Statistical Annex

The international banking market

Securities markets

Derivatives markets

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).[1]

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 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). 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.

[1] More detailed tables and options to download the data in time series form are available at www.bis.org/statistics/index.htm.

Table 1A: International positions of banks by residence of counterparty, September 2012[1]

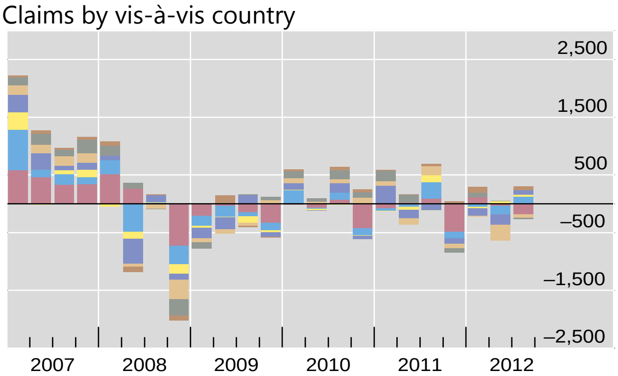
In billions of US dollars

	Vis-à-vis developed countries	Vis-à-vis offshore centres	Vis-à-vis emerging markets: Total	Africa	Asia	Europe	Latin America	All countries
			Amounts outstanding					
Total claims	**25,163**	**4,245**	**3,785**	**497**	**1,711**	**854**	**723**	**33,913**
Total cross-border claims [3]	**22,422**	**3,651**	**3,134**	**490**	**1,328**	**704**	**612**	**29,421**
Loans	15,749	2,968	2,469	453	1,046	532	438	21,266
Securities	4,580	556	368	17	153	75	123	5,635
Claims on banks	14,212	2,135	1,628	205	817	363	243	18,132
Claims on non-banks	8,210	1,516	1,506	285	510	342	369	11,289
US dollar	8,423	2,216	1,289	284	396	191	418	11,984
Euro	9,460	262	439	87	46	284	22	10,257
Foreign currency claims on residents	**2,742**	**594**	**651**	**7**	**383**	**149**	**111**	**3,987**
			Estimated exchange rate-adjusted changes during the quarter [2]					
Total claims	**92**	**-50**	**-10**	**11**	**-16**	**9**	**-14**	**54**
Total cross-border claims [3]	**106**	**-58**	**-30**	**11**	**-29**	**-1**	**-10**	**33**
Loans	-28	-72	-47	11	-36	-7	-14	-143
Securities	28	9	11	1	4	6	1	59
Claims on banks	5	-82	-55	8	-47	-5	-11	-120
Claims on non-banks	101	24	26	2	18	4	1	153
US dollar	170	-72	-17	6	-13	-5	-5	89
Euro	-157	-11	-5	2	-3	-1	-2	-167
Foreign currency claims on residents	**-14**	**9**	**19**	**0**	**13**	**11**	**-4**	**14**
			Amounts outstanding					
Total liabilities	**21,564**	**4,952**	**3,194**	**869**	**1,356**	**432**	**538**	**32,671**
Total cross-border liabilities [3]	**18,451**	**4,071**	**2,564**	**859**	**931**	**313**	**460**	**25,336**
Deposits	15,692	3,921	2,472	850	896	308	419	22,326
Securities	1,362	90	21	2	9	1	9	1,475
Liabilities to banks	13,520	2,721	1,609	533	640	225	211	18,032
Liabilities to non-banks	4,931	1,349	955	326	291	89	249	7,304
US dollar	7,192	2,571	1,415	563	372	131	349	11,249
Euro	7,449	410	350	137	76	98	39	8,348
Foreign currency liabilities to residents	**3,113**	**881**	**631**	**10**	**425**	**119**	**77**	**4,624**
			Estimated exchange rate-adjusted changes during the quarter [2]					
Total liabilities	**24**	**13**	**1**	**-17**	**15**	**8**	**-6**	**42**
Total cross-border liabilities [3]	**-25**	**9**	**-10**	**-18**	**4**	**8**	**-5**	**-21**
Deposits	-129	-1	-6	-12	4	8	-6	-134
Securities	26	3	-6	-6	-1	0	1	23
Liabilities to banks	-84	13	-16	-17	-8	9	0	-79
Liabilities to non-banks	59	-4	6	-1	13	-2	-4	57
US dollar	132	25	-13	-19	-10	13	3	142
Euro	-226	-16	-23	1	-6	-12	-6	-260
Foreign currency liabilities to residents	**49**	**3**	**11**	**1**	**11**	**0**	**-2**	**63**

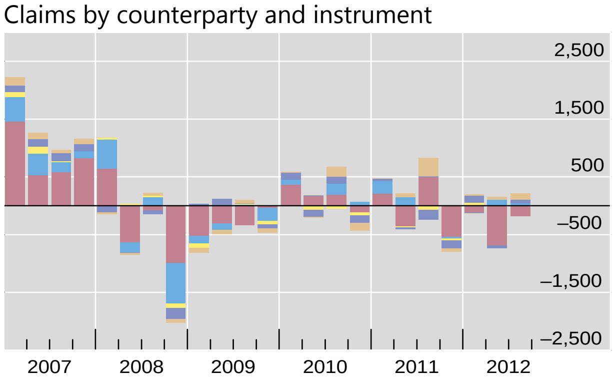
Cross-border positions

Exchange rate-adjusted changes in stocks

Claims by vis-à-vis country



Claims by counterparty and instrument



[1] Detailed breakdowns and time series data are available at http://www.bis.org/statistics/bankstats.htm (Tables 1–7B). [2] Taking into account exchange rate effects on outstanding balances in non-dollar currencies. [3] External position has been revised to exclude assets/liabilities unallocated by counterparty country. See "Box 2: A reallocation of external positions in the BIS locational banking statistics", Highlights of the BIS international statistics, BIS Quarterly Review, December 2012.

Table 1B: International positions of banks by nationality of head office, September 2012[1]

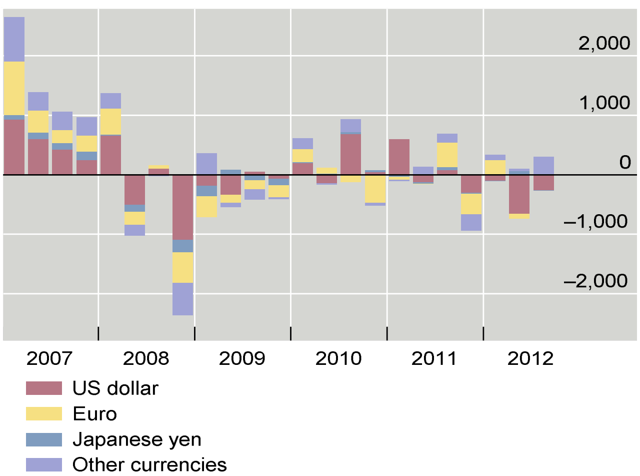
In billions of US dollars

	Nationality of banks										All countries
	France	Germany	Italy	Nether-lands	Spain	Switzer-land	United Kingdom	Japan	United States	Emerging markets	
	Amounts outstanding										
Total claims	**3,385**	**3,836**	**896**	**1,619**	**693**	**2,520**	**4,608**	**4,438**	**3,961**	**1,452**	**33,841**
on banks	2,314	2,122	491	1,024	369	1,582	2,650	1,857	2,592	778	19,740
on related foreign offices	831	1,162	253	404	204	965	1,651	952	1,534	226	10,258
on other banks	1,456	951	238	616	162	569	967	904	1,035	495	9,211
on official monetary institutions	27	9	0	4	3	47	32	1	24	56	270
on non-banks	1,071	1,714	405	595	324	938	1,958	2,581	1,369	674	14,101
US dollar	991	1,208	112	372	226	1,339	1,699	2,387	2,471	988	13,467
Euro	1,798	2,007	659	903	302	528	1,644	516	633	124	11,058
Other currencies	596	622	125	344	164	653	1,265	1,535	858	340	9,315
	Estimated exchange rate-adjusted changes during the quarter [2]										
Total claims	**-124**	**31**	**32**	**51**	**-37**	**39**	**-47**	**145**	**-63**	**49**	**114**
on banks	-82	22	23	25	-23	-12	-42	65	-62	14	-84
on related foreign offices	-122	48	23	-42	-19	109	15	63	-64	-4	25
on other banks	34	-28	1	67	-4	-166	-75	2	-18	7	-190
on official monetary institutions	6	2	0	1	0	45	18	0	20	11	81
on non-banks	-42	9	9	26	-14	51	-5	80	-1	36	198
US dollar	-40	36	-4	-26	-13	44	4	85	-48	39	-255
Euro	-67	-11	-13	62	-25	-37	-81	41	2	-3	10
Other currencies	-17	6	50	15	1	32	30	19	-17	14	359
	Amounts outstanding										
Total liabilities	**3,254**	**3,199**	**808**	**1,691**	**753**	**2,761**	**4,852**	**2,614**	**4,446**	**1,500**	**32,882**
to banks	2,088	1,783	516	1,216	406	1,548	2,416	1,512	2,368	847	18,525
to related foreign offices	742	1,113	189	337	140	951	1,385	761	1,335	192	8,875
to other banks	1,249	588	305	850	249	564	913	699	843	633	8,822
to official monetary institutions	97	82	22	29	17	33	119	53	190	23	828
to non-banks	1,166	1,416	292	474	348	1,213	2,436	1,102	2,077	653	14,357
US dollar	1,080	1,271	98	515	240	1,365	1,608	1,554	3,030	956	14,047
Euro	1,572	1,210	605	725	389	641	1,570	294	588	129	9,883
Other currencies	602	718	105	450	124	755	1,674	766	828	415	8,952
	Estimated exchange rate-adjusted changes during the quarter [2]										
Total liabilities	**-54**	**37**	**-1**	**43**	**-71**	**33**	**-70**	**99**	**-8**	**47**	**76**
to banks	-110	3	-2	32	-27	33	-60	35	10	29	-96
to related foreign offices	-133	36	8	-27	-16	52	-28	31	-9	-6	-124
to other banks	19	-6	-9	62	-13	-31	-40	12	7	30	28
to official monetary institutions	4	-27	0	-4	2	12	8	-8	11	5	0
to non-banks	56	33	1	11	-44	0	-10	64	-18	18	172
US dollar	18	55	-8	-9	-11	52	33	35	-25	43	-137
Euro	-49	-18	-28	42	-52	-46	-113	32	16	-8	-129
Other currencies	-24	-1	35	10	-7	27	10	32	1	12	341

