

# Statistical Annex

## The international banking market

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## The BIS international financial statistics summary tables

The BIS publishes a variety of international financial statistics, most of them on a quarterly basis. They cover banking statistics on both a locational and a consolidated basis, debt securities issues in both domestic and international markets, and statistics on derivatives traded on exchanges and over the counter. The main purpose of the statistics is to provide a measure of the size and structure of key segments of the global financial market and to monitor their development. A summary of the most recent data is presented in seven tables (see below).<sup>1</sup>

### 1. International banking statistics (Tables 1A, 1B, 2A and 2B)

The locational reporting system provides quarterly data on the international financial claims and liabilities of banks resident in the 44 reporting countries on a gross basis. The methodology is consistent with the principles underlying the compilation of national accounts, balances of payments and external debt statistics. Breakdowns are provided in terms of instrument, currency, sector and vis-à-vis country. The currency breakdown allows the BIS to approximate global bank credit flows adjusted for exchange rate fluctuations.

The consolidated banking statistics cover banks' worldwide on-balance sheet claims, on both a contractual (immediate borrower) and an ultimate risk basis (ie net of risk mitigants such as guarantees and collateral). Positions are reported by head offices in their home country and include all branches and subsidiaries on a worldwide consolidated basis, net of inter-office accounts. Breakdowns are available in terms of instrument, sector, maturity and vis-à-vis country. Information is also available on key off-balance sheet items such as guarantees extended, credit commitments and derivative contracts. Currently 31 countries provide consolidated banking data.

While the locational statistics are appropriate for measuring lending flows in a given period, the consolidated statistics are more suited to gauging the size of banks' country and liquidity risk exposures. The data are compiled by the BIS on the basis of national data reported by the respective central banks, which in turn collect these data from the internationally active banks in their jurisdiction.

### 2. Debt securities statistics (Tables 3A and 3B)

Securities statistics are harmonised with recommendations from the Handbook on Securities Statistics Part 1 (jointly released by BIS, ECB and IMF; available at the IMF web site [www.imf.org/external/np/sta/wgsd/pdf/051309.pdf](http://www.imf.org/external/np/sta/wgsd/pdf/051309.pdf)). There are three datasets, each covering a different market of issue: international debt securities, domestic debt securities and total debt securities.

The sectoral breakdown presents data based on the sector of the borrower itself and not on the sector of the parent of the borrower or any guarantor. "General government" comprises central government and other governments, while "Financial corporations" comprises commercial banks, central bank, and other financial institutions.

The compilation methodology was changed in December 2012 for the full history of the statistics. For statistics compiled according to the old methodology, see the detailed Annex Tables in pre-December 2012 version of the *BIS Quarterly Review*.

### 3. Derivatives statistics (Table 4)

Semi-annual data are compiled for activity in over-the-counter (OTC) markets whilst quarterly data are available on activity in exchange-traded markets. The data on OTC derivatives are based on the reporting to the BIS by central banks in major financial centres that in turn collect the information on a consolidated basis from reporting dealers headquartered in their respective country, while those on exchange-traded derivatives are obtained from market sources.

The derivatives data cover notional amounts outstanding and gross market values for a number of risk categories: foreign exchange, interest rates, equity-linked, commodities and credit default swaps. Gross credit exposure in OTC markets after bilateral netting is also available.

<sup>1</sup> More detailed tables and options to download the data in time series form are available at [www.bis.org/statistics/index.htm](http://www.bis.org/statistics/index.htm).

**Table 1A: International positions of banks by residence of counterparty, March 2013<sup>1</sup>**

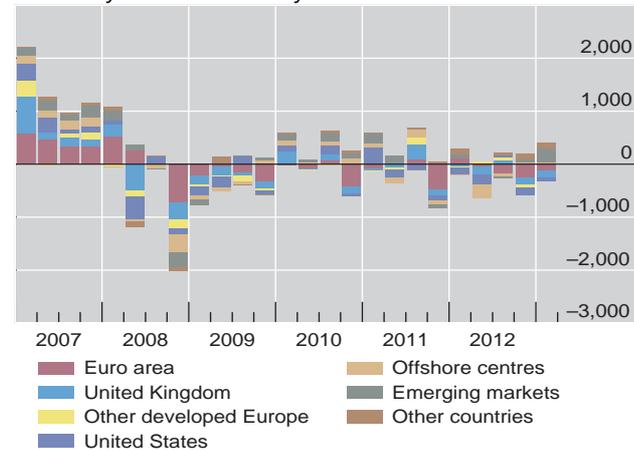
In billions of US dollars

	Vis-à-vis developed countries	Vis-à-vis offshore centres	Vis-à-vis emerging markets					All countries
			Total	Africa	Asia	Europe	Latin America	
<b>Amounts outstanding</b>								
<b>Total claims</b>	<b>23,931</b>	<b>4,246</b>	<b>4,030</b>	<b>486</b>	<b>1,854</b>	<b>905</b>	<b>784</b>	<b>32,950</b>
<b>Total cross-border claims</b>	<b>21,283</b>	<b>3,615</b>	<b>3,404</b>	<b>478</b>	<b>1,525</b>	<b>737</b>	<b>665</b>	<b>28,589</b>
Loans	14,822	2,906	2,662	435	1,208	554	465	20,476
Securities	4,450	569	406	18	179	78	131	5,624
Claims on banks	12,971	2,020	1,835	214	957	384	280	17,013
Claims on non-banks	8,312	1,595	1,569	264	567	353	386	11,576
US dollar	8,196	2,228	1,426	276	463	225	463	11,907
Euro	8,937	261	438	79	58	277	25	9,802
<b>Foreign currency claims on residents</b>	<b>2,648</b>	<b>631</b>	<b>625</b>	<b>9</b>	<b>330</b>	<b>168</b>	<b>118</b>	<b>3,905</b>
<b>Estimated exchange rate-adjusted changes during the quarter<sup>2</sup></b>								
<b>Total claims</b>	<b>-304</b>	<b>53</b>	<b>298</b>	<b>2</b>	<b>205</b>	<b>37</b>	<b>54</b>	<b>40</b>
<b>Total cross-border claims</b>	<b>-341</b>	<b>24</b>	<b>267</b>	<b>0</b>	<b>198</b>	<b>25</b>	<b>44</b>	<b>-28</b>
Loans	-161	-1	227	2	168	38	19	68
Securities	-64	16	20	-1	20	-5	6	-8
Claims on banks	-328	-21	199	1	148	14	35	-137
Claims on non-banks	-13	44	68	-1	50	10	9	110
US dollar	-60	-33	145	-1	72	38	36	58
Euro	-189	17	11	2	10	-3	2	-145
<b>Foreign currency claims on residents</b>	<b>37</b>	<b>30</b>	<b>31</b>	<b>2</b>	<b>7</b>	<b>12</b>	<b>10</b>	<b>98</b>
<b>Amounts outstanding</b>								
<b>Total liabilities</b>	<b>20,653</b>	<b>4,956</b>	<b>3,206</b>	<b>893</b>	<b>1,304</b>	<b>460</b>	<b>549</b>	<b>31,739</b>
<b>Total cross-border liabilities</b>	<b>17,724</b>	<b>4,039</b>	<b>2,596</b>	<b>883</b>	<b>911</b>	<b>340</b>	<b>461</b>	<b>24,610</b>
Deposits	14,842	3,859	2,493	873	867	334	419	21,438
Securities	1,462	86	26	3	13	1	9	1,576
Liabilities to banks	12,440	2,577	1,652	574	616	251	212	16,841
Liabilities to non-banks	5,284	1,462	943	309	295	90	249	7,770
US dollar	7,143	2,628	1,469	597	370	154	347	11,315
Euro	6,996	381	310	120	50	98	42	7,824
<b>Foreign currency liabilities to residents</b>	<b>2,928</b>	<b>916</b>	<b>611</b>	<b>10</b>	<b>393</b>	<b>120</b>	<b>88</b>	<b>4,455</b>
<b>Estimated exchange rate-adjusted changes during the quarter<sup>2</sup></b>								
<b>Total liabilities</b>	<b>-68</b>	<b>53</b>	<b>116</b>	<b>35</b>	<b>18</b>	<b>37</b>	<b>27</b>	<b>87</b>
<b>Total cross-border liabilities</b>	<b>-27</b>	<b>33</b>	<b>107</b>	<b>34</b>	<b>19</b>	<b>35</b>	<b>19</b>	<b>122</b>
Deposits	-88	23	102	34	15	34	19	48
Securities	74	2	4	0	4	1	0	81
Liabilities to banks	-167	-6	114	33	30	35	16	-51
Liabilities to non-banks	140	39	-7	1	-11	1	3	173
US dollar	41	57	78	29	17	21	11	172
Euro	-86	-7	-1	-2	-7	4	3	-86
<b>Foreign currency liabilities to residents</b>	<b>-41</b>	<b>20</b>	<b>10</b>	<b>1</b>	<b>-1</b>	<b>1</b>	<b>8</b>	<b>-11</b>

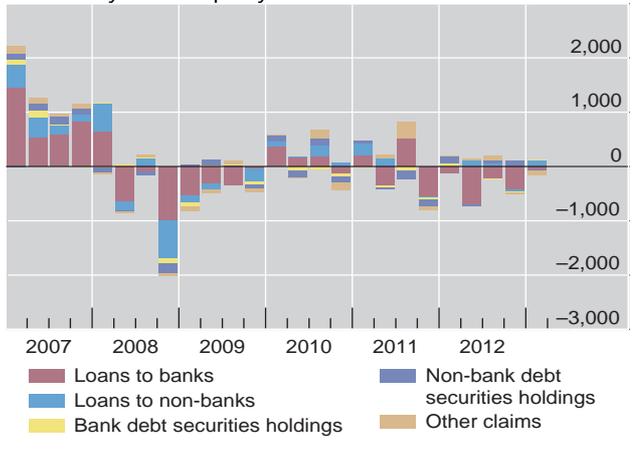
### Cross-border positions

Exchange rate-adjusted changes in stocks

Claims by vis-à-vis country



Claims by counterparty and instrument



<sup>1</sup> Detailed breakdowns and time series data are available at <http://www.bis.org/statistics/bankstats.htm> (Tables 1–7B). <sup>2</sup> Taking into account exchange rate effects on outstanding balances in non-dollar currencies.

