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 43 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 30 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)

These statistics are derived from various national, market and institutional data sources and provide information on amounts outstanding and flows of debt securities issuance in both international and domestic markets. Nominal values are used and the data are broken down using similar criteria as for the banking statistics, ie sector, currency and maturity. However, only the liabilities of the issuers are covered.

International debt securities comprise domestic and foreign currency issues by residents of a given country outside their respective domestic market, foreign currency issues by residents in their domestic market and foreign and domestic currency debt securities issued in the domestic market by non-residents. Breakdowns are available in terms of currency, sector and maturity.

Domestic debt securities comprise issues in domestic markets in national currency for 53 countries. Breakdowns are provided in terms of sector and maturity. As far as possible, the BIS endeavours to eliminate any overlap between its international and domestic debt securities statistics.

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

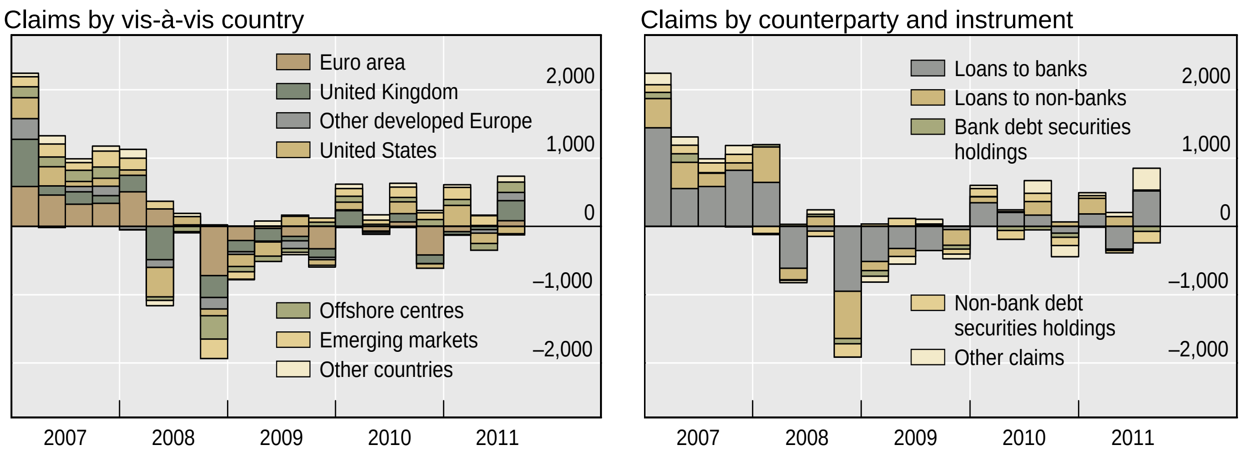
Table 1A: International positions of banks by residence of counterparty, September 2011[1]

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	
Amounts outstanding								
Total claims	**26,755**	**4,671**	**3,773**	**498**	**1,702**	**876**	**697**	**35,878**
Total cross-border claims	**23,734**	**4,091**	**3,178**	**490**	**1,340**	**757**	**591**	**31,682**
Loans	17,024	3,398	2,514	445	1,071	572	426	23,303
Securities	4,728	553	357	21	143	77	117	5,742
Claims on banks	15,422	2,601	1,720	193	882	407	238	20,308
Claims on non-banks	8,312	1,490	1,459	297	458	350	353	11,374
US dollar	9,124	2,653	1,297	278	415	202	401	13,159
Euro	10,144	303	480	91	52	315	22	11,062
Foreign currency claims on residents	**3,021**	**580**	**595**	**8**	**362**	**119**	**105**	**4,196**
Estimated exchange rate adjusted changes during the quarter[2]								
Total claims	**553**	**190**	**-2**	**-8**	**32**	**-32**	**5**	**791**
Total cross-border claims	**427**	**151**	**-18**	**-9**	**25**	**-35**	**1**	**610**
Loans	300	169	23	-6	37	-20	13	531
Securities	-190	-22	-32	-2	-8	-13	-9	-241
Claims on banks	646	151	-9	-8	22	-21	-3	826
Claims on non-banks	-219	-1	-9	-1	3	-15	4	-216
US dollar	-74	143	3	-8	4	-2	8	71
Euro	353	-5	-1	2	3	-3	-4	369
Foreign currency claims on residents	**126**	**39**	**16**	**1**	**7**	**4**	**4**	**181**
Amounts outstanding								
Total liabilities	**23,263**	**5,425**	**2,891**	**793**	**1,143**	**410**	**545**	**34,879**
Total cross-border liabilities	**19,949**	**4,541**	**2,279**	**780**	**733**	**306**	**459**	**30,069**
Deposits	17,323	4,391	2,189	766	703	301	419	24,395
Securities	1,396	94	27	9	9	0	9	4,110
Liabilities to banks	14,750	3,187	1,381	481	466	221	213	22,023
Liabilities to non-banks	5,199	1,354	898	299	268	85	246	8,046
US dollar	8,002	3,015	1,231	511	268	107	345	13,196
Euro	8,187	451	348	127	51	125	45	9,819
Foreign currency liabilities to residents	**3,314**	**884**	**611**	**13**	**410**	**104**	**85**	**4,810**
Estimated exchange rate adjusted changes during the quarter[2]								
Total liabilities	**995**	**3**	**-12**	**-14**	**-14**	**5**	**12**	**965**
Total cross-border liabilities	**843**	**-40**	**-6**	**-18**	**-15**	**6**	**21**	**776**
Deposits	571	-34	-9	-17	-13	5	16	583
Securities	-69	-8	-2	-1	-3	0	3	-184
Liabilities to banks	778	-51	3	-21	-14	11	27	717
Liabilities to non-banks	65	11	-9	3	-1	-5	-7	59
US dollar	122	-41	-32	-17	-13	-16	14	-41
Euro	626	-5	34	-2	10	23	3	719
Foreign currency liabilities to residents	**153**	**43**	**-6**	**4**	**1**	**-1**	**-9**	**190**

Cross-border positions

Exchange rate adjusted changes in stocks



[1] Detailed breakdowns and time series data are available at http://www.bis.org/statistics/bankstats.htm (Tables1–7B). [2] Taking into account exchange rate effects on outstanding balances in non-dollar currencies.

Table 1B: International positions of banks by nationality of head office, September 2011[1]

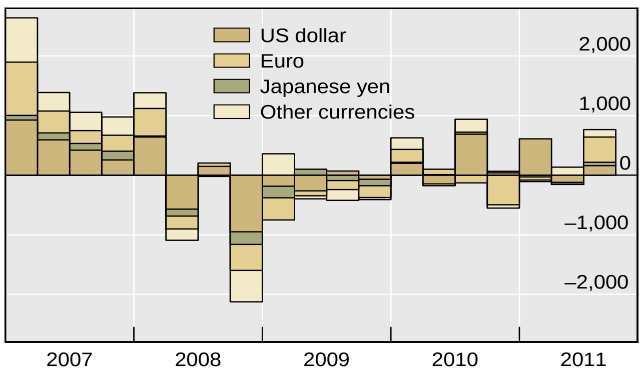
In billions of US dollars

	Nationality of banks										All countries
	France	Germany	Italy	Nether-lands	Spain	Switzer-land	United Kingdom	Japan	United States	Emerging markets	
	Amounts outstanding										
Total claims	**4,067**	**4,147**	**967**	**1,592**	**770**	**2,523**	**4,709**	**3,972**	**4,856**	**1,453**	**35,836**
on banks	2,793	2,360	549	989	429	1,620	2,866	1,669	3,473	728	21,633
on related foreign offices	1,115	1,326	281	433	266	709	1,542	755	2,322	229	11,096
on other banks	1,664	1,024	268	555	161	905	1,273	914	1,147	465	10,375
on official monetary institutions	14	9	0	2	3	6	52	0	4	33	162
on non-banks	1,274	1,787	418	602	340	903	1,843	2,302	1,383	725	14,203
US dollar	1,228	1,321	150	409	257	1,271	1,917	2,081	3,343	1,049	14,919
Euro	2,125	2,227	731	859	332	635	1,636	466	667	117	11,759
Other currencies	713	599	86	324	180	617	1,157	1,425	846	287	9,158
	Estimated exchange rate adjusted changes during the quarter[2]										
Total claims	**-276**	**22**	**-5**	**56**	**-53**	**29**	**11**	**140**	**393**	**103**	**766**
on banks	-189	57	-33	68	-51	67	76	82	436	25	824
on related foreign offices	-160	73	-44	-13	-45	27	41	30	262	18	230
on other banks	-20	-16	12	81	-8	38	12	53	172	5	551
on official monetary institutions	-9	-1	0	0	2	2	23	0	2	2	44
on non-banks	-87	-34	27	-12	-2	-38	-65	57	-43	78	-59
US dollar	-182	12	-26	-22	-6	32	-114	101	243	105	161
Euro	-24	37	29	65	-32	25	74	-10	86	0	427
Other currencies	-70	-27	-8	13	-15	-27	51	49	64	-2	177
	Amounts outstanding										
Total liabilities	**3,838**	**3,447**	**939**	**1,698**	**1,005**	**2,701**	**4,775**	**2,289**	**5,381**	**1,440**	**34,800**
to banks	2,601	2,020	646	1,205	478	1,505	2,473	1,343	3,205	824	20,367
to related foreign offices	996	1,301	224	351	207	791	1,273	612	1,820	197	9,473
to other banks	1,512	616	404	822	246	690	1,072	692	1,217	608	10,080
to official monetary institutions	92	103	18	32	25	25	127	38	168	19	814
to non-banks	1,238	1,428	293	493	527	1,196	2,303	947	2,176	615	14,433
US dollar	1,190	1,416	125	558	276	1,294	1,612	1,367	3,980	959	15,371
Euro	1,920	1,346	718	719	570	708	1,601	236	627	133	10,758
Other currencies	729	685	96	420	159	699	1,563	687	775	348	8,671
	Estimated exchange rate adjusted changes during the quarter[2]										
Total liabilities	**-318**	**113**	**-63**	**110**	**-77**	**62**	**144**	**139**	**350**	**32**	**855**
to banks	-163	104	-56	73	-63	41	172	66	326	50	801
to related foreign offices	-181	52	3	-8	-41	2	80	38	230	18	214
to other banks	32	42	-49	86	-9	31	70	36	75	27	576
to official monetary institutions	-15	11	-10	-5	-13	7	21	-8	21	5	11
to non-banks	-154	8	-7	37	-14	21	-28	72	24	-18	54
US dollar	-286	32	-67	-17	-40	40	-45	100	251	22	-73
Euro	65	97	26	112	-10	22	126	-5	98	9	766
Other currencies	-97	-16	-22	16	-28	0	62	44	1	1	161

