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 A1, A2, B1 and B2)

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 C1 and C2)

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 D)

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.

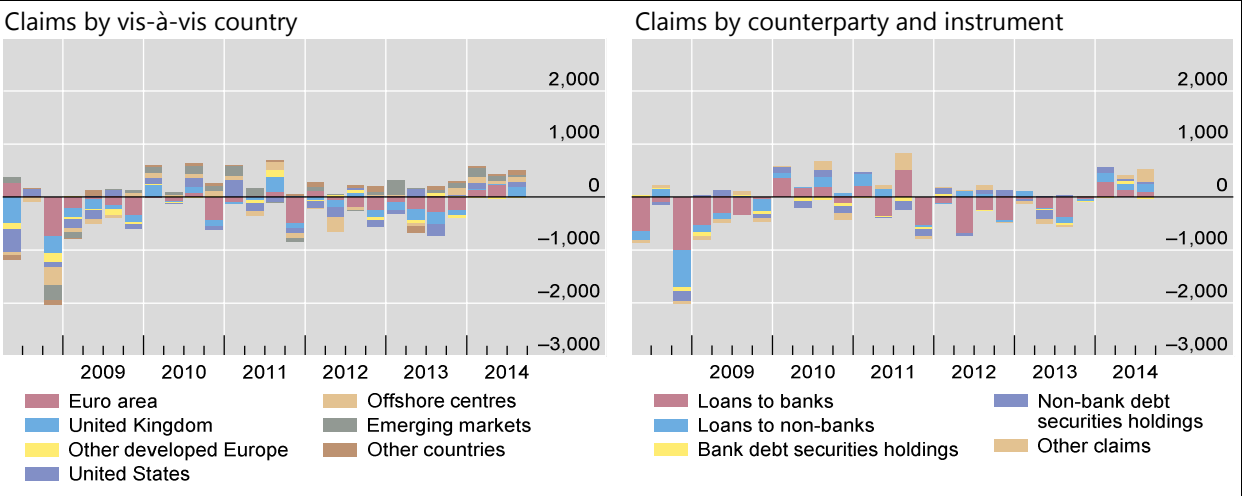
Table A1: International positions of banks by residence of counterparty, September 2014[1]

In billions of US dollars

	Vis-à-vis advanced economies	Vis-à-vis offshore centres	Vis-à-vis emerging market economies					All countries
			Total	Africa	Asia	Europe	Latin America	
Amounts outstanding								
Total claims	**23,548**	**4,956**	**4,580**	**514**	**2,437**	**880**	**749**	**33,723**
Total cross-border claims	**21,098**	**4,009**	**3,869**	**504**	**2,060**	**661**	**643**	**29,291**
Loans	14,185	3,153	3,066	458	1,632	497	480	20,466
Securities	4,443	605	473	20	279	58	116	5,767
Claims on banks	12,787	2,171	2,166	215	1,345	356	250	17,196
Claims on non-banks	8,311	1,838	1,703	289	716	305	393	12,094
US dollar	8,472	2,477	1,515	294	563	205	453	12,523
Euro	8,246	279	417	73	65	257	23	9,132
Foreign currency claims on residents	**2,450**	**947**	**712**	**10**	**377**	**219**	**107**	**4,109**
Estimated exchange rate-adjusted changes during the quarter[2]								
Total claims	**354**	**130**	**66**	**21**	**61**	**-9**	**-7**	**549**
Total cross-border claims	**347**	**101**	**40**	**20**	**47**	**-17**	**-10**	**494**
Loans	105	71	55	18	40	-15	12	230
Securities	10	11	-4	1	-1	-4	0	24
Claims on banks	183	29	20	13	31	-8	-17	231
Claims on non-banks	164	71	21	7	16	-9	8	263
US dollar	197	86	-15	7	-12	-1	-9	267
Euro	2	4	1	3	7	-7	-2	13
Foreign currency claims on residents	**7**	**30**	**26**	**1**	**14**	**8**	**3**	**63**
Amounts outstanding								
Total liabilities	**20,616**	**5,477**	**3,592**	**942**	**1,626**	**444**	**580**	**32,948**
Total cross-border liabilities	**17,744**	**4,261**	**2,850**	**929**	**1,128**	**291**	**503**	**25,934**
Deposits	14,575	4,006	2,684	888	1,069	276	452	21,518
Securities	1,565	86	33	7	13	1	12	2,500
Liabilities to banks	12,419	2,671	1,770	583	751	200	236	17,759
Liabilities to non-banks	5,325	1,591	1,080	346	377	91	266	8,176
US dollar	7,490	2,819	1,584	629	471	117	367	12,281
Euro	6,450	390	301	108	46	104	43	7,622
Foreign currency liabilities to residents	**2,872**	**1,216**	**742**	**13**	**498**	**154**	**77**	**4,830**
Estimated exchange rate-adjusted changes during the quarter[2]								
Total liabilities	**209**	**197**	**18**	**24**	**33**	**-35**	**-3**	**455**
Total cross-border liabilities	**212**	**136**	**15**	**23**	**31**	**-43**	**3**	**349**
Deposits	4	137	8	24	25	-44	3	135
Securities	26	-6	0	0	0	0	0	18
Liabilities to banks	133	63	-25	16	10	-47	-3	173
Liabilities to non-banks	79	73	39	7	22	4	6	177
US dollar	105	94	-49	-1	7	-44	-10	136
Euro	23	27	32	19	6	2	4	82
Foreign currency liabilities to residents	**-3**	**61**	**3**	**1**	**1**	**8**	**-6**	**61**

Cross-border positions

Exchange rate-adjusted changes in stocks



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

Table A2: International positions of banks by nationality of head office, September 2014[1]

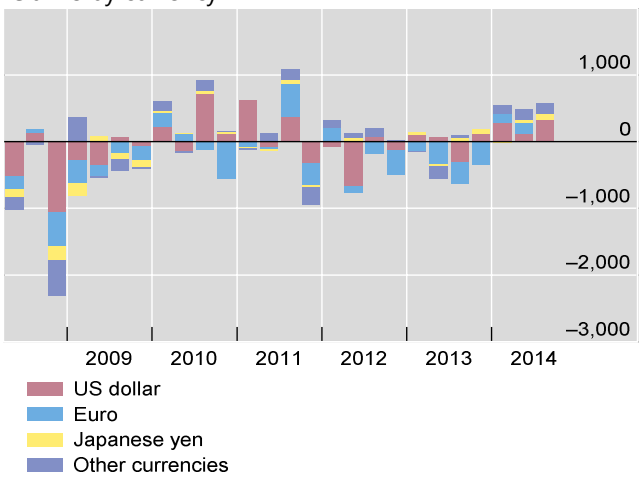
In billions of US dollars

	Nationality of banks										All countries
	France	Germany	Italy	Nether-lands	Spain	Switzer-land	United Kingdom	Japan	United States	Emerging markets	
Amounts outstanding											
Total claims	**3,568**	**3,525**	**864**	**1,774**	**688**	**2,612**	**3,763**	**4,501**	**4,054**	**1,704**	**33,696**
On banks	2,242	1,997	540	769	341	1,538	1,871	1,816	2,456	878	18,363
On related foreign offices	1,310	1,073	172	467	209	1,136	1,209	1,096	1,647	350	10,751
On other banks	916	887	367	289	131	395	627	717	779	460	7,352
On official monetary institutions	16	37	1	13	1	7	36	3	30	67	261
On non-banks	1,326	1,528	323	1,004	347	1,074	1,892	2,685	1,598	826	15,333
US dollar	1,125	1,222	156	543	240	1,371	1,688	2,583	2,616	1,310	15,503
Euro	1,749	1,793	623	923	313	495	1,076	560	706	119	9,919
Other currencies	693	510	84	308	134	746	999	1,358	732	275	8,273
Estimated exchange rate-adjusted changes during the quarter[2]											
Total claims	**5**	**-32**	**19**	**70**	**-10**	**96**	**16**	**75**	**207**	**32**	**567**
On banks	-18	-28	13	-5	-14	57	-2	16	129	17	201
On related foreign offices	-28	-7	2	-6	-9	53	22	15	80	13	101
On other banks	16	-24	11	0	-5	3	-25	1	59	5	104
On official monetary institutions	-7	2	0	1	0	1	1	1	-10	-1	-4
On non-banks	23	-4	6	75	5	39	19	59	78	15	366
US dollar	-14	-27	4	26	-9	99	22	7	168	32	323
Euro	-24	-3	16	36	3	-32	-14	3	32	-8	-5
Other currencies	43	-1	-2	8	-4	28	8	65	7	9	249
Amounts outstanding											
Total liabilities	**3,560**	**3,231**	**673**	**1,724**	**684**	**2,773**	**3,895**	**2,625**	**4,802**	**1,817**	**33,008**
To banks	1,920	1,650	400	586	430	1,443	1,738	1,675	2,457	938	17,080
To related foreign offices	1,105	999	165	387	151	1,114	1,122	891	1,466	247	9,378
To other banks	724	557	218	174	254	306	490	708	764	645	6,729
To official monetary institutions	92	94	17	26	25	22	127	76	226	46	973
To non-banks	1,640	1,581	273	1,138	254	1,330	2,157	950	2,346	879	15,928
US dollar	1,287	1,270	149	612	255	1,458	1,690	1,729	3,382	1,279	16,293
Euro	1,626	1,345	471	721	349	563	1,022	336	650	149	8,866
Other currencies	648	616	53	391	80	752	1,184	560	770	389	7,849
Estimated exchange rate-adjusted changes during the quarter[2]											
Total liabilities	**63**	**-62**	**6**	**61**	**3**	**110**	**2**	**-8**	**182**	**43**	**471**
To banks	-3	-38	-5	-5	-3	73	-5	-22	93	20	92
To related foreign offices	3	-59	-1	1	-12	59	-9	15	122	8	92
To other banks	-4	13	-6	-4	14	14	2	-33	-4	-1	17
To official monetary institutions	-1	8	2	-2	-5	1	2	-4	-25	13	-17
To non-banks	66	-24	11	66	6	36	7	15	89	23	379
US dollar	-6	-69	-1	19	-19	79	12	-35	132	16	115
Euro	19	-11	3	37	26	-5	-10	5	45	8	132
Other currencies	50	18	3	5	-4	35	0	22	5	18	223