**Table 1B: International positions of banks by nationality of head office, March 2013<sup>1</sup>**

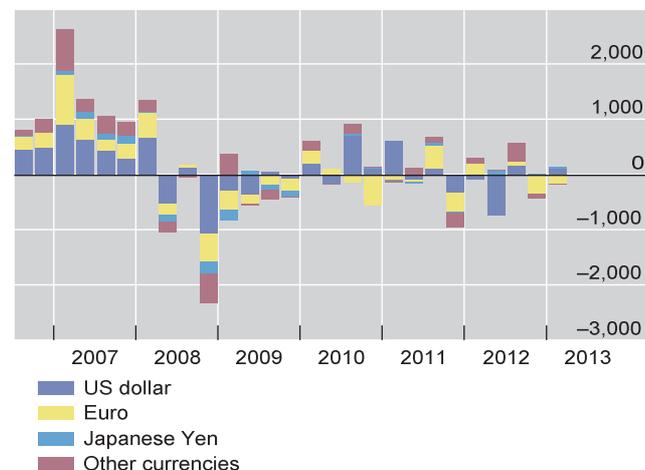
In billions of US dollars

	Nationality of banks										All countries
	France	Germany	Italy	Netherlands	Spain	Switzerland	United Kingdom	Japan	United States	Emerging markets	
<b>Amounts outstanding</b>											
<b>Total claims</b>	<b>3,491</b>	<b>3,626</b>	<b>907</b>	<b>1,607</b>	<b>689</b>	<b>2,341</b>	<b>4,292</b>	<b>4,401</b>	<b>3,798</b>	<b>1,486</b>	<b>32,845</b>
on banks	2,125	2,018	567	683	337	1,415	2,369	1,835	2,423	775	18,272
on related foreign offices	1,093	1,030	210	365	211	935	1,429	942	1,417	238	9,696
on other banks	1,000	976	357	311	124	477	900	891	971	481	8,338
on official monetary institutions	32	12	0	6	1	3	40	2	35	56	238
on non-banks	1,367	1,608	340	924	352	925	1,922	2,567	1,375	710	14,573
US dollar	1,026	1,196	141	445	218	1,285	1,825	2,496	2,469	1,135	14,626
Euro	1,821	1,908	671	882	330	474	1,511	589	678	128	10,668
Other currencies	644	522	95	279	140	582	956	1,316	651	222	7,552
<b>Estimated exchange rate-adjusted changes during the quarter<sup>2</sup></b>											
<b>Total claims</b>	<b>35</b>	<b>-43</b>	<b>-38</b>	<b>23</b>	<b>1</b>	<b>-20</b>	<b>-28</b>	<b>43</b>	<b>-95</b>	<b>73</b>	<b>-15</b>
on banks	-9	-39	-38	-7	-1	-20	-27	24	-84	47	-163
on related foreign offices	-63	-77	-17	-9	-5	-34	-105	33	-86	22	-310
on other banks	53	33	-21	8	5	15	65	-9	2	23	160
on official monetary institutions	1	5	0	-6	-1	-1	14	0	0	2	-12
on non-banks	43	-3	0	30	2	0	-1	18	-11	26	147
US dollar	29	-25	13	32	9	-22	43	-17	-93	72	112
Euro	-17	-12	-45	5	8	17	-72	41	20	6	-147
Other currencies	23	-6	-7	-14	-15	-15	0	19	-22	-4	20
<b>Amounts outstanding</b>											
<b>Total liabilities</b>	<b>3,367</b>	<b>3,045</b>	<b>687</b>	<b>1,617</b>	<b>687</b>	<b>2,546</b>	<b>4,472</b>	<b>2,610</b>	<b>4,361</b>	<b>1,562</b>	<b>31,668</b>
to banks	1,804	1,745	474	537	422	1,366	2,151	1,662	2,339	851	17,067
to related foreign offices	914	1,038	148	345	152	971	1,338	832	1,329	190	8,914
to other banks	793	613	306	161	243	379	701	762	799	640	7,267
to official monetary institutions	96	93	20	32	27	16	112	68	211	21	886
to non-banks	1,563	1,300	213	1,079	265	1,180	2,322	948	2,022	711	14,601
US dollar	1,175	1,289	128	547	247	1,278	1,743	1,676	3,068	1,104	15,326
Euro	1,650	1,146	500	685	353	572	1,413	369	612	140	9,283
Other currencies	542	610	59	385	86	696	1,316	566	682	318	7,059
<b>Estimated exchange rate-adjusted changes during the quarter<sup>2</sup></b>											
<b>Total liabilities</b>	<b>61</b>	<b>-3</b>	<b>-39</b>	<b>-21</b>	<b>38</b>	<b>-8</b>	<b>-68</b>	<b>-24</b>	<b>-63</b>	<b>70</b>	<b>-3</b>
to banks	8	-6	-43	-21	34	-76	-112	4	-22	57	-185
to related foreign offices	-10	-67	-9	-12	-9	-85	-99	24	-63	18	-354
to other banks	12	42	-29	-9	45	9	-15	-23	23	46	112
to official monetary institutions	5	19	-6	0	-2	0	2	4	17	-7	57
to non-banks	53	3	4	0	4	68	44	-28	-41	13	181
US dollar	47	12	4	13	-5	-20	41	-66	-83	53	97
Euro	-16	1	-43	-20	54	10	-106	47	18	10	-162
Other currencies	29	-16	0	-14	-10	2	-3	-4	3	8	61

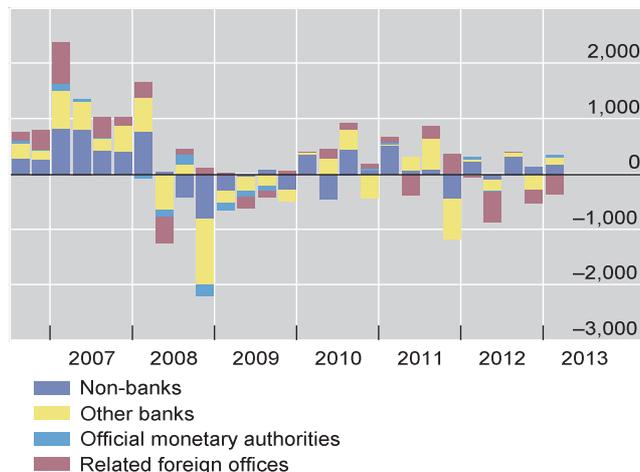
### International positions of BIS reporting banks

Exchange rate-adjusted changes in stocks

Claims by currency



Liabilities by sector of counterparty



<sup>1</sup> Detailed breakdowns and time series data are available at <http://www.bis.org/statistics/bankstats.htm> (Tables 8A–8B). <sup>2</sup> Taking into account exchange rate effects on outstanding balances in non-dollar currencies.

**Table 2A: Consolidated claims, immediate borrower basis, March 2013<sup>1</sup>**

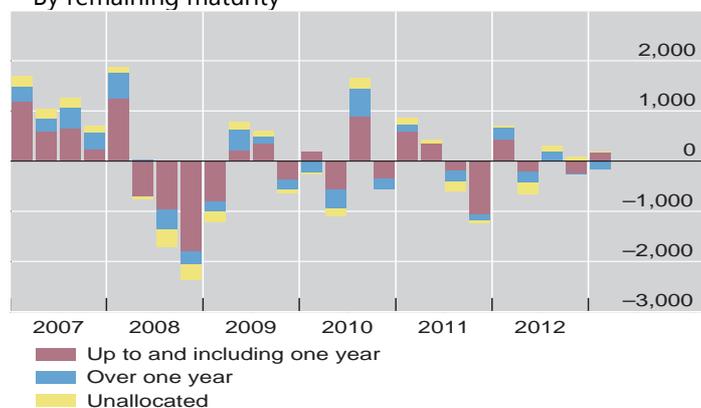
Amounts outstanding, in billions of US dollars

	Vis-à-vis developed countries				Vis-à-vis offshore centres	Vis-à-vis emerging markets					All countries
	Total	United States	Euro area	Japan		Total	Africa	Asia	Europe	Latin America	
<b>Foreign claims</b>	<b>21,896</b>	<b>5,727</b>	<b>8,665</b>	<b>1,153</b>	<b>2,764</b>	<b>5,846</b>	<b>642</b>	<b>2,353</b>	<b>1,457</b>	<b>1,394</b>	<b>30,742</b>
<b>International claims</b>	<b>13,790</b>	<b>2,550</b>	<b>6,354</b>	<b>786</b>	<b>2,192</b>	<b>3,456</b>	<b>434</b>	<b>1,599</b>	<b>832</b>	<b>590</b>	<b>19,671</b>
Up to and including one year	6,970	885	2,974	690	1,143	1,832	207	1,031	313	281	10,010
Over one year	4,494	986	2,312	41	655	1,287	202	406	435	244	6,514
Unallocated by maturity	2,326	679	1,068	56	394	337	25	162	84	66	3,146
<b>Local currency claims</b>	<b>8,106</b>	<b>3,177</b>	<b>2,310</b>	<b>367</b>	<b>573</b>	<b>2,390</b>	<b>208</b>	<b>754</b>	<b>625</b>	<b>804</b>	<b>11,070</b>
<b>Local currency liabilities</b>	<b>6,131</b>	<b>2,564</b>	<b>1,921</b>	<b>197</b>	<b>494</b>	<b>1,774</b>	<b>178</b>	<b>485</b>	<b>501</b>	<b>612</b>	<b>8,402</b>
	<b>Unadjusted changes during the quarter<sup>2</sup></b>										
<i>Foreign claims</i>	-560	-56	-283	-43	60	195	-21	171	16	29	-32
<i>International claims</i>	-332	-91	-133	-13	50	168	-11	158	20	1	23
<i>Local currency claims</i>	-228	35	-150	-30	10	27	-9	13	-5	27	-55
<i>Local currency liabilities</i>	20	95	-52	2	3	-1	-13	4	-5	12	123
<b>Nationality of reporting banks:</b>	<b>Foreign claims</b>										
<b>Domestically owned banks (total)</b>	<b>18,251</b>	<b>5,327</b>	<b>7,064</b>	<b>717</b>	<b>2,656</b>	<b>5,220</b>	<b>593</b>	<b>1,935</b>	<b>1,392</b>	<b>1,300</b>	<b>26,349</b>
Euro area	7,381	1,375	3,884	169	405	2,192	210	298	1,073	612	10,100
Switzerland	1,182	600	282	64	223	163	28	68	23	44	1,578
United Kingdom	2,302	997	918	82	602	940	214	508	76	141	3,889
Japan	2,229	1,190	582	.	581	379	33	251	35	60	3,189
United States	2,056	.	787	336	484	810	69	352	95	295	3,378
Other countries <sup>3</sup>	3,101	1,166	611	66	360	735	40	458	90	147	4,214
<b>Other foreign banks</b>	<b>3,645</b>	<b>400</b>	<b>1,601</b>	<b>437</b>	<b>109</b>	<b>626</b>	<b>49</b>	<b>418</b>	<b>65</b>	<b>94</b>	<b>4,393</b>
	<b>International claims, all maturities</b>										
<b>Domestically owned banks (total)</b>	<b>10,249</b>	<b>2,173</b>	<b>4,828</b>	<b>350</b>	<b>2,083</b>	<b>2,832</b>	<b>388</b>	<b>1,181</b>	<b>767</b>	<b>497</b>	<b>15,386</b>
Euro area	4,239	564	2,363	103	367	1,039	152	217	521	149	5,766
Switzerland	547	118	258	19	205	132	25	55	22	30	893
United Kingdom	1,097	334	579	46	252	433	89	238	58	48	1,828
Japan	1,764	850	544	.	536	285	33	161	34	57	2,585
United States	1,362	.	698	139	434	457	51	203	66	138	2,281
Other countries <sup>3</sup>	1,240	308	387	44	288	487	39	307	67	74	2,033
<b>Other foreign banks</b>	<b>3,541</b>	<b>377</b>	<b>1,526</b>	<b>436</b>	<b>109</b>	<b>624</b>	<b>46</b>	<b>418</b>	<b>65</b>	<b>94</b>	<b>4,285</b>
	<b>International claims, short-term</b>										
<b>Domestically owned banks (total)</b>	<b>4,722</b>	<b>703</b>	<b>2,111</b>	<b>271</b>	<b>1,070</b>	<b>1,444</b>	<b>183</b>	<b>727</b>	<b>287</b>	<b>247</b>	<b>7,300</b>
Euro area	1,968	278	883	67	187	379	54	97	160	68	2,570
Switzerland	305	46	148	11	145	71	18	27	10	15	522
United Kingdom	535	141	300	26	152	249	43	147	38	21	940
Japan	214	82	62	.	54	107	7	80	8	12	375
United States	1,016	.	495	133	370	356	43	171	44	97	1,758
Other countries <sup>3</sup>	684	155	223	34	163	282	16	205	28	33	1,134
<b>Other foreign banks</b>	<b>2,248</b>	<b>182</b>	<b>863</b>	<b>419</b>	<b>73</b>	<b>388</b>	<b>24</b>	<b>304</b>	<b>26</b>	<b>34</b>	<b>2,711</b>

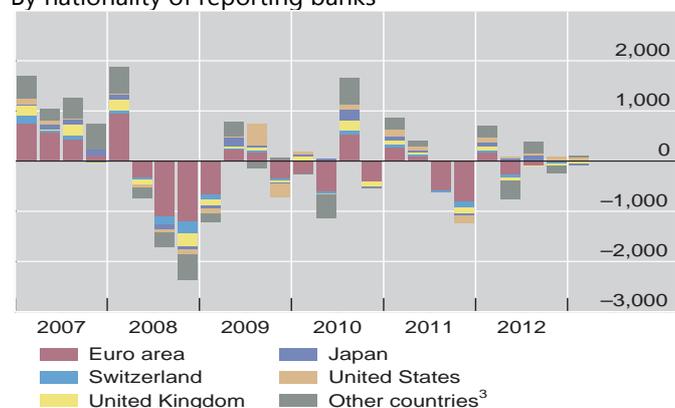
**International claims of BIS reporting banks on an immediate borrower basis<sup>4</sup>**

 Changes in stocks<sup>2</sup>

By remaining maturity



By nationality of reporting banks



<sup>1</sup> Detailed breakdowns and time series data are available at <http://www.bis.org/statistics/constats.htm> (Tables 9A–9B and BIS WebStats). <sup>2</sup> Quarterly difference in outstanding stocks, excluding effects of breaks in series, not adjusted for exchange rate movements. <sup>3</sup> Domestically owned banks in other reporting countries. <sup>4</sup> Worldwide consolidated positions of domestically owned banks and unconsolidated positions of foreign banks in 30 reporting countries.