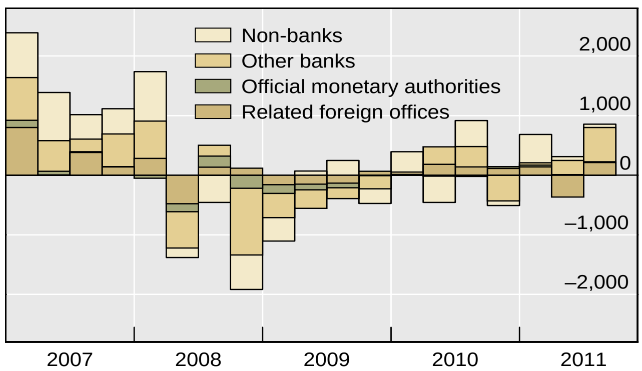
International positions of BIS reporting banks

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 2011[1]

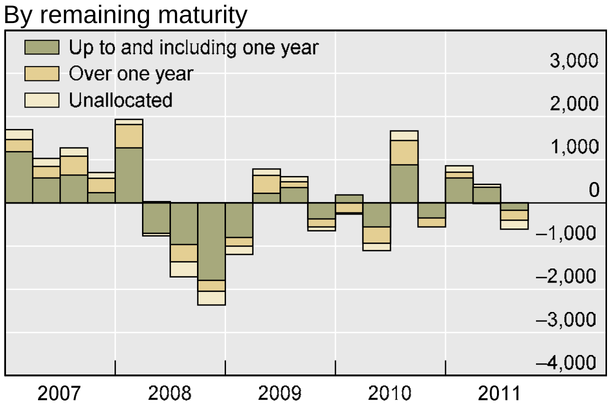
Amounts outstanding, in billions of US dollars

	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	**23,783**	**6,241**	**9,632**	**1,103**	**2,629**	**5,399**	**662**	**2,059**	**1,417**	**1,261**	**31,949**
International claims	**15,036**	**2,884**	**6,931**	**688**	**2,088**	**3,155**	**440**	**1,370**	**803**	**542**	**20,418**
Up to and including one year	8,045	1,124	3,554	558	1,068	1,676	204	915	301	256	10,820
Over one year	4,650	1,066	2,318	78	623	1,210	218	325	443	224	6,526
Unallocated by maturity	2,341	695	1,058	52	398	270	18	130	59	63	3,072
Local currency claims	**8,747**	**3,357**	**2,701**	**415**	**540**	**2,243**	**222**	**689**	**614**	**719**	**11,531**
Local currency liabilities	**6,186**	**2,550**	**1,837**	**240**	**450**	**1,569**	**189**	**458**	**368**	**555**	**8,207**
	Unadjusted changes during the quarter[2]										
Foreign claims	*-413*	*288*	*-587*	*41*	*6*	*-262*	*-13*	*-37*	*-113*	*-99*	*-672*
International claims	*-539*	*245*	*-701*	*34*	*6*	*-76*	*1*	*-16*	*-56*	*-5*	*-610*
Local currency claims	*126*	*43*	*113*	*7*	*0*	*-186*	*-14*	*-21*	*-57*	*-95*	*-62*
Local currency liabilities	*-198*	*0*	*-98*	*-27*	*1*	*-130*	*-14*	*-9*	*-31*	*-76*	*-327*
Nationality of reporting banks:	**Foreign claims**										
Domestically owned banks (total)	**19,776**	**5,650**	**7,782**	**804**	**2,540**	**4,936**	**618**	**1,769**	**1,368**	**1,180**	**27,386**
Euro area	8,795	1,748	4,524	227	453	2,271	249	329	1,113	580	11,577
Switzerland	1,431	698	360	86	209	166	28	75	20	43	1,812
United Kingdom	2,664	1,155	1,084	127	578	918	226	486	55	152	4,198
Japan	2,055	1,095	502	0	571	329	32	219	23	54	2,955
United States	2,033	0	718	313	448	712	54	341	74	244	3,210
Other countries[3]	2,799	954	595	50	279	540	28	320	84	108	3,634
Other foreign banks	**4,006**	**592**	**1,849**	**299**	**88**	**463**	**44**	**290**	**49**	**81**	**4,563**
	International claims, all maturities										
Domestically owned banks (total)	**11,030**	**2,292**	**5,082**	**389**	**2,000**	**2,693**	**396**	**1,080**	**754**	**462**	**15,855**
Euro area	4,894	699	2,668	106	407	1,145	174	240	562	168	6,505
Switzerland	723	152	329	51	195	135	25	61	19	30	1,059
United Kingdom	1,268	400	648	65	259	416	100	229	39	49	1,980
Japan	1,664	789	472	0	531	254	32	146	23	53	2,448
United States	1,343	0	604	135	393	382	37	194	46	105	2,135
Other countries[3]	1,138	252	360	31	215	360	28	211	65	57	1,729
Other foreign banks	**4,006**	**592**	**1,849**	**299**	**88**	**463**	**44**	**290**	**49**	**80**	**4,563**
	International claims, short-term										
Domestically owned banks (total)	**5,227**	**794**	**2,279**	**271**	**1,008**	**1,373**	**178**	**689**	**278**	**228**	**7,638**
Euro area	2,241	322	1,017	62	199	449	62	129	183	75	2,895
Switzerland	448	80	207	32	129	81	19	39	9	15	660
United Kingdom	583	158	312	32	157	233	46	141	23	23	976
Japan	250	97	68	0	62	100	7	76	6	10	412
United States	1,027	0	460	119	342	318	31	171	35	80	1,700
Other countries[3]	677	138	215	27	119	192	12	134	22	25	994
Other foreign banks	**2,819**	**330**	**1,275**	**287**	**59**	**303**	**26**	**226**	**23**	**27**	**3,183**

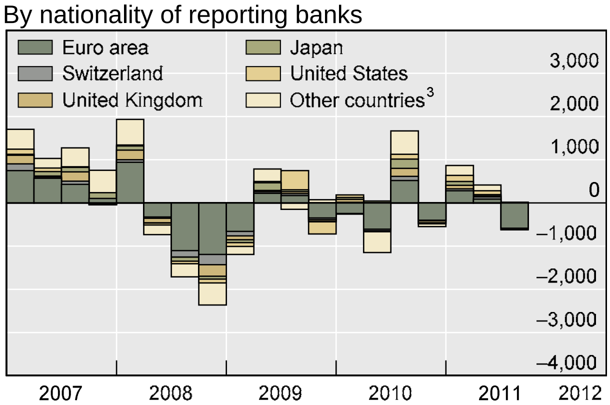
International claims of BIS reporting banks on an immediate borrower basis[4]

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. [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 2011[1]

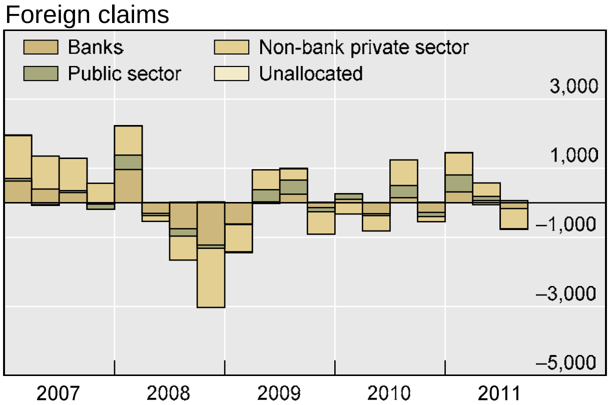
Amounts outstanding, in billions of US dollars