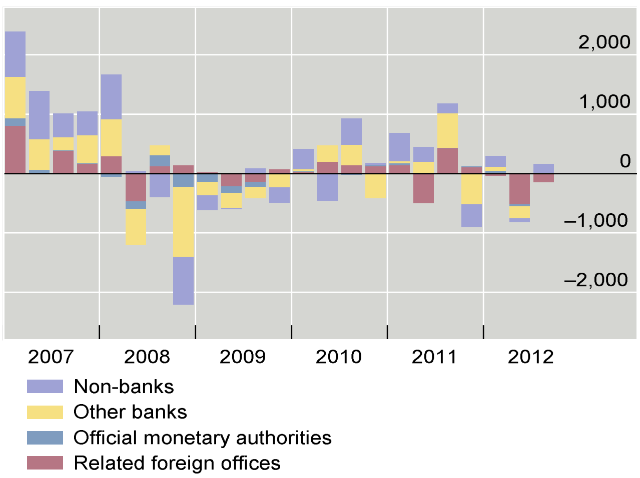
International positions of BIS reporting banks

Exchange rate-adjusted changes in stocks

Claims by currency



Liabilities by sector of counterparty



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

Table 2A: Consolidated claims, immediate borrower basis, September 2012[1]

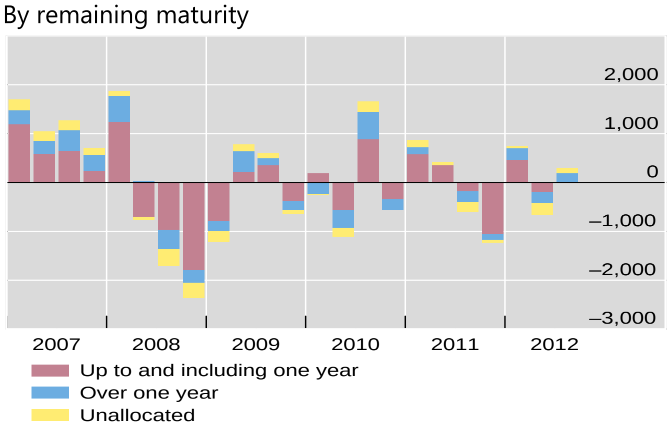
Amounts outstanding, in billions of US dollars

	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	
Foreign claims	**22,942**	**5,897**	**9,120**	**1,198**	**2,650**	**5,601**	**685**	**2,150**	**1,437**	**1,328**	**31,383**
International claims	**14,311**	**2,694**	**6,506**	**788**	**2,107**	**3,256**	**457**	**1,430**	**811**	**558**	**19,861**
Up to and including one year	7,331	942	3,158	655	1,060	1,672	221	897	298	256	10,107
Over one year	4,718	1,105	2,309	62	666	1,259	210	385	426	238	6,702
Unallocated by maturity	2,262	646	1,039	71	380	326	27	148	87	64	3,053
Local currency claims	**8,631**	**3,203**	**2,615**	**410**	**543**	**2,345**	**228**	**720**	**626**	**771**	**11,521**
Local currency liabilities	**6,279**	**2,504**	**1,924**	**243**	**481**	**1,756**	**192**	**479**	**493**	**592**	**8,517**
	Unadjusted changes during the quarter[2]										
Foreign claims	*381*	*85*	*155*	*-1*	*55*	*144*	*31*	*18*	*70*	*25*	*592*
International claims	*194*	*72*	*77*	*11*	*46*	*43*	*18*	*10*	*15*	*1*	*296*
Local currency claims	*187*	*13*	*78*	*-11*	*9*	*101*	*14*	*8*	*55*	*24*	*296*
Local currency liabilities	*234*	*12*	*116*	*6*	*27*	*46*	*-2*	*12*	*27*	*9*	*307*
Nationality of reporting banks:	**Foreign claims**										
Domestically owned banks (total)	**19,090**	**5,463**	**7,343**	**790**	**2,539**	**5,062**	**626**	**1,815**	**1,378**	**1,242**	**26,869**
Euro area	7,792	1,426	4,048	150	373	2,186	234	282	1,081	588	10,419
Switzerland	1,339	678	307	88	210	170	28	73	25	44	1,729
United Kingdom	2,562	1,103	1,020	129	592	919	228	470	72	148	4,118
Japan	2,250	1,199	561	.	587	360	33	242	30	55	3,196
United States	2,074	.	761	353	442	751	65	339	79	269	3,297
Other countries[3]	3,073	1,057	644	71	335	677	39	409	91	138	4,109
Other foreign banks	**3,852**	**434**	**1,778**	**408**	**111**	**539**	**59**	**335**	**59**	**86**	**4,513**
	International claims, all maturities										
Domestically owned banks (total)	**10,569**	**2,282**	**4,808**	**381**	**1,996**	**2,720**	**400**	**1,095**	**753**	**472**	**15,461**
Euro area	4,374	596	2,380	94	342	1,037	158	205	526	148	5,822
Switzerland	594	125	265	33	195	137	25	60	23	29	934
United Kingdom	1,185	379	594	76	262	418	100	214	53	51	1,910
Japan	1,812	884	515	.	542	277	33	162	29	53	2,631
United States	1,321	.	643	133	391	403	47	182	51	123	2,144
Other countries[3]	1,283	298	411	45	264	448	38	272	70	68	2,020
Other foreign banks	**3,742**	**412**	**1,697**	**407**	**111**	**536**	**57**	**335**	**58**	**86**	**4,400**
	International claims, short-term										
Domestically owned banks (total)	**4,991**	**768**	**2,163**	**270**	**994**	**1,352**	**188**	**661**	**277**	**226**	**7,378**
Euro area	2,155	321	931	57	157	373	60	90	158	65	2,692
Switzerland	337	53	148	17	138	76	19	31	11	15	552
United Kingdom	585	163	325	35	164	236	47	129	36	24	990
Japan	209	74	60	.	54	104	7	82	8	8	367
United States	987	.	462	124	334	312	38	154	37	84	1,653
Other countries[3]	719	157	236	37	147	252	17	177	27	32	1,125
Other foreign banks	**2,340**	**175**	**995**	**385**	**66**	**320**	**33**	**236**	**21**	**30**	**2,729**

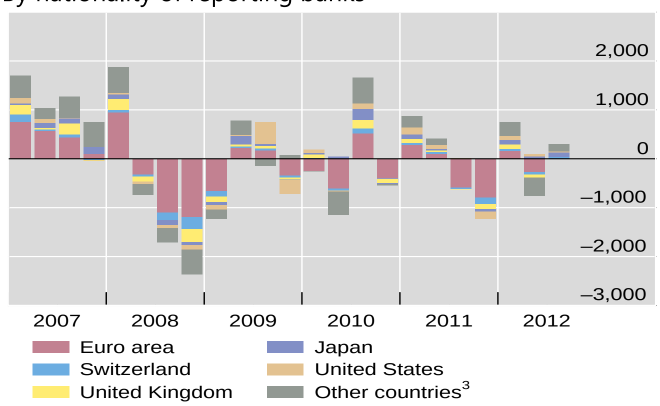
International claims of BIS reporting banks on an immediate borrower basis[4]