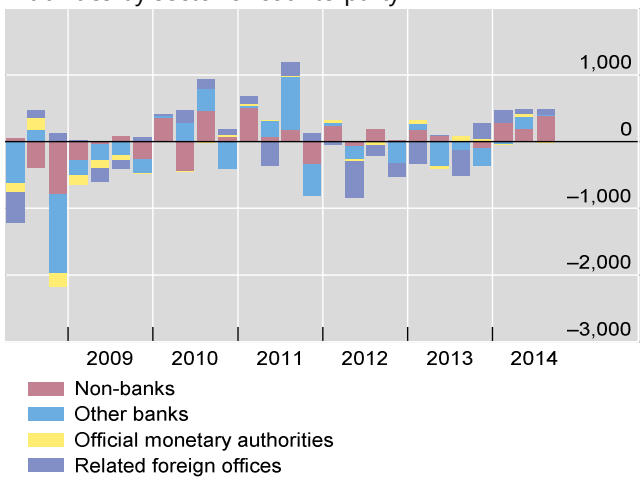
International positions of BIS reporting banks

Exchange rate-adjusted changes in stocks

Claims by currency



Liabilities by sector of counterparty



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

Table B1: Consolidated claims, immediate borrower basis, September 2014[1]

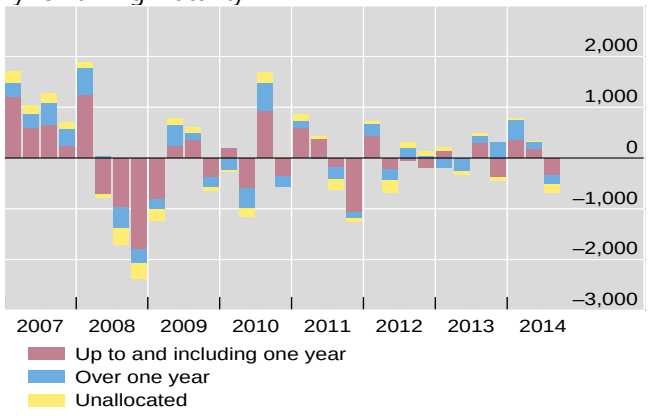
Amounts outstanding, in billions of US dollars

	Vis–à–vis advanced economies				Vis-à-vis offshore centres	Vis–à–vis emerging market economies					All countries
	Total	United States	Euro area	Japan		Total	Africa	Asia	Europe	Latin America	
Foreign claims	**21,867**	**6,179**	**8,410**	**1,206**	**3,072**	**6,174**	**654**	**2,842**	**1,351**	**1,326**	**31,465**
International claims	**13,555**	**2,594**	**6,289**	**831**	**2,448**	**3,785**	**444**	**2,022**	**730**	**589**	**20,139**
Up to and including one year	6,701	996	2,795	681	1,228	2,102	207	1,365	275	255	10,107
Over one year	4,784	1,018	2,486	93	777	1,395	209	503	390	293	7,111
Unallocated by maturity	2,070	580	1,009	56	443	287	28	153	64	41	2,920
Local currency claims	**8,312**	**3,584**	**2,120**	**375**	**624**	**2,389**	**210**	**820**	**622**	**736**	**11,327**
Local currency liabilities	**6,139**	**2,434**	**1,973**	**190**	**523**	**1,701**	**171**	**509**	**481**	**540**	**8,603**
	Unadjusted changes during the quarter[2]										
Foreign claims	*-1,002*	*-32*	*-633*	*3*	*59*	*-141*	*3*	*-2*	*-118*	*-24*	*-1,094*
International claims	*-650*	*-7*	*-465*	*3*	*34*	*-58*	*8*	*4*	*-70*	*-1*	*-684*
Local currency claims	*-352*	*-25*	*-168*	*0*	*25*	*-83*	*-5*	*-6*	*-49*	*-23*	*-410*
Local currency liabilities	*-218*	*30*	*-153*	*2*	*27*	*-109*	*-6*	*6*	*-56*	*-53*	*-303*
Nationality of reporting banks:	**Foreign claims**										
Domestically owned banks (total)	**18,321**	**5,704**	**6,822**	**726**	**2,922**	**5,317**	**603**	**2,211**	**1,285**	**1,218**	**26,896**
Euro area	7,494	1,567	3,772	220	383	2,206	219	376	1,008	603	10,283
Switzerland	1,388	672	370	.	244	143	30	.	.	.	1,808
United Kingdom	2,061	980	737	101	647	930	211	525	62	132	3,689
Japan	2,259	1,217	605	.	655	470	35	333	38	63	3,384
United States	1,886	.	747	289	546	746	66	345	96	238	3,198
Other countries[3]	3,234	1,267	592	116	448	822	41	632	81	181	4,534
Other foreign banks	**3,546**	**475**	**1,587**	**480**	**150**	**857**	**51**	**632**	**66**	**108**	**4,570**
	International claims, all maturities										
Domestically owned banks (total)	**10,118**	**2,152**	**4,775**	**351**	**2,298**	**2,932**	**395**	**1,390**	**665**	**482**	**15,682**
Euro area	4,169	523	2,295	111	355	1,063	153	291	462	157	5,785
Switzerland	740	175	350	25	226	141	28	69	19	26	1,141
United Kingdom	949	290	502	48	266	435	91	252	45	47	1,701
Japan	1,749	828	578	.	604	331	35	199	37	59	2,684
United States	1,250	.	662	124	489	409	47	192	56	114	2,169
Other countries[3]	1,260	335	387	43	359	554	40	387	48	79	2,203
Other foreign banks	**3,437**	**442**	**1,515**	**480**	**150**	**852**	**49**	**632**	**64**	**107**	**4,457**
	International claims, short–term										
Domestically owned banks (total)	**4,442**	**734**	**1,915**	**224**	**1,132**	**1,496**	**177**	**860**	**252**	**207**	**7,140**
Euro area	1,949	288	829	74	196	442	61	164	145	72	2,616
Switzerland	406	81	181	10	183	90	19	45	11	15	703
United Kingdom	419	122	238	13	167	249	42	156	29	22	836
Japan	208	68	61	.	55	124	7	95	12	10	387
United States	767	.	384	94	330	252	31	137	29	54	1,358
Other countries[3]	693	176	221	33	201	340	18	262	26	34	1,240
Other foreign banks	**2,259**	**262**	**879**	**457**	**96**	**606**	**29**	**506**	**24**	**48**	**2,967**

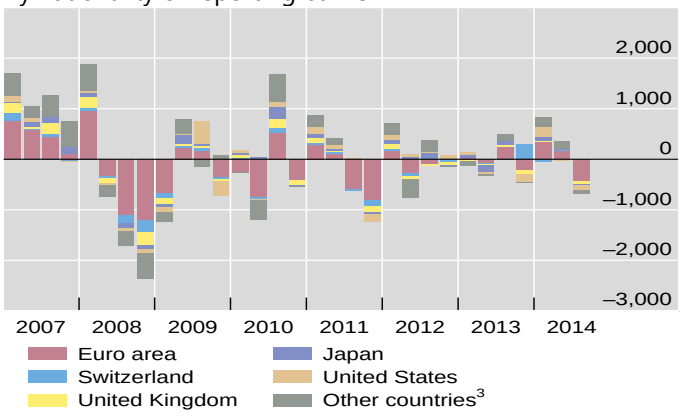
International claims of BIS reporting banks on an immediate borrower basis[4]

Changes in stocks[2]

By remaining maturity



By nationality of reporting banks



[1] Detailed breakdowns and time series data are available at 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 31 reporting countries.