	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	**19,359**	**5,700**	**7,568**	**832**	**1,889**	**4,767**	**596**	**1,714**	**1,309**	**1,148**	**26,169**
Banks	4,658	897	2,049	247	173	956	96	503	208	149	5,795
Public sector	3,974	1,406	1,591	363	202	1,171	134	364	289	385	5,464
Non-bank private sector	10,597	3,346	3,906	222	1,486	2,621	366	846	797	612	14,730
Unallocated	131	52	22	1	27	19	1	1	15	2	180
Cross-border claims	**9,991**	**2,378**	**4,999**	**363**	**1,164**	**2,121**	**358**	**887**	**511**	**365**	**13,428**
Local claims in all currencies	**9,366**	**3,321**	**2,569**	**469**	**725**	**2,644**	**238**	**826**	**798**	**782**	**12,738**
	Unadjusted changes during the quarter[2]										
Foreign claims	*-419*	*59*	*-410*	*23*	*-16*	*-273*	*-8*	*-52*	*-103*	*-111*	*-707*
Cross-border claims	*-433*	*14*	*-377*	*34*	*-31*	*-79*	*5*	*-41*	*-22*	*-22*	*-539*
Local claims in all currencies	*12*	*43*	*-33*	*-11*	*15*	*-196*	*-13*	*-12*	*-80*	*-91*	*-172*
Nationality of reporting banks[3]	**Foreign claims**										
Total	**19,359**	**5,700**	**7,568**	**832**	**1,889**	**4,767**	**596**	**1,714**	**1,309**	**1,148**	**26,169**
Euro area	8,631	1,749	4,439	229	365	2,195	248	310	1,060	577	11,251
France	2,449	570	1,354	139	107	484	142	116	186	41	3,050
Germany	2,523	586	1,142	55	148	333	60	103	127	44	3,035
Italy	650	35	533	…	15	219	12	20	181	6	888
Spain	910	216	256	2	21	505	5	11	46	443	1,437
witzerland	1,475	731	360	84	146	146	18	67	22	39	1,773
nited Kingdom	2,639	1,134	1,066	142	521	929	224	496	55	154	4,125
apan	2,046	1,198	439	0	353	317	30	206	23	57	2,715
nited States	2,118	0	733	338	309	709	52	342	72	242	3,165
Other countries	2,452	888	532	39	197	471	23	292	77	80	3,139
	Cross-border claims										
Total	**9,991**	**2,378**	**4,999**	**363**	**1,164**	**2,121**	**358**	**887**	**511**	**365**	**13,428**
Euro area	4,598	713	2,725	102	280	893	186	206	366	136	5,832
France	1,321	213	741	70	81	286	97	78	78	33	1,698
Germany	1,706	341	962	24	127	249	58	65	85	41	2,113
Italy	297	27	204	…	14	48	6	13	24	6	363
Spain	187	23	113	2	12	53	4	11	5	33	254
witzerland	665	170	328	47	111	114	16	52	20	25	895
nited Kingdom	1,215	381	623	65	151	339	74	191	33	42	1,742
apan	1,663	906	407	0	298	215	30	108	22	55	2,176
nited States	1,112	0	620	129	235	327	32	170	41	84	1,704
Other countries	738	207	298	20	90	233	19	161	29	24	1,078
	Other potential exposures[4, 5]										
Derivatives contracts	4,204	1,092	1,629	123	160	235	41	92	34	67	4,618
Guarantees extended	6,707	822	2,386	208	247	1,112	142	335	368	266	8,231
Credit commitments	2,852	894	987	57	200	581	78	184	143	176	3,635

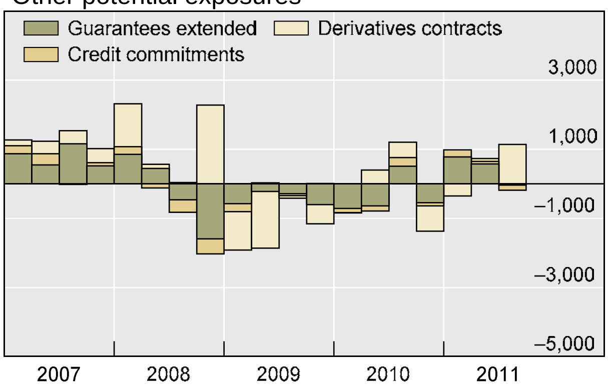
Consolidated claims and other potential exposures of BIS reporting banks on an ultimate risk basis

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. [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.

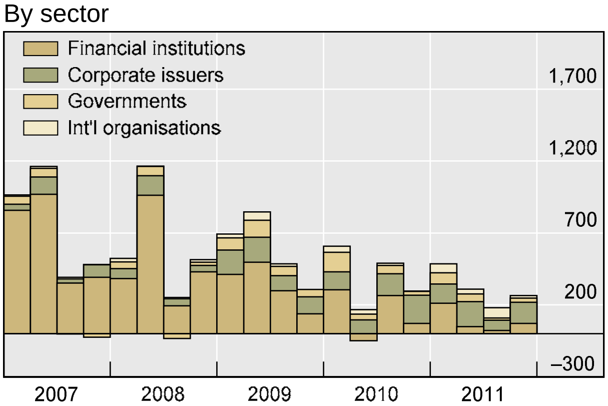
Table 3A: International debt securities issuance, December 2011[1]

In billions of US dollars

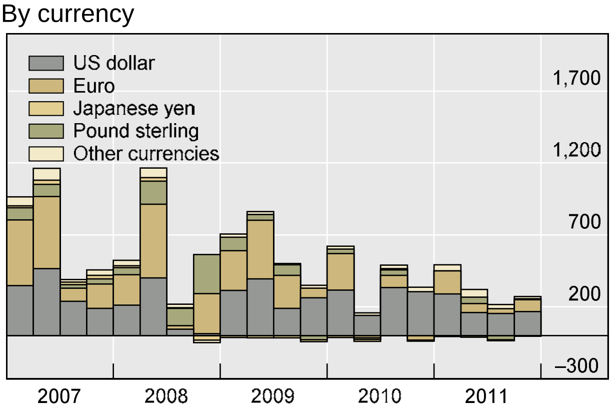
	Developed countries				Off-shore centres	Emerging markets					Int'l organi-sations	All countries
	Total	United States	Euro area	Japan		Total	Africa	Asia	Europe	Latin America		
						Amounts outstanding						
Total issues	**24,561**	**6,821**	**11,713**	**181**	**1,593**	**1,287**	**171**	**348**	**297**	**471**	**1,273**	**28,715**
Money market instruments	**810**	**47**	**497**	**1**	**47**	**8**	**1**	**6**	**0**	**1**	**30**	**895**
Financial institutions	742	47	455	1	46	8	0	6	0	1	0	796
Corporate issuers	34	0	23	0	1	0	0	0	0	0	0	35
Governments	34	0	19	0	0	1	1	0	0	0	0	35
US dollar	263	41	138	0	23	5	1	4	0	1	12	303
Euro	356	3	248	0	4	1	0	1	0	0	10	372
Other currencies	190	3	111	1	21	3	0	2	0	0	8	221
Bonds and notes	**23,751**	**6,774**	**11,216**	**180**	**1,546**	**1,279**	**171**	**341**	**297**	**470**	**1,244**	**27,820**
Financial institutions	18,312	4,783	8,779	136	1,429	323	45	156	37	86	0	20,064
Corporate issuers	3,593	1,978	919	42	71	346	59	107	39	142	0	4,010
Governments	1,846	12	1,519	2	46	609	67	78	221	243	0	2,500
US dollar	8,924	5,995	1,227	57	1,112	933	126	271	152	385	342	11,311
Euro	11,058	472	9,064	10	166	184	19	9	116	41	325	11,733
Other currencies	3,770	307	925	112	268	161	25	61	29	45	576	4,776
Floating rate	6,995	1,039	3,812	21	553	86	27	32	12	16	72	7,707
Straight fixed rate	16,388	5,590	7,299	125	931	1,135	134	269	283	449	1,172	19,625
Equity-related	368	145	105	33	62	58	9	41	2	6	0	488
						Net issuance during the quarter						
Total issues	**189**	**56**	**131**	**3**	**16**	**42**	**14**	**6**	**1**	**21**	**17**	**265**
Money market instruments	**-39**	**-28**	**3**	**0**	**1**	**1**	**0**	**1**	**0**	**0**	**3**	**-33**
Financial institutions	-40	-27	8	0	1	1	0	1	0	0	0	-38
Corporate issuers	0	-1	-3	0	0	0	0	0	0	0	0	-1
Governments	2	0	-1	0	0	0	0	0	0	0	0	2
US dollar	-35	-26	-6	0	3	1	0	1	0	0	-1	-33
Euro	5	0	8	0	-3	0	0	0	0	0	3	5
Other currencies	-9	-1	1	0	1	0	0	0	0	0	2	-6
Bonds and notes	**228**	**84**	**128**	**3**	**15**	**41**	**14**	**5**	**1**	**21**	**14**	**299**
Financial institutions	94	5	96	0	10	5	1	3	0	1	0	109
Corporate issuers	123	78	27	3	1	24	8	2	0	14	0	149
Governments	10	0	6	0	4	13	5	0	1	6	0	26
US dollar	143	114	2	1	11	36	14	3	3	16	9	200
Euro	82	-18	119	0	-2	-1	0	-1	-2	1	-1	78
Other currencies	2	-13	7	2	6	6	0	2	0	4	6	21
Floating rate	42	-38	53	-1	-3	0	2	-3	1	0	3	41
Straight fixed rate	183	119	77	1	18	44	12	10	0	21	11	256
Equity-related	3	3	-2	3	1	-2	0	-2	0	0	0	2
Memo: Announced international equity issuance	*54*	*22*	*20*	*1*	*3*	*20*	*1*	*17*	*1*	*1*	*0*	*77*

Net international debt securities issuance

By sector



By currency



[1] Detailed breakdowns and time series data, including for gross international debt securities issuance, are available at http://www.bis.org/statistics/secstats.htm (Tables 11, 12A–D, 13A–B, 14A–B, 15A–B and 17B).