Changes in stocks[2]

By remaining maturity



By nationality of reporting banks



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

Table 2B: Consolidated claims, ultimate risk basis, September 2012[1]

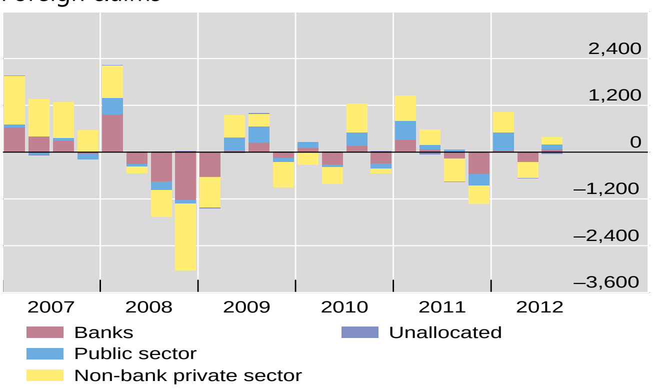
Amounts outstanding, in billions of US dollars

	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	
Foreign claims	**18,566**	**5,448**	**7,054**	**804**	**1,902**	**4,824**	**579**	**1,741**	**1,298**	**1,207**	**25,478**
Banks	4,100	754	1,666	252	129	883	78	466	183	156	5,122
Public sector	4,140	1,472	1,671	286	198	1,192	150	356	302	385	5,676
Non-bank private sector	10,197	3,174	3,695	266	1,549	2,731	350	917	800	664	14,503
Unallocated	130	47	22	2	26	18	1	2	14	2	177
Cross-border claims	**9,494**	**2,303**	**4,539**	**313**	**1,181**	**2,041**	**319**	**873**	**474**	**375**	**12,897**
Local claims in all currencies	**9,073**	**3,145**	**2,515**	**491**	**721**	**2,783**	**259**	**868**	**824**	**832**	**12,581**
	Unadjusted changes during the quarter[2]										
Foreign claims	*160*	*-10*	*47*	*-24*	*52*	*132*	*19*	*17*	*57*	*38*	*345*
Cross-border claims	*289*	*43*	*126*	*-30*	*44*	*53*	*14*	*13*	*18*	*8*	*390*
Local claims in all currencies	*-130*	*-53*	*-79*	*5*	*7*	*79*	*5*	*5*	*39*	*30*	*-45*
Nationality of reporting banks[3]	**Foreign claims**										
Total	**18,566**	**5,448**	**7,054**	**804**	**1,902**	**4,824**	**579**	**1,741**	**1,298**	**1,207**	**25,478**
Euro area	7,511	1,359	3,892	143	324	2,108	224	271	1,018	595	10,010
France	2,026	395	1,222	67	97	430	131	93	171	35	2,560
Germany	2,258	508	1,012	52	128	328	55	101	127	45	2,755
Italy	628	29	521	3	12	210	10	13	184	3	856
Spain	909	208	238	4	17	536	3	10	48	476	1,464
Switzerland	1,394	717	324	82	128	154	18	71	24	42	1,687
United Kingdom	2,544	1,081	1,007	146	544	931	223	485	72	150	4,063
Japan	2,256	1,295	506	.	369	347	29	232	29	57	2,973
United States	2,175	.	764	380	319	740	62	338	76	264	3,277
Other countries	2,685	995	560	53	218	544	23	344	79	98	3,467
	Cross-border claims										
Total	**9,494**	**2,303**	**4,539**	**313**	**1,181**	**2,041**	**319**	**873**	**474**	**375**	**12,897**
Euro area	3,842	552	2,222	59	251	750	145	176	308	121	4,911
France	1,028	130	623	20	76	199	71	65	37	27	1,310
Germany	1,551	302	846	27	111	239	51	62	84	42	1,941
Italy	260	20	175	.	11	36	3	7	23	3	312
Spain	177	22	104	4	12	46	3	9	5	30	237
Switzerland	562	143	280	27	94	118	16	56	21	25	783
United Kingdom	1,131	355	578	72	160	334	69	174	47	44	1,669
Japan	1,838	1,003	461	.	317	237	29	126	27	54	2,393
United States	1,185	.	643	126	246	342	40	156	44	100	1,815
Other countries	935	251	355	29	113	260	20	185	25	29	1,326
	Other potential exposures[4, 5]										
Derivatives contracts	3,416	875	1,243	94	104	168	34	58	25	51	3,708
Guarantees extended	5,944	605	2,435	225	230	1,196	134	357	447	258	8,319
Credit commitments	2,723	875	936	41	199	543	66	179	127	172	3,470

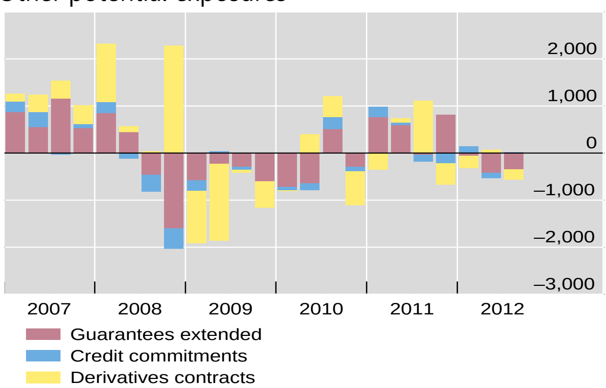
Consolidated claims and other potential exposures of BIS reporting banks on an ultimate risk basis

Changes in stocks[2]

Foreign claims



Other potential exposures[4, 5]



[1] Detailed breakdowns and time series data are available at http://www.bis.org/statistics/consstats/htm (Tables 9C–9E). [2] Quarterly difference in outstanding stocks, excluding effects of breaks in series, not adjusted for exchange rate movements. [3] Worldwide consolidated positions of domestically owned banks of 24 reporting countries. [4] Not included in foreign claims. [5] 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.

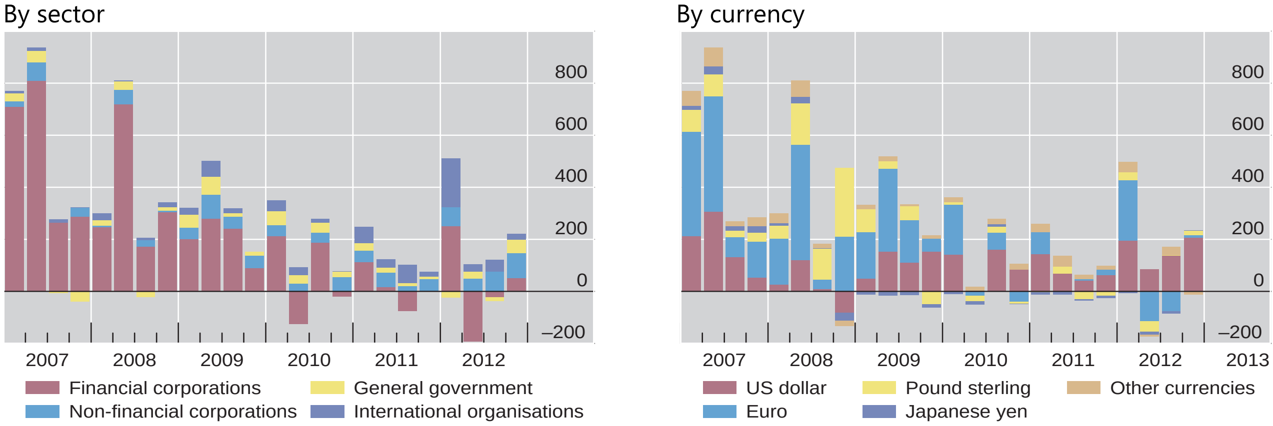
Table 3A: International debt securities issuance, December 2012[1]