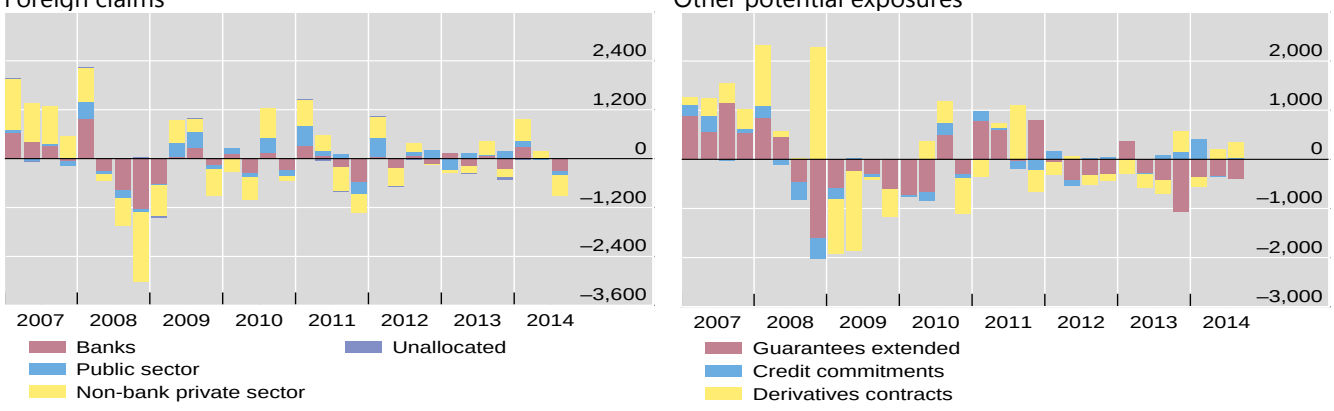
Table B2: Consolidated claims, ultimate risk basis, September 2014[1]

Amounts outstanding, in billions of US dollars

	Vis–à–vis advanced economies				Vis–à–vis offshore centres	Vis–à–vis emerging market economies					All countries
	Total	United States	Euro area	Japan		Total	Africa	Asia	Europe	Latin America	
Foreign claims	**17,646**	**5,662**	**6,523**	**716**	**2,323**	**5,057**	**530**	**2,150**	**1,232**	**1,144**	**25,330**
Banks	3,494	624	1,509	183	176	1,043	82	641	173	146	4,725
Public sector	4,379	1,883	1,557	258	232	1,167	112	426	290	338	6,027
Non–bank private sector	9,722	3,136	3,440	273	1,908	2,833	335	1,080	759	659	14,508
Unallocated	51	20	17	2	6	13	0	3	9	1	70
Cross–border claims	**9,060**	**2,350**	**4,440**	**257**	**1,418**	**2,159**	**278**	**1,131**	**416**	**334**	**12,939**
Local claims in all currencies	**8,586**	**3,312**	**2,082**	**460**	**905**	**2,897**	**252**	**1,019**	**815**	**810**	**12,391**
	Unadjusted changes during the quarter[2]										
Foreign claims	*-837*	*-68*	*-474*	*-10*	*67*	*-136*	*-2*	*-8*	*-102*	*-24*	*-915*
Cross–border claims	*-431*	*-28*	*-306*	*8*	*42*	*-30*	*6*	*-1*	*-33*	*-1*	*-428*
Local claims in all currencies	*-407*	*-40*	*-168*	*-18*	*25*	*-107*	*-8*	*-6*	*-70*	*-23*	*-488*
Nationality of reporting banks[3]	**Foreign claims**										
Total	**17,646**	**5,662**	**6,523**	**716**	**2,323**	**5,057**	**530**	**2,150**	**1,232**	**1,144**	**25,330**
Euro area	7,233	1,545	3,613	209	333	2,099	191	346	974	589	9,868
France	2,258	575	1,167	148	104	476	110	149	180	38	2,870
Germany	1,942	488	813	37	130	268	30	110	108	20	2,397
Italy	583	30	480	…	10	209	9	12	185	3	813
Spain	904	236	254	7	18	572	3	9	64	496	1,525
Switzerland	1,268	685	327	.	124	6	6	.	.	.	1,398
United Kingdom	2,096	961	767	118	604	949	207	543	63	135	3,700
Japan	2,280	1,272	584	.	487	462	32	329	36	66	3,230
United States	1,893	.	739	305	463	754	61	355	99	239	3,134
Other countries	2,875	1,199	493	84	311	786	32	577	60	117	4,000
	Cross–border claims										
Total	**9,060**	**2,350**	**4,440**	**257**	**1,418**	**2,159**	**278**	**1,131**	**416**	**334**	**12,939**
Euro area	3,531	489	2,077	76	215	722	115	248	264	95	4,667
France	1,048	121	618	37	62	230	61	99	43	27	1,369
Germany	1,286	273	696	21	95	186	28	79	61	19	1,623
Italy	254	17	174	…	8	43	3	12	26	3	315
Spain	200	20	129	7	13	45	3	8	4	30	288
Switzerland	804	398	308	.	93	4	4	.	.	.	901
United Kingdom	956	281	520	52	153	353	62	209	40	42	1,514
Japan	1,789	910	557	.	405	267	29	146	31	62	2,461
United States	1,034	.	645	94	379	357	38	173	49	97	1,793
Other countries	947	272	334	34	173	456	30	355	32	39	1,603
	Other potential exposures[4, 5]										
Derivatives contracts	3,671	735	1,224	124	122	151	31	59	23	38	3,953
Guarantees extended	3,868	1,027	1,577	120	251	800	125	271	235	168	5,170
Credit commitments	3,060	1,105	952	79	284	531	71	187	118	156	3,942

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

Changes in stocks[2]



[1] Detailed breakdowns and time series data are available at 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 25 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.

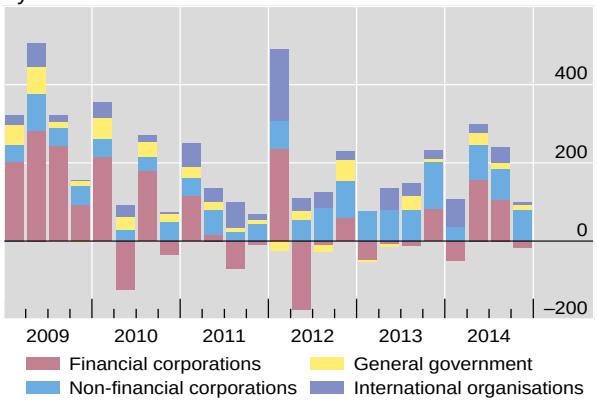
Table C1: International debt securities issuance, December 2014

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	**16,570**	**2,133**	**8,586**	**236**	**1,970**	**1,853**	**242**	**510**	**447**	**654**	**1,489**	**21,882**
Money market instruments	**748**	**19**	**397**	**4**	**92**	**19**	**7**	**8**	**4**	**0**	**24**	**883**
Financial corporations	678	14	361	4	92	19	7	8	4	0	0	789
Non-financial corporations	40	5	26	0	0	0	0	0	0	0	0	41
General government	29	0	10	0	0	0	0	0	0	0	0	29
US dollar	283	2	155	2	50	12	3	5	4	0	18	363
Euro	273	12	149	1	8	2	0	2	0	0	1	284
Other currencies	192	5	93	2	35	5	3	1	0	0	5	236
Bonds and notes	**15,822**	**2,114**	**8,189**	**231**	**1,878**	**1,834**	**235**	**502**	**443**	**653**	**1,465**	**20,999**
Financial corporations	12,689	1,742	6,527	176	1,728	558	77	251	107	123	0	14,975
Non-financial corporations	2,337	367	1,099	49	93	521	71	140	62	247	0	2,951
General government	797	5	563	5	57	754	87	111	274	283	0	1,608
US dollar	5,092	1,500	1,472	149	1,524	1,402	196	389	279	537	458	8,475
Euro	7,703	373	5,889	11	121	226	20	19	134	52	658	8,709
Other currencies	3,027	241	828	72	233	206	18	94	30	64	349	3,815
Floating rate	4,684	408	2,600	27	558	64	10	27	10	17	145	5,451
Fixed rate	10,826	1,576	5,496	173	1,266	1,731	216	453	430	632	1,320	15,143
Equity-related	311	130	93	31	54	39	9	22	3	4	0	404
Net issuance during the quarter												
Total issues	**-19**	**36**	**-73**	**8**	**26**	**67**	**10**	**40**	**9**	**8**	**5**	**80**
Money market instruments	**-16**	**5**	**-15**	**-1**	**-3**	**1**	**0**	**1**	**0**	**0**	**4**	**-13**
Financial corporations	-14	4	-7	-1	-3	1	0	1	0	0	0	-16
Non-financial corporations	2	1	2	0	0	0	0	0	0	0	0	2
General government	-4	0	-10	0	0	0	0	0	0	0	0	-4
US dollar	-2	0	-1	0	1	0	-1	1	0	0	4	3
Euro	-9	5	-10	0	-1	0	0	0	0	0	0	-9
Other currencies	-5	1	-4	0	-3	2	1	0	0	0	-1	-7
Bonds and notes	**-3**	**31**	**-58**	**8**	**29**	**65**	**10**	**39**	**9**	**8**	**1**	**93**
Financial corporations	-69	6	-71	6	28	39	5	29	5	-1	0	-2
Non-financial corporations	60	25	13	3	1	17	5	4	1	7	0	77
General government	6	0	0	0	0	11	0	6	2	2	0	17
US dollar	14	13	-8	6	34	50	9	29	7	5	5	103
Euro	13	18	-36	1	0	4	0	1	2	0	3	19
Other currencies	-30	1	-15	1	-4	11	1	9	-1	3	-6	-29
Floating rate	-21	7	-14	0	4	3	0	2	1	1	4	-9
Fixed rate	10	21	-44	6	27	65	10	40	8	7	-3	99
Equity-related	8	4	0	2	-1	-3	0	-3	0	0	0	3