Table 3B: Domestic debt securities issuance, September 2011[1]

In billions of US dollars

Amounts outstanding

	All countries	United States	Euro area	France	Germany	Italy	Spain	Other developed	Canada	Japan	United Kingdom
Total issues	**69,938**	**26,176**	**13,489**	**3,384**	**2,648**	**3,114**	**1,472**	**21,010**	**1,507**	**15,139**	**1,745**
Governments	41,989	12,550	7,555	1,800	1,813	2,012	691	16,358	1,062	12,967	1,433
Of which: short-term[2]	10,250	2,623	1,781	383	519	429	170	4,266	203	3,709	211
Financial institutions	20,725	10,381	4,633	1,290	447	744	757	3,379	274	1,236	293
Of which: short-term[2]	5,541	2,097	1,127	499	386	22	47	1,406	92	477	293
Corporate issuers	7,225	3,245	1,301	294	388	358	24	1,272	171	936	20
Of which: short-term[2]	839	159	207	82	72	1	1	148	13	111	1

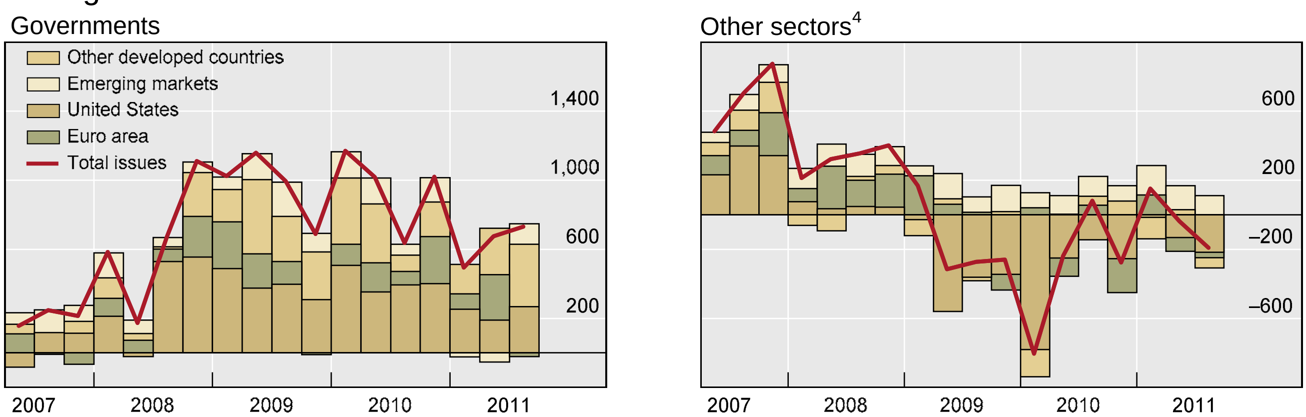
	Emerging markets	Brazil	China	Chinese Taipei	Czech Republic	India	Malaysia	Mexico	South Africa	South Korea	Turkey
Total issues	**9,263**	**1,368**	**3,232**	**254**	**86**	**649**	**284**	**445**	**179**	**1,123**	**199**
Governments	5,525	847	1,477	152	59	557	125	270	122	487	196
Of which: short-term[2]	1,580	325	487	17	13	25	1	96	25	132	0
Financial institutions	2,331	510	1,127	37	18	69	73	139	32	237	2
Of which: short-term[2]	910	510	125	8	0	69	31	26	4	106	2
Corporate issuers	1,406	10	628	65	9	23	86	36	25	399	1
Of which: short-term[2]	325	10	149	22	0	23	4	2	0	105	0

Changes in stocks during the quarter

	All countries	United States	Euro area	France	Germany	Italy	Spain	Other developed	Canada	Japan	United Kingdom
Total issues	**530**	**52**	**-54**	**58**	**-18**	**-8**	**-19**	**301**	**24**	**207**	**75**
Governments	726	268	-21	-14	21	-20	3	361	17	227	89
Of which: short-term[3]	55	-54	13	10	-8	9	2	95	6	100	-1
Financial institutions	-228	-257	-14	64	-40	13	-22	-48	4	-7	-14
Of which: short-term[3]	-192	-209	45	48	19	0	-19	-56	5	-1	-14
Corporate issuers	32	41	-19	9	1	-1	0	-11	3	-13	0
Of which: short-term[3]	3	10	20	11	8	0	0	-14	2	-16	0

	Emerging markets	Brazil	China	Chinese Taipei	Czech Republic	India	Malaysia	Mexico	South Africa	South Korea	Turkey
Total issues	**231**	**66**	**33**	**-4**	**3**	**…**	**5**	**18**	**6**	**11**	**2**
Governments	119	40	-35	-3	3	…	-3	17	5	3	2
Of which: short-term[3]	0	29	-87	-2	0	…	0	0	1	0	-3
Financial institutions	91	26	54	1	1	…	9	0	1	-2	0
Of which: short-term[3]	27	26	0	1	0	…	4	-3	0	-1	0
Corporate issuers	21	0	14	-1	0	…	0	1	0	10	0
Of which: short-term[3]	-13	0	-11	-2	0	…	0	0	0	0	0

Changes in stocks of domestic debt securities



Euro area: Austria, Belgium, Cyprus, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Malta, the Netherlands, Portugal, Slovakia, Slovenia, Spain; Other developed countries: Australia, Canada, Denmark, Iceland, Japan, New Zealand, Norway, Sweden, Switzerland, the United Kingdom; Emerging markets: Argentina, Brazil, Chile, China, Chinese Taipei, Colombia, Croatia, the Czech Republic, Hong Kong SAR, Hungary, India, Indonesia, Lebanon, Malaysia, Mexico, Pakistan, Peru, the Philippines, Poland, Russia, Singapore, South Africa, South Korea, Thailand, Turkey, Venezuela.

[1] Detailed breakdowns and time series data are available at http://www.bis.org/statistics/secstats.htm (Tables 16A–16B and 17A). [2] Issues with a remaining maturity to final repayment of up to one year. [3] Money market instruments. [4] Financial institutions plus corporate issuers.

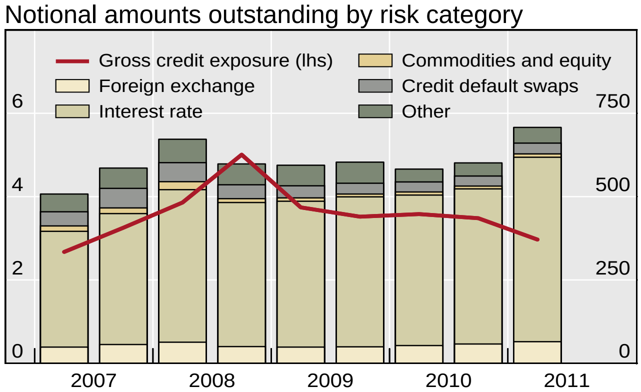
Table 4: Global OTC derivatives market, end-June 2011[1]