In billions of US dollars

	Developed countries				Off-shore centres	Emerging markets					Int'l organi-sations	All countries
	Total	United States	Euro area	Japan		Total	Africa	Asia	Europe	Latin America		
Amounts outstanding												
Total issues	**17,400**	**2,043**	**9,364**	**182**	**1,718**	**1,503**	**191**	**390**	**391**	**531**	**1,357**	**21,979**
Money market instruments	**753**	**8**	**444**	**1**	**51**	**12**	**3**	**6**	**0**	**3**	**28**	**844**
Financial corporations	676	7	398	1	51	12	3	6	0	2	0	739
Non-financial corporations	27	1	18	0	0	0	0	0	0	0	0	27
General government	50	0	29	0	0	0	0	0	0	0	0	50
US dollar	258	1	138	0	31	8	2	3	0	2	18	315
Euro	304	3	209	0	6	1	1	1	0	0	4	315
Other currencies	191	3	97	1	13	3	1	2	0	0	6	214
Bonds and notes	**16,647**	**2,036**	**8,920**	**181**	**1,668**	**1,491**	**188**	**384**	**391**	**528**	**1,329**	**21,135**
Financial corporations	13,822	1,788	7,329	137	1,545	401	50	181	70	101	0	15,768
Non-financial corporations	1,980	243	966	41	71	405	67	109	51	177	0	2,456
General government	845	5	625	4	51	683	70	92	270	251	0	1,579
US dollar	4,475	1,323	1,297	78	1,254	1,104	148	297	224	435	377	7,209
Euro	8,661	441	6,670	10	152	205	20	10	133	42	571	9,589
Other currencies	3,512	272	952	93	262	182	20	77	34	51	382	4,337
Floating rate	5,329	413	3,002	21	522	67	19	20	12	16	94	6,012
Fixed rate	11,097	1,553	5,855	132	1,091	1,379	160	337	376	505	1,235	14,802
Equity-related	221	70	63	28	55	45	8	26	3	7	0	320
Net issuance during the quarter												
Total issues	**75**	**-3**	**71**	**3**	**49**	**75**	**15**	**6**	**36**	**18**	**23**	**222**
Money market instruments	**-17**	**0**	**-11**	**0**	**-3**	**0**	**0**	**-1**	**0**	**1**	**3**	**-17**
Financial corporations	-38	0	-16	0	-3	0	0	-1	0	1	0	-41
Non-financial corporations	-2	0	-2	0	0	0	0	0	0	0	0	-3
General government	23	0	7	0	0	0	0	0	0	0	0	23
US dollar	23	0	3	0	-2	0	0	-1	0	1	5	26
Euro	-36	0	-13	0	0	0	0	0	0	0	-3	-39
Other currencies	-4	0	-1	0	0	-1	0	-1	0	0	0	-4
Bonds and notes	**93**	**-3**	**82**	**3**	**51**	**75**	**14**	**8**	**36**	**17**	**20**	**239**
Financial corporations	14	-15	39	1	43	33	9	3	16	6	0	90
Non-financial corporations	75	12	37	1	4	21	4	3	6	8	0	100
General government	4	0	5	0	4	21	2	2	14	4	0	29
US dollar	74	-3	38	1	52	56	11	4	25	16	-1	180
Euro	15	1	32	0	-2	13	3	0	10	0	22	48
Other currencies	4	-1	12	1	2	7	1	3	1	2	-1	11
Floating rate	-44	7	-25	3	-2	-1	0	-1	0	0	4	-44
Fixed rate	133	-12	103	-2	57	80	15	13	36	17	16	286
Equity-related	4	2	4	1	-3	-4	0	-4	0	0	0	-3

Net international debt securities issuance

By sector | By currency



[1] 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, September 2012[1]

In billions of US dollars

	Domestic debt securities											
	China	Brazil	South Korea	Mexico	Malaysia	Thailand	Turkey	South Africa	Russia	Israel	Indonesia	Singapore
Amounts outstanding												
All issuers	3,635	2,073	1,197	535	344	281	231	214	209	190	129	117
Financial corporations	1,651	605	356	157	78	137	14	52	49	40	12	...
Non-financial corporations	736	147	445	41	125	45	0	27	63	40	8	...
General government	1,248	1,321	396	337	141	100	217	135	97	110	110	117
Short-term	...	...	92	98	74	67	11	32	...	2	...	48
Long-term	...	...	1,106	437	269	214	220	182	97	108	...	70
Unallocated	3,635	2,073	0	0	0	0	0	0	112	79	129	0
Exchange rate adjusted changes												
All issuers	159	-8	0	18	13	-7	6	6	2	5	-1	1
Financial corporations	50	10	0	0	3	-10	1	0	3	1	0	...
Non-financial corporations	43	10	0	2	7	2	0	1	-1	2	1	...
General government	65	-28	0	16	3	2	6	5	-1	3	-2	1
Short-term	...	...	...	0	5	-12	2	-1	...	0	...	-1
Long-term	...	...	...	18	8	6	5	7	-1	3	...	2
Unallocated	159	-8	0	0	0	0	0	0	3	2	-1	0

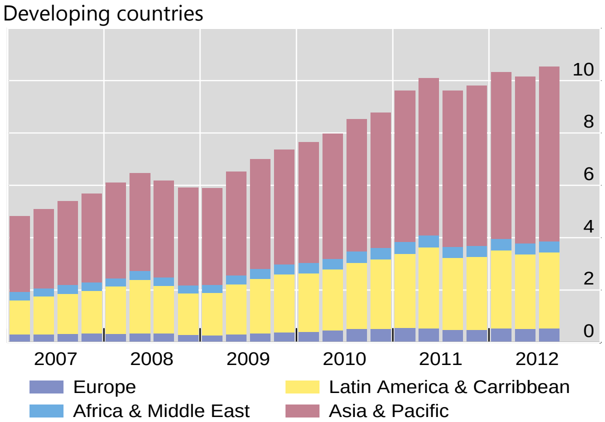
	Total debt securities											
	United States	Japan	United Kingdom	France	Germany	Italy	Spain	Netherlands	Canada	Australia	Ireland	Denmark
Amounts outstanding												
All issuers[2]	34,410	16,103	5,713	4,512	4,323	3,827	2,348	2,291	2,089	2,001	1,308	845
Financial corporations	14,366	3,047	2,656	1,902	2,025	1,537	1,404	1,747	449	1,244	1,187	651
Non-financial corporations	6,055	1,035	810	584	141	131	20	125	346	199	3	31
General government	13,744	12,021	2,243	2,026	2,157	2,159	924	418	1,294	558	117	163

Outstanding amounts

In trillions of US dollars

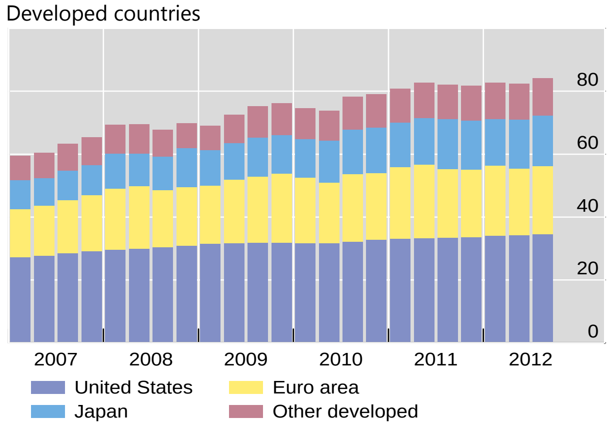
Domestic debt securities

Developing countries



Total debt securities

Developed countries



[1] 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. [2] All issuers include households and non-profit institutions serving households.

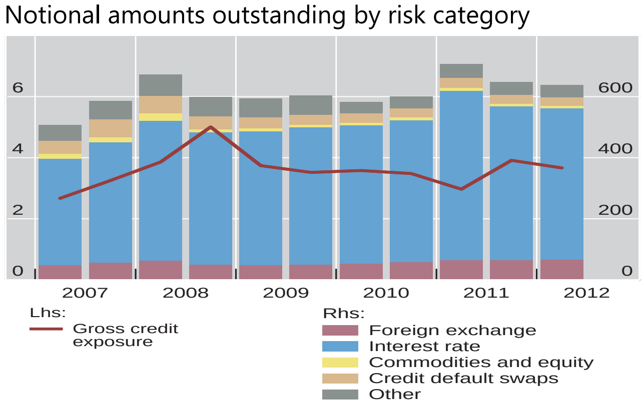
Table 4: Global OTC derivatives market, end-June 2012[1]

