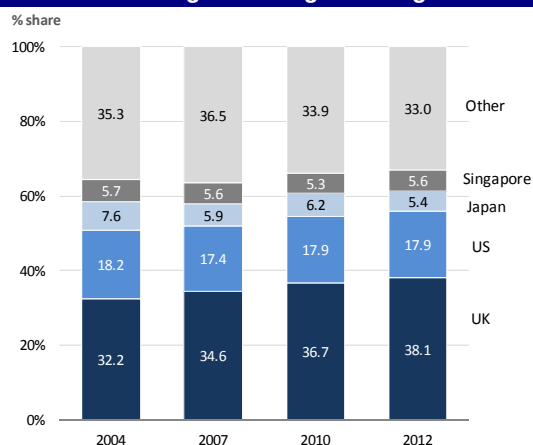
For Hong Kong, the Hong Kong Monetary Authority has two components, the Backing Portfolio and the Investment Portfolio. The FX Reserves table includes both while the SWF table includes only the Investment Portfolio.

**Figure 28: Foreign Exchange Market Average Daily Turnover**

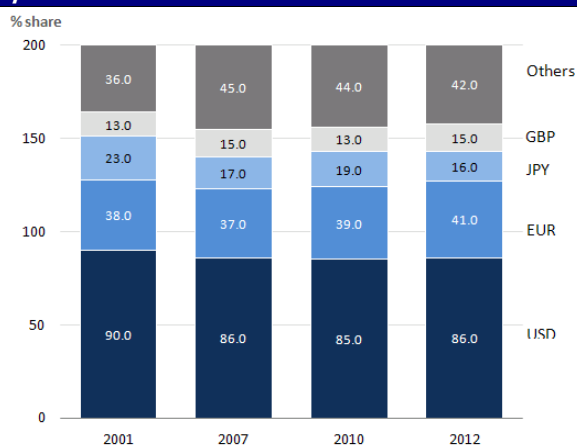
Source: Bank for International Settlements; TheCityUK estimates

**Figure 29: Global Foreign Exchange Turnover by Transaction Type**

Source: Bank for International Settlements; TheCityUK estimates

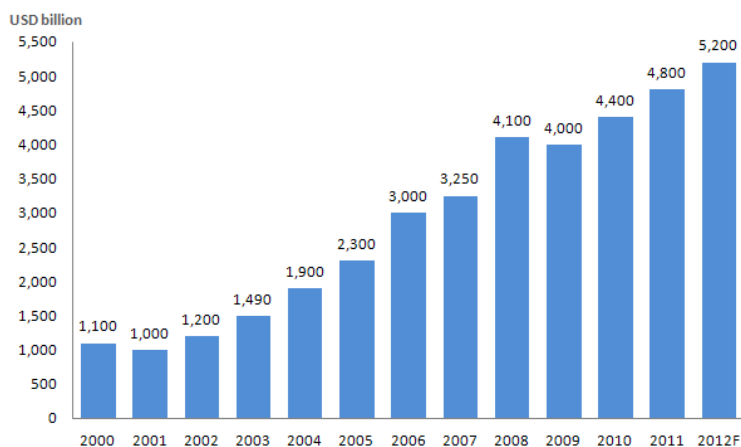
**Figure 30: Main Countries for Foreign Exchange Trading**

Source: Bank for International Settlements; TheCityUK estimates

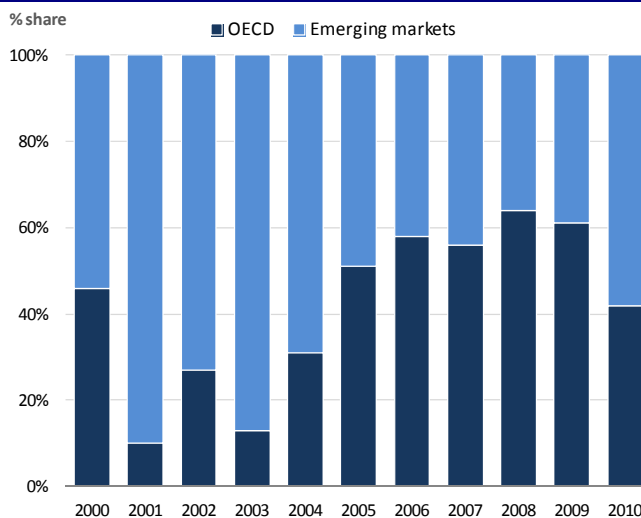
**Figure 31: Currency Distribution of Forex Turnover**

Source: Bank for International Settlements, TheCityUK estimates

NOTE: Because two currencies are involved in each transaction, the sum of the transactions in the individual currencies comes to twice the total reported turnover.