**Table 2B: Consolidated claims, ultimate risk basis, March 2013<sup>1</sup>**

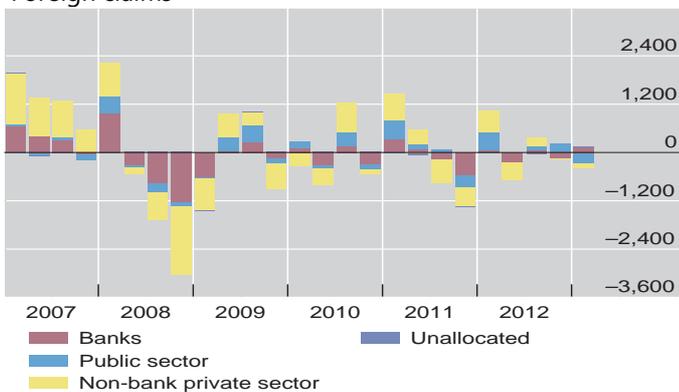
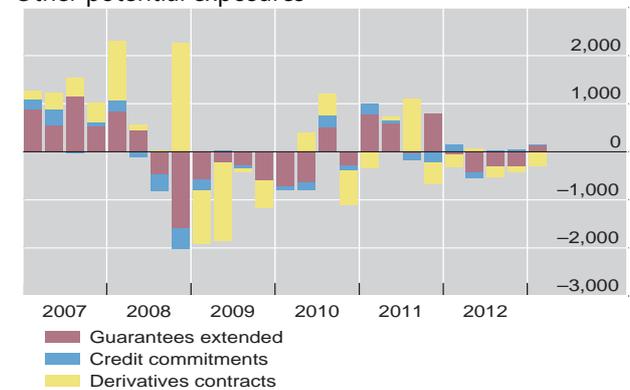
Amounts outstanding, in billions of US dollars

	Vis-à-vis developed countries				Vis-à-vis offshore centres	Vis-à-vis emerging markets					All countries
	Total	United States	Euro area	Japan		Total	Africa	Asia	Europe	Latin America	
<b>Foreign claims</b>	<b>17,981</b>	<b>5,371</b>	<b>6,877</b>	<b>745</b>	<b>1,981</b>	<b>5,043</b>	<b>548</b>	<b>1,888</b>	<b>1,344</b>	<b>1,263</b>	<b>25,236</b>
Banks	3,998	758	1,670	251	146	972	78	535	190	170	5,127
Public sector	3,970	1,464	1,553	217	215	1,253	139	397	320	398	5,588
Non-bank private sector	9,872	3,098	3,628	277	1,590	2,800	331	955	821	693	14,328
Unallocated	141	51	26	1	31	18	1	2	13	3	193
<b>Cross-border claims</b>	<b>9,373</b>	<b>2,222</b>	<b>4,602</b>	<b>294</b>	<b>1,228</b>	<b>2,190</b>	<b>299</b>	<b>988</b>	<b>512</b>	<b>392</b>	<b>13,019</b>
<b>Local claims in all currencies</b>	<b>8,608</b>	<b>3,149</b>	<b>2,275</b>	<b>451</b>	<b>753</b>	<b>2,853</b>	<b>250</b>	<b>901</b>	<b>832</b>	<b>871</b>	<b>12,217</b>
<b>Unadjusted changes during the quarter<sup>2</sup></b>											
Foreign claims	-436	-63	-178	-42	48	144	-17	108	29	25	-232
Cross-border claims	-201	-67	-28	-24	37	115	-6	91	29	2	-37
Local claims in all currencies	-235	4	-150	-17	11	29	-12	17	0	23	-195
<b>Nationality of reporting banks<sup>3</sup></b>											
<b>Foreign claims</b>											
<b>Total</b>	<b>17,981</b>	<b>5,371</b>	<b>6,877</b>	<b>745</b>	<b>1,981</b>	<b>5,043</b>	<b>548</b>	<b>1,888</b>	<b>1,344</b>	<b>1,263</b>	<b>25,236</b>
Euro area	7,290	1,365	3,804	167	323	2,142	200	296	1,033	612	9,870
France	2,116	430	1,230	101	110	449	119	103	186	40	2,683
Germany	2,163	492	983	52	116	309	44	108	118	39	2,635
Italy	591	32	485	...	12	212	9	15	185	3	819
Spain	850	200	233	4	16	574	3	11	62	497	1,483
Switzerland	1,238	630	299	66	142	149	17	67	22	43	1,540
United Kingdom	2,340	999	937	98	559	960	212	526	77	145	3,905
Japan	2,241	1,269	539	.	383	371	30	245	34	62	2,995
United States	2,151	.	784	369	343	817	66	357	100	294	3,352
Other countries	2,721	1,107	514	47	231	604	22	397	78	106	3,574
<b>Cross-border claims</b>											
<b>Total</b>	<b>9,373</b>	<b>2,222</b>	<b>4,602</b>	<b>294</b>	<b>1,228</b>	<b>2,190</b>	<b>299</b>	<b>988</b>	<b>512</b>	<b>392</b>	<b>13,019</b>
Euro area	3,816	546	2,228	78	249	755	133	197	313	113	4,935
France	1,110	140	683	37	84	215	68	72	47	28	1,417
Germany	1,497	295	825	31	102	225	42	69	77	37	1,872
Italy	245	22	160	...	10	42	3	8	28	3	302
Spain	175	21	106	4	11	48	3	11	5	29	278
Switzerland	527	133	273	21	103	116	15	53	20	28	755
United Kingdom	1,085	333	580	41	151	359	61	202	53	43	1,640
Japan	1,797	953	501	.	328	250	27	131	32	59	2,375
United States	1,241	.	691	129	271	406	44	180	66	116	1,959
Other countries	907	257	330	26	126	305	19	224	27	34	1,354
<b>Other potential exposures<sup>4,5</sup></b>											
Derivatives contracts	3,014	728	1,123	98	94	158	30	55	24	48	3,282
Guarantees extended	6,404	525	2,496	215	225	1,211	132	390	445	244	8,190
Credit commitments	2,764	939	927	39	198	568	69	192	133	174	3,535

### Consolidated claims and other potential exposures of BIS reporting banks on an ultimate risk basis

 Changes in stocks<sup>2</sup>

Foreign claims

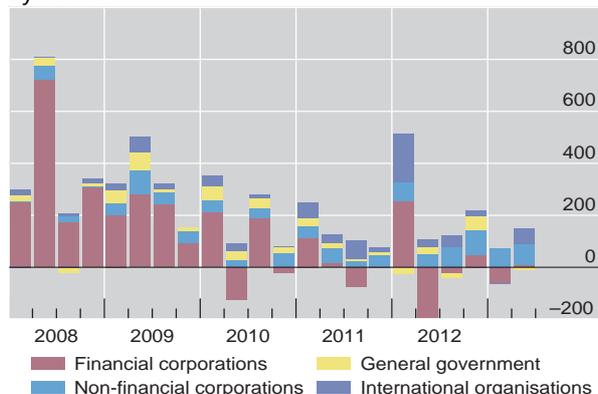
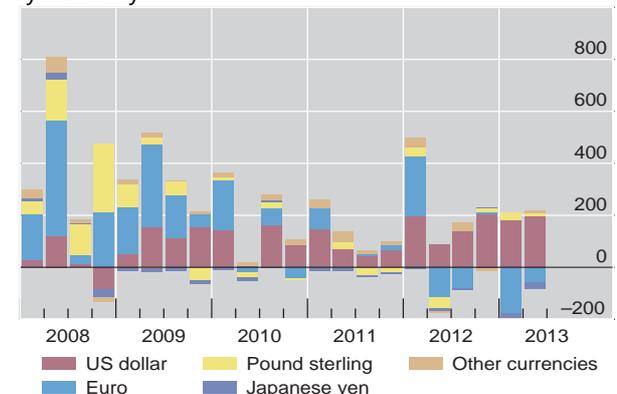

 Other potential exposures<sup>4,5</sup>


<sup>1</sup> Detailed breakdowns and time series data are available at <http://www.bis.org/statistics/constats/htm> (Tables 9C–9E). <sup>2</sup> Quarterly difference in outstanding stocks, excluding effects of breaks in series, not adjusted for exchange rate movements. <sup>3</sup> Worldwide consolidated positions of domestically owned banks of 24 reporting countries. <sup>4</sup> Not included in foreign claims. <sup>5</sup> Derivatives relate to positive market values recorded as on- or off-balance sheet items. Credit commitments and guarantees are recorded as off-balance sheet items.

**Table 3A: International debt securities issuance, June 2013<sup>1</sup>**

In billions of US dollars

	Developed countries				Off-shore centres	Emerging markets					Int'l organisations	All countries
	Total	United States	Euro area	Japan		Total	Africa	Asia	Europe	Latin America		
<b>Amounts outstanding</b>												
<b>Total issues</b>	<b>17,001</b>	<b>1,963</b>	<b>9,208</b>	<b>186</b>	<b>1,777</b>	<b>1,597</b>	<b>199</b>	<b>427</b>	<b>415</b>	<b>555</b>	<b>1,381</b>	<b>21,755</b>
<b>Money market instruments</b>	<b>746</b>	<b>10</b>	<b>452</b>	<b>2</b>	<b>70</b>	<b>14</b>	<b>5</b>	<b>6</b>	<b>1</b>	<b>2</b>	<b>21</b>	<b>852</b>
Financial corporations	680	6	409	1	70	14	5	6	1	2	0	764
Non-financial corporations	39	4	24	0	0	0	0	0	0	0	0	39
General government	28	0	19	0	0	0	0	0	0	0	0	28
US dollar	267	1	155	0	35	9	3	3	0	2	16	327
Euro	291	5	200	0	12	2	0	1	0	0	2	307
Other currencies	188	4	97	1	24	3	1	1	0	0	3	218
<b>Bonds and notes</b>	<b>16,255</b>	<b>1,953</b>	<b>8,756</b>	<b>185</b>	<b>1,707</b>	<b>1,582</b>	<b>194</b>	<b>420</b>	<b>415</b>	<b>553</b>	<b>1,360</b>	<b>20,904</b>
Financial corporations	13,385	1,702	7,146	140	1,579	441	57	194	83	107	0	15,405
Non-financial corporations	2,034	246	1,010	40	74	452	65	130	63	194	0	2,561
General government	835	4	601	5	53	687	73	94	269	251	0	1,576
US dollar	4,638	1,291	1,359	94	1,315	1,207	162	336	250	459	411	7,571
Euro	8,349	402	6,487	10	150	198	16	10	130	42	587	9,283
Other currencies	3,268	260	910	80	242	177	16	74	35	52	363	4,050
Floating rate	5,109	404	2,879	22	511	61	14	18	13	15	109	5,789
Fixed rate	10,910	1,465	5,801	139	1,144	1,479	172	378	399	531	1,251	14,785
Equity-related	236	84	77	23	51	42	8	24	3	7	0	329
<b>Net issuance during the quarter</b>												
<b>Total issues</b>	<b>-35</b>	<b>-20</b>	<b>21</b>	<b>5</b>	<b>50</b>	<b>67</b>	<b>3</b>	<b>29</b>	<b>19</b>	<b>16</b>	<b>59</b>	<b>142</b>
<b>Money market instruments</b>	<b>-4</b>	<b>1</b>	<b>8</b>	<b>0</b>	<b>9</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>4</b>	<b>11</b>
Financial corporations	6	0	9	0	9	1	1	0	1	0	0	16
Non-financial corporations	7	1	3	0	0	0	0	0	0	0	0	7
General government	-16	0	-5	0	0	0	0	0	0	0	0	-16
US dollar	-3	0	6	0	1	0	0	0	0	-1	6	4
Euro	1	1	4	0	2	0	0	0	0	0	-1	2
Other currencies	-2	0	-2	0	6	1	1	0	0	0	0	4
<b>Bonds and notes</b>	<b>-31</b>	<b>-21</b>	<b>13</b>	<b>5</b>	<b>41</b>	<b>66</b>	<b>2</b>	<b>28</b>	<b>19</b>	<b>17</b>	<b>55</b>	<b>131</b>
Financial corporations	-67	-25	0	1	35	26	4	12	7	4	0	-6
Non-financial corporations	40	3	26	3	3	33	-1	15	10	10	0	76
General government	-4	0	-12	1	3	7	0	2	2	3	0	6
US dollar	81	-13	28	5	38	66	8	30	15	13	7	192
Euro	-101	-13	-42	1	2	2	-3	1	3	1	41	-56
Other currencies	-11	5	26	-1	1	-2	-3	-3	0	3	7	-5
Floating rate	-67	-1	-33	0	0	-4	-4	-2	1	0	5	-66
Fixed rate	24	-28	41	4	43	70	6	30	18	17	49	186
Equity-related	12	8	5	0	-2	0	0	0	0	0	0	11

**Net international debt securities issuance**
**By sector**

**By currency**


<sup>1</sup> Compilation methodology changed in December 2012 for the full history of the statistics; see "Enhancements to the BIS debt securities statistics", BIS Quarterly Review, December 2012.