In billions of US dollars

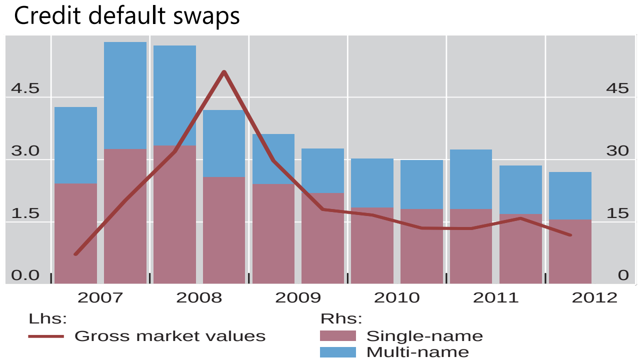
	Forwards and swaps				Options			
	Total	with reporting dealers	with other financial institutions	with non-financial customers	Total	with reporting dealers	with other financial institutions	with non-financial customers
	Notional amounts outstanding							
All contracts[2]	**567,364**	**158,800**	**357,590**	**48,856**	**71,564**	**41,128**	**24,477**	**4,873**
Foreign exchange	**55,551**	**24,273**	**23,109**	**8,169**	**11,094**	**5,211**	**4,429**	**1,455**
US dollar	48,662	22,535	19,978	6,149	8,692	4,059	3,446	1,187
Euro	20,167	8,199	8,238	3,730	4,123	1,866	1,569	688
Japanese yen	10,385	5,437	3,610	1,338	3,255	1,823	1,133	298
Pound sterling	6,867	2,705	2,947	1,215	724	301	301	122
Other	25,021	9,670	11,444	3,907	5,394	2,372	2,408	614
Up to one year	39,958	16,184	17,794	5,980	8,507	3,800	3,615	1,092
Over one year	15,593	8,090	5,315	2,189	2,587	1,411	814	363
Memo: Exchange-traded[3]	*215*	.	.	.	*111*	.	.	.
Interest rate	**443,704**	**107,782**	**298,915**	**37,006**	**50,314**	**31,364**	**16,298**	**2,653**
US dollar	149,934	32,144	106,686	11,105	14,090	7,768	5,447	875
Euro	154,891	29,331	113,261	12,299	23,776	15,884	6,765	1,127
Japanese yen	53,078	18,865	27,788	6,425	7,014	4,940	1,848	226
Pound sterling	36,512	9,632	23,875	3,004	3,401	1,991	1,218	193
Other	49,289	17,810	27,306	4,173	2,032	780	1,020	232
Up to one year	192,737	45,970	133,902	12,865	14,179	7,687	5,674	818
Over one year	250,967	61,812	165,014	24,141	36,135	23,677	10,624	1,835
Memo: Exchange-traded[3]	*22,410*	.	.	.	*33,225*	.	.	.
Equity	**1,880**	**552**	**1,047**	**281**	**4,434**	**1,849**	**2,140**	**445**
Memo: Exchange-traded[3]	*1,113*	.	.	.	*2,448*	.	.	.
Commodities	**1,978**	**...**	**...**	**...**	**1,015**	**...**	**...**	**...**
Credit default swaps	**26,931**	**15,747**	**10,997**	**187**	**...**	**...**	**...**	**...**
Unallocated	**37,321**	**10,446**	**23,522**	**3,214**	**4,707**	**2,705**	**1,610**	**321**
	Gross market values							
All contracts	**22,160**	**7,363**	**13,251**	**1,546**	**2,811**	**1,733**	**827**	**251**
Foreign exchange	**1,955**	**741**	**808**	**406**	**262**	**135**	**76**	**51**
US dollar	1,592	661	651	280	208	105	56	46
Euro	790	264	327	198	88	41	29	19
Japanese yen	382	175	132	74	124	74	28	22
Pound sterling	203	62	82	59	10	4	4	2
Other	943	321	423	200	95	46	36	13
Interest rate	**17,265**	**5,290**	**10,996**	**979**	**1,848**	**1,278**	**487**	**83**
US dollar	6,763	2,132	4,312	319	623	437	159	27
Euro	6,957	1,928	4,593	437	983	675	263	46
Japanese yen	960	405	519	35	96	74	19	2
Pound sterling	1,349	395	864	90	113	76	32	5
Other	1,236	430	708	98	33	16	13	4
Equity	**147**	**31**	**80**	**36**	**497**	**195**	**204**	**98**
Credit default swaps	**1,187**	**767**	**407**	**13**	**...**	**...**	**...**	**...**
Unallocated	**1,606**	**533**	**960**	**112**	**204**	**126**	**60**	**18**

Global OTC derivatives[4]

Notional amounts outstanding by risk category



Credit default swaps



[1] 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). [2] Due to incomplete counterparty breakdowns for the commodity derivatives, components do not add up to the total. [3] 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. [4] 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 2012Q2. Locational data on other instruments for Finland for 2011Q4, 2012Q1, 2012Q2 and 2012Q3 relate to 2011Q3. 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.

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.

Types of claims

A	B	C	D
Cross-border claims	Local claims of foreign affiliates in foreign currency	Local claims of foreign affiliates in local currency	Domestic claims in the reporting country

International claims (A + B)

Foreign claims (A + B + C)

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

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.

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). 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

Special Features in the BIS Quarterly Review

December 2012	Natural catastrophes and global reinsurance	S von Dahlen and G von Peter
December 2012	The euro area crisis and cross-border bank lending to emerging markets	S Avdjiev, Z Kuti & E Takáts
December 2012	On the liquidity coverage ratio and monetary policy implementation	M Bech & T Keister
December 2012	Enhancements to the BIS debt securities statistics	B Gruíc & P Wooldridge
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September 2012	Taylor rules and monetary policy: a global "Great Deviation"?	B Hofmann & B Bogdanova
September 2012	Credit in times of stress: lessons from Latin America	C Montoro & L Rojas-Suarez
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December 2011	Assessing global liquidity	D Domanski, I Fender & P McGuire
December 2011	The impact of recent central bank asset purchase programmes	J Meaning & F Zhu
December 2011	Enhanced BIS statistics on credit risk transfer	N Vause

Recent BIS publications[1]

BIS Papers

Globalisation and inflation dynamics in Asia and the Pacific
February 2013

www.bis.org/publ/bppdf/bispap70.htm

The Bank for International Settlements (BIS) organised a research workshop on globalisation and inflation dynamics in Asia and the Pacific on June 18-19 in Hong Kong SAR. The topic was endorsed by the Asian Consultative Council in February 2012 as the new monetary stability research theme for the two-year research programme of the BIS Representative Office for Asia and the Pacific. The conference venue was provided by the Hong Kong Monetary Authority.

The goal of the event was to bring together researchers and policymakers to present the latest developments in the research area of globalisation and inflation. The workshop also helped to sharpen the focus on the key aspects of this topic in the research programme of the BIS Asian office going forward. There were 34 participants, including academics, researchers and policymakers from central banks and international organisations from the Asia-Pacific region, Europe and the United States.

The workshop presentations revolved around five key themes: economic globalisation and inflation dynamics in the region; financial globalisation and its impact on exchange rate passthrough to inflation; the importance of commodity price swings; the difficulties measuring economic slack in small, open economies; and understanding how to interpret inflation expectation data from different sources. Emphasis was put on the changing economic and financial environment and the implications for monetary policymaking. In addition to presentations of research papers, the workshop included two high-level policy panel discussions focused on monetary policy challenges in the Asia-Pacific region.

There was a broad recognition among the central bankers and academics of the importance of this topic for Asia and the Pacific. The discussions identified various theoretical channels through which global developments influence domestic inflation dynamics. In addition to the theoretical channels, there were questions about how labour market dynamics in Asia, especially in China, are spilling over to the region and elsewhere, and how new supply chain relationships in the region can amplify the transmission of inflation shocks. Several presenters noted the deep conceptual and empirical challenges related to the measurement of economic slack in dynamic, open economies of the type in Asia. The event also cast new light on the debate on how monetary policy should respond to commodity price swings.

This volume is a collection of presentations during the workshop.

The future of financial globalisation
December 2012

www.bis.org/publ/bppdf/bispap69.htm

The BIS 11th Annual Conference took place in Lucerne, Switzerland on 21–22 June 2012. The event brought together senior representatives of central banks and academic institutions, who exchanged views on the conference theme of "The future of financial globalisation". This volume contains the opening address of Stephen Cecchetti (Economic Adviser, BIS), a keynote address from Amartya Sen (Harvard University), and the available contributions of the policy panel on "Will financial globalisation survive?". The participants in the policy panel discussion, chaired by Jaime Caruana (General Manager, BIS), were Ravi Menon (Monetary Authority of Singapore), Jacob Frenkel (JP Morgan Chase International) and José Dario Uribe Escobar (Banco de la Repubblica).

BIS Working Papers

Financial crises and bank funding: recent experience in the euro area
Adrian Van Rixtel and Gabriele Gasperini

[1] 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).

www.bis.org/publ/work406.htm

This paper provides an overview of bank funding trends in the euro area following the 200709 global financial crisis and the euro area crisis. It shows that funding has become segmented along national borders and that secured instruments are much more prevalent than previously. Rising debt retention by euro area banks has accompanied greater dependence on liquidity provided by the ECB.

Information flows in dark markets: dissecting customer currency trades

Lukas Menkhoff, Lucio Sarno, Maik Schmeling and Andreas Schrimpf

www.bis.org/publ/work405.htm

We study the information in order flows of different customer segments in the world's largest over-the-counter market, the foreign exchange market. The analysis draws on a unique dataset covering a broad cross-section of currency pairs and distinguishing trades by key types of foreign exchange end-users. We find that order flows are highly informative about future exchange rates and provide significant economic value for the few large dealers who have access to these flows. Moreover, customer groups systematically engage in risk sharing with each other and differ markedly in their predictive ability, trading styles, and risk exposure.