In billions of US dollars

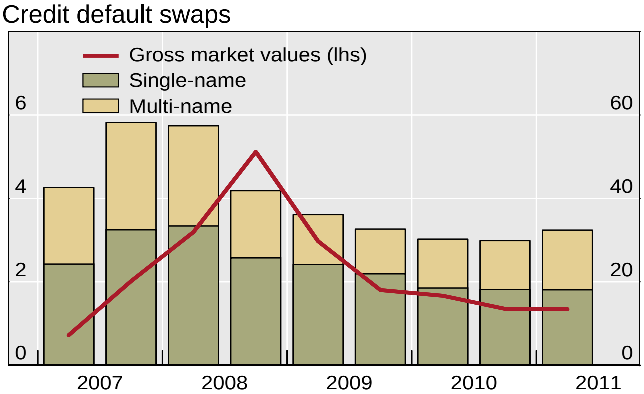
	Forwards and swaps				Options			
	Total	with reporting dealers	with other financial institutions	with non-financial customers	Total	with reporting dealers	with other financial institutions	with non-financial customers
	Notional amounts outstanding							
All contracts[2]	**628,722**	**178,009**	**400,536**	**47,898**	**78,847**	**42,129**	**29,345**	**6,231**
Foreign exchange	**53,341**	**21,007**	**24,278**	**8,055**	**11,358**	**5,163**	**4,575**	**1,619**
US dollar	45,414	19,202	20,336	5,876	8,621	3,900	3,457	1,265
Euro	20,805	7,582	9,209	4,014	4,168	1,818	1,584	766
Japanese yen	9,477	4,715	3,566	1,195	3,591	1,984	1,241	366
Pound sterling	6,304	2,185	2,974	1,145	707	299	277	132
Other	24,682	8,329	12,471	3,881	5,628	2,325	2,592	711
Up to one year	39,290	14,557	18,798	5,934	8,442	3,515	3,671	1,256
Over one year	14,051	6,450	5,480	2,121	2,915	1,648	904	363
Memo: Exchange-traded[3]	*205*	.	.	.	*184*	.	.	.
Interest rate	**497,457**	**127,347**	**333,984**	**36,127**	**56,423**	**32,309**	**20,384**	**3,729**
US dollar	154,726	40,081	104,480	10,165	15,932	8,136	6,761	1,035
Euro	192,979	41,451	138,361	13,167	26,703	15,697	9,357	1,649
Japanese yen	58,310	20,555	31,398	6,357	7,181	5,457	1,565	158
Pound sterling	46,190	8,583	34,472	3,134	3,932	2,155	1,603	174
Other	45,253	16,676	25,273	3,304	2,675	864	1,098	713
Up to one year	231,169	61,409	156,101	13,660	15,559	7,571	6,782	1,206
Over one year	266,288	65,938	177,884	22,467	40,863	24,739	13,602	2,523
Memo: Exchange-traded[3]	*28,939*	.	.	.	*47,116*	.	.	.
Equity	**2,029**	**598**	**1,103**	**328**	**4,813**	**1,885**	**2,455**	**472**
Memo: Exchange-traded[3]	*1,197*	.	.	.	*5,219*	.	.	.
Commodities	**2,129**	**...**	**...**	**...**	**1,068**	**...**	**...**	**...**
Credit default swaps	**32,409**	**17,348**	**14,823**	**238**	**...**	**...**	**...**	**...**
Unallocated	**41,357**	**11,709**	**26,347**	**3,151**	**5,186**	**2,771**	**1,930**	**410**
	Gross market values							
All contracts	**16,657**	**5,041**	**10,460**	**1,157**	**2,353**	**1,315**	**789**	**249**
Foreign exchange	**2,005**	**705**	**878**	**422**	**332**	**170**	**95**	**67**
US dollar	1,556	603	670	284	252	132	67	54
Euro	792	237	353	203	102	45	33	23
Japanese yen	378	169	137	72	162	98	35	30
Pound sterling	239	64	106	69	12	5	5	3
Other	1,043	337	491	215	136	60	51	24
Interest rate	**11,925**	**3,135**	**8,197**	**593**	**1,319**	**842**	**419**	**58**
US dollar	5,266	1,313	3,765	187	479	315	142	21
Euro	4,157	1,041	2,861	255	639	400	212	26
Japanese yen	915	349	527	39	97	72	24	2
Pound sterling	893	204	624	64	77	44	29	4
Other	694	227	420	47	28	12	12	4
Equity	**176**	**32**	**102**	**42**	**532**	**208**	**217**	**106**
Credit default swaps	**1,345**	**804**	**525**	**16**	**...**	**...**	**...**	**...**
Unallocated	**1,207**	**365**	**758**	**84**	**170**	**95**	**57**	**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, 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 statistics of the latest quarter for Chile and Non-US banks in Bahamas relate to 2011Q2. 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 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 30 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 http://www.bis.org/statistics/consstats.htm.

Tables 3A–3B

The methodology used to compile the international and domestic debt securities statistics and a description of the coverage can be found on pages 13 to 17 of the *Guide to the international financial statistics*, available at http://www.bis.org/publ/bispap14.htm.

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. "Governments" comprise central governments, other governments and central banks. "Financial institutions" comprise commercial banks and other financial institutions.

The international debt securities data include "repackaged securities", for example the new global issues of Argentina, resulting from the April 2005 exchange offer.

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 http://www.bis.org/publ/bispap14.htm.

Special features in the BIS Quarterly Review

December 2011	FX strategies in periods of distress	J Gyntelberg & A Schrimpf
December 2011	Renminbi internationalisation and China's financial development	R McCauley
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
September 2011	The trade balance and the real exchange rate	E Kharroubi
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September 2011	The rise of sovereign credit risk: implications for financial stability	M Davies & T Ng
June 2011	The global output gap: measurement issues and regional disparities	P Gerlach
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June 2011	The predictive content of financial cycle measures for output fluctuations	T Ng
June 2011	Expansion of central clearing	D Heller & N Vause
March 2011	Systemic importance: some simple indicators	M Drehmann & N Tarashev
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March 2011	Foreign exchange trading in emerging currencies: more financial, more offshore	R McCauley & M Scatigna
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December 2010	Derivatives in emerging markets	D Mihaljek & F Packer
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September 2010	Debt reduction after crises	G Tang & C Upper
September 2010	The collapse of international bank finance during the crisis: evidence from syndicated loan markets	M Chui, D Domanski, P Kugler & J Shek
September 2010	Options for meeting the demand for international liquidity during financial crises	R Moessner & W A Allen
September 2010	Bank structure, funding risk and the transmission of shocks across countries: concepts and measurement	I Fender & P McGuire

Recent BIS publications[1]

BIS Papers

Weathering financial crises: bond markets in Asia and the Pacific
January 2012

http://www.bis.org/publ/bppdf/bispap63.htm

The Bank for International Settlements (BIS) and the Bank of Japan (BOJ) jointly organised a high-level seminar on "The development of regional capital markets" in Yokohama, Japan, on 21-22 November 2011. The seminar brought together senior officials of 12 central banks in Asia and the Pacific, the European Central Bank, the Bank of Mexico, the Bank of England and the Federal Reserve Bank of New York, as well as an academic and a private sector participant. Masaaki Shirakawa, Governor of the BOJ and Chair of the Asian Consultative Council of the BIS, and Jaime Caruana, General Manager of the BIS, delivered welcoming remarks. The seminar consisted of five sessions on (1) development of domestic bond markets; (2) development of off-shore bond markets; (3) credit derivatives and structured finance in Asia and the Pacific; (4) credit rating agencies; and (5) market liquidity. It concluded with a panel discussion on the impact of capital flows on bond market development in Asia. This volume is a collection of the welcoming remarks, a paper based on the background note for the seminar, a paper on domestic bond markets in emerging market economies, and a paper on local currency bond markets and the Asian Bond Fund 2 Initiative. The last paper served as a basis for the panel discussion by Jaime Caruana at the seminar.

Financial sector regulation for growth, equity and stability
January 2012

http://www.bis.org/publ/bppdf/bispap62.htm

The financial crisis has demonstrated the need to better understand the complex interactions between the financial system and the real economy. While stability has become the main focus of the regulatory changes, the implications for growth and equity are also important. To think through these issues and provide an emerging market perspective, CAFRAL, in collaboration with the Bank for International Settlements, organised an international conference of central banks and regulators on "Financial regulation and its implications for growth equity and stability in the post crisis world" in Mumbai on 15th and 16th November 2011.
Several international experts and 26 representatives from 21 central banks/regulators joined Reserve Bank of India's Governor Duvvuri Subbarao and BIS General Manager Jaime Caruana at this conference. This volume is a collection of the speeches, papers and summaries of discussions in the conference.

Currency internationalisation: lessons from the global financial crisis and prospects for the future in Asia and the Pacific
January 2012

http://www.bis.org/publ/bppdf/bispap61.htm

Since its launch in September 2006, the Asian Research Programme has focused on policy-oriented studies for central banks and supervisory authorities in the Asia-Pacific region. Under the programme, the BIS Representative Office for Asia and the Pacific has co-organised a series of conferences, seminars and workshops with central banks and supervisory authorities in Asia and the Pacific. The subjects of interest have included improving monetary policy and operations, developing financial markets, maintaining financial stability and strengthening prudential policy.
On 19-20 March 2009, the BIS Asian Office and the Bank of Korea co-hosted a high-level seminar on currency internationalisation in Seoul. Participants from 12 central banks as well as academic scholars and BIS economists attended the seminar. The purpose of the seminar was to review experiences of economies in the Asia-Pacific region with currency internationalisation and to assess the prospects for further internationalisation, emphasising the policy implications facing central banks if current trends continue. Lessons learned about currency internationalisation since the intensification of the strains in global markets in mid-2007 were also discussed. This volume is a collection of the speeches, presentations and papers from the seminar.

Central Macroprudential regulation and policy
December 2011

http://www.bis.org/publ/bppdf/bispap60.htm

The Bank for International Settlements (BIS) and the Bank of Korea (BoK) jointly organised a conference on macroprudential regulation and policy in Seoul, Korea, on 16-18 January 2011. The conference aimed to bring academics together with researchers at central banks and other public institutions to present and discuss ongoing theoretical and empirical work in the field. In response to their call for papers, the organisers received more than 75 submissions from central banks, public agencies, supranational organisations and academic institutions. From these, a selection committee from the BIS and the BoK chose 12 papers organised around the following four themes: (i) systemic risk; (ii) financial system procyclicality; (iii) macroeconomic impact studies and early warning indicators; and (iv) effective implementation of macroprudential policy.
In all, 35 participants took part, including central bank economists from Asia and the Pacific, Europe, Latin America and the United States, as well as academics from Europe, Korea and North America. Governor Choongsoo Kim of the BoK gave the welcome address, and Governor Stefan Ingves of Sveriges Riksbank and Professor Hyun Song Shin from

[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).

Princeton University gave keynote speeches. The conference concluded with a policy panel focusing on macroprudential policy frameworks. This volume is a collection of the welcome address, keynote speeches, revised versions of all papers presented during the conference and the panel discussions.

Fiscal policy and its implications for monetary and financial stability
December 2011

http://www.bis.org/publ/bppdf/bispap59.htm

The BIS 10th Annual Conference took place in Lucerne, Switzerland on 23-24 June 2011. The event brought together senior representatives of central banks and academic institutions, who exchanged views on the conference theme of "Fiscal policy and its implications for monetary and financial stability". This volume contains the opening address of Stephen Cecchetti (Economic Adviser, BIS), a keynote address from Martin Feldstein, and the contributions of the policy panel on "Fiscal policy sustainability and implications for monetary and financial stability". The participants in the policy panel discussion, chaired by Jaime Caruana (General Manager, BIS), were José De Gregorio (Bank of Chile), Peter Diamond (Massachusetts Institute of Technology) and Peter Praet (European Central Bank).