**Table 3B: Domestic and total debt securities, March 2013<sup>1</sup>**

In billions of US dollars

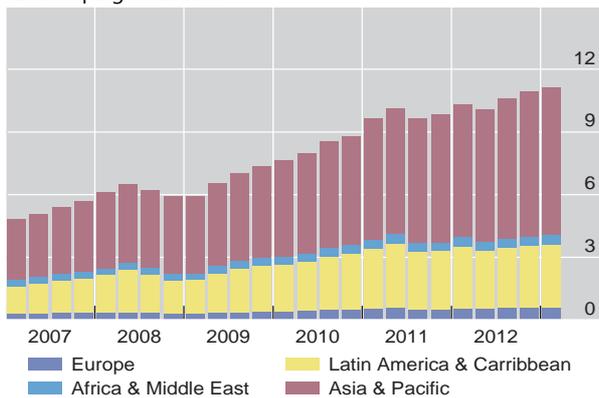
Domestic debt securities												
	China	Brazil	Korea	Mexico	Malaysia	Thailand	Turkey	South Africa	Russia	Israel	Indonesia	Singapore
<b>Amounts outstanding</b>												
All issuers	3,898	2,149	1,272	587	344	318	233	207	256	214	110	118
Financial corporations	1,744	619	362	171	65	163	16	47	64	44	14	...
Non-financial corporations	867	154	494	44	131	49	1	27	79	44	7	...
General government	1,286	1,377	416	373	148	106	216	133	113	126	89	118
Short-term	...	...	95	102	62	72	12	30	...	1	...	48
Long-term	...	...	1,177	485	282	246	221	175	...	124	...	70
Unallocated	3,898	2,149	0	0	0	0	0	2	256	88	110	0
<b>Exchange rate adjusted changes</b>												
All issuers	112	-22	30	19	-5	14	5	4	5	0	-20	3
Financial corporations	52	10	5	0	-10	11	1	0	4	0	1	...
Non-financial corporations	60	-6	14	0	2	2	0	1	6	0	0	...
General government	0	-26	11	19	3	1	4	3	-4	0	-21	3
Short-term	...	...	3	-1	-10	1	0	2	...	...	...	...
Long-term	...	...	27	20	5	13	5	2	...	...	...	3
Unallocated	112	-22	0	0	0	0	0	0	5	0	-20	0
Total debt securities												
	United States	Japan	United Kingdom	France	Germany	Italy	Spain	Netherlands	Canada	Australia	Ireland	Denmark
<b>Amounts outstanding</b>												
All issuers <sup>2</sup>	35,677	13,495	5,660	4,441	4,168	3,804	2,357	2,259	2,104	2,007	1,277	833
Financial corporations	14,448	2,852	2,841	1,800	1,924	1,486	1,342	1,698	460	1,219	1,116	649
Non-financial corporations	6,588	818	627	597	158	139	23	129	362	210	3	31
General government	14,401	9,825	2,190	2,044	2,086	2,179	992	432	1,282	578	158	152

**Outstanding amounts**

In trillions of US dollars

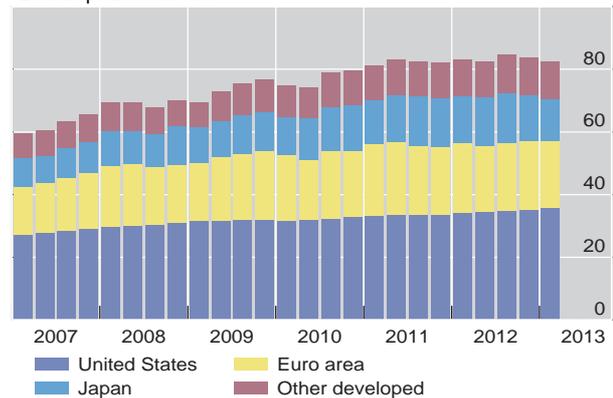
**Domestic debt securities**

Developing countries



**Total debt securities**

Developed countries



<sup>1</sup> Compilation methodology changed in December 2012 for the full history of the statistics; see "Enhancements to the BIS debt securities statistics", BIS Quarterly Review, December 2012. <sup>2</sup> All issuers include households and non-profit institutions serving households.

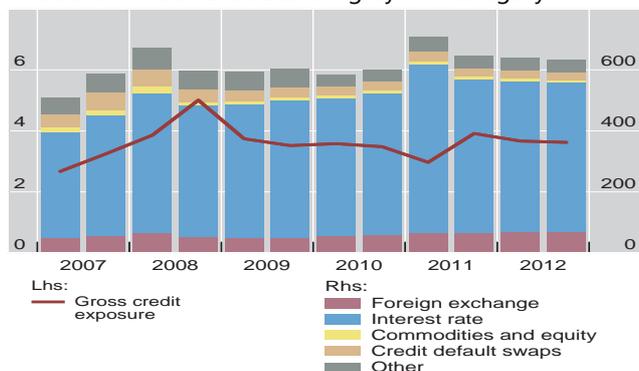
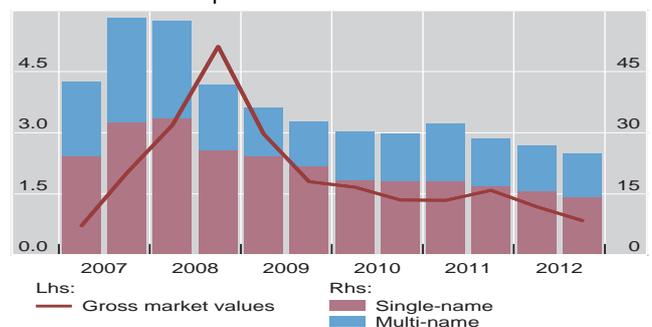
**Table 4: Global OTC derivatives market, end-December 2012<sup>1</sup>**

In billions of US dollars

	Forwards and swaps				Options			
	Total	with reporting dealers	with other financial institutions	with non-financial customers	Total	with reporting dealers	with other financial institutions	with non-financial customers
<b>Notional amounts outstanding</b>								
<b>All contracts<sup>2</sup></b>	<b>564,385</b>	<b>134,547</b>	<b>383,855</b>	<b>44,208</b>	<b>68,193</b>	<b>38,889</b>	<b>23,944</b>	<b>4,366</b>
<b>Foreign exchange</b>	<b>57,138</b>	<b>23,979</b>	<b>24,669</b>	<b>8,490</b>	<b>10,220</b>	<b>4,856</b>	<b>4,162</b>	<b>1,203</b>
US dollar	49,745	22,305	21,059	6,381	7,855	3,528	3,350	977
Euro	20,241	7,774	8,646	3,822	3,556	1,844	1,222	490
Japanese yen	10,641	5,318	3,866	1,457	3,471	1,764	1,365	341
Pound sterling	7,323	2,882	3,186	1,255	502	218	194	89
Other	26,326	9,678	12,582	4,066	5,058	2,358	2,192	508
Up to one year	40,697	15,616	18,878	6,203	7,438	3,175	3,358	905
Over one year	16,441	8,362	5,792	2,287	2,782	1,681	804	298
<i>Memo: Exchange-traded<sup>3</sup></i>	231	.	.	.	105	.	.	.
<b>Interest rate</b>	<b>441,351</b>	<b>86,973</b>	<b>322,095</b>	<b>32,283</b>	<b>48,351</b>	<b>29,923</b>	<b>15,981</b>	<b>2,448</b>
US dollar	135,725	23,385	103,162	9,178	12,950	7,166	4,977	808
Euro	163,114	23,813	128,562	10,740	24,249	15,984	7,183	1,082
Japanese yen	48,754	16,257	27,175	5,322	6,058	4,105	1,736	217
Pound sterling	39,153	6,974	29,540	2,639	3,092	1,927	1,031	133
Other	54,606	16,544	33,657	4,405	2,002	741	1,054	207
Up to one year	177,677	30,708	136,661	10,308	12,995	7,163	5,130	702
Over one year	263,674	56,265	185,434	21,975	35,356	22,759	10,851	1,746
<i>Memo: Exchange-traded<sup>3</sup></i>	22,683	.	.	.	25,947	.	.	.
<b>Equity</b>	<b>2,045</b>	<b>597</b>	<b>1,121</b>	<b>327</b>	<b>4,207</b>	<b>1,552</b>	<b>2,226</b>	<b>429</b>
<i>Memo: Exchange-traded<sup>3</sup></i>	1,252	.	.	.	2,331	.	.	.
<b>Commodities</b>	<b>1,658</b>	<b>...</b>	<b>...</b>	<b>...</b>	<b>929</b>	<b>...</b>	<b>...</b>	<b>...</b>
<b>Credit default swaps</b>	<b>25,069</b>	<b>14,149</b>	<b>10,720</b>	<b>200</b>	<b>...</b>	<b>...</b>	<b>...</b>	<b>...</b>
<b>Unallocated</b>	<b>37,125</b>	<b>8,850</b>	<b>25,250</b>	<b>2,908</b>	<b>4,486</b>	<b>2,558</b>	<b>1,575</b>	<b>287</b>
<b>Gross market values</b>								
<b>All contracts</b>	<b>21,759</b>	<b>6,712</b>	<b>13,419</b>	<b>1,628</b>	<b>2,595</b>	<b>1,582</b>	<b>785</b>	<b>228</b>
<b>Foreign exchange</b>	<b>2,050</b>	<b>817</b>	<b>838</b>	<b>395</b>	<b>254</b>	<b>125</b>	<b>71</b>	<b>58</b>
US dollar	1,674	742	661	271	194	95	54	45
Euro	687	218	296	173	72	33	22	17
Japanese yen	681	341	240	101	145	75	37	34
Pound sterling	198	58	83	58	9	4	2	3
Other	860	276	396	187	87	43	28	16
<b>Interest rate</b>	<b>17,128</b>	<b>4,850</b>	<b>11,206</b>	<b>1,072</b>	<b>1,706</b>	<b>1,174</b>	<b>463</b>	<b>69</b>
US dollar	5,438	1,789	3,354	295	498	354	126	18
Euro	8,091	1,920	5,621	549	976	668	271	37
Japanese yen	835	349	454	32	76	58	17	1
Pound sterling	1,492	363	1,031	98	124	80	35	9
Other	1,272	428	747	98	31	14	14	3
<b>Equity</b>	<b>157</b>	<b>30</b>	<b>94</b>	<b>33</b>	<b>448</b>	<b>169</b>	<b>194</b>	<b>85</b>
<b>Credit default swaps</b>	<b>848</b>	<b>529</b>	<b>309</b>	<b>10</b>	<b>...</b>	<b>...</b>	<b>...</b>	<b>...</b>
<b>Unallocated</b>	<b>1,576</b>	<b>486</b>	<b>972</b>	<b>118</b>	<b>188</b>	<b>115</b>	<b>57</b>	<b>16</b>

**Global OTC derivatives<sup>4</sup>**

Notional amounts outstanding by risk category


**Credit default swaps**

<sup>1</sup> Detailed breakdowns and time series data are available at <http://www.bis.org/statistics/derstats.htm> (Tables 19, 20A–C, 21A–C, 22A–C and 23A–B). <sup>2</sup>

 Due to incomplete counterparty breakdowns for the commodity derivatives, components do not add up to the total. <sup>3</sup> Futures and options. Data on exchange-traded and OTC derivatives are not directly comparable; the former refers to open interest while the latter refers to gross positions. <sup>4</sup> In trillions of US dollars.

## Notes to tables

Data for the most recent period are provisional. Data on changes in stocks have been calculated by converting the relevant stocks into their original currencies using end-of-period exchange rates and subsequently converting the changes in stocks into US dollar amounts using period average rates. Flow and turnover data have been calculated by converting flows and turnover in original currencies into US dollar amounts using period average exchange rates.

Tables 1A–1B The data in Tables 1A–1B (the locational BIS banking statistics) cover banks' unconsolidated gross international on-balance sheet assets and liabilities. These data are based on the residence of the reporting institution and therefore measure the activities of all banking offices residing in each reporting country. Such offices report exclusively on their own unconsolidated business, which thus includes international transactions with any of their own affiliates. BIS reporting banks include banks residing in the G10 countries, plus Australia, Austria, the Bahamas, Bahrain, Bermuda, Brazil, the Cayman Islands, Chile, Chinese Taipei, Curacao, Cyprus, Denmark, Finland, Greece, Guernsey, Hong Kong SAR, India, Indonesia, Ireland, Isle of Man, Jersey, Korea, Luxembourg, Macao SAR, Malaysia, Mexico, the Netherlands Antilles (till Q3 2010), Norway, Panama, Portugal, Singapore, South Africa, Spain and Turkey. Breakdowns by currency are compiled from actual reported data and do not include any estimates done by the BIS for reporting countries that provide incomplete or partial currency information. Table 1A provides aggregated figures by residence of banks in all reporting countries. Table 1B provides figures by nationality of banks in reporting countries. The nationality statistics are prepared by regrouping the locational data into categories based on the control or ownership of the banking offices in question. Thus, for a reporting country, total assets and total liabilities of all banks reported under locational by residence statistics should be equal to the total assets and total liabilities of all banks reported under nationality statistics. Locational by residence and nationality statistics of the latest quarter for Bahamas relate to 2012Q4. Detailed tables, including time series data in CSV files, guidelines and information on breaks in series in the locational banking statistics, are available on the BIS website under [www.bis.org/statistics/bankstats.htm](http://www.bis.org/statistics/bankstats.htm).