Net international debt securities issuance

By sector



By currency

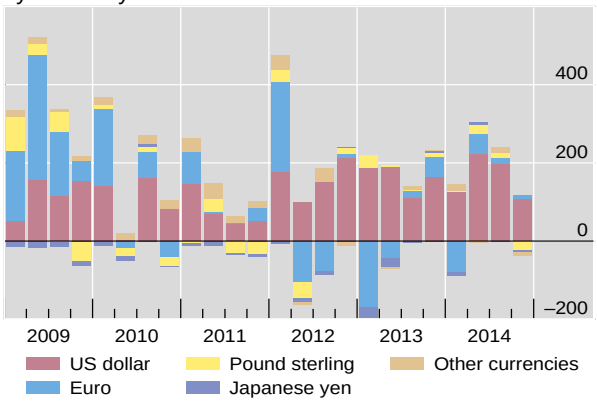


Table C2: Domestic and total debt securities, September 2014

In billions of US dollars

Domestic debt securities

	China	Brazil	Korea	Mexico	Malaysia	Thailand	Turkey	South Africa	Russia	Israel	Indonesia	Singapore
Amounts outstanding												
All issuers	4,368	613	1,465	636	354	289	198	200	245	210	119	80
Financial corporations	1,886	613	412	174	70	126	16	41	77	29	13	...
Non-financial corporations	854	156	553	50	123	56	3	24	65	46	7	...
General government	1,628	1,253	500	412	162	107	179	134	104	135	99	80
Short-term	...	...	106	101	55	60	12	26	...	1	...	6
Long-term	...	...	1,358	535	299	229	186	174	245	134	...	73
Unallocated	4,368	2,023	0	0	0	0	0	0	0	76	119	0
Exchange rate adjusted changes												
All issuers	127	14	9	16	11	0	2	4	1	3	6	1
Financial corporations	22	14	10	2	11	-3	2	0	3	2	0	...
Non-financial corporations	15	3	1	4	-1	3	1	0	-1	1	0	...
General government	90	-18	-2	10	1	0	0	4	0	0	5	1
Short-term	...	...	-6	-3	8	-3	1	1	...	0	...	...
Long-term	...	...	15	20	3	3	1	3	1	1	...	1
Unallocated	127	-1	0	0	0	0	0	0	0	3	6	0

Total debt securities

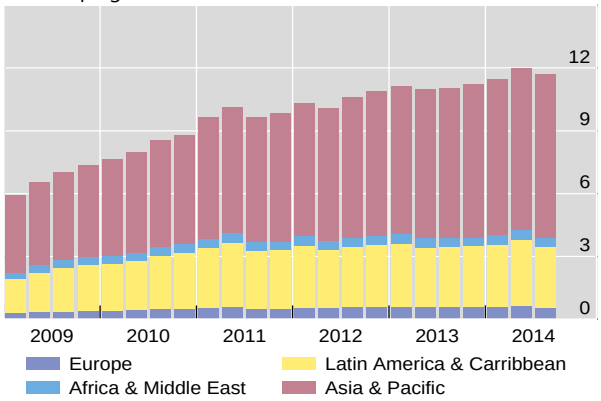
	United States	Japan	United Kingdom	France	Germany	Italy	Spain	Netherlands	Canada	Australia	Ireland	Denmark
Amounts outstanding												
All issuers[1]	35,337	12,063	...	4,528	3,953	3,654	2,111	2,264	2,204	1,932	1,096	824
Financial corporations	14,857	2,383	...	1,722	1,720	1,220	986	1,684	539	1,150	941	628
Non-financial corporations	5,046	703	619	651	156	164	29	125	422	208	11	36
General government	15,210	8,976	2,517	2,154	2,077	2,270	1,095	456	1,243	575	144	161

Outstanding amounts

In trillions of US dollars

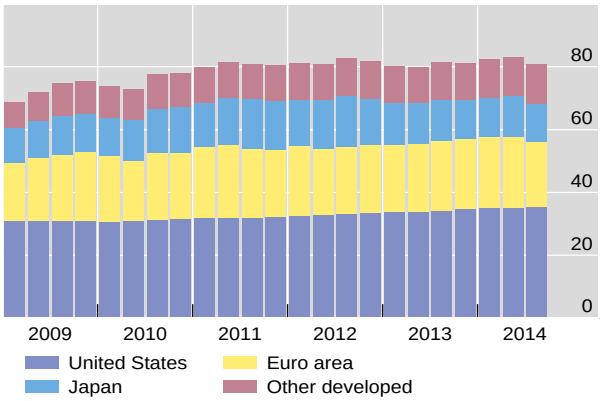
Domestic debt securities

Developing countries



Total debt securities

Developed countries



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

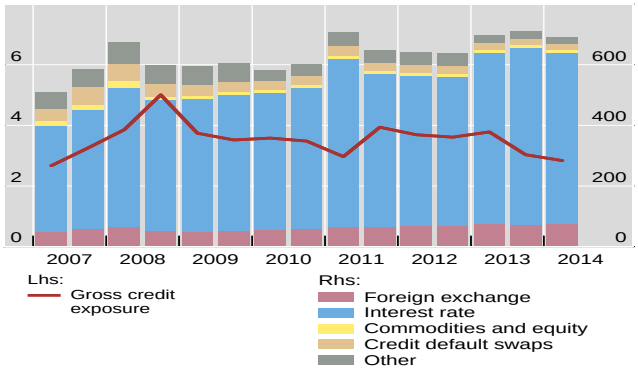
Table D: Global OTC derivatives market, end-June 2014[1]