Working Papers

Inflation dynamics in the presence of informal labour markets
Paul Castillo and Carlos Montoro

http://www.bis.org/publ/work372.htm

In this paper we analyse the effects of informal labour markets on the dynamics of inflation and on the transmission of aggregate demand and supply shocks. In doing so, we incorporate the informal sector in a modified New Keynesian model with labour market frictions as in the Diamond-Mortensen-Pissarides model. Our main results show that the informal economy generates a "buffer" effect that diminishes the pressure of demand shocks on inflation. This finding is consistent with the empirical literature on the effects of informal labour markets in business cycle fluctuations. This result implies that, in economies with large informal labour markets, changes in interest rates are more effective in stimulating real output and there is less impact on inflation. Furthermore, the model produces cyclical flows from informal to formal employment, consistent with the data.

Stochastic herding in financial markets evidence from institutional investor equity portfolios
Makoto Nirei, Theodoros Stamatiou and Vladyslav Sushko

http://www.bis.org/publ/work371.htm

We estimate a structural model of herding behavior in which feedback arises due to mutual concerns of traders over the unobservable "true" level of market liquidity. In a herding regime, random shocks are exacerbated by endogenous feedback, producing a dampened power-law in the fluctuation of largest sales. The key to the fluctuation is that each trader responds not only to private information, but also to the aggregate behavior of others. Applying the model to the data on portfolios of institutional investors (fund managers), we find that the empirical distribution is consistent with model predictions. A stock's realized illiquidity propagates herding and raises the probability of observing a sell-off. The distribution function itself has desirable properties for evaluating "tail risk".

Credit at times of stress: Latin American lessons from the global financial crisis
Carlos Montoro and Liliana Rojas-Suarez

http://www.bis.org/publ/work370.htm

The financial systems in emerging market economies (EMEs) during the 2008-09 global financial crisis performed much better than in previous crisis episodes, albeit with significant differences across regions. For example, real credit growth in Asia and Latin America was less affected than in Central and Eastern Europe. This paper identifies the factors at both the country and the bank levels that contributed to the behaviour of real credit growth in Latin America during the global financial crisis. The resilience of real credit during the crisis was highly related to policies, measures and reforms implemented in the pre-crisis period.

In particular, we find that the best explanatory variables were those that gauged the economy's capacity to withstand an external financial shock. Key were balance sheet measures such as the economy's overall currency mismatches and external debt ratios (measuring either total debt or short-term debt). The quality of pre-crisis credit growth mattered as much as its rate of expansion. Credit expansions that preserved healthy balance sheet measures (the "quality" dimension) proved to be more sustainable. Variables signalling the capacity to set countercyclical monetary and fiscal policies during the crisis were also important determinants. Moreover, financial soundness characteristics of Latin American banks, such as capitalisation, liquidity and bank efficiency, also played a role in explaining the dynamics of real credit during the crisis. We also found that foreign banks and banks which had expanded credit growth more before the crisis were also those that cut credit most.

The methodology used in this paper includes the construction of indicators of resilience of real credit growth to adverse external shocks in a large number of emerging markets, not just in Latin America. As additional data become available, these indicators could be part of a set of analytical tools to assess how emerging market economies are preparing themselves to cope with the adverse effects of global financial turbulence on real credit growth

Stress-testing macro stress testing: does it live up to expectations?
Claudio Borio, Mathias Drehmann and Kostas Tsatsaronis

http://www.bis.org/publ/work369.htm

We critically review the state of the art in macro stress testing, assessing its strengths and weaknesses. We argue that, given current technology, macro stress tests are ill-suited as early warning devices, ie as tools for identifying vulnerabilities during seemingly tranquil times and for triggering remedial action. By contrast, as long as properly designed, stress tests can be quite effective as crisis management and resolution tools. We also see additional side benefits, stemming largely from the way such tests can discipline thinking about financial stability. We suggest possible ways to improve their performance.

The sustainability of pension schemes
Srichander Ramaswamy

http://www.bis.org/publ/work368.htm

Poor financial market returns and low long-term real interest rates in recent years have created challenges for the sponsors of defined benefit pension schemes. At the same time, lower payroll tax revenues in a period of high unemployment, and rising fiscal deficits in many advanced economies as economic activity has fallen, are also testing the sustainability of pay-as-you-go public pension schemes. Amendments to pension accounting rules that require corporations to regularly report the valuation differences between their defined benefit pension assets and plan liabilities on their balance sheet have made investors more aware of the pension risk exposure for the sponsors of such schemes. This paper sheds light on what effects these developments are having on the design of occupational pension schemes, and also provides some estimates for the post-employment benefits that could be delivered by these schemes under different sets of assumptions. The paper concludes by providing some policy perspectives.

Is the long-term interest rate a policy victim, a policy variable or a policy lodestar?
Philip Turner

http://www.bis.org/publ/work367.htm

Few financial variables are more fundamental than the "risk free" real long-term interest rate because it prices the terms of exchange over time. During the past 15 years, it has dropped from a range of 4 to 5% to a range of 0 to 2%. By late 2011, cyclical factors had driven it close to zero. This paper explores why. Possible persistent factors are: the investment of the large savings generated by developing Asia in highly-rated bonds; accounting and valuation rules for institutional investment; and financial sector regulation. The consequences could be far-reaching: cheaper leverage; less pressure to correct fiscal deficits; larger interest rate exposures in the financial industry; and a more cyclical bond market. During the financial crisis, central banks in the advanced countries have made the long-term interest rate a policy variable as Keynes had always advocated. This policy focus will draw more attention to the macroeconomic and financial consequences of government debt management policies. Coordination between central bank balance sheet policies and government debt management is essential. With government debt very high for years to come, bond market volatility could confront central banks with unenviable choices.

Currency momentum strategies
Lukas Menkhoff, Lucio Sarno, Maik Schmeling and Andreas Schrimpf

http://www.bis.org/publ/work366.htm

We provide a broad empirical investigation of momentum strategies in the foreign exchange market. We find a signiffcant cross-sectional spread in excess returns of up to 10% p.a. between past winner and loser currencies. This spread in excess returns is not explained by traditional risk factors, it is partially explained by transaction costs and shows behavior consistent with investor under- and over-reaction. Moreover, crosssectional currency momentum has very different properties from the widely studied carry trade and is not highly correlated with returns of benchmark technical trading rules. However, there seem to be very effective limits to arbitrage which prevent momentum returns from being easily exploitable in currency markets.

Was this time different?: fiscal policy in commodity republics
Luis Felipe Céspedes and Andrés Velasco

http://www.bis.org/publ/work365.htm

According to standard economic theory, fiscal policy should be countercyclical. In the neoclassical smoothing model of Barro (1979), a government should optimally run surpluses in good times and deficits in bad times. That is the same a government should do, though for different reasons, in the standard Keynesian or neo-Keynesian framework.
Yet in practice governments often seem to follow a pro-cyclical fiscal policy. Cuddington (1989), Talvi and Vegh (2005) and Sinnott (2009), among others, document that governments save little or even disave in booms. Procyclicality is most evident in Latin America (Gavin et al (1996), Gavin and Perotti (1997), Stein et al (1999)) but is also present in OECD countries (Talvi and Vegh (2005), Arreaza et al (1999), Lane (2003)).

Perceptions and misperceptions of fiscal inflation
Eric M Leeper and Todd B Walker

http://www.bis.org/publ/work364.htm

The Great Recession and worldwide financial crisis have exploded fiscal imbalances and brought fiscal policy and inflation to the forefront of policy concerns. Those concerns will only grow as aging populations increase demands on government expenditures in coming decades. It is widely perceived that fiscal policy is inflationary if and only if it leads the central bank to print new currency to monetize deficits. Monetization can be inflationary. But it is a misperception that this is the only channel for fiscal inflations. Nominal bonds, the predominant form of government debt in advanced economies, derive their value from expected future nominal primary surpluses and money creation; changes in the price level can align the market value of debt to its expected real backing. This introduces a fresh channel, not requiring monetization, through which fiscal deficits directly affect inflation. The paper begins by pointing out similarities and differences between the Weimar Republic after World War I and the United States today. It describes various ways in which fiscal policy can directly affect inflation and explains why these fiscal effects are difficult to detect in time series data.