Tables 2A–2B The consolidated statistics are based mainly on the country of incorporation of the reporting institutions and measure the international lending activities of banks' head offices in the reporting countries and all their offices at home and abroad, with positions between offices of the same bank being netted out. The data in Table 2A cover BIS reporting banks' worldwide consolidated claims on an immediate borrower basis. These contractual claims are not adjusted for risk mitigants, such as guarantees and collateral. The 31 reporting countries comprise the G10 countries plus Australia, Austria, Brazil, Chile, Chinese Taipei, Denmark, Finland, Greece, Hong Kong SAR, India, Ireland, Luxembourg, Mexico, Norway, Panama, Portugal, Singapore, Spain and Turkey. The data in Table 2B cover BIS reporting banks' worldwide consolidated claims on an ultimate risk basis. These contractual claims are adjusted for risk mitigants, such as guarantees and collateral. The reporting population is a subset of 24 countries which reports both sets of data and comprises Australia, Austria, Belgium, Canada, Chile, Chinese Taipei, Finland, France, Germany, Greece, India, Ireland, Italy, Japan, the Netherlands, Norway, Portugal, Singapore, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. In table 2B, German banks' foreign claims vis-à-vis developed countries are on an immediate borrower basis. The data in Table 2A cover both foreign and international claims, while Table 2B covers foreign claims only. International claims are defined as BIS reporting banks' cross-border claims in all currencies plus the local claims of their foreign affiliates in foreign currency. Foreign claims include, in addition, reporting banks' foreign affiliates' local claims in local currency, as shown below.

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### Types of claims

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<b>A</b> Cross-border claims	<b>B</b> Local claims of foreign affiliates in foreign currency	<b>C</b> Local claims of foreign affiliates in local currency	<b>D</b> Domestic claims in the reporting country
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***International claims*** (A + B)

***Foreign claims*** (A + B + C)

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The shaded area indicates claims excluded from the consolidated banking statistics; bold italics indicate claims published within the consolidated banking statistics.

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Austria and Portugal report on a partially consolidated basis. Detailed information on breaks in series in the consolidated banking statistics is available on the BIS website under [www.bis.org/statistics/consstats.htm](http://www.bis.org/statistics/consstats.htm).

Tables 3A–3B Securities statistic are harmonised with recommendations from the Handbook on Securities Statistics Part 1 (jointly released by BIS, ECB and IMF; available at the IMF web site, [www.imf.org/external/np/sta/wgsd/pdf/051309.pdf](http://www.imf.org/external/np/sta/wgsd/pdf/051309.pdf)). There are three datasets, each covering different market of issue: international debt securities, domestic debt securities and total debt securities.

The sectoral breakdown presents data based on the sector of the borrower itself and not on the sector of the parent company of the borrower or any guarantor. “General government” comprises central governments and other governments, while “Financial corporations” comprises commercial banks, central banks, and other financial institutions.

Detailed information about the compilation of the statistics on domestic and total debt securities is available on the BIS website.

Table 4 The data in Table 4 cover the activity recorded in the global over-the-counter (OTC) and exchange-traded derivatives markets. The data on exchange-traded derivatives are obtained from market sources, while those on OTC derivatives are based on the reporting to the BIS by central banks in major financial centres that in turn collect the information on a consolidated basis from reporting dealers headquartered in their respective countries.

The data on OTC derivatives are available in terms of notional amounts outstanding, gross market values and gross credit exposure. Gross credit exposure excludes credit default swap contracts for all countries except the United States. These statistics are adjusted for inter-dealer double-counting and cover foreign exchange, interest rate, equity, commodity and credit derivatives.

For the exchange-traded derivatives, data on open interest measured in terms of US dollars are available for the main financial derivatives contracts (interest rate, currency and equity-linked derivatives).

Information on the methodology used to compile these statistical sets and a more detailed description of their coverage can be found on pages 18 to 21 of the Guide to the international financial statistics, available at [www.bis.org/publ/bispap14.htm](http://www.bis.org/publ/bispap14.htm)

## Special Features in the BIS Quarterly Review

June 2013	A template for recapitalising too-big-to-fail banks	P Melaschenko & N Reynolds
June 2013	Total credit as an early warning indicator for systemic banking crises	M Drehmann
June 2013	Looking at the tail: price-based measures of systemic importance	C Zhou & N Tarashev
March 2013	Central bank asset purchases and inflation expectations	B Hofmann & F Zhu
March 2013	Financial conditions and economic activity: a statistical approach	M Erdem & K Tsatsaronis
March 2013	Hedging in derivatives markets: the experience of Chile	F Avalos & R Moreno
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December 2012	Natural catastrophes and global reinsurance	S von Dahlen & G von Peter
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## Recent BIS publications<sup>1</sup>

### BIS Papers

#### **Sovereign risk: a world without risk-free assets?** July 2013

[www.bis.org/publ/bppdf/bispap72.htm](http://www.bis.org/publ/bppdf/bispap72.htm)

This volume presents and summarises the proceedings of a one-and-a-half day seminar on sovereign risk hosted by the BIS in January 2013. The event brought together senior central bankers, sovereign ratings analysts, fund managers and other market participants, sovereign legal specialists, risk managers at financial institutions and academics.

In the first panel, three central bank governors discuss sovereign risks and challenges, drawing on their own varied experiences. The second panel addresses the sovereign rating business from a number of angles. The third panel considers the polar case of financial markets without a risk-free sovereign. The fourth panel features legal experts describing how market participants have adapted to the absence of a general legal insolvency framework for the default of a sovereign. The fifth panel looks at sovereign risk management in financial institutions. In a Foreword, the General Manager of the Bank for International Settlements sets down his impressions from the day and a half.

### BIS Working Papers

#### **The response of tail risk perceptions to unconventional monetary policy** Masazumi Hattori, Andreas Schrimpf and Vladyslav Sushko

[www.bis.org/publ/work425.htm](http://www.bis.org/publ/work425.htm)

We evaluate the response of perceived tail risks in financial markets to the implementation of unconventional monetary policy by the U.S. Federal Reserve. Using information from out-of-the-money equity index options, we find that perceived risks decline significantly in response to both policy announcements and actual asset purchases. The announcement effects are strongest specifically for downside risk measures rather than simple measures of volatility (e.g. the VIX). The impact of actual purchases is strongest when driven by simultaneous expansion and the duration extension of the Federal Reserve's balance sheet. These effects of both announcements and purchases have been variable over time and particularly pronounced during the latest policy phases implemented in 2012, a period also coinciding with the Federal Reserve's more extensive use of forward guidance about short-term rates.

#### **Global and euro imbalances: China and Germany** Guonan Ma and Robert N McCauley

[www.bis.org/publ/work424.htm](http://www.bis.org/publ/work424.htm)

We analyse global and euro area imbalances by focusing on China and Germany as large surplus and creditor countries. In the 2000s, domestic reforms in both countries expanded the effective labour force, restrained wages, shifted income towards profits and increased corporate saving. As a result, both economies' current account surpluses widened before the global financial crisis, and that of Germany has proven more persistent as domestic investment has remained subdued.

#### **Intraday dynamics of euro area sovereign CDS and bonds** Jacob Gyntelberg, Peter Hördahl, Kristyna Ters and Jörg Urban

[www.bis.org/publ/work423.htm](http://www.bis.org/publ/work423.htm)

In The recent sovereign debt crisis in the euro area has seen credit spreads on sovereign bonds and credit default swaps (CDS) surge for a number of member states. While these events have increased

<sup>1</sup> Requests for publications should be addressed to Bank for International Settlements, Press & Communications, Centralbahnplatz 2, CH-4002 Basel. These publications are also available on the BIS website ([www.bis.org](http://www.bis.org)).

interest in understanding the dynamics of sovereign spreads in bond and CDS markets, there is little agreement in the literature as to whether one of the two markets is more important than the other in terms of price discovery of sovereign credit risk.

### **Measuring bank competition in China: a comparison of new versus conventional approaches applied to loan markets**

**Bing Xu, Adrian Van Rixtel and Michiel van Leuvensteijn**

[www.bis.org/publ/work422.htm](http://www.bis.org/publ/work422.htm)

Since the 1980s, important and progressive reforms have profoundly reshaped the structure of the Chinese banking system. Many empirical studies suggest that financial reform promoted bank competition in most mature and emerging economies. However, some earlier studies that adopted conventional approaches to measure competition concluded that bank competition in China declined during the past decade, despite these reforms. In this paper, we show both empirically and theoretically that this apparent contradiction is the result of flawed measurement. Conventional indicators such as the Lerner index and Panzar-Rosse H-statistic fail to measure competition in Chinese loan markets properly due to the system of interest rate regulation. By contrast, the relatively new Profit Elasticity (PE) approach that was introduced in Boone (2008) as Relative Profit Differences (RPD) does not suffer from these shortcomings. Using balance sheet information for a large sample of banks operating in China during 1996-2008, we show that competition actually increased in the past decade when the PE indicator is used. We provide additional empirical evidence that supports our results. We find that these firstly are in line with the process of financial reform, as measured by several indices, and secondly are robust for a large number of alternative specifications and estimation methods. All in all, our analysis suggests that bank lending markets in China have been more competitive than previously assumed.

### **Evaluating early warning indicators of banking crises: Satisfying policy requirements**

**Mathias Drehmann and Mikael Juselius**

[www.bis.org/publ/work421.htm](http://www.bis.org/publ/work421.htm)

Early warning indicators (EWIs) of banking crises should ideally be evaluated on the basis of their performance relative to the macroprudential policy maker's decision problem. We translate several practical aspects of this problem - such as difficulties in assessing the costs and benefits of various policy measures as well as requirements for the timing and stability of EWIs - into statistical evaluation criteria. Applying the criteria to a set of potential EWIs, we find that the credit-to-GDP gap and a new indicator, the debt service ratio (DSR), consistently outperform other measures. The credit-to-GDP gap is the best indicator at longer horizons, whereas the DSR dominates at shorter horizons.

### **On the correlation between commodity and equity returns: implications for portfolio allocation**

**Marco Jacopo Lombardi and Francesco Ravazzolo**

[www.bis.org/publ/work420.htm](http://www.bis.org/publ/work420.htm)

In the recent years several commentators hinted at an increase of the correlation between equity and commodity prices, and blamed investment in commodity-related products for this. First, this paper investigates such claims by looking at various measures of correlation. Next, we assess what are the implications of higher correlations between oil and equity prices for asset allocation. We develop a time-varying Bayesian Dynamic Conditional Correlation model for volatilities and correlations and find that joint modelling commodity and equity prices produces more accurate point and density forecasts, which lead to substantial benefits in portfolio allocation. This, however, comes at the price of higher portfolio volatility. Therefore, the popular view that commodities are to be included in one's portfolio as a hedging device is not grounded.

### **Caveat creditor**

**Philip Turner**

[www.bis.org/publ/work419.htm](http://www.bis.org/publ/work419.htm)

One area where international monetary cooperation has failed is in the role of surplus or creditor countries in limiting or in correcting external imbalances. The stock dimensions of such imbalances - net external positions, leverage in national balance sheets, currency/maturity mismatches, the structure of ownership of assets and liabilities and over-reliance on debt - can threaten financial stability in creditor as in debtor countries. Creditor countries therefore have a responsibility both for avoiding "overlending" and for devising cooperative solutions to excessive or prolonged imbalances.

## **Should monetary policy lean against the wind? - An analysis based on a DSGE model with banking**

**Leonardo Gambacorta and Federico M Signoretti**

[www.bis.org/publ/work418.htm](http://www.bis.org/publ/work418.htm)

The global financial crisis has reaffirmed the importance of financial factors for macroeconomic fluctuations. Recent work has shown how the conventional pre-crisis prescription that monetary policy should pay no attention to financial variables over and above their effects on inflation may no longer be valid in models that consider frictions in financial intermediation (Cúrdia and Woodford, 2009). This paper analyses whether Taylor rules augmented with asset prices and credit can improve upon a standard rule in terms of macroeconomic stabilization in a DSGE with both a firms' balance-sheet channel and a bank-lending channel and in which the spread between lending and policy rates endogenously depends on banks' leverage. The main result is that, even in a model in which financial stability does not represent a distinctive policy objective, leaning-against-the-wind policies are desirable in the case of supply-side shocks whenever the central bank is concerned with output stabilization, while both strict inflation targeting and a standard rule are less effective. The gains are amplified if the economy is characterized by high private sector indebtedness.