In billions of US dollars

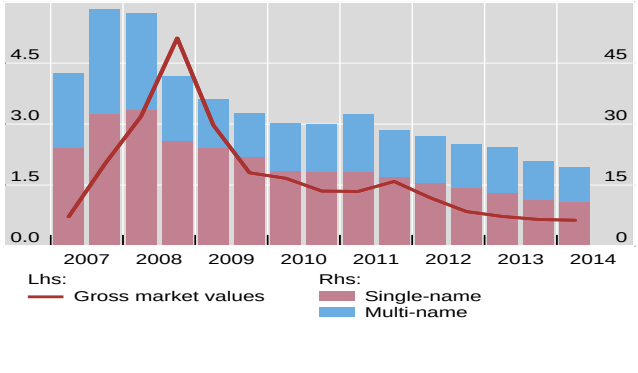
	Forwards and swaps				Options			
	Total	with reporting dealers	with other financial institutions	with non-financial customers	Total	with reporting dealers	with other financial institutions	with non-financial customers
				Notional amounts outstanding				
All contracts[2]	**620,823**	**95,406**	**501,413**	**22,475**	**70,668**	**37,790**	**27,894**	**4,226**
Foreign exchange	**61,331**	**25,820**	**27,708**	**7,803**	**13,451**	**6,151**	**5,992**	**1,308**
US dollar	53,693	24,161	23,822	5,710	11,442	5,154	5,018	1,269
Euro	22,586	8,881	9,852	3,852	3,864	1,895	1,507	462
Japanese yen	10,071	5,055	3,877	1,139	3,108	1,652	1,169	287
Pound sterling	8,264	3,019	3,937	1,308	920	402	404	114
Other	28,049	10,523	13,928	3,597	7,569	3,199	3,886	484
Up to one year	44,212	16,761	22,022	5,430	10,902	4,868	5,042	993
Over one year	17,119	9,060	5,686	2,374	2,549	1,284	951	315
Memo: Exchange-traded[3]	*242*	.	.	.	*137*	.	.	.
Interest rate	**513,848**	**55,968**	**444,434**	**13,446**	**49,442**	**28,552**	**18,586**	**2,303**
US dollar	143,943	15,367	123,728	4,848	16,862	8,222	7,689	951
Euro	198,502	15,129	178,278	5,095	23,353	15,485	6,890	978
Japanese yen	47,858	7,700	39,167	992	3,848	2,448	1,292	108
Pound sterling	57,272	3,852	52,806	614	3,551	1,732	1,703	116
Other	66,274	13,921	50,457	1,897	1,827	665	1,011	151
Up to one year	214,106	16,533	195,086	2,487	14,793	7,386	6,713	694
Over one year	299,743	39,436	249,348	10,959	34,649	21,166	11,873	1,610
Memo: Exchange-traded[3]	*27,272*	.	.	.	*38,352*	.	.	.
Equity	**2,433**	**655**	**1,562**	**217**	**4,508**	**1,731**	**2,314**	**463**
Memo: Exchange-traded[3]	*1,588*	.	.	.	*5,873*	.	.	.
Commodities	**1,474**	**...**	**...**	**...**	**732**	**...**	**...**	**...**
Credit default swaps	**19,462**	**9,540**	**9,719**	**203**	**...**	**...**	**...**	**...**
Unallocated	**22,274**	**3,423**	**17,990**	**806**	**2,535**	**1,356**	**1,001**	**152**
				Gross market values				
All contracts	**15,084**	**3,934**	**9,961**	**1,190**	**2,059**	**1,227**	**664**	**168**
Foreign exchange	**1,510**	**603**	**615**	**292**	**213**	**106**	**77**	**29**
US dollar	1,236	529	515	192	162	85	52	25
Euro	533	181	208	144	69	24	36	8
Japanese yen	252	120	83	50	100	62	24	14
Pound sterling	234	74	95	65	9	4	4	2
Other	764	302	330	132	86	38	38	10
Interest rate	**12,168**	**2,833**	**8,515**	**820**	**1,292**	**886**	**356**	**50**
US dollar	2,948	805	1,969	174	298	206	81	11
Euro	6,528	1,277	4,769	482	833	578	225	30
Japanese yen	707	226	457	23	53	41	11	1
Pound sterling	992	229	690	73	87	52	29	6
Other	993	295	629	69	21	10	9	2
Equity	**191**	**34**	**135**	**23**	**475**	**187**	**205**	**82**
Credit default swaps	**635**	**313**	**313**	**9**	**...**	**...**	**...**	**...**
Unallocated	**580**	**151**	**383**	**46**	**79**	**47**	**26**	**6**

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.

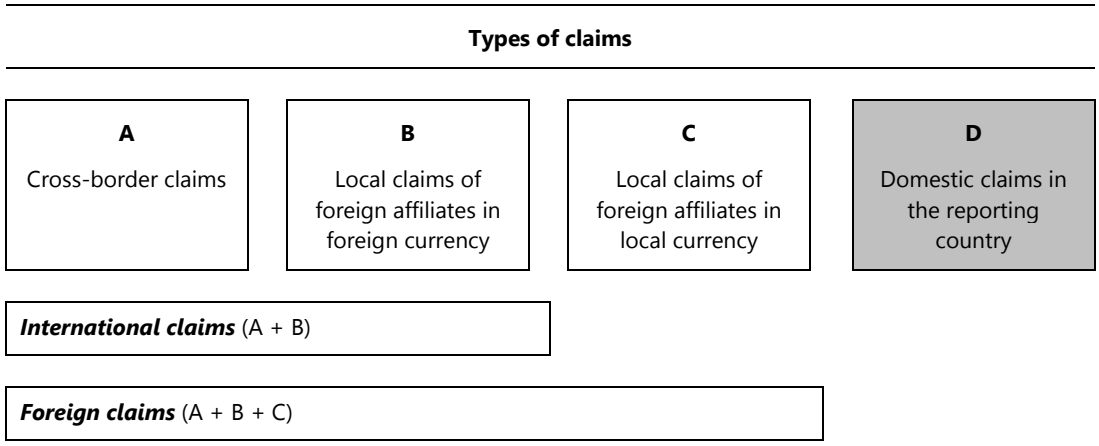
Tables A1–A2

The data in Tables A1–A2 (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 A1 provides aggregated figures by residence of banks in all reporting countries. Table A2 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. 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 B1–B2

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 B1 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 B2 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 25 countries which reports both sets of data and comprises Australia, Austria, Belgium, Canada, Chile, Chinese Taipei, Finland, France, Germany, Greece, India, Ireland, Italy, Japan, Korea, the Netherlands, Norway, Portugal, Singapore, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. The data in Table B1 cover both foreign and international claims, while Table B2 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.

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.



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

Tables C1–C2

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 D

The data in Table D 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/bppdf/bispap14.htm.

Special features in the BIS Quarterly Review

December 2014	Currency movements drive reserve composition	Robert N McCauley & Tracy Chan
December 2014	Securitisations: tranching concentrates uncertainty	Adonis Antoniades & Nikola Tarashev
December 2014	Bank business models	Rungporn Roengpitya, Nikola Tarashev & Kostas Tsatsaronis
December 2014	Non-financial corporations from emerging market economies and capital flows	Stefan Avdjiev, Michael Chui & Hyun Song Shin
September 2014	Asset managers in emerging market economies	Ken Miyajima & Ilhyock Shim
September 2014	Risks related to EME corporate balance sheets: the role of leverage and currency mismatch	Michael Chui, Ingo Fender & Vladyslav Sushko
September 2014	Cross-border bank lending during the taper tantrum: the role of emerging market fundamentals	Stefan Avdjiev & Előd Takáts
September 2014	Residential property price statistics across the globe	Michela Scatigna, Robert Szemere & Kostas Tsatsaronis
March 2014	Financial structure and growth	Leonardo Gambacorta, Jing Yang & Kostas Tsatsaronis
March 2014	Forward guidance at the zero lower bound	Andrew Filardo & Boris Hofmann
March 2014	The credit-to-GDP gap and countercyclical capital buffers: questions and answers	Mathias Drehmann & Kostas Tsatsaronis
March 2014	Non-deliverable forwards: 2013 and beyond	Robert N McCauley, Chang Shu & Guonan Ma
March 2014	Non-US banks' claims on the Federal Reserve	Robert N McCauley & Patrick McGuire
December 2013	The anatomy of the global FX market through the lens of the 2013 Triennial Survey	D Rime & A Schrimpf
December 2013	FX market trends before, between and beyond Triennial Surveys	M Bech & J Sobrun
December 2013	FX and derivatives markets in emerging economies and the internationalisation of their currencies	T Ehlers & F Packer
December 2013	The OTC interest rate derivatives market in 2013	J Gyntelberg & C Upper

Recent BIS publications[1]

BIS Papers

Debt
January 2015

The 13th BIS Annual Conference took place in Lucerne, Switzerland on 27 June 2014. The event brought together a distinguished group of central bank governors, leading academics and former public officials to exchange views. The focus this year was on debt. The papers presented at the conference and the discussants' comments are released as BIS Working Papers 479 to 482.

BIS Papers No 80 contains the opening address by Jaime Caruana (General Manager, BIS) on "Debt: the view from Basel" and a keynote address by Benjamin Friedman (Harvard University) entitled "A predictable pathology". Panel remarks by Stephen King (HSBC) and Masaaki Shirakawa (Aoyama Gakuin University).

BIS Working Papers

Why do we need both liquidity regulations and a lender of last resort? A perspective from Federal Reserve lending during the 2007–09 US financial crisis
Mark Carlson, Burcu Duygan-Bump and William Nelson

During the 2007–09 financial crisis, there were severe reductions in the liquidity of financial markets, runs on the shadow banking system, and destabilizing defaults and near-defaults of major financial institutions. In response, the Federal Reserve, in its role as lender of last resort (LOLR), injected extraordinary amounts of liquidity. In the aftermath, lawmakers and regulators have taken steps to reduce the likelihood that such lending would be required in the future, including the introduction of liquidity regulations. These changes were motivated in part by the argument that central bank lending entails extremely high costs and should be made unnecessary by liquidity regulations. By contrast, some have argued that the loss of liquidity was the result of market failures, and that central banks can solve such failures by lending, making liquidity regulations unnecessary. In this paper, we argue that LOLR lending and liquidity regulations are complementary tools. Liquidity shortfalls can arise for two very different reasons: First, sound institutions can face runs or a deterioration in the liquidity of markets they depend on for funding. Second, solvency concerns can cause creditors to pull away from troubled institutions. Using examples from the recent crisis, we argue that central bank lending is the best response in the former situation, while orderly resolution (by the institution as it gets through the problem on its own or via a controlled failure) is the best response in the second situation. We also contend that liquidity regulations are a necessary tool in both situations: They help ensure that the authorities will have time to assess the nature of the shortfall and arrange the appropriate response, and they provide an incentive for banks to internalize the externalities associated with any liquidity risks.