The liquidation of government debt
Carmen M. Reinhart and M. Belen Sbrancia

http://www.bis.org/publ/work363.htm

Historically, periods of high indebtedness have been associated with a rising incidence of default or restructuring of public and private debts. A subtle type of debt restructuring takes the form of "financial repression." Financial repression includes directed lending to government by captive domestic audiences (such as pension funds), explicit or implicit caps on interest rates, regulation of cross-border capital movements, and (generally) a tighter connection between government and banks. In the heavily regulated financial markets of the Bretton Woods system, several restrictions facilitated a sharp and rapid reduction in public debt/GDP ratios from the late 1940s to the 1970s. Low nominal interest rates help reduce debt servicing costs while a high incidence of negative real interest rates liquidates or erodes the real value of government debt. Thus, financial repression is most successful in liquidating debts when accompanied by a steady dose of inflation. Inflation need not take market participants entirely by surprise and, in effect, it need not be very high (by historic standards). For the advanced economies in our sample, real interest rates were negative roughly ½ of the time during 1945–1980. For the United States and the United Kingdom our estimates of the annual liquidation of debt via negative real interest rates amounted on average from 2 to 3 percent of GDP a year. We describe some of the regulatory measures and policy actions that characterized the heyday of the financial repression era

The "austerity myth": gain without pain?
Roberto Perotti

http://www.bis.org/publ/work362.htm

As governments around the world contemplate slashing budget deficits, the "expansionary fiscal consolidation hypothesis" is back in vogue. I argue that, as a statement about the short run, it should be taken with caution.
Alesina and Perotti (1995) and Alesina and Ardagna (2010) (AAP) have argued that fiscal consolidations may be expansionary if implemented mainly by cutting government spending. IMF (2010) criticizes the data and methodology used by AAP, and reach opposite conclusions. Some of the methodological critiques are correct. However, the implementation of the IMF methodology has several problems of its own. I then argue that because of the multi-year nature of the large fiscal consolidations, which are precisely the most informative ones, using yearly panels of fiscal policy is limiting. I present four detailed case studies, two - Denmark and Ireland - undertaken under fixed exchange rates (the most relevant case for many Eurozone countries today) and two - Finland and Sweden - after floating the currency.
All four fiscal episodes were associated with an expansion; but only in Denmark the driver of growth was internal demand. However, after three years a long slump set in as the economy lost competitiveness. In all the others for a long time the main driver of growth was exports. In Ireland this occurred because the sterling coincidentally appreciated. In Finland and Sweden the currency experienced an extremely large depreciation after floating.
In all consolidations interest rate fell fast, and wage moderation played a key role in generating a gain competitiveness and a decline in interest rates. Wage moderation was facilitated by the direct intervention of the government in the wage negotiation process. In Finland and Sweden, the adoption of inflation targeting at the same time of the consolidation helped the decline in interest rates.
These results cast doubt on at least some versions of the "expansionary fiscal consolidations" hypothesis, and on its applicability to many countries in the present circumstances. A depreciation is not available to EMU members today (except vis à vis countries outside the Eurozone). A net export boom is not feasible for the world as a whole. A further decline in interest rates is unlikely in the current situation. And incomes policies are not popular nowadays; moreover, international experience and the Danish case, suggest that they are ineffective after a few years.

Long-term fiscal sustainability in major economies
Alan J Auerbach

http://www.bis.org/publ/work361.htm

As the world economy slowly recovers from the very deep and widespread recession of recent years, many countries confront very serious fiscal imbalances. How much time they have to deal with these imbalances is a central question, the salience of which can only have been increased by the ongoing fiscal crisis and bailout in Greece and the immediate fiscal adjustments being discussed or already undertaken in several other countries.
There is little doubt that much of the current attention to fiscal imbalances is attributable to the rapid increases in debt to GDP ratios arising from the recession, either directly through the automatic tax and spending responses to slow growth, or indirectly through the countercyclical discretionary fiscal measures undertaken. Table 1 shows the evolution of net general government debt to GDP ratios for several leading economies in recent years, starting in 2007, just as the worldwide recession began.

Basel Committee on Banking Supervision

Report on intra-group support measures
February 2012

http://www.bis.org/publ/joint28.htm

The objective of this report is to assist national supervisors in gaining a better understanding of the use of intra-group support measures in times of stress or unexpected loss by financial groups across the banking, insurance and securities sectors. The report provides an important overview of intra-group support measures used in practice at a time when authorities are increasingly focused on ways to ensure banks and other financial entities can be wound down in an orderly manner during periods of distress.

Application of own credit risk adjustments to derivatives - consultative document
December 2011

http://www.bis.org/publ/bcbs214.htm

A deterioration in a bank's own creditworthiness can lead to an increase in the bank's common equity as a result of a reduction in the value of its liabilities. The Basel III rules seek to prevent this. Paragraph 75 of the Basel III rules requires a bank to "[d]erecognise in the calculation of Common Equity Tier 1, all unrealised gains and losses that have resulted from changes in the fair value of liabilities that are due to changes in the bank's own credit risk". The application of paragraph 75 to fair valued derivatives is not straightforward since their valuations depend on a range of factors other than the bank's own creditworthiness. The consultative paper proposes that debit valuation adjustments (DVAs) for over-the-counter derivatives and securities financing transactions should be fully deducted in the calculation of Common Equity Tier 1. It briefly reviews other options for applying the underlying concept of paragraph 75 to these products and the reasons these alternatives were not supported by the Basel Committee.

Core principles for effective banking supervision - consultative document
December 2011

http://www.bis.org/publ/bcbs213.htm

The Basel Committee on Banking Supervision has issued for consultation its revised Core principles for effective banking supervision. The consultative paper updates the Committee's 2006 Core principles for effective banking supervision and the associated Core principles methodology (assessment methodology).

Both the existing Core Principles and the associated assessment methodology have served their purpose well in terms of helping countries to assess their supervisory systems and identify areas for improvement. While conscious efforts were made to maintain continuity and comparability as far as possible, the Committee has merged the Core Principles and the assessment methodology into a single comprehensive document. The revised set of twenty-nine Core Principles have also been reorganised to foster their implementation through a more logical structure, highlighting the difference between what supervisors do themselves and what they expect banks to do: Principles 1 to 13 address supervisory powers, responsibilities and functions, focusing on effective risk-based supervision, and the need for early intervention and timely supervisory actions. Principles 14 to 29 cover supervisory expectations of banks, emphasising the importance of good corporate governance and risk management, as well as compliance with supervisory standards.

Important enhancements have been introduced into the individual Core Principles, particularly in those areas that are necessary to strengthen supervisory practices and risk management. Various additional criteria have been upgraded to essential criteria as a result, while new assessment criteria were warranted in other instances. Close attention was given to addressing many of the significant risk management weaknesses and other vulnerabilities highlighted in the last crisis.

In addition, the review has taken account of several key trends and developments that emerged during the last few years of market turmoil: the need for greater intensity and resources to deal effectively with systemically important banks; the importance of applying a system-wide, macro perspective to the microprudential supervision of banks to assist in identifying, analysing and taking pre-emptive action to address systemic risk; and the increasing focus on effective crisis management, recovery and resolution measures in reducing both the probability and impact of a bank failure. The Committee has sought to give appropriate emphasis to these emerging issues by embedding them into the Core Principles, as appropriate, and including specific references under each relevant Principle.

In addition, sound corporate governance underpins effective risk management and public confidence in individual banks and the banking system. Given fundamental deficiencies in banks' corporate governance that were exposed in the last crisis, a new Core Principle on corporate governance has been added in this review by bringing together existing corporate governance criteria in the assessment methodology and giving greater emphasis to sound corporate governance practices. Similarly, the Committee reiterated the key role of robust market discipline in fostering a safe and sound banking system by expanding an existing Core Principle into two new ones dedicated respectively to greater public disclosure and transparency, and enhanced financial reporting and external audit.

As a result of this review, the number of Core Principles has increased from 25 to 29. There are a total of 36 new assessment criteria, comprising 31 new essential criteria and 5 new additional criteria. In addition, 33 additional criteria from the existing assessment methodology have been upgraded to essential criteria that represent minimum baseline requirements for all countries.

Principles for the supervision of financial conglomerates - consultative document
December 2011

http://www.bis.org/publ/joint27.htm

The proposed principles, which revise the Joint Forum's 1999 principles, provide national authorities, standard setters and supervisors with a set of internationally agreed principles that support consistent and effective supervision of financial conglomerates and in particular those financial conglomerates that are active across borders.

The proposed principles are organised into five sections and expand on and supplement the 1999 Principles in a number of ways:

Supervisory powers and authority

The principles are directed to both policy makers and supervisors highlighting the need for a clear legal framework that provides supervisors with the necessary powers, authority and resources to perform, with independence and in coordination with other supervisors, comprehensive group-wide supervision.

Supervisory responsibility

The principles reaffirm the importance of supervisory cooperation, coordination and information exchange. They clarify the importance of identifying a group-level supervisor whose responsibility is to focus on group-level supervision and the facilitation of coordination between relevant supervisors. New principles have been included which relate to the role and responsibilities of supervisors in implementing minimum prudential standards, monitoring and supervising activities of financial conglomerates and taking corrective action as appropriate.

Corporate governance

The principles reaffirm the importance of fit and proper principles and also provide, through a series of new principles, guidance for supervisors intended to ensure the existence of a robust corporate governance framework for financial conglomerates. These new principles relate to the structure of the financial conglomerate, the responsibilities of the board and senior management, the treatment of conflicts of interest and remuneration policy.

Capital adequacy and liquidity
The principles highlight the role of supervisors in assessing capital adequacy on a group basis, taking into account unregulated entities and activities and the risks they pose to regulated entities. They include new principles on group-wide capital management. The principles also provide guidance on internal capital planning processes that rely on sound board and management decisions, incorporate stressed scenario outcomes, and are subject to adequate internal controls. A new principle on liquidity assessment and management is also introduced - providing guidance for supervisors intended to ensure that financial conglomerates properly measure and manage liquidity risk.
Risk management
The principles set out the need for a financial conglomerate to have a comprehensive risk management framework to manage and report group-wide risk concentrations and intra-group transactions and exposures. Greater emphasis is placed on the financial conglomerate's ability to measure, manage and report all material risks to which it is exposed, including those stemming from unregulated entities and activities. The principles focus on group-wide risk management culture and appropriate tolerance levels; addressing risks associated with new business areas and outsourcing; group-wide stress-tests and scenario analyses for the prudent aggregation of risks; bringing off-balance sheet activities within the scope of group-wide supervision.