**Figure 32: Sovereign Wealth Funds Assets under Management**

Source: The CityUK estimates

**Figure 33: SWF Investment Trends**

Source: TheCityUK estimates

**Table 15: Largest Sovereign Wealth Funds - May 2012**

<b>Sovereign Wealth Fund</b>	<b>USD billion</b>	<b>Country</b>	<b>Inception</b>	<b>Origin</b>
Abu Dhabi Investment Authority	627.0	UAE - Abu Dhabi	1976	Oil
Government Pension Fund - Global	611.0	Norway	1990	Oil
SAMA Foreign Holdings	532.8	Saudi Arabia	n/a	Oil
China Investment Corporation	439.6	China	2007	Non-commodity
Kuwait Investment Authority	296.0	Kuwait	1953	Oil
Hong Kong Monetary Authority Investment Portfolio	293.3	China - Hong Kong	1993	Non-commodity
Government of Singapore Investment Corporation	247.5	Singapore	1981	Non-commodity
Temasek Holdings	157.2	Singapore	1974	Non-commodity
National Wealth Fund (May 2012; two funds combined)	149.7	Russia	2008	Oil
National Social Security Fund	134.5	China	2000	Non-commodity
Qatar Investment Authority	100.0	Qatar	2005	Oil
Australian Future Fund	80.0	Australia	2006	Non-commodity
Investment Corporation of Dubai	70.0	UAE - Dubai	2006	Oil
Libyan Investment Authority	65.0	Libya	2006	Oil
Kazakhstan National Fund	58.2	Kazakhstan	2000	Oil
International Petroleum Investment Company	58.0	UAE - Abu Dhabi	1984	Oil
Revenue Regulation Fund	56.7	Algeria	2000	Oil
Mubadala Development Company	48.2	UAE - Abu Dhabi	2002	Oil
Korea Investment Corporation	43.0	South Korea	2005	Non-commodity
Alaska Permanent Fund	40.3	US - Alaska	1976	Oil
Khazanah Nasional	36.8	Malaysia	1993	Non-commodity
State Oil Fund	30.2	Azerbaijan	1999	Oil
National Pensions Reserve Fund	30.0	Ireland	2001	Non-commodity
Brunei Investment Agency	30.0	Brunei	1983	Oil
Strategic Investment Fund	28.0	France	2008	Non-commodity
Texas Permanent School Fund	24.4	US - Texas	1854	Oil & Other
Oil Stabilisation Fund	23.0	Iran	1999	Oil
New Zealand Superannuation Fund	15.9	New Zealand	2003	Non-commodity
Alberta's Heritage Fund	15.1	Canada	1976	Oil

<b>Sovereign Wealth Fund</b>	<b>USD billion</b>	<b>Country</b>	<b>Inception</b>	<b>Origin</b>
Social & Economic Stabilization Fund	15.0	Chile	2007	Copper
New Mexico State Investment Council	14.3	US - New Mexico	1958	Non-commodity
Sovereign Fund of Brazil	11.3	Brazil	2008	Non-commodity
Timor-Leste Petroleum Fund	9.9	East Timor	2005	Oil & Gas
Mumtalakat Holdings	9.1	Bahrain	2006	Non-commodity
State General Reserve Fund	8.2	Oman	1980	Oil & Gas
<b>Total</b>	<b>4,409.2</b>			

Source: SWF Institute

NOTES:

For China, The State Administration of Foreign Exchange (SAFE) is responsible for managing China's foreign exchange. Therefore we have not included in the SWF but only in the FX reserves table. The China Investment Corporation is a Sovereign Wealth Fund as such and therefore has not been included in the table for Foreign Exchange Reserves, but only in the SWF table.