## **Relationship and transaction lending in a crisis**

**Patrick Bolton, Xavier Freixas, Leonardo Gambacorta and Paolo Emilio Mistrulli**

[www.bis.org/publ/work417.htm](http://www.bis.org/publ/work417.htm)

We study how relationship lending and transaction lending vary over the business cycle. We develop a model in which relationship banks gather information on their borrowers, which allows them to provide loans for profitable firms during a crisis. Due to the services they provide, operating costs of relationship-banks are higher than those of transaction-banks. In our model, where relationship-banks compete with transaction-banks, a key result is that relationship-banks charge a higher intermediation spread in normal times, but offer continuation-lending at more favourable terms than transaction banks to profitable firms in a crisis. Using detailed credit register information for Italian banks before and after the Lehman Brothers' default, we are able to study how relationship and transaction-banks responded to the crisis and we test existing theories of relationship banking. Our empirical analysis confirms the basic prediction of the model that relationship banks charged a higher spread before the crisis, offered more favourable continuation-lending terms in response to the crisis, and suffered fewer defaults, thus confirming the informational advantage of relationship banking.

## **Credit and growth after financial crises**

**Előd Takáts and Christian Upper**

[www.bis.org/publ/work416.htm](http://www.bis.org/publ/work416.htm)

We find that declining bank credit to the private sector will not necessarily constrain the economic recovery after output has bottomed out following a financial crisis. To obtain this result, we examine data from 39 financial crises, which - as the current one - were preceded by credit booms. In these crises the change in bank credit, either in real terms or relative to GDP, consistently did not correlate with growth during the first two years of the recovery. In the third and fourth year, the correlation becomes statistically significant but remains small in economic terms. The lack of association between deleveraging and the speed of recovery does not seem to arise due to limited data. In fact, our data shows that increasing competitiveness, via exchange rate depreciations, is statistically and economically significantly associated with faster recoveries. Our results contradict the current consensus that private sector deleveraging is necessarily harmful for growth.

## **The interest rate effects of government debt maturity**

**Jagjit S Chadha, Philip Turner and Fabrizio Zampolli**

[www.bis.org/publ/work415.htm](http://www.bis.org/publ/work415.htm)

Federal Reserve purchases of bonds in recent years have meant that a smaller proportion of long-dated government debt has had to be held by other investors (private sector and foreign official institutions). But the US Treasury has been lengthening the maturity of its issuance at the same time. This paper reports estimates of the impact of these policies on long-term rates using an empirical model that builds on Laubach (2009). Lowering the average maturity of US Treasury debt held outside the Federal Reserve by one year is estimated to reduce the five-year forward 10-year yield by between 130 and 150 basis points. Such estimates assume that the decisions of debt managers are largely exogenous to cyclical interest rate developments; but they could be biased upwards if the issuance policies of debt managers are not exogenous but instead respond to interest rates. Central banks will face uncertainty not only about the true magnitude of maturity effects, but also about the size and concentration of interest rate

risk exposures in the financial system. Nor do they know what the fiscal authorities and their debt managers will do as long-term rates change.

### **Foreign exchange intervention and expectation in emerging economies** **Ken Miyajima**

[www.bis.org/publ/work414.htm](http://www.bis.org/publ/work414.htm)

Using monthly data for four selected emerging economies, sterilised central bank foreign exchange intervention is found to have little systematic influence on the near-term nominal exchange rate expectations in the direction intended by the central banks. In other words, central bank dollar purchases to stem exchange rate appreciation or related exchange rate volatility are not associated with an adjustment of the near-term exchange rate forecasts in the direction of depreciation, and vice versa. This suggests intervention may not change the near-term exchange rate expectations. Moreover, intervention may have had unintended effects in the sense that it can lead to undesired volatility in the exchange rate, which is consistent with previous studies.

## **Basel Committee on Banking Supervision**

### **Margin requirements for non-centrally cleared derivatives - final document** **September 2013**

[www.bis.org/publ/bcbs261.htm](http://www.bis.org/publ/bcbs261.htm)

The Basel Committee on Banking Supervision and the International Organization of Securities Commissions (IOSCO) released today the final framework for margin requirements for non-centrally cleared derivatives.

Under these globally agreed standards, all financial firms and systemically important non-financial entities that engage in non-centrally cleared derivatives will have to exchange initial and variation margin commensurate with the counterparty risks arising from such transactions. The framework has been designed to reduce systemic risks related to over-the-counter (OTC) derivatives markets, as well as to provide firms with appropriate incentives for central clearing while managing the overall liquidity impact of the requirements.

The final requirements have been developed taking into account feedback from two rounds of consultation, as well as a quantitative impact study that helped inform the policy deliberations. Compared with the near-final framework proposed earlier this year, the final set of requirements includes the following modifications:

- The framework exempts physically settled foreign exchange (FX) forwards and swaps from initial margin requirements. Variation margin on these derivatives should be exchanged in accordance with standards developed after considering the Basel Committee supervisory guidance for managing settlement risk in FX transactions.
- The framework also exempts from initial margin requirements the fixed, physically settled FX transactions that are associated with the exchange of principal of cross-currency swaps. However, the variation margin requirements that are described in the framework apply to all components of cross-currency swaps.
- "One-time" re-hypothecation of initial margin collateral is permitted subject to a number of strict conditions. This should help to mitigate the liquidity impact associated with the requirements.

A number of other features of the framework are also intended to manage the liquidity impact of the margin requirements on financial market participants. In particular, the requirements allow for the introduction of a universal initial margin threshold of €50 million below which a firm would have the option of not collecting initial margin. The framework also allows for a broad array of eligible collateral to satisfy initial margin requirements, thus further reducing the liquidity impact.

Finally, the framework published today envisages a gradual phase-in period to provide market participants with sufficient time to adjust to the requirements. The requirement to collect and post initial margin on non-centrally cleared trades will be phased in over a four-year period, beginning in December 2015 with the largest, most active and most systemically important derivatives market participants.

### **Report to G20 Leaders on monitoring implementation of Basel III regulatory reforms** **August 2013**

[www.bis.org/publ/bcbs260.htm](http://www.bis.org/publ/bcbs260.htm)

Full, timely and consistent implementation of Basel III remains fundamental to building a resilient financial system, maintaining public confidence in regulatory ratios and providing a level playing field for internationally active banks. This report updates G20 Leaders on progress in adopting the Basel III regulatory reforms since the Basel Committee on Banking Supervision issued its April 2013 report.

The report covers the steps taken by Basel Committee member jurisdictions towards implementing the Basel III standards, the further harmonisation of capital regulations across member jurisdictions and the finalisation of remaining post-crisis reforms that form part of the Basel regulatory framework. The report also includes the findings of the Committee's work on banks' calculation of risk-weighted assets.

**Mortgage insurance: market structure, underwriting cycle and policy implications - final document**  
**August 2013**

[www.bis.org/publ/joint33.htm](http://www.bis.org/publ/joint33.htm)

This report on Mortgage insurance: market structure, underwriting cycle and policy implications examines the interaction of mortgage insurers with mortgage originators and underwriters. It makes the following set of recommendations directed at policymakers and supervisors which aim at reducing the likelihood of mortgage insurance stress and failure in such tail events:

1. Policymakers should consider requiring that mortgage originators and mortgage insurers align their interests;
2. Supervisors should ensure that mortgage insurers and mortgage originators maintain strong underwriting standards;
3. Supervisors should be alert to - and correct for - deterioration in underwriting standards stemming from behavioural incentives influencing mortgage originators and mortgage insurers;
4. Supervisors should require mortgage insurers to build long-term capital buffers and reserves during the troughs of the underwriting cycle to cover claims during its peaks;
5. Supervisors should be aware of and take action to prevent cross-sectoral arbitrage which could arise from differences in the accounting between insurers' technical reserves and banks' loan loss provisions, and from differences in the capital requirements for credit risk between banks and insurers;
6. Supervisors should be alert to potential cross-sectoral arbitrage resulting from the use of alternatives to traditional mortgage insurance; and
7. Supervisors should apply the FSB Principles for Sound Residential Mortgage Underwriting Practices to mortgage insurers noting that proper supervisory implementation necessitates both insurance and banking expertise.

An earlier version of this report was issued for consultation in February 2013. The Joint Forum wishes to thank those who provided feedback and comments as these were instrumental in revising and finalising the report and its recommendations

**Point of Sale disclosure in the insurance, banking and securities sectors - consultative report**  
**August 2013**

[www.bis.org/publ/joint32.htm](http://www.bis.org/publ/joint32.htm)

Point of Sale disclosure in the insurance, banking and securities sectors identifies and assesses differences and gaps in regulatory approaches to point of sale (POS) disclosure for investment and savings products across the insurance, banking and securities sectors. The report considers whether regulatory approaches to POS disclosure need to be further aligned across sectors, and it makes a number of recommendations, mainly to policymakers and supervisors, to assist them in considering, developing or modifying their POS disclosure regulations:

1. Jurisdictions should consider implementing a concise written or electronic POS disclosure document for the product sample identified in this report, taking into account the jurisdiction's regulatory regime.
2. The POS disclosure document should be provided to consumers free of charge, before the time of purchase.
3. A jurisdiction considering POS disclosure should consider requiring that a POS disclosure document disclose key characteristics including costs, risks and financial benefits or other features of a given product and any underlying or referenced assets, investments or indices, irrespective of the financial sector from which the products are derived.
4. The POS disclosure document should be clear, fair, not misleading and written in a plain language designed to be understandable by the consumer.
5. The POS disclosures should include the same type of information to facilitate comparison of competing products.
6. The POS disclosure document should be concise, set out key information about a product and may include, as appropriate, links or refer to other information. It should make clear that it does not provide exhaustive information.
7. Allocation of responsibility for preparing, making available and/or delivering the POS disclosure document should be clearly established, and the POS disclosure document should identify which entity is responsible for its content.

8. A jurisdiction considering POS disclosure should consider how to use its capabilities and powers to implement these POS recommendations, taking into account the jurisdiction's regulatory regime.

**Longevity risk transfer markets: market structure, growth drivers and impediments, and potential risks - consultative report**  
**August 2013**

[www.bis.org/publ/joint31.htm](http://www.bis.org/publ/joint31.htm)

The ageing population phenomenon being observed in many countries poses serious social policy challenges. Longevity risk - the risk of paying out on pensions and annuities longer than anticipated - is significant when measured from a financial perspective. Longevity risk transfer markets: market structure, growth drivers and impediments, and potential risks is a forward-looking report released by the Joint Forum on longevity risk transfer (LRT) markets. It makes the following recommendations to policymakers and supervisors:

1. Supervisors should communicate and cooperate on LRT internationally and cross-sectorally in order to reduce the potential for regulatory arbitrage.
2. Supervisors should seek to ensure that holders of longevity risk under their supervision have the appropriate knowledge, skills, expertise and information to manage it.
3. Policymakers should review their explicit and implicit policies with regards to where longevity risk should reside to inform their policy towards LRT markets. They should also be aware that social policies may have consequences on both longevity risk management practices and the functioning of LRT markets.
4. Policymakers should review rules and regulations pertaining to the measurement, management and disclosure of longevity risk with the objective of establishing or maintaining appropriately high qualitative and quantitative standards, including provisions and capital requirements for expected and unexpected increases in life expectancy.
5. Policymakers should consider ensuring that institutions taking on longevity risk, including pension fund sponsors, are able to withstand unexpected, as well as expected, increases in life expectancy.
6. Policymakers should closely monitor the LRT taking place between corporates, banks, (re)insurers and the financial markets, including the amount and nature of the longevity risk transferred, and the interconnectedness this gives rise to.
7. Supervisors should take into account that longevity swaps may expose the banking sector to longevity tail risk, possibly leading to risk transfer chain breakdowns.
8. Policymakers should support and foster the compilation and dissemination of more granular and up-to-date longevity and mortality data that are relevant for the valuations of pension and life insurance liabilities.

**Liquidity coverage ratio disclosure standards - consultative document**  
**July 2013**

[www.bis.org/publ/bcbs259.htm](http://www.bis.org/publ/bcbs259.htm)

The Basel Committee on Banking Supervision has today issued for consultation Liquidity coverage ratio disclosure standards.