Definition of capital disclosure requirements - consultative document
December 2011

http://www.bis.org/publ/bcbs212.htm

The Basel Committee on Banking Supervision has published proposed disclosure requirements that aim to improve the transparency and comparability of a bank's capital base. During the financial crisis, market participants and supervisors were hampered in their efforts to undertake detailed assessments of banks' capital positions and make cross jurisdictional comparisons as a result of insufficiently detailed disclosure and a lack of consistency in reporting between banks and across jurisdictions. This lack of clarity may have contributed to uncertainty during the financial crisis. In addition to improving the quality and level of required capital, Basel III will establish certain high level disclosure requirements to improve transparency of regulatory capital and enhance market discipline. These proposed disclosure requirements are set out in the Basel Committee's consultative document.

High cost credit protection
December 2011

http://www.bis.org/publ/bcbs_nl16.htm

Supervisors have raised concerns regarding some recent credit protection transactions and the potential for regulatory capital arbitrage. Given these concerns, the Basel Committee has issued a statement to alert banks that supervisors will closely scrutinise such transactions. The statement sets out the Basel Committee's expectation for supervisors to increase their supervisory assessment of credit risk transfer under the Basel securitisation framework rules, as well as within the broader context of the Basel framework's Pillar 2 supervisory review process and assessment of capital adequacy.

Basel III definition of capital - Frequently asked questions (update of FAQs published in October 2011)
December 2011

http://www.bis.org/publ/bcbs211.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.
The Committee has reviewed frequently asked questions (FAQs) and today's publication provides answers to these together with technical elaboration of the rules text and interpretative guidance where necessary. These aim to promote consistent global implementation of Basel III.
The FAQs published in this document correspond to the definition of capital sections of the Basel III rules text. These FAQs are in addition to the first set published in July 2011 and the second set published in October 2011. They are grouped according to the relevant paragraphs of the rules text. FAQs that have been added since the publication of the second version of this document are shaded yellow.

Committee on Payment and Settlement Systems

Report on OTC derivatives data reporting and aggregation requirements - final report
January 2012

http://www.bis.org/publ/cpss100.htm

The Committee on Payment and Settlement Systems (CPSS) and the Technical Committee of the International Organization of Securities Commissions (IOSCO) have published their final report on the OTC derivatives data that should be collected, stored and disseminated by trade repositories (TRs).
The committees support the view that TRs, by collecting such data centrally, would provide authorities and the public with better and more timely information on OTC derivatives. This would make markets more transparent, help to prevent market abuse, and promote financial stability.
The final report reflects public comments received in response to a consultative version of the report published in August 2011. Following the consultation exercise, the report was expanded to elaborate on the description of possible options to address data gaps.
The report was also updated to reflect recent international developments in data reporting and aggregation requirements stemming from the Legal Entity Identifier (LEI) workshop in September 2011 and other efforts under the auspices of the Financial Stability Board (FSB), in support of a request by the G20 at the Cannes Summit, to advance the development of a global LEI.

As the report indicates, some questions remain regarding how best to address current data gaps and define authorities' access to TRs. As requested by the G20, two internationally coordinated working groups will address these questions in the coming year. The FSB will establish an ad hoc group of experts to further consider means of filling current data gaps, while the CPSS and IOSCO will establish a joint group to examine authorities' access to trade repositories.

Statistics on payment, clearing and settlement systems in the CPSS countries - Figures for 2010
January 2012

http://www.bis.org/publ/cpss99.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 2010 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 2011

Speeches

Monetary policy in the crisis: testing the limits of monetary policy

Speech by Mr Hervé Hannoun, Deputy General Manager of the BIS, at the 47th SEACEN Governors' Conference, Seoul, Korea, 13–14 February 2012

http://www.bis.org/speeches/sp120216.htm

In the wake of the crisis, demands on monetary policy have grown beyond recognition, putting frameworks under enormous pressure. Central banks are increasingly seen by market participants as all-powerful, able to intervene without any limit. The trend towards unlimited intervention combined with ultra-low interest rates does not only have potentially serious side effects on the functioning of the market economy. It also gives rise to three major risks and one ultimate possible consequence for monetary policy itself: these three risks are those of financial dominance, exchange rate dominance and fiscal dominance; and the ultimate possible consequence is an inflation surprise that could severely damage central banks' hard-earned credibility. To prevent these risks from materialising, we need to forge a consensus on what could be called "the new frontier of monetary policy" in order to refocus monetary policy on maintaining lasting price stability. This also implies that central banks should reject the market illusion of unlimited intervention and the associated theory of the "printing press".

Building a resilient financial system

Keynote speech by Jaime Caruana, General Manager of the BIS, at the 2012 ADB Financial Sector Forum on "Enhancing financial stability - issues and challenges" Manila, 7 February 2012

http://www.bis.org/speeches/sp120208.htm

The uncertain global environment has prompted calls to reconsider or weaken financial reform. I would argue that, on the contrary, the current uncertainty makes it all the more important for us to follow through on what we have set out to do. A number of broad principles guide this work. First, financial stability is about resilience and should be prepared in advance. Second, preserving financial stability involves a wide range of policy areas. Third, a globalised financial system requires global rules. And fourth, we should stay focused on the end result we want to achieve, namely a system characterised by less leverage, better liquidity management, sounder incentives, less moral hazard, stronger oversight, and more transparency. With these broad goals in mind, we can work out appropriate timetables, and we should monitor implementation for unintended consequences. The key challenges in carrying forward this agenda are: first, implementing what has been agreed, especially with regard to bank capital; second, designing the right transition given a still weak recovery; third, completing the regulatory reform agenda, notably in the areas of liquidity standards, resolution regimes, OTC derivatives, and the shadow banking system; and fourth, ensuring sound micro- and macroprudential oversight

The need for effective international collaboration in times of financial stress

Speech by Mr Jaime Caruana, General Manager of the BIS, at the seminar on "Long-term growth: organizing the stability and attractiveness of European financial markets", Berlin, 20 January 2012

http://www.bis.org/speeches/sp120124.htm

The Collaboration between financial authorities has never been so testing - and yet never has collaboration been so important. We face key coordination challenges in the area of financial regulation, particularly with respect to the consistency of the calculations of risk-weighted assets, the treatment of sovereign exposures, and liquidity standards. Yet, the institutional settings for collaboration are actually improving. Given sufficient commitment from the authorities, these new settings and processes will pave the way for enhanced cooperation.

Financial stability and risk disclosure

Keynote address by Mr Jaime Caruana, General Manager of the BIS, to the FSB Roundtable on risk disclosure, Basel, 9 December 2011

http://www.bis.org/speeches/sp111026.htm

High-quality risk disclosure is good for markets, because it helps investors make more informed decisions. It is good for prudential supervisors, because it makes banks more accountable to both supervisors and investors. And it is good for financial stability, because it reduces the chance that unexpected events will disrupt the system. To be effective in promoting market discipline, disclosure must be complemented by strong incentives for counterparties to engage in monitoring. The public sector’s role in promoting transparency arises from a number of market failures, including the externalities to be gained from common standards, the “free rider” problems that may lead to too little investment in producing and gathering financial information, and the tendency of markets to overreact to bad news when the information environment is clouded. Guided by these considerations, the Financial Stability Board and the Basel Committee on Banking Supervision have long supported improvements in transparency, through their work on accounting, disclosure templates and aggregate market data. At the same time, industry and investor representatives need to play a key role in developing disclosure standards. Accounting standards need to converge, standards for the discussion and analysis that accompany financial statements need to be established, and external auditors need to insist on higher-quality risk disclosures

Why central bank balance sheets matter

Keynote address by Mr Jaime Caruana, General Manager of the BIS, at the Bank of Thailand-BIS conference on "Central bank balance sheets in Asia and the Pacific: the policy challenges ahead", Chiang Mai, Thailand, 12 December 2011.

http://www.bis.org/speeches/sp111216.htm

Central bank balance sheets have proved crucial in designing and pursuing policies in the wake of financial crises in recent years. Central banks have bought a wide range of financial assets in order to further major macroeconomic and financial stability objectives, which has implied a comparable increase in domestic liabilities. This has led to an unprecedented global expansion of central bank balance sheets. But balance sheets of the current size could create broad policy risks, beyond the increased exposure of the balance sheet to market developments. These risks include inflation, financial instability, distortions in financial markets, and conflicts with government debt managers. Analysing balance sheet-related risks can also help design suitable "exit strategies" from the current policies.

Foreign participation and bond market development in Asia and the Pacific

Closing remarks by Mr Jaime Caruana, General Manager of the BIS, at the Bank of Japan-BIS high-level seminar on "The development of regional capital markets", Yokohama, Japan, 20–22 November 2011.

http://www.bis.org/speeches/sp111209.htm

Many initiatives in emerging Asia over the past decade have sought to encourage foreign investors to participate in domestic bond markets and so boost liquidity in local currency instruments. The removal of withholding taxes and of some restrictions on local currency convertibility has been instrumental in this regard. At the same time, the elimination of barriers to cross-border investment can at times run counter to the policy objective of stabilising the financial system and macroeconomy in the face of large and volatile capital inflows. As a result, the region's policymakers have chosen on occasion to discourage foreign portfolio investment inflows.