Rethinking potential output: Embedding information about the financial cycle

Claudio Borio, Piti Disyatat and Mikael Juselius

www.bis.org/publ/work404.htm

This paper argues that incorporating information about the financial cycle is important to improve measures of potential output and output gaps. Conceptually, identifying potential output with non-inflationary output is too restrictive. Potential output is seen as sustainable; yet experience indicates that output may be on an unsustainable path even if inflation is low and stable whenever financial imbalances are building up. More generally, as long as potential output is identified with the non-cyclical component of output fluctuations and financial factors play a key role in explaining the cyclical part, ignoring these factors leaves out valuable information. Within a simple and transparent framework, we show that including information about the financial cycle can yield measures of potential output and output gaps that are not only estimated more precisely, but also much more robust in real time. In the context of policy applications, such "finance-neutral" output gaps are shown to yield more reliable estimates of cyclically adjusted budget balances and to serve as complementary guides for monetary policy.

Benign neglect of the long-term interest rate

Philip Turner

www.bis.org/publ/work403.htm

Large-scale central bank purchases of government bonds have made the long-term interest rate key in the monetary policy debate. How central banks react to bond market movements has varied greatly from one episode to another. Driving the term premium in long-term rates negative may stimulate aggregate demand. And a negative term premium encourages borrowers to lengthen the maturity of their debts. Such a reduction in maturity risks makes the financial system more resilient to shocks, and in particular can help emerging economies finance their heavy infrastructure and housing investment needs more safely. But an extended period of very low long rates and high public debt creates financial stability risks. Interest rate risk in the banking system has grown, and some institutional investors face significant exposures. Central banks in the advanced economies now hold a high proportion of bonds issued by their governments, most of which have so far failed to arrest the rise in the ratio of government debt to GDP. Implementing an effective exit strategy will be difficult. Current policy frameworks should be reconsidered, with a view to clarifying the importance of the long-term interest rate for monetary policy, for financial stability and for government debt management.

Understanding global liquidity

Sandra Eickmeier, Leonardo Gambacorta and Boris Hofmann

www.bis.org/publ/work402.htm

We explore the concept of global liquidity based on a factor model estimated using a large set of financial and macroeconomic variables from 24 advanced and emerging market economies. We measure global liquidity conditions based on the common global factors in the dynamics of liquidity indicators. By imposing theoretically motivated sign restrictions on factor loadings, we achieve a structural identification of the factors. The results suggest that global liquidity conditions are largely driven by three common factors and can therefore not be summarised by a single indicator. These three factors can be identified as global monetary policy, global credit supply and global credit demand.

Why do firms issue abroad? Lessons from onshore and offshore corporate bond finance in Asian emerging markets
Paul Mizen, Frank Packer, Eli M Remolona and Serafeim Tsoukas

www.bis.org/publ/work401.htm

Corporate bond issuers in emerging economies in Asia have often had a choice between an onshore market and an offshore one. Since 1998, however, many of these issuers have increasingly turned to the onshore market. This paper investigates systematically what factors have influenced this choice between markets for issuers in eight emerging economies - China, Hong Kong SAR, Indonesia, Korea, Malaysia, the Philippines, Singapore and Thailand. For variables measuring market depth and liquidity, the availability of hedging instruments, and the size of the investor base, we rely on BIS statistics that have not been used in this literature before. We combine these market-level data with firm-level data in an unbalanced panel for the eight countries covering the period 1995 to 2007. We control for variables representing agency, static trade-off and risk management theories of the capital structure. Our results show that the choice between domestic and foreign markets has changed over time in large part because of the increased depth of the onshore market. The firms that benefit from such market development tend to be the unseasoned issuers rather than the seasoned ones.

Capital flows and the risk-taking channel of monetary policy
Valentina Bruno and Hyun Song Shin

www.bis.org/publ/work400.htm

Low This paper examines the relationship between low interests maintained by advanced economy central banks and credit booms in emerging economies. In a model with cross-border banking, low funding rates increase credit supply, but the initial shock is amplified through the "risk-taking channel" of monetary policy where greater risk-taking interacts with dampened measured risks that are driven by currency appreciation to create a feedback loop. In an empirical investigation using VAR analysis, we find that expectations of lower short-term rates dampen measured risks and stimulate cross-border banking sector capital flows.

Global safe assets
Pierre-Olivier Gourinchas and Olivier Jeanne

www.bis.org/publ/work399.htm

Will the world run out of 'safe assets' and what would be the consequences on global financial stability? We argue that in a world with competing private stores of value, the global economic system tends to favour the riskiest ones. Privately produced stores of value cannot provide sufficient insurance against global shocks. Only public safe assets may, if appropriately supported by monetary policy. We draw some implications for the global financial system.

The great leveraging
Alan M. Taylor

www.bis.org/publ/work398.htm

What can history can tell us about the relationship between the banking system, financial crises, the global economy, and economic performance? Evidence shows that in the advanced economies we live in a world that is more financialised than ever before as measured by importance of credit in the economy. I term this long-run evolution "The Great Leveraging" and present a ten-point examination of its main contours and implications.

Financial globalisation and the crisis
Philip R. Lane

www.bis.org/publ/work397.htm

The global financial crisis provides an important testing ground for the financial globalisation model. We ask three questions. First, did financial globalisation materially contribute to the origination of the global financial crisis? Second, once the crisis occurred, how did financial globalisation affect the incidence and propagation of the crisis across different countries? Third, how has financial globalisation affected the management of the crisis at national and international levels?

Systematic monetary policy and the forward premium puzzle
Demosthenes N. Tambakis and Nikola Tarashev

www.bis.org/publ/work396.htm

Is systematic monetary policy a driver of the forward premium puzzle, i.e. the tendency of high interest-rate currencies to appreciate, thus strongly violating Uncovered Interest Parity (UIP)? We address this question by studying a battery of monetary policy rules in a small open economy that is subject to stationary but persistent domestic and foreign shocks. Each rule leads to model-implied UIP violations, which we derive analytically and then calibrate numerically. Our key finding is that only a forward-looking rule based on CPI inflation can account for frequently observed strong UIP violations.

The financial cycle and macroeconomics: what have we learnt?
Claudio Borio

www.bis.org/publ/work395.htm

It is high time we rediscovered the role of the financial cycle in macroeconomics. In the environment that has prevailed for at least three decades now, it is not possible to understand business fluctuations and the corresponding analytical and policy challenges without understanding the financial cycle. This calls for a rethink of modelling strategies and for significant adjustments to macroeconomic policies. This essay highlights the stylised empirical features of the financial cycle, conjectures as to what it may take to model it satisfactorily, and considers its policy implications. In the discussion of policy, the essay pays special attention to the bust phase, which is less well explored and raises much more controversial issues.

Unmitigated disasters? New evidence on the macroeconomic cost of natural catastrophes
Goetz von Peter, Sebastian von Dahlen and Sweta C Saxena

www.bis.org/publ/work394.htm

This paper presents a large panel study on the macroeconomic consequences of natural catastrophes and analyses the extent to which risk transfer to insurance markets facilitates economic recovery. Our main results are that major natural catastrophes have large and significant negative effects on economic activity, both on impact and over the longer run. However, it is mainly the uninsured losses that drive the subsequent macroeconomic cost, whereas sufficiently insured events are inconsequential in terms of foregone output. This result helps to disentangle conflicting findings in the literature, and puts the focus on risk transfer mechanisms to help mitigate the macroeconomic costs of natural catastrophes.

Interpreting TARGET2 balances
Stephen G Cecchetti, Robert N McCauley and Patrick McGuire

www.bis.org/publ/work393.htm

The increase in the TARGET2 balance for the Bundesbank has led to a debate in Germany about the appropriate interpretation and policy response, if any. In this paper we review the evidence for the current account financing interpretation, and find it wanting in explaining the data in 2012. BIS international banking data, by contrast, point to the importance of TARGET2 balances as a symptom of a reduction by core European banks of credit previously extended to borrowers in peripheral Europe. These same data suggest that banks headquartered outside the euro area, particularly UK banks, boosted TARGET2 balances by hedging redenomination risk. As such, TARGET2 balances reflect not only concern regarding actual credit exposures but also potential currency exposures.