Following the publication of the LCR standard in January 2013, the Basel Committee indicated its intention to develop associated disclosure standards. Public disclosure improves transparency, reduces uncertainty in the markets and strengthens market discipline. To promote the benefits of disclosure the Committee believes that it is important that banks adopt a common disclosure framework to help market participants consistently assess the liquidity risk position of banks. Moreover, to promote consistency and ease of use of disclosures related to the LCR, the Basel Committee has agreed that internationally-active banks across Basel member jurisdictions will be required to publish their LCR according to a common template.

In designing the disclosure standards for the LCR, the Basel Committee has balanced the benefits of promoting market discipline against the challenges associated with disclosure of liquidity positions under certain circumstances, including the potential for undesirable dynamics during periods of stress.

**The regulatory framework: balancing risk sensitivity, simplicity and comparability - discussion paper**  
**July 2013**

[www.bis.org/publ/bcbs258.htm](http://www.bis.org/publ/bcbs258.htm)

The Basel Committee on Banking Supervision today released a Discussion Paper to initiate discussion on the topic of balancing risk sensitivity, simplicity and comparability within the Basel capital standards. The Basel Committee, in response to the financial crisis that began in 2007, introduced a number of reforms to substantially raise the resilience of the financial system to shocks. While some of these measures strengthen the bank capital adequacy framework itself, others are designed to complement it in ensuring the soundness of banks. These measures include the introduction of a leverage ratio, an additional

capital surcharge for global systemically important banks (G-SIBs), a proposed framework for measuring and controlling large exposures, and minimum liquidity and funding standards. The Committee has also introduced a comprehensive regulatory consistency assessment programme with a view to ensuring consistent implementation of Basel III across banks and jurisdictions.

In addition to these reforms, during 2012 the Committee commissioned a small group of its members (the Task Force on Simplicity and Comparability) to undertake a review of the Basel capital framework. The goal of the Task Force was to identify opportunities to remove undue complexity within the framework, and improve the comparability of its outcomes. The creation of the Task Force acknowledged that the framework has steadily grown over time as risk coverage has been expanded and more sophisticated risk measurement methodologies have been introduced.

The paper being released today discusses the reasons behind the evolution of the current framework, and outlines the potential benefits and costs that arise from a more risk sensitive methodology. The paper also discusses ideas that could possibly be explored to further reform the framework with the objective that it continues to strike an appropriate balance between the complementary goals of risk sensitivity, simplicity and comparability.

The purpose of the discussion paper is to seek views on this critical issue so as to help shape the Committee's thinking. At this stage, the Committee has not made a decision to pursue any of the ideas presented; the paper is being published to elicit comments and feedback from interested stakeholders, which will help the Committee refine its thinking in this area. Furthermore, the Committee remains firmly of the view that full, timely and consistent implementation of Basel III remains fundamental to building a resilient financial system, maintaining public confidence in regulatory ratios and providing a level playing field for internationally active banks. Adopting the Basel III reforms (higher and better quality capital, improved risk coverage, capital buffers, and liquidity and funding requirements) in accordance with the internationally-agreed transition period deadlines is itself an important step in improving the consistency of bank regulation globally.

### **Regulatory consistency assessment programme (RCAP) - Analysis of risk-weighted assets for credit risk in the banking book** July 2013

[www.bis.org/publ/bcbs256.htm](http://www.bis.org/publ/bcbs256.htm)

This report presents the findings of the Committee's initial analysis of RWA outcomes for banks that have adopted the IRB approach for credit risk in the banking book. It complements the preliminary findings for RWAs in the trading book published by the Committee in January 2013 and the on-going work on RWAs for operational risk. Collectively, these findings on RWA variations will inform other work streams of the Committee including how to increase the robustness of the risk-based capital framework and the fundamental review of prudential requirements for the trading book.

### **Capital requirements for banks' equity investments in funds - consultative document** July 2013

[www.bis.org/publ/bcbs257.htm](http://www.bis.org/publ/bcbs257.htm)

The Basel Committee on Banking Supervision today published a set of proposals that would revise the prudential treatment of banks' equity investments in funds. The Basel II framework outlines the current treatment of banks' equity investments in funds under the Standardised Approach and the Internal Ratings-Based (IRB) approaches for credit risk and the Committee believes that the existing standard would benefit from further clarity in some areas. In addition, it does not require banks to reflect a fund's leverage when determining capital requirements associated with their investments in a fund, even though leverage is an important risk driver. In reviewing the existing Basel II standard for banks' equity investments in funds, the Committee's objective was to develop an appropriately risk sensitive and consistently applied risk-based capital regime. The Committee believes the revised standard will more appropriately reflect the risk of a fund's underlying investments and its leverage.

The revised standard will also help address risks associated with banks' interactions with shadow banking entities. The work of the Basel Committee therefore contributes to the broader effort by the Financial Stability Board to strengthen the oversight and regulation of shadow banking.

The Committee's proposal is based on the general principle that banks should apply a look-through approach to identify the underlying assets whenever investing in schemes with underlying exposures such as investment funds. The Committee recognises that a full look-through approach may not always be feasible and that a staged approach based on different degrees of granularity of the look-through is warranted. The proposed risk weighting framework therefore enables the application of a consistent risk-sensitive capital framework which provides incentives for improved risk management practices.

Following this principle, the proposed policy framework consists of three approaches, with varying degrees of risk sensitivity: the "look-through approach" (LTA), the "mandate-based approach" (MBA), and the "fall-back approach" (FBA). To ensure that banks have appropriate incentives to enhance the risk management of their exposures, the degree of conservatism increases with each successive approach (as risk sensitivity decreases).

**Global systemically important banks: updated assessment methodology and the higher loss absorbency requirement**  
**July 2013**

[www.bis.org/publ/bcbs255.htm](http://www.bis.org/publ/bcbs255.htm)

The framework text sets out the Basel Committee's methodology for assessing and identifying global systemically important banks (G-SIBs). It also describes the additional loss absorbency requirements that will apply to G-SIBs, the phase-in arrangements for these requirements and the disclosures that banks above a certain size are required to make to enable the framework to operate on the basis of publicly available information.

The rationale for the policy measures set out in the framework text is to deal with the cross-border negative externalities created by G-SIBs which current regulatory policies do not fully address. The measures will enhance the going-concern loss absorbency of G-SIBs and reduce the probability of their failure.

The assessment methodology for G-SIBs is based on an indicator-based approach and comprises five broad categories: size, interconnectedness, lack of readily available substitutes or financial institution infrastructure, global (cross-jurisdictional) activity and complexity.

The additional loss absorbency requirements will range from 1% to 2.5% Common Equity Tier 1 (CET1) depending on a bank's systemic importance with an initially empty bucket of 3.5% CET1 as a means to discourage banks from becoming even more systemically important.

The higher loss absorbency requirements will be introduced in parallel with the Basel III capital conservation and countercyclical buffers, ie between 1 January 2016 and year end 2018 becoming fully effective on 1 January 2019.

**Regulatory consistency assessment programme (RCAP) - Analysis of risk-weighted assets for credit risk in the banking book**  
**July 2013**

[www.bis.org/publ/bcbs256.htm](http://www.bis.org/publ/bcbs256.htm)

This report presents the findings of the Committee's initial analysis of RWA outcomes for banks that have adopted the IRB approach for credit risk in the banking book. It complements the preliminary findings for RWAs in the trading book published by the Committee in January 2013 and the on-going work on RWAs for operational risk. Collectively, these findings on RWA variations will inform other work streams of the Committee including how to increase the robustness of the risk-based capital framework and the fundamental review of prudential requirements for the trading book.

**The non-internal model method for capitalising counterparty credit risk exposures - consultative document**  
**June 2013**

[www.bis.org/publ/bcbs254.htm](http://www.bis.org/publ/bcbs254.htm)

The Basel Committee's consultative paper The non-internal model method for capitalising counterparty credit risk exposures outlines a proposal to improve the methodology for assessing the counterparty credit risk associated with derivative transactions. The proposal would, when finalised, replace the capital framework's existing methods - the Current Exposure Method and the Standardised Method. It improves on the risk sensitivity of the Current Exposure Method by differentiating between margined and unmargined trades. The proposed non-internal model method updates supervisory factors to reflect the level of volatilities observed over the recent stress period and provides a more meaningful recognition of netting benefits. At the same time, the proposed method is suitable for a wide variety of derivatives transactions, reduces the scope for discretion by banks and avoids undue complexity.

The Basel Committee will conduct a quantitative impact study in order to inform the final formulation of the non-internal model method and to assess the difference in exposure and overall capital requirements under this proposal as compared to other measures of counterparty credit risk under the Basel framework. In addition to replacing the Current Exposure Method and the Standardised Method, the non-internal model method may also be used with respect to the leverage ratio, large exposures, and exposures to central counterparties (CCPs).

**Capital treatment of bank exposures to central counterparties - consultative document**  
**June 2013**

[www.bis.org/publ/bcbs253.htm](http://www.bis.org/publ/bcbs253.htm)

The Basel Committee on Banking Supervision, in cooperation with the Committee on Payment and Settlement Systems (CPSS) and the International Organization of Securities Commissions (IOSCO), is seeking views on potential changes to the capital treatment of banks' exposure to central counterparties (CCPs). The Basel Committee published an interim standard in July 2012 and noted at that time that

additional work was needed to improve the capital framework. Introduction of the interim standard represented an important step towards ensuring appropriate measurement, monitoring and management of banks' exposures to CCPs, exposures which had previously attracted no regulatory capital charge.

The proposed changes to the interim standard seek to establish a capital treatment that ensures banks' exposures to central counterparties are adequately capitalised, while also preserving incentives for central clearing. They promote robust risk management by banks and CCPs, including by encouraging CCPs to satisfy the CPSS-IOSCO Principles for financial market infrastructures (PFMIs). The proposed changes respond to evidence that application of the interim rules could lead both to instances of very little capital being held against exposures to some CCPs, and potentially in certain cases, to capital charges that are higher than for bilateral (non-centrally-cleared) transactions. There was also concern that, in some cases, the interim capital treatment might not create the appropriate incentives for maintaining generous default funds. These outcomes are potentially inconsistent with the Committee's objectives and the changes set out in the consultative paper seek to address those concerns.

In parallel to this consultation, the Committee will also conduct a quantitative impact study. Any amendments to the proposed standard will be based on feedback on this consultative document, evidence from the quantitative impact study that will be conducted alongside this consultation, and further consultation with CPSS and IOSCO. The Committee is not proposing any change to the capital treatment of exposures to non-qualifying CCPs. Nor does this consultative paper consider any changes to the rules on capital treatment of clearing member exposures to clients.

### **Sound management of risks related to money laundering and financing of terrorism - consultative document** **June 2013**

[www.bis.org/publ/bcbs252.htm](http://www.bis.org/publ/bcbs252.htm)

The Basel Committee has a long-standing commitment to promote the implementation of sound policies and procedures to combat money laundering (ML) and the financing of terrorism (FT). Its commitment to combating ML and FT is fully aligned with its mandate to strengthen the regulation, supervision and practices of banks worldwide with the purpose of enhancing financial stability.

Prudent management of risks related to ML and FT along with effective supervisory oversight are critical in protecting the safety and soundness of banks and the integrity of the international financial system. The inadequacy or absence of sound management can increase the exposure of banks to serious risks, especially reputational, operational, compliance and concentration risks. Recent developments, including robust enforcement actions taken by regulators and the corresponding direct and indirect costs incurred by banks due to their lack of diligence in applying appropriate risk management policies, procedures and controls, have highlighted those risks. These costs and damage could probably have been avoided had the banks maintained effective risk-based policies and procedures to protect against risks arising from ML and FT.

In February 2012, the Financial Action Task Force (FATF) released a revised version of the International Standards on Combating Money Laundering and the Financing of Terrorism and Proliferation (the FATF standards), to which the Committee provided input. The Committee's intention in issuing this consultative paper is to support countries' implementation of the FATF standards with respect to their banks and banking groups, by exploring complementary areas and leveraging the expertise available in both organisations. Therefore, these guidelines are intended to be consistent with and to supplement the goals and objectives of the FATF standards. The Committee has included cross-references to FATF standards in this document in order to assist banks in complying with national requirements based on the implementation of those standards.

### **Revised Basel III leverage ratio framework and disclosure requirements - consultative document** **June 2013**

[www.bis.org/publ/bcbs251.htm](http://www.bis.org/publ/bcbs251.htm)

An underlying feature of the financial crisis was the build-up of excessive on- and off-balance sheet leverage in the banking system. The Basel III reforms introduced a simple, transparent, non-risk based leverage ratio to act as a credible supplementary measure to the risk-based capital requirements. The leverage ratio is intended to:

- restrict the build-up of leverage in the banking sector to avoid destabilising deleveraging processes that can damage the broader financial system and the economy; and
- reinforce the risk-based requirements with a simple, non-risk-based "backstop" measure.