[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).

Assessing the CNH-CNY pricing differential: role of fundamentals, contagion and policy
Michael Funke, Chang Shu, Xiaoqiang Cheng and Sercan Eraslan

Renminbi internationalisation has brought about an active offshore market where the exchange rate frequently diverges from the onshore market. Using extended GARCH models, we explore the role of fundamentals, global factors and policies related to renminbi internationalisation in driving the pricing differential between the onshore and offshore exchange rates. Differences in the liquidity of the two markets play an important role in explaining the level of the differential, while rises in global risk aversion tend to increase the differential's volatility. On the policy front, measures permitting cross-border renminbi outflows have a particularly discernible impact in reducing the volatility of the pricing gap between the two markets.

A dynamic network model of the unsecured interbank lending market
Francisco Blasques, Falk Bräuning and Iman van Lelyveld

We introduce a structural dynamic network model of the formation of lending relationships in the unsecured interbank market. Banks are subject to random liquidity shocks and can form links with potential trading partners to bilaterally Nash bargain about loan conditions. To reduce credit risk uncertainty, banks can engage in costly peer monitoring of counterparties. We estimate the structural model parameters by indirect inference using network statistics of the Dutch interbank market from 2008 to 2011. The estimated model accurately explains the high sparsity and stability of the lending network. In particular, peer monitoring and credit risk uncertainty are key factors in the formation of stable interbank lending relationships that are associated with improved credit conditions. Moreover, the estimated degree distribution of the lending network is highly skewed with a few very interconnected core banks and many peripheral banks that trade mainly with core banks. Shocks to credit risk uncertainty can lead to extended periods of low market activity, amplified by a reduction in peer monitoring. Finally, our monetary policy analysis shows that a wider interest rate corridor leads to a more active market through a direct effect on the outside options and an indirect multiplier effect by increasing banks' monitoring and search efforts.

Why does financial sector growth crowd out real economic growth?
G Cecchetti and Enisse Kharroubi

In this paper we examine the negative relationship between the rate of growth of the financial sector and the rate of growth of total factor productivity. We begin by showing that by disproportionately benefiting high collateral/low productivity projects, an exogenous increase in finance reduces total factor productivity growth. Then, in a model with skilled workers and endogenous financial sector growth, we establish the possibility of multiple equilibria. In the equilibrium where skilled labour works in finance, the financial sector grows more quickly at the expense of the real economy. We go on to show that consistent with this theory, financial growth disproportionately harms financially dependent and R&D-intensive industries.

Liquidity and growth: the role of counter-cyclical interest rates
Philippe Aghion, Emmanuel Farhi and Enisse Kharroubi

In this paper, we use cross-industry, cross-country panel data to test whether industry growth is positively affected by the interaction between the reaction of real short-term interest rates to the business cycle and industry-level measures of financial constraints. Financial constraints are measured, either by the extent to which an industry is prone to being "credit-constrained", or by the extent to which it is prone to being "liquidity-constrained". Our main findings are that: (i) the interaction between credit or liquidity constraints and the counter-cyclical real short-term interest rate has a positive, significant, and robust impact on the average annual growth rate of industry labor productivity; (ii) these interaction effects tend to be more significant in recessions than in expansions.

Bank competition and credit booms

Phurichai Rungcharoenkitkul

A model of imperfectly competitive banks is examined under asymmetric information about borrower quality. Greater bank competition and a lower risk-free rate raise the screening costs of lending, which can result in pooling Nash equilibria with credit booms. Such equilibria are characterised by sharp increases in credit supply and deteriorations in average loan quality, which are inefficient for banks. In the model, banks' incentives to make risky loans can vary despite unchanged capital structure, thus highlighting the role of a risk-taking mechanism. This approach helps explain the existing mixed empirical results on the relationship between bank competition and financial stability. The model can be used to define a neutral interest rate in the context of financial cycles, namely a finance-neutral interest rate, which is estimated in the case of the United States.

The biofuel connection: impact of US regulation on oil and food prices

Fernando Avalos and Marco Jacopo Lombardi

Biofuel policies are frequently mentioned in the policy and academic debates because of their potential impact on food prices. In 2005, the United States authorities passed legislation under which corn-based ethanol became in practice the only available gasoline additive. Some studies have then argued that ethanol and biodiesel subsidies in advanced economies may have strengthened the link between the prices of oil and those of some food commodities. This paper tests whether the response of food commodity prices to global demand shocks and to oil-specific demand shocks has changed following the introduction of this legislation. Our results show that corn prices exhibit a stronger response to global demand shocks after 2006. Some short-lived but statistically significant response to oil-specific demand shocks is also documented. Close substitutes of corn in the feedstock business (eg soybeans and wheat) exhibit comparable but more muted responses, while other food commodities unaffected by biofuel policies do not change their behaviour. We also report some evidence that global liquidity is a factor driving global demand shocks, and through that channel may have affected food commodity prices.

Why did bank lending rates diverge from policy rates after the financial crisis?

Anamaria Illes, Marco Jacopo Lombardi and Paul Mizen

The global finance crisis prompted central banks in many countries to cut short-term policy rates to near zero levels. Yet, lending rates did not fall as much as the decline in policy rates would have suggested. We argue that comparing lending rates to policy rates is misleading: banks do not obtain all their funds at policy rates, and after the crisis, costs of funding rose substantially. Comparing lending rates with a weighted average cost of funds suggests that banks did not substantially change their rate setting behaviour after the financial crisis: interest rate pass-through relationships across eleven countries in Europe appear to have remained stable.

Can demography affect inflation and monetary policy?

Mikael Juselius and Előd Takáts

Several countries are concurrently experiencing historically low inflation rates and ageing populations. Is there a connection, as recently suggested by some senior central bankers? We undertake a comprehensive test of this hypothesis in a panel of 22 countries over the 1955–2010 period. We find a stable and significant correlation between demography and low-frequency inflation. In particular, a larger share of dependents (ie young and old) is correlated with higher inflation, while a larger share of working age cohorts is correlated with lower inflation. The results are robust to different country samples, time periods, control variables and estimation techniques. We also find a significant, albeit unstable, relationship between demography and monetary policy.

Bank capital shock propagation via syndicated interconnectedness

Makoto Nirei, Julián Caballero and Vladyslav Sushko

Loan syndication increases bank interconnectedness through co-lending relationships. We study the financial stability implications of such dependency on syndicate partners in the presence of shocks to banks' capital. Model simulations in a network setting show that such shocks can produce rare events in this market when banks have shared loan exposures while

also relying on a common risk management tool such as value-at-risk (VaR). This is because a withdrawal of a bank from a syndicate can cause ripple effects through the market, as the loan arranger scrambles to commit more of its own funds by also pulling back from other syndicates or has to dissolve the syndicate it had arranged. However, simulations also show that the core-periphery structure observed in the empirical network may reduce the probability of such contagion. In addition, simulations with tighter VaR constraints show banks taking on less risk ex-ante.

Global dollar credit: links to US monetary policy and leverage

Robert N McCauley, Patrick McGuire and Vladyslav Sushko

Since the global financial crisis, banks and bond investors have increased the outstanding US dollar credit to non-bank borrowers outside the United States from $6 trillion to $9 trillion. This increase has implications for understanding global liquidity and monetary policy transmission. We analyse the links between US monetary policy, leverage and flows into bond funds, on the one hand, and dollar credit extended to non-US borrowers, on the other. Prior to the crisis, global banks drew on low US dollar funding rates and easy leveraging to extend dollar credit to non-US borrowers. After the Federal Reserve announced its large-scale bond purchases in 2008, however, investors responded to compressed long-term US Treasury rates by buying higher yielding dollar bonds from non-US issuers. Thus, US unconventional monetary policy contributed to shifting the balance of dollar credit transmission from global banks to global bond investors.

Secular stagnation, debt overhang and other rationales for sluggish growth, six years on

Stephanie Lo and Kenneth Rogoff

There is considerable controversy over why sluggish economic growth persists across many advanced economies six years after the onset of the financial crisis. Theories include a secular deficiency in aggregate demand, slowing innovation, adverse demographics, lingering policy uncertainty, post-crisis political fractionalisation, debt overhang, insufficient fiscal stimulus, excessive financial regulation, and some mix of all of the above. This paper surveys the alternative viewpoints. We argue that until significant pockets of private, external and public debt overhang further abate, the potential role of other headwinds to economic growth will be difficult to quantify.