Liquidity in government versus covered bond markets
Jens Dick-Nielsen, Jacob Gyntelberg and Thomas Sangill

www.bis.org/publ/work392.htm

We present findings on the secondary market liquidity of government and covered bonds in Denmark before, during and after the 2008 financial crisis. The analysis focuses on wholesale trading in the two markets and is based on a complete transaction level dataset covering November 2007 until end 2011. Overall, our findings suggest that Danish benchmark covered bonds by and large are as liquid as Danish government bonds - including in periods of market stress. Before the financial crisis of 2008, government bonds were slightly more liquid than covered bonds. During the crisis, trading continued in both markets but the government bond market experienced a brief but pronounced decline in market liquidity while liquidity in the covered bond market was more robust - partly reflective of a number of events as well as policy measures introduced in the autumn of 2008. After the crisis, liquidity in the government bond market quickly rebounded and government bonds again became slightly more liquid than covered bonds.

Basel Committee on Banking Supervision

Supervisory guidance for managing risks associated with the settlement of foreign exchange transactions
February 2013

www.bis.org/publ/bcbs241.htm

This document provides guidance to supervisors and banks on approaches for managing the risks associated with the settlement of foreign exchange (FX) transactions. It expands on, and replaces, the Basel Committee's Supervisory guidance for managing settlement risk in foreign exchange transactions published in 2000.

Since the original FX settlement risk guidance was published, the FX market has made significant strides in reducing the risks associated with the settlement of FX transactions. Substantial FX settlement-related risks remain, however, not least because of the rapid growth in FX trading activities.

The guidance provides a more comprehensive and detailed view on governance arrangements and the management of principal risk, replacement cost risk and all other FX settlement-related risks. In addition, it promotes the use of payment-versus-payment (PVP) arrangements, where practicable, to reduce principal risk.

The guidance is organised into seven "guidelines" that address governance, principal risk, replacement cost risk, liquidity risk, operational risk, legal risk and capital for FX transactions. The key recommendations emphasise that a bank should:

- ensure that all FX settlement-related risks are effectively managed and that its practices are consistent with those used for managing other counterparty exposures of similar size and duration.
- reduce its principal risk as much as practicable by settling FX transactions through the use of financial market infrastructures (FMIs) that provide PVP arrangements. Where PVP settlement is not practicable, the bank should properly identify, measure, control and reduce the size and duration of its remaining principal risk.
- ensure that when analysing its capital needs, all FX settlement-related risks should be considered, including principal risk and replacement cost risk and that sufficient capital is held against these potential exposures, as appropriate.
- use netting arrangements and collateral arrangements to reduce its replacement cost risk and should fully collateralise its mark-to-market exposure on physically settling FX swaps and forwards with counterparties that are financial institutions and systemically important non-financial entities.

An annex to the final guidance provides detailed explanation of FX settlement-related risks and how they arise

Margin requirements for non-centrally cleared derivatives - Second consultative document
February 2013

www.bis.org/publ/bcbs242.htm

The Basel Committee on Banking Supervision and the International Organization of Securities Commissions (IOSCO) have today published a second consultative paper which represents a near-final proposal on margin requirements for non-centrally-cleared derivatives.

Several features of the near-final proposal are intended to manage the liquidity impact of the margin requirements on financial market participants. The proposed requirements would allow for the introduction of a universal initial margin threshold of €50 million. The results of a quantitative impact study (QIS) conducted in 2012 indicate that application of the threshold could reduce the total liquidity costs by 56% relative to a margining framework with a zero initial margin threshold, which was initially proposed in the July 2012 first consultative paper.

Today's proposal also envisages a gradual phase-in 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 is proposed to be phased in over a four year period beginning 2015 and begin with the largest, most active and most systemically risky derivative market participants.

The proposed margin standards are articulated through a set of key principles that primarily seek to ensure that appropriate margining practices will be established for all non-centrally-cleared over-the-counter (OTC) derivative transactions. These principles will apply to all transactions that involve either financial firms or systemically important non-financial entities.

The Basel Committee and IOSCO seek public comment on the near-final proposal and specifically solicit feedback on the following four issues relating to:

1. the treatment of physically-settled foreign exchange (FX) forwards and swaps under the framework,
2. the ability to engage in limited re-hypothecation of collected initial margin,
3. the proposed phase-in framework, and
4. the adequacy of the conducted quantitative impact study (QIS).

Mortgage insurance: market structure, underwriting cycle and policy implications - Consultative paper released by the Joint Forum
February 2013

www.bis.org/publ/joint30.htm

This Home Monetary & financial stability Basel Committee on Banking Supervision Joint Forum
Mortgage insurance: market structure, underwriting cycle and policy implications - Consultative paper released by the Joint Forum
February 2013
This consultative report on Mortgage insurance: market structure, underwriting cycle and policy implications examines the interaction of mortgage insurers with mortgage originators and underwriters. The report sets out the following recommendations directed at policymakers and supervisors with the aim of 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 valleys of the underwriting cycle to cover claims during its peaks;
5. Supervisors should be aware of and mitigate 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; and
6. Supervisors should apply the FSB Principles for Sound Residential Mortgage Underwriting Practices ("FSB Principles") to mortgage insurers noting that proper supervisory implementation necessitates both insurance and banking expertise.

Regulatory consistency assessment programme (RCAP) - Analysis of risk-weighted assets for market risk
January 2013

www.bis.org/publ/bcbs240.htm

The Basel Committee on Banking Supervision has today published its report on the regulatory consistency of risk-weighted assets for market risk. This analysis of risk-weighted assets in the trading book is part of the wider Regulatory Consistency Assessment Programme (RCAP) initiated by the Committee in 2012; a similar analysis is currently under way for the banking book. The programme aims to ensure consistent implementation of the Basel framework, which will help strengthen the resilience of the global banking system, maintain market confidence in regulatory ratios and provide a level playing field for banks operating internationally.
The report brings together two pieces of analysis. The first is based on an examination of publicly available bank data for a selection of large banks. It also contains the results of a hypothetical test portfolio exercise, in which 15 internationally active banks participated.
The Basel Committee plans to conduct a further hypothetical test portfolio exercise later this year. This will include other, more complex, hypothetical test portfolios, with the aim of helping the Committee to deepen its analysis of the variation in risk measurement of trading books across banks.
This report is a revised version of the report published in January 2013. The revision reflects a modification to Figure 9 regarding the results for portfolio 26.

Principles for effective risk data aggregation and risk reporting
January 2013

www.bis.org/publ/bcbs239.htm

The financial crisis that began in 2007 revealed that many banks, including global systemically important banks (G-SIBs), were unable to aggregate risk exposures and identify concentrations fully, quickly and accurately. This meant that banks' ability to take risk decisions in a timely fashion was seriously impaired with wide-ranging consequences for the banks themselves and for the stability of the financial system as a whole.
The Basel Committee's Principles for effective risk data aggregation will strengthen banks' risk data aggregation capabilities and internal risk reporting practices. Implementation of the principles will strengthen risk management at banks - in particular, G-SIBs - thereby enhancing their ability to cope with stress and crisis situations.
An earlier version of the principles published today was issued for consultation in June 2012. The Committee wishes to thank those who provided feedback and comments as these were instrumental in revising and finalising the principles.

Basel III: The Liquidity Coverage Ratio and liquidity risk monitoring tools
January 2013

www.bis.org/publ/bcbs238.htm

The Basel Committee has issued the full text of the revised Liquidity Coverage Ratio (LCR) following endorsement on 6 January 2013 by its governing body - the Group of Central Bank Governors and Heads of Supervision (GHOS). The LCR is an essential component of the Basel III reforms, which are global regulatory standards on bank capital adequacy and liquidity endorsed by the G20 Leaders.

The LCR is one of the Basel Committee's key reforms to strengthen global capital and liquidity regulations with the goal of promoting a more resilient banking sector. The LCR promotes the short-term resilience of a bank's liquidity risk profile. It does this by ensuring that a bank has an adequate stock of unencumbered high-quality liquid assets (HQLA) that can be converted into cash easily and immediately in private markets to meet its liquidity needs for a 30 calendar day liquidity stress scenario. It will improve the banking sector's ability to absorb shocks arising from financial and economic stress, whatever the source, thus reducing the risk of spillover from the financial sector to the real economy.

The LCR was first published in December 2010. At that time, the Basel Committee put in place a rigorous process to review the standard and its implications for financial markets, credit extension and economic growth. It committed to address unintended consequences as necessary.

The revisions to the LCR incorporate amendments to the definition of high-quality liquid assets (HQLA) and net cash outflows. In addition, the Basel Committee has agreed a revised timetable for phase-in of the standard and additional text to give effect to the Committee's intention for the stock of liquid assets to be used in times of stress. The changes to the definition of the LCR, developed and agreed by the Basel Committee over the past two years, include an expansion in the range of assets eligible as HQLA and some refinements to the assumed inflow and outflow rates to better reflect actual experience in times of stress.

Once the LCR has been fully implemented, its 100% threshold will be a minimum requirement in normal times. During a period of stress, banks would be expected to use their pool of liquid assets, thereby temporarily falling below the minimum requirement. The GHOS agreed that the LCR should be subject to phase-in arrangements which align with those that apply to the Basel III capital adequacy requirements.