For Saudi Arabia, SAMA Foreign Holdings is counted as part of FX Reserves as well as a SWF. Therefore this is included in both the tables for SWF and FX Reserves respectively.

For Hong Kong, the Hong Kong Monetary Authority has two components, the Backing Portfolio and the Investment Portfolio. The FX Reserves table includes both while the SWF table includes only the Investment Portfolio.

# The Wide Angle Series

**Deutsche Bank**

**The Wide Angle**  
The End of Population Growth

**Summary**

The global population will reach its peak around 2050, after which it will decline. This is due to a combination of factors, including a decline in fertility rates and an increase in life expectancy. The decline in fertility rates is driven by a number of factors, including a decline in the number of children born per woman and a decline in the number of women of reproductive age. The increase in life expectancy is driven by a number of factors, including a decline in mortality rates and an increase in the number of people living in developed countries.

**Deutsche Bank AG/Hong Kong**

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**Deutsche Bank**

**The Wide Angle**  
Is Outsourcing History?

**Summary**

The number of jobs lost to outsourcing has increased significantly in recent years. This is due to a number of factors, including a decline in the cost of outsourcing and an increase in the number of companies that are outsourcing jobs. The decline in the cost of outsourcing is driven by a number of factors, including a decline in the cost of labor in developing countries and an increase in the efficiency of outsourcing. The increase in the number of companies that are outsourcing jobs is driven by a number of factors, including a decline in the cost of outsourcing and an increase in the number of companies that are outsourcing jobs.

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**Deutsche Bank**

**The Wide Angle**  
Can Asian consumers replace the West?

**Summary**

There are significant differences between the consumption patterns of Asian and Western consumers. Asian consumers tend to spend more on goods and services, while Western consumers tend to spend more on services. This is due to a number of factors, including a difference in the structure of the economy and a difference in the culture. The difference in the structure of the economy is driven by a number of factors, including a difference in the number of people working in the service sector and a difference in the number of people working in the manufacturing sector. The difference in the culture is driven by a number of factors, including a difference in the number of people who are middle class and a difference in the number of people who are wealthy.

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**Deutsche Bank**

**The Wide Angle**  
The Future of Our Cities

**Summary**

The global urban population is expected to increase significantly in the coming decades. This is due to a number of factors, including a decline in the birth rate in developed countries and an increase in the birth rate in developing countries. The decline in the birth rate in developed countries is driven by a number of factors, including a decline in the number of children born per woman and an increase in the number of people living in developed countries. The increase in the birth rate in developing countries is driven by a number of factors, including a decline in the number of children born per woman and an increase in the number of people living in developing countries.

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**Deutsche Bank**

**The Wide Angle**  
Are We Entering a Post Dollar World?

**Summary**

The global financial system is undergoing a significant transformation. This is due to a number of factors, including a decline in the dominance of the US dollar and an increase in the number of countries that are using their own currencies. The decline in the dominance of the US dollar is driven by a number of factors, including a decline in the number of countries that are using the US dollar and an increase in the number of countries that are using their own currencies. The increase in the number of countries that are using their own currencies is driven by a number of factors, including a decline in the dominance of the US dollar and an increase in the number of countries that are using their own currencies.

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**Deutsche Bank**

**The Wide Angle**  
Transportation versus Communications: What is Next?

**Summary**

The global economy is undergoing a significant transformation. This is due to a number of factors, including a decline in the dominance of transportation and an increase in the dominance of communications. The decline in the dominance of transportation is driven by a number of factors, including a decline in the number of people who are using transportation and an increase in the number of people who are using communications. The increase in the dominance of communications is driven by a number of factors, including a decline in the dominance of transportation and an increase in the dominance of communications.

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**Deutsche Bank**

**The Wide Angle**  
Who are the World's Consumers?

**Summary**

The global consumer market is undergoing a significant transformation. This is due to a number of factors, including a decline in the dominance of the US and an increase in the number of countries that are becoming major consumers. The decline in the dominance of the US is driven by a number of factors, including a decline in the number of people who are using the US dollar and an increase in the number of people who are using their own currencies. The increase in the number of countries that are becoming major consumers is driven by a number of factors, including a decline in the dominance of the US and an increase in the number of countries that are becoming major consumers.