Credit booms: implications for the public and the private sector

Tano Santos

The pre-crisis period was characterised by ample liquidity, a credit boom, and low yields in a wide range of asset classes. It was also defined by the accumulation of risks on and off the balance sheets of many financial intermediaries, particularly banks, as well as by a substantial increase in public and private sector debt in some countries. Understanding the relation between liquidity and the excessive accumulation of risks remains a central policy question. How do credit booms affect incentives? In the case of the government sector, credit booms may affect the incentives of different interest groups to agree on policies for reform or fiscal stabilisation. In the case of the private sector, it may change the incentives of originators to produce good assets. Credit booms complicate the evaluation of policies and agents and in addition may facilitate the entrenchment of interest groups and the deterioration of governance institutions.

Trilemmas and trade-offs: living with financial globalisation

Maurice Obstfeld

This paper evaluates the capacity of emerging market economies (EMEs) to moderate the domestic impact of global financial and monetary forces through their own monetary policies. Those EMEs that are able to exploit a flexible exchange rate are far better positioned than those that devote monetary policy to fixing the rate - a reflection of the classical monetary policy trilemma. However, exchange rate changes alone do not insulate economies from foreign financial and monetary shocks. While potentially a potent source of economic benefits, financial globalisation does have a downside for economic management. It worsens the trade-offs monetary policy faces in navigating among multiple domestic objectives. This

drawback of globalisation raises the marginal value of additional tools of macroeconomic and financial policy. Unfortunately, the availability of such tools is constrained by a financial policy trilemma that is distinct from the monetary trilemma. This second trilemma posits the incompatibility of national responsibility for financial policy, international financial integration and financial stability.

Understanding the role of debt in the financial system

Bengt Holmstrom

Money markets are fundamentally different from stock markets. Stock markets are about price discovery for the purpose of allocating risk efficiently. Money markets are about obviating the need for price discovery using over-collateralised debt to reduce the cost of lending. Yet, attempts to reform credit markets in the wake of the recent financial crisis often draw on insights grounded in our understanding of stock markets. This can be very misleading. The paper presents a perspective on the logic of credit markets and the structure of debt contracts that highlights the information insensitivity of debt. This perspective explains among other things why opacity often enhances liquidity in credit markets and therefore why all financial panics involve debt. These basic insights into the nature of debt and credit markets are simple but important for thinking about policies on transparency, on capital buffers and other regulatory issues concerning banking and money markets.

Spillovers of US unconventional monetary policy to Asia: the role of long-term interest rates

Ken Miyajima, Madhusudan Mohanty and James Yetman

This paper reviews the role of long-term interest rates in international monetary transmission and related policy challenges in the wake of exceptionally easy US monetary policy. It employs a panel VAR model to examine the impact of a very low US term premium on relatively small open Asian economies. The results show that unconventional US monetary policy spills over to Asia mainly through low domestic bond yields and rapid growth of domestic bank credit. Financial integration does not appear to reduce the control of national monetary authorities over short-term policy rates. However, it does compromise control over long-term rates that are key determinants of economic activity. In light of the results, the paper reviews potential policy options to deal with volatile term and risk premiums.

Has the transmission of policy rates to lending rates been impaired by the Global Financial Crisis?

Leonardo Gambacorta, Anamaria Illes and Marco Jacopo Lombardi

Central banks of major advanced economies have maintained a very accommodative monetary policy stance in the last few years. However, concerns have surfaced that the transmission of low policy rates to lending rates has been weaker than in the past. Has the transmission of policy rates to lending rates been impaired by the Global Financial Crisis? To answer this question, we first estimate standard cointegrating equations linking policy and lending rates for non-financial firms in Italy, Spain, United Kingdom and United States. We then test for structural change in the cointegration parameters, reporting strong evidence of a break after Lehman Brothers' default. Such structural break is due to a strong increase in the mark-up between the lending rate and the policy rate that standard models assume constant in the long run. The structural shift is explained by compounding the lending rate equation with measures of risk.

Financial inclusion and optimal monetary policy

Aaron Mehrotra and James Yetman

Limited access to the formal financial sector is a common feature of the economic environment in many emerging market and developing economies. In this paper, we examine how the level of financial inclusion affects welfare-maximising monetary policy. Our theoretical framework is based on Galí, López-Salido and Vallés (2004). In this model, only financially included households are able to borrow and save to smooth consumption in the face of income volatility. We show that optimal monetary policy implies a positive relationship between the share of financially included households and the ratio of output volatility to inflation volatility. We find strong empirical support for the model's predictions

using a broad cross-country dataset on financial inclusion. The empirical results are driven primarily by central banks with a high degree of autonomy in their monetary policy decisions, who might be most likely to set monetary policy optimally.

SMEs, financial constraints and growth
Ryan Banerjee

The SME sector is often hailed as an important engine of economic growth. But recent research suggests that young rather than small firms are the main contributors to employment growth. This paper shows that young firms are also key contributors to profit growth across advanced economies. It them examines the impact of financial constraints on profitability across the age distribution of SMEs. We find that start-ups which report finance as their greatest constraint receive smaller new loans and evidence that financing constraints reduce start-up profitability. We do not find a similar relationship for older SMEs in pre-crisis data. Therefore, policy initiatives which ease financing constraints for start-ups could play an important role in boosting economic growth. However, following the protracted financial crisis in Europe, we also find that financial constraints reduced profitability in the cohort of more mature firms that were start-ups just before the financial crisis.

Exchange rate risk and local currency sovereign bond yields in emerging markets
Blaise Gadanecz, Ken Miyajima and Chang Shu

In this paper we consider the role of exchange rate risk in influencing local currency sovereign bond yields in emerging market economies (EMEs). We explicitly account for exchange rate expectations and uncertainty around them, as measured by exchange rate volatility. The analysis points to an important influence of exchange rate risk: when exchange rate volatility increases, investors require a larger yield compensation for holding EME local currency sovereign bonds. The impact of exchange rate volatility has become more important since May 2013, when investors realised that the Federal Reserve may reduce the scale of its asset purchases sooner than previously expected.

The liquidity risk and the credit crunch of 2007–08: evidence from micro-level data on mortgage loan applications
Adonis Antoniades

Recent empirical studies have shown that during the financial crisis of 2007-2008 banks that were more heavily exposed to liquidity risk contracted their supply of credit more sharply. I contribute to the identification of this effect by relying on the use of micro-level data on US mortgage loan applications, which allows me to identify liquidity risk as an important determinant of the contraction of credit in the mortgage market, but as separate from the precipitous fall in credit demand, disruptions in the securitization and subprime markets, shifts in asset risk, and changing risk-aversion among loan officers.

Correlations across Asia-Pacific bond markets and the impact of capital flow measures
Pornpinun Chantapacdepong and Ilhyock Shim

Using a novel database on capital flow measures in Asia over 2004−13, we investigate the impact of bond inflow measures on the cross-market correlations of weekly bond fund flows and of daily bond returns in 12 Asia-Pacific economies, after controlling for global, regional and local factors. We find that a bond inflow measure taken by a country tends to increase the correlation of bond flows into the country with those into other countries in the region. In particular, a country's policy actions to loosen (ie increase) bond inflows significantly increase bond flow correlations, but policy actions to tighten (ie decrease) bond inflows have no significant impact. We also find that bond inflow measures increase bond return correlations in the long run. These results can be explained by the signalling hypothesis, under which global investors expect that when a country takes a bond inflow measure other countries to take similar actions, so that they increase or decrease their investment in the region at the same time.

Basel Committee on Banking Supervision

Basel III Monitoring Report
March 2015

This report presents the results of the Basel Committee's latest Basel III monitoring exercise. The study is based on the rigorous reporting process set up by the Committee to periodically review the implications of the Basel III standards for banks. The results of previous exercises in this series were published in September 2014, March 2014, September 2013, March 2013, September 2012 and April 2012.

A total of 224 banks participated in the current study, comprising 98 large internationally active banks ("Group 1 banks", defined as internationally active banks that have Tier 1 capital of more than €3 billion) and 126 Group 2 banks (ie representative of all other banks).

The results of the monitoring exercise assume that the final Basel III package is fully in force, based on data as of 30 June 2014. That is, they do not take account of the transitional arrangements set out in the Basel III framework, such as the gradual phase-in of deductions from regulatory capital. No assumptions were made about bank profitability or behavioural responses, such as changes in bank capital or balance sheet composition. For that reason, the results of the study are not comparable to industry estimates.