Specifically, the LCR will be introduced as planned on 1 January 2015, but the minimum requirement will begin at 60%, rising in equal annual steps of 10 percentage points to reach 100% on 1 January 2019. This graduated approach is designed to ensure that the LCR can be introduced without disruption to the orderly strengthening of banking systems or the ongoing financing of economic activity.

The GHOS agreed that, during periods of stress it would be entirely appropriate for banks to use their stock of HQLA, thereby falling below the minimum. Moreover, it is the responsibility of bank supervisors to give guidance on usability according to circumstances.

The GHOS also agreed that, since deposits with central banks are the most - indeed, in some cases, the only - reliable form of liquidity, the interaction between the LCR and the provision of central bank facilities is critically important. The Committee will therefore continue to work on this issue over the course of 2013.

Mervyn King, Chairman of the GHOS and Governor of the Bank of England, said, "The Liquidity Coverage Ratio is a key component of the Basel III framework. The agreement reached today is a very significant achievement. For the first time in regulatory history, we have a truly global minimum standard for bank liquidity. Importantly, introducing a phased timetable for the introduction of the LCR, and reaffirming that a bank's stock of liquid assets are usable in times of stress, will ensure that the new liquidity standard will in no way hinder the ability of the global banking system to finance a recovery."

Basel III counterparty credit risk and exposures to central counterparties - Frequently asked questions (update of FAQs published in November 2012)
December 2012

www.bis.org/publ/bcbs237.htm

The Basel Committee on Banking Supervision has received a number of interpretation questions related to the December 2010 publication of the Basel III regulatory frameworks for capital and liquidity as well as the July 2012 publication of the interim framework for determining capital requirements for bank exposures to CCPs.

Today's publication sets out the fourth set of frequently asked questions (FAQs) that relate to Basel III counterparty credit risk requirements, including the default counterparty credit risk charge, the credit valuation adjustment capital charge and asset value correlations. It also includes FAQs relating to the interim framework for bank exposures to CCPs. FAQs that have been added since the publication of the third version of this document in November 2012 are shaded yellow

Revisions to the Basel Securitisation Framework - consultative document
December 2012

www.bis.org/publ/bcbs236.htm

The performance of securitisation exposures and the central role they played during the recent financial crisis were a key motivation for the Basel Committee to perform a broader review of its securitisation framework for regulatory capital requirements. The Committee's objectives are to make capital requirements more prudent and risk-sensitive; to mitigate mechanistic reliance on external credit ratings; and to reduce current cliff effects in capital requirements.

The major elements of the proposed revised framework include the following:

- The Committee is considering two possible hierarchies that would be significantly different from hierarchies currently employed in the securitisation framework. These two hierarchies differ in aspects such as the specific approach to be applied for certain types of exposures, the order and scope of application of approaches, as well as the flexibility that is given to either jurisdictions or to banks to opt for one approach or the other.
- The Committee is proposing enhancements to the current ratings-based approaches and the supervisory formula approach included in the Basel II securitisation framework. The proposal contains a revised ratings-based approach and a modified supervisory formula approach, both of which are intended to create a more risk-sensitive and prudent calibration. To accomplish these objectives, underlying assumptions of the current framework have been revised to reflect lessons learned during the crisis. The enhanced approaches also incorporate additional risk drivers, such as maturity.
- The proposed revisions to the securitisation framework include the introduction of new approaches, such as a simplified supervisory formula approach and different applications of the concentration ratio based approach that was included in the Basel 2.5 enhancements.

In the coming months, the Committee will conduct a quantitative impact study (QIS) on the proposals. Responses to the public consultation, together with the QIS results, will be considered as the Committee moves forward to revise the securitisation framework.

Basel III counterparty credit risk - Frequently asked questions (update of FAQs published in July 2012)
November 2012

www.bis.org/publ/bcbs235.htm

The Basel Committee on Banking Supervision has received a number of interpretation questions related to the December 2010 publication of the Basel III regulatory frameworks for capital and liquidity and the 13 January 2011 press release on the loss absorbency of capital at the point of non-viability.

Today's publication sets out the third set of frequently asked questions (FAQs) that relate to counterparty credit risk, including the default counterparty credit risk charge, the credit valuation adjustment (CVA) capital charge and asset value correlations. FAQs that have been added since the publication of the second version of this document in July 2012 are shaded yellow.

These FAQs aim to promote consistent global implementation of Basel III.

Committee on the Global Financial System

Operationalising the selection and application of macroprudential instruments
December 2012

www.bis.org/publ/cgfs48.htm

This report - prepared by a Working Group chaired by José-Manuel González-Páramo, formerly European Central Bank - aims to help policymakers in operationalising macroprudential policies. Specifically, it draws out three high-level criteria that are key in determining the selection and application of macroprudential instruments:

(i) the ability to determine the appropriate timing for the activation or deactivation of the instrument;
(ii) the effectiveness of the instrument in achieving the stated policy objective; and
(iii) the efficiency of the instrument in terms of a cost-benefit assessment.

In trying to operationalise these criteria, this report proposes a number of practical tools. First, to help determine the appropriate timing for the activation and deactivation of instruments, it lays out stylised scenarios. Their identification is facilitated by two alternative approaches that seek to link systemic risk analysis and instrument selection. Second, to support the evaluation of the effectiveness and efficiency of macroprudential tools for a range of macroprudential instruments, the report proposes "transmission maps" - stylised presentations of how changes in individual instruments are expected to contribute to the objectives of macroprudential policy.

Committee on payment and Settlements Systems

Statistics on payment, clearing and settlement systems in the CPSS countries - Figures for 2011
January 2013

www.bis.org/publ/cpss107.htm

This is an annual publication that provides data on payments and payment, clearing and settlement systems in the CPSS countries.
This version of the statistical update contains data for 2011 and earlier years. There are detailed tables for each individual country as well as a number of comparative tables.
A preliminary version was published in September 2012.

Principles for financial market infrastructures: disclosure framework and assessment methodology
December 2012

www.bis.org/publ/cpss106.htm

The Committee on Payment and Settlement Systems (CPSS) and the International Organization of Securities Commissions (IOSCO) have published a disclosure framework and assessment methodology for their Principles for financial market infrastructures (PFMIs), the new international standards for financial market infrastructures:

- the disclosure framework is intended to promote consistent and comprehensive public disclosure by FMIs in line with the requirements of the PFMIs; and
- the assessment methodology provides guidance for monitoring and assessing observance with the PFMIs.

The disclosure framework and assessment methodology were issued for public consultation in April as two separate documents. The final versions being issued now as Principles for financial market infrastructures: disclosure framework and assessment methodology have been revised in light of the comments received during that consultation. Given that disclosure and assessment are closely related, the CPSS and IOSCO have revised the disclosure framework so that it more closely mirrors the assessment methodology and combined the two documents into one for the final versions. This is also in line with comments received during the consultation.
The disclosure framework and the assessment methodology promote consistent disclosures of information by FMIs and consistent assessments by international financial institutions and national authorities. The assessment methodology is primarily intended for use by external assessors at the international level, in particular the International Monetary Fund and the World Bank. It also provides a baseline for national authorities to assess observance of the principles by the FMIs under their oversight or supervision and to self-assess the way they discharge their own responsibilities as regulators, supervisors, and overseers.
The PFMIs are new international standards for payment, clearing and settlement systems, including central counterparties, that were published in April as Principles for financial market infrastructures (PFMIs). The PFMIs are designed to ensure that the infrastructure supporting global financial markets is robust and thus well placed to withstand financial shocks.

Speeches

Assessing global liquidity from a financial stability perspective

Speech by Jaime Caruana, General Manager of the Bank for International Settlements, at the 48th SEACEN Governors' Conference and High-Level Seminar, Ulaanbaatar, 22–24 November 2012.

www.bis.org/speeches/sp121122.htm

Global liquidity has become a focus of the international policy debate. Despite accommodative monetary policies and a pickup in search-for-yield behaviour, several factors seem to suggest that financial stability risks stemming from global liquidity conditions are limited. In particular, elements of credit growth, notably cross-border flows, remain muted in comparison to past liquidity surges. Meanwhile, the macroeconomic environment in the major economies is still weak and uncertain. That said, the extremely low volatility in financial markets contrasts with a widespread slowdown in global economic growth and the well-known risks related to public finances and to impaired banking systems in some advanced economies. This could make global liquidity conditions vulnerable to event risks. Furthermore, stocks of credit may also be a concern. In advanced economies, these need to fall further to support a selfsustaining recovery. For several emerging market economies, including in Asia, financial stability risks stem primarily from prolonged credit and property price booms, and the prospect of a turn in the credit cycle. The current calm should thus be used to implement policies to contain these medium-term risks.