The Basel Committee is of the view that a simple leverage ratio framework is critical and complementary to the risk-based capital framework and that a credible leverage ratio is one that ensures broad and adequate capture of both the on- and off-balance sheet leverage of banks.

Implementation of the leverage ratio requirement has begun with bank-level reporting to supervisors of the leverage ratio and its components from 1 January 2013, and will proceed with public disclosure starting 1 January 2015. Any final adjustments to the definition and calibration of the leverage ratio will be made by 2017, with a view to migrating to a Pillar 1 treatment on 1 January 2018 based on appropriate review and calibration.

The Basel Committee's consultative paper The revised Basel III leverage ratio framework is set out in the remainder of this document, along with the public disclosure requirements starting 1 January 2015. In summary, revisions to the framework relate primarily to the denominator of the leverage ratio, the Exposure Measure. The major changes to the Exposure Measure include:

- specification of a broad scope of consolidation for the inclusion of exposures;
- clarification of the general treatment of derivatives and related collateral;
- enhanced treatment of written credit derivatives; and
- enhanced treatment of Securities Financing Transactions (SFTs) (eg repos).

In parallel with the consultation on the proposals, the Committee will also undertake a Quantitative Impact Study to ensure that the calibration of the leverage ratio, and its relationship with the risk-based framework, remains appropriate.

### **Frequently asked questions on Large Exposures QIS June 2013**

[www.bis.org/publ/bcbs250.htm](http://www.bis.org/publ/bcbs250.htm)

This document provides answers to technical and interpretive questions raised by supervisors and banks during the Large Exposures QIS. The document intends to facilitate the completion of the questionnaire and is not to be construed as an official interpretation of other documents published by the Committee.

## **Committee on Payment and Settlements Systems**

### **Implementation monitoring of PFMIIs - Level 1 assessment report August 2013**

<http://www.bis.org/publ/cpss111.htm>

The Committee on Payment and Settlement Systems (CPSS) and the International Organization of Securities Commissions (IOSCO) have started the process of monitoring implementation of the Principles for financial market infrastructures (PFMIIs). This report reviews jurisdictions' progress towards adopting the legislation and other policies that will enable them to completely implement the 24 Principles for FMIIs and the Responsibilities for authorities included in the PFMIIs. Future CPSS-IOSCO assessments will evaluate the consistency of implementation measures in each jurisdiction with the PFMIIs and will evaluate consistency of outcomes among FMIIs themselves resulting from the application of the PFMIIs.

The PFMIIs are international standards for payment, clearing and settlement systems, and trade repositories. They are designed to ensure that the infrastructure supporting global financial markets is robust and well placed to withstand financial shocks. The PFMIIs were issued by CPSS-IOSCO in April 2012, and jurisdictions around the world are currently in the process of implementing them into their regulatory frameworks to foster the safety, efficiency and resilience of their financial market infrastructures (FMIIs).

The Implementation monitoring of PFMIIs - Level 1 assessment report includes jurisdictions' self-assessments of progress towards full adoption. The report indicates that most jurisdictions have begun the process of implementation. Few have completed the process for all types of FMIIs but many are making good progress and expect to be well advanced by the end of the year. Given that the PFMI were only issued in April 2012 this represents substantial progress

### **Authorities' access to trade repository data August 2013**

[www.bis.org/publ/cpss110.htm](http://www.bis.org/publ/cpss110.htm)

The Committee on Payment and Settlement Systems (CPSS) and the International Organization of Securities Commissions (IOSCO) have published a report entitled Authorities' access to trade repository data.

Trade repositories (TRs) are entities that maintain a centralised electronic record of over-the-counter (OTC) derivatives transaction data. TRs play a key role in increasing transparency in the OTC derivatives markets by improving the availability of data to authorities and the public in a manner that supports the proper handling and use of the data. For a broad range of authorities and international financial institutions, it is essential to be able to access the data needed to fulfill their respective mandates while maintaining the confidentiality of the data pursuant to the laws of relevant jurisdictions.

The purpose of the report issued today is to provide guidance to TRs and authorities on the principles that should guide authorities' access to data held in TRs for typical and non-typical data requests. The report describes the expected data access needs of authorities using a functional approach complemented by an illustrative data access mapping that aligns each function to the minimum level of access authorities would typically require in support of their mandates and responsibilities. The report also sets out possible approaches to addressing procedural and legal constraints to data access as well as confidentiality concerns. Authorities and TRs are encouraged to develop and maintain access policies and arrangements informed by the guidance and mapping outlined in the report.

### **Recovery of financial market infrastructures - consultative report August 2013**

[www.bis.org/publ/cpss109.htm](http://www.bis.org/publ/cpss109.htm)

The Committee on Payment and Settlement Systems (CPSS) and the International Organization of Securities Commissions (IOSCO) have published for public comment a consultative report on the Recovery of financial market infrastructures.

The report provides guidance to financial market infrastructures such as CCPs on how to develop plans to enable them to recover from threats to their viability and financial strength that might prevent them from continuing to provide critical services to their participants and the markets they serve. It also provides guidance to relevant authorities in carrying out their responsibilities associated with the development and implementation of recovery plans and tools.

The report has been produced in response to comments received on the July 2012 CPSS-IOSCO report on Recovery and resolution of financial market infrastructures that requested more guidance on what recovery tools would be appropriate for FMIs.

The report supplements the CPSS-IOSCO Principles for financial market infrastructures (PFMI), the international standards for financial market infrastructures (FMIs) published in April 2012. It provides guidance on how FMIs can observe the requirements in the PFMI that they have effective recovery plans. It does not itself create additional standards for FMIs. The report is also consistent with the Financial Stability Board's Key attributes of effective resolution regimes for financial institutions, published in October 2011 and which also covers the importance of recovery planning. Aspects of the consultation report concerning FMI resolution have been included in a new draft annex to the FSB Key attributes and will be included in a forthcoming assessment methodology for the Key attributes.

Financial market infrastructures (FMIs), which include payments systems, securities settlement systems, central securities depositories, central counterparties and trade repositories, play an essential role in the global financial system. The disorderly failure of an FMI could lead to severe systemic disruption if it caused markets to cease to operate effectively.

Published with the report is a cover note that lists specific issues on which the committees seek comments during the public consultation period. Comments on the report are invited from all interested parties and should be sent by 11 October 2013 to both the CPSS secretariat ([cpss@bis.org](mailto:cpss@bis.org)) and the IOSCO secretariat ([fmirecovery@iosco.org](mailto:fmirecovery@iosco.org)). The comments will be published on the websites of the BIS and IOSCO unless commentators have requested otherwise.

## Committee on the Global Financial System

### **Asset encumbrance, financial reform and the demand for collateral assets May 2013**

[www.bis.org/publ/cgfs49.htm](http://www.bis.org/publ/cgfs49.htm)

The demand for high-quality assets that can be used as collateral will increase due to a number of key regulatory reforms. This comes on top of greater demand for collateral assets through increased reliance by banks on collateralised funding, particularly in Europe. While this can lead to temporary shortages in some countries, concerns about an absolute shortage of high-quality collateral assets appear unjustified, given that the supply of collateral assets has risen significantly since end-2007. In addition, endogenous private sector responses, such as collateral transformation activities, will help to address supply-demand imbalances if and when they emerge.

The report identifies implications for markets and policy that result from these developments that warrant monitoring and further analysis. They include:

- Endogenous market responses, while mitigating collateral scarcity, are likely to come at the cost of increased interconnectedness and greater financial system procyclicality.
- Greater reliance by banks on collateralised funding can adversely affect the residual claims of unsecured creditors during bank resolution, increase risks to deposit insurance schemes and reduce the effectiveness of policies aimed at bail-in.

## Speeches

### **Debt, global liquidity and the challenges of exit**

Speech by Jaime Caruana, General Manager of the Bank for International Settlements, given at the 8th FLAR-CAF International Conference on "External liquidity, economic policy and macroeconomic stability in the emerging and developing world", Cartagena, Colombia, 8 July 2013.

[www.bis.org/speeches/sp130708.htm](http://www.bis.org/speeches/sp130708.htm)

Recent volatility in financial markets suggests that, notwithstanding the many efforts of the authorities to support growth in the past six years, full normality is not yet at hand and that fragilities persist in the global economy and financial system. This speech, delivered at the 8th FLAR-CAF International Conference on "External liquidity, economic policy and macroeconomic stability in the emerging and developing world", reflects on the sources and implications of these fragilities. It examines in particular the rising indebtedness and the rapid credit growth observed in parts of the world in recent years. It also discusses the role that monetary accommodation may have played in this context and the challenges it may pose.

### **General Manager's speech: Making the most of borrowed time**

Speech delivered by Mr Jaime Caruana, General Manager of the BIS, on the occasion of the Bank's Annual General Meeting, Basel, 23 June.

[www.bis.org/speeches/sp130623.htm](http://www.bis.org/speeches/sp130623.htm)

Since the beginning of the financial crisis almost six years ago, central banks and fiscal authorities have supported the global economy with unprecedented measures. Policy rates have been kept near zero in the largest advanced economies. Central bank balance sheets have doubled from \$10 trillion to more than \$20 trillion. And fiscal authorities almost everywhere have been piling up debt, which has risen by \$23 trillion since 2007. In emerging market economies, public debt has grown more slowly than GDP; but in advanced economies, it has grown much faster, so that it now exceeds one year's GDP.

Without these forceful and determined policy responses, the global financial system could easily have collapsed, bringing the world economy down with it. But the subsequent global recovery has remained halting, fragile and uneven. In the United States, the expansion continues, albeit at a moderate pace. In major emerging market economies, growth is losing momentum. Most of Europe has fallen back into recession. At the same time, the general downward trend in productivity growth has not been receiving enough attention from policymakers.

As the risks mounted around mid-2012, central banks rode to the rescue yet again. The ECB addressed market fears with the promise that it would do "whatever it takes" within its mandate to save the euro. It followed up with a conditional programme to buy sovereign debt of troubled euro area countries. The Federal Reserve, the Bank of England and the Bank of Japan likewise pushed forward with additional expansionary measures.

And while large advanced economies were expanding their unconventional policies, central banks in many emerging market economies lowered their target policy rates, in some cases reducing them to their 2009 levels.

### **Global liquidity: where do we stand?**

Speech by Jaime Caruana, General Manager of the Bank for International Settlements, prepared for the Bank of Korea International Conference 2013 on "Assessing global liquidity in a global framework", Seoul, 4 June

[www.bis.org/speeches/sp130604.htm](http://www.bis.org/speeches/sp130604.htm)

Global financial conditions show strong cross-currents and merit policymakers' attention. In countries at the centre of the global financial crisis, deleveraging has lagged. In contrast, some advanced and emerging market economies show ongoing leveraging that in some cases is posing late financial-cycle risks. Global international bank credit shows little growth, but this aggregate conceals shrinkage of bank credit in Europe and its expansion in Asia. Aggregates that include credit extended in booming bond markets, like dollar credit outside the United States and euro credit outside of the euro area, are growing at double-digit rates.

With regard to recommendations, first, the private sector in the countries hardest hit by the global financial crisis needs to redouble its efforts to deleverage and repair its balance sheets, and policymakers in those countries need to enact far-reaching reforms. This would also allow central banks to normalise monetary policy in a manner consistent with a return to sustainable and balanced growth. Second, economies that have had credit booms and face late-cycle risks should not only sustain the macroprudential policies adopted to date but also implement policies to build up financial resilience.

Third, policymakers need to strengthen prudential policies that anticipate and counter the challenges of the inevitable and desirable normalisation of global interest rates.

### **Hitting the limits of "outside the box" thinking? Monetary policy in the crisis and beyond**

Speech by Jaime Caruana, General Manager of the Bank for International Settlements, to OMFIF (Golden Series Lecture), London, 16 May

[www.bis.org/speeches/sp130516.htm](http://www.bis.org/speeches/sp130516.htm)

Central banks have had to "think outside the box" to address unprecedented financial instability and to provide monetary stimulus in trying times. Monetary accommodation has been critical to stabilise the financial system and the economy. But questions remain about the efficacy of such policies as long as balance sheets and structural headwinds are not more fully addressed. Monetary accommodation can only be as helpful as the balance sheet, fiscal and structural policies that accompany it. Looking ahead, central banks will continue to face daunting challenges as they navigate in uncharted waters, including how best to integrate new perspectives on the financial cycle and global spillovers into their monetary policy frameworks.