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**Deutsche Bank**

**The Wide Angle**  
What does the World Consume?

**Summary**

The global consumer market is undergoing a significant transformation. This is due to a number of factors, including a decline in the dominance of the US and an increase in the number of countries that are becoming major consumers. The decline in the dominance of the US is driven by a number of factors, including a decline in the number of people who are using the US dollar and an increase in the number of people who are using their own currencies. The increase in the number of countries that are becoming major consumers is driven by a number of factors, including a decline in the dominance of the US and an increase in the number of countries that are becoming major consumers.

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**Deutsche Bank**

**The Wide Angle**  
Global Imbalances in the Post-Crisis World

**Summary**

The global economy is undergoing a significant transformation. This is due to a number of factors, including a decline in the dominance of the US and an increase in the number of countries that are becoming major consumers. The decline in the dominance of the US is driven by a number of factors, including a decline in the number of people who are using the US dollar and an increase in the number of people who are using their own currencies. The increase in the number of countries that are becoming major consumers is driven by a number of factors, including a decline in the dominance of the US and an increase in the number of countries that are becoming major consumers.

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# The Random Walk Series

**Global Markets Research**

**Deutsche Bank**

20 February 2012

**The Random Walk**

**Mapping the World's Financial Markets**

**Periodic**

Responsible Analyst: Stephen Sempel  
Responsible Analyst: Stephen Sempel  
Responsible Analyst: Stephen Sempel

This is the first issue of a new series of publications that we have named The Random Walk. It is meant as a companion to The World's Financial Markets. The Random Walk series will have steady state. Both the publications will look at global issues and perspectives with the aim of providing the reader with the best available data and analysis of a topic. The Random Walk reports, however, will be less formal and will be more the actual investigation rather than the polished investigation. The aim is to fill in some gaps into the current and future of the global picture even as we try to keep up with the ever-changing world around us.

In our very first report in this series, we have tried to map out the broad contours of the world's financial markets. For an industry that spends so much time going over data, we found that the financial sector is surprisingly diverse in its own size and scale. There are many areas where data is available or accessible. There are problems with definitions and double-counting. Nevertheless, we have put together the best available information in an easy-to-understand format. To many users we have also estimated or updated numbers using several independent sources. An attempt has been made to try and internalize inconsistencies where possible. But, we should be aware that a certain amount of research is still in those for countries – for most of current industry-wide data. We will probably return to this in a later issue. In short, the following numbers should not be treated as gospel truth but as an attempt to grasp the scale of magnitude that defines the world's capital markets.

**Figure 1: Share of Global Financial Assets**

**Deutsche Bank AG/Hong Kong**

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**Global Markets Research**

**Deutsche Bank**

11 April 2012

**The Random Walk**

**Mapping the World's Prices**

**Periodic**

Responsible Analyst: Stephen Sempel  
Responsible Analyst: Stephen Sempel  
Responsible Analyst: Stephen Sempel

The cross-country comparison of prices has long been used by economists for a number of purposes ranging from gauging export competitiveness to assessing sustainability. The most commonly used frameworks are Purchasing Power Parity and Cost of Living but few are happy with problems arising from the choice of baskets of goods/services to that of appropriate weights that work across countries and applications, as well as some important caveats. Thus, from an academic to applied perspective, the 'Big Mac Index' that is called by The Economist magazine, illustrates the choice of baskets of goods in the analysis and some of the problems that arise from the choice of weights.

In the issue of The Random Walk series, we have presented a simple survey of prices and index for a very wide array of goods and services from around the world. The data is mostly gathered from the internet and every effort has been made to ensure that the prices are comparable across countries. Whenever possible we have used a product that is identical across countries or a close equivalent like the index accompanying the basket. Of course, we are aware of the limitations and discrepancies of gathering prices over the internet. Costs in financial countries and products are able to source some of these goods/services at lower prices than those that we have presented. Nonetheless, we feel that the data set still provides the reader with a reasonably robust view of global prices.

In many cases, the data confirmed what we had expected. Developing countries, with the exception of Brazil, were found to be generally much cheaper than developed countries. Australia, for instance, was consistently found to be very expensive. Moreover, the data also showed at data diverging countries. For instance, London and Hong Kong are indeed very expensive when it comes to office but Mainland China found to be significantly cheaper. Next, other than financial hubs even other accounting for taxes and other additional charges. Certainly, the Philippines and China are much cheaper to buy in North America or Asia in Malaysia.

One of the most interesting aspects of the data is that cross-country comparisons provide us insight into the internal price structure of individual cities. For example, Singapore is a very expensive place to live when it comes to dining and dining are clearly not encouraged, but is a cheap place to do an MBA or watch a movie. Similarly, Hong Kong is generally very expensive but for hotel and public transport are among the cheapest in the world.

We also constructed a number of new indices to gauge the relative cost of different locations. We defined the baskets in terms of different categories. Thus, we found that Delhi is the cheapest place to go out on a date while Hong Kong is the most expensive place to quality a graduate school. Finally, we found that Kuala Lumpur is the cheapest place for a weekend holiday while Sydney is the most expensive.

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**Global Markets Research**

**Deutsche Bank**

15 February 2013

**The Random Walk**

**Mapping the World's Financial Markets 2013**

**Periodic**

Responsible Analyst: Stephen Sempel  
Responsible Analyst: Stephen Sempel  
Responsible Analyst: Stephen Sempel

A year ago, we published the first edition of "Mapping the World's Financial Markets". The idea was to put together the best available information in the broad contours of the world's financial markets in an easy-to-understand format. The publication proved to be very popular with clients as well as our own staff. Therefore, we have decided to publish an update and hope to do so every year in the future.

We have tried hard to update all the data and tables that we presented last year as well as to improve the same format. We succeeded in most areas but there were some recent market reports where our data is either unavailable or inconsistent with past data. Thus, we have used our judgment either to update the numbers with our own estimates or to leave out the relevant chart altogether. Nevertheless, we have to have compromised by illustrating interesting new data on market segments that we had not covered last year.

Readers should be aware that the data presented in this report are derived from many different sources that may not always be consistent with each other. We have made every effort to try and inconsistencies where possible but problems with definitions and double-counting remain. Thus, the following numbers should not be treated as gospel truth but as an attempt to grasp the scale of magnitude of the world's financial markets.

**Figure 1: Share of Global Financial Assets**

**Deutsche Bank AG/Hong Kong**

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# Appendix 1

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Additional information available upon request

**For disclosures pertaining to recommendations or estimates made on a security mentioned in this report, please see the most recently published company report or visit our global disclosure look-up page on our website at <http://gm.db.com/ger/disclosure/DisclosureDirectory.eqsr>.**

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The views expressed in this report accurately reflect the personal views of the undersigned lead analyst(s). In addition, the undersigned lead analyst(s) has not and will not receive any compensation for providing a specific recommendation or view in this report. Sanjeev Sanyal

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Macroeconomic fluctuations often account for most of the risks associated with exposures to instruments that promise to pay fixed or variable interest rates. For an investor that is long fixed rate instruments (thus receiving these cash flows), increases in interest rates naturally lift the discount factors applied to the expected cash flows and thus cause a loss. The longer the maturity of a certain cash flow and the higher the move in the discount factor, the higher will be the loss. Upside surprises in inflation, fiscal funding needs, and FX depreciation rates are among the most common adverse macroeconomic shocks to receivers. But counterparty exposure, issuer creditworthiness, client segmentation, regulation (including changes in assets holding limits for different types of investors), changes in tax policies, currency convertibility (which may constrain currency conversion, repatriation of profits and/or the liquidation of positions), and settlement issues related to local clearing houses are also important risk factors to be considered. The sensitivity of fixed income instruments to macroeconomic shocks may be mitigated by indexing the contracted cash flows to inflation, to FX depreciation, or to specified interest rates – these are common in emerging markets. It is important to note that the index fixings may – by construction – lag or mis-measure the actual move in the underlying variables they are intended to track. The choice of the proper fixing (or metric) is particularly important in swaps markets, where floating coupon rates (i.e., coupons indexed to a typically short-dated interest rate reference index) are exchanged for fixed coupons. It is also important to acknowledge that funding in a currency that differs from the currency in which the coupons to be received are denominated carries FX risk. Naturally, options on swaps (swaptions) also bear the risks typical to options in addition to the risks related to rates movements.

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