Data as of 30 June 2014 show that all large internationally active banks now meet the Basel III risk-based capital minimum requirements. Moreover, capital shortfalls relative to the higher target levels have been further reduced. For example, at the Common Equity Tier 1 (CET1) target level of 7.0% (plus the surcharges on global systemically important banks – G-SIBs – as applicable), the aggregate shortfall for Group 1 banks is €3.9 billion, compared to €15.1 billion on 31 December 2013 and €485.6 billion on 30 June 2011. As a point of reference, the sum of after-tax profits prior to distributions across the same sample of Group 1 banks for the six-month period ending 30 June 2014 was €210.1 billion.

Under the same assumptions, the capital shortfall for Group 2 banks included in the sample is estimated at €0.1 billion for the CET1 minimum of 4.5% and €1.8 billion for a CET1 target level of 7.0%. This represents a narrowing of the shortfall from €2.0 billion and €9.4 billion compared to the previous period, respectively.

The average CET1 capital ratios under the Basel III framework across the same sample of banks are 10.8% for Group 1 banks and 11.8% for Group 2 banks.

Basel III's Liquidity Coverage Ratio (LCR) came into effect on 1 January 2015. The minimum requirement is set initially at 60% and will then rise in equal annual steps to reach 100% in 2019. The weighted average LCR for the Group 1 bank sample was 121% on 30 June 2014, up from 119% six months earlier. For Group 2 banks, the weighted average LCR was 140%, up from 132% six months earlier. For banks in the sample, 80% reported an LCR that met or exceeded 100%, while 96% reported an LCR at or above 60%.

Basel III also includes a longer-term structural liquidity standard - the Net Stable Funding Ratio (NSFR) - which was finalised by the Basel Committee in October 2014. Given data collected as part of the end-June 2014 reporting period was obtained prior to the release of the revised standard, the report provides analysis of results under the consultative document issued in January 2014. The weighted average NSFR for the Group 1 bank sample was 110% while for Group 2 banks the average NSFR was 114%. As of June 2014, 80% of the 212 banks in the NSFR sample reported a ratio that met or exceeded 100%, while 92% of the banks reported an NSFR at or above 90%.

Developments in credit risk management across sectors: current practices and recommendations - consultative document
February 2015

Significant market and regulatory developments since the 2008 financial crisis have led to changes in how banks, insurers and securities firms measure credit risk. The Joint Forum surveyed supervisors and firms in the banking, securities and insurance sectors globally in

order to understand how credit risk supervision and management have changed. Fifteen supervisors and 23 firms from Europe, North America and Asia responded to the survey.

This survey provides insight into the state of credit risk management and the implications for regulatory and supervisory frameworks. It updates the Joint Forum's 2006 review: Regulatory and market differences: issues and observations. Based on its analysis of the responses and subsequent discussions with firms, the Joint Forum makes the following recommendations for consideration by supervisors.

Recommendation 1: Supervisors should be cautious against over-reliance on internal models for credit risk management and regulatory capital. Where appropriate, simple measures could be evaluated in conjunction with sophisticated modelling to provide a more complete picture.

Recommendation 2: With the current low interest rate environment possibly generating a "search for yield" through a variety of mechanisms, supervisors should be cognisant of the growth of such risk-taking behaviours and the resulting need for firms to have appropriate risk management processes.

Recommendation 3: Supervisors should be aware of the growing need for high-quality liquid collateral to meet margin requirements for OTC derivatives sectors, and if any issues arise in this regard they should respond appropriately. The Joint Forum's Parent Committees (BCBS, IAIS and IOSCO) should consider taking appropriate steps to monitor and evaluate the availability of such collateral in their future work while also considering the objective of reducing systemic risk and promoting central clearing through collateralisation of counterparty credit risk exposures that stems from non-centrally cleared OTC derivatives.

Recommendation 4: Supervisors should consider whether firms are accurately capturing central counterparty exposures as part of their credit risk management.

Guidance on accounting for expected credit losses - consultative document
February 2015

The consultative document outlines supervisory expectations regarding sound credit risk practices associated with implementing and applying an expected credit loss (ECL) accounting framework.

In June 2006, the Basel Committee issued supervisory guidance on Sound Credit Risk Assessment and Valuation for Loans to address how common data and processes related to loans may be used for assessing credit risk, accounting for loan impairment and determining regulatory capital requirements. This document replaces the Committee's June 2006 guidance which was based on the incurred-loss model of accounting.

With the global transition to an ECL accounting framework, the Committee is updating its guidance. The Committee recognises that differences exist between ECL accounting frameworks across jurisdictions. The revised guidance aims to promote high-quality, robust and consistent implementation of ECL accounting frameworks across all jurisdictions.

The guidance sets forth supervisory expectations for ECL accounting that are consistent with the applicable accounting standards established by the IASB and other standard setters. Moreover, the paper presents the Committee's view of the robust application of those standards, including circumstances in which the Committee expects internationally active banks to limit their use of particular simplifications and/or practical expedients included in the relevant accounting standards.

Range of practice in the regulation and supervision of institutions relevant to financial inclusion
January 2015

The fast pace of change in the financial inclusion landscape is presenting supervisors with new issues and challenges. Developments in digital financial inclusion, in particular, are posing new challenges for how authorities define their regulatory scope and allocate supervisory resources.

This Basel Committee report reveals the extent to which supervisory and regulatory practices are evolving in response to the emergence of new institutions, financial products and intermediation channels that service poor and low-income customers in different jurisdictions. The report sets out findings from a survey of over 50 Basel Committee members and non-members. The survey was undertaken by the Basel Consultative Group, the Committee's outreach group for enhancing the understanding of key supervisory and regulatory issues worldwide.

The interplay of accounting and regulation and its impact on bank behaviour: Literature review
January 2015

Regulatory and accounting rules are important determinants of bank behaviour; however, the interaction of the two is often not well understood and their intended outcomes do not always align. This Basel Committee working paper reviews academic literature on the interplay of accounting and regulatory frameworks, how these two regimes affect bank behaviour and whether regulatory and accounting requirements can be used to counter unintended outcomes and/or reinforce prudential objectives.

The review explores the following questions:

- How can fair value accounting contribute to default contagion in crisis times?
- What are the implications of different provisioning regimes for bank management?
- What are the implications for bank behaviour of prudential filters and their removal?
- To what extent can disclosure of accounting information enhance market discipline?

Revised Pillar 3 disclosure requirements
January 2015

The revisions to the disclosure requirements address shortcomings in Pillar 3 of the Basel framework. The revised disclosure requirements will enable market participants to better compare banks' disclosures of risk-weighted assets. They form part of the Committee's broader agenda to reform regulatory standards for banks in response to the global financial crisis. The revisions notably focus on improving the transparency of the internal model-based approaches that banks use to calculate minimum regulatory capital requirements.

The revised requirements will take effect from year-end 2016. The revised requirements supersede the existing Pillar 3 disclosure requirements first issued as part of the Basel II framework・ in 2004 and the Basel 2.5 revisions・ and enhancements ・ introduced in 2009. The most significant revisions with respect to the previous Pillar 3 disclosure requirements relate to the use of templates for quantitative disclosure accompanied with definitions, some of them with a fixed format. This aims to enhance comparability of bank's disclosures, both across banks and over time.

The revised standard incorporates feedback from Pillar 3 preparers and users collected during a public consultation. Compared to the consultative version, the key changes are:

- rebalancing the disclosures required quarterly, semi-annually and annually;
- streamlining the requirements related to disclosure of credit risk exposures and credit risk mitigation techniques; and
- clarifying and streamlining the disclosure requirements for securitisation exposures.

Progress in adopting the principles for effective risk data aggregation and risk reporting
January 2015

The Basel Committee on Banking Supervision today issued a second progress report・ on banks' adoption of the Committee's Principles for effective risk data aggregation and risk reporting. Published in 2013, the Principles aim to strengthen risk data aggregation and risk reporting at banks to improve their risk management practices and decision-making

processes. Firms designated as global systemically important banks (G-SIBs) are required to implement the Principles in full by 2016.

The report published today reviews banks' progress in 2014 and updates a 2013 "stocktaking" self-assessment survey completed by G-SIBs, other large banks and supervisors. It outlines the measures G-SIBs have taken to comply with the Principles, as well as the challenges they face. Notably, of the 31 participating banks, 14 reported that they will be unable to fully comply with the Principles by the 2016 deadline, compared with 10 G-SIBs in 2013.

The Committee will continue to monitor G-SIBs' progress towards meeting the 2016 deadline.

Revisions to the standardised approach for credit risk - consultative document
December 2014

The proposed Revisions to the Standardised Approach for credit risk・ seek to strengthen the existing regulatory capital standard in several ways. These include:

- reduced reliance on external credit ratings;
- enhanced granularity and risk sensitivity;
- updated risk weight calibrations, which for purposes of this consultation are indicative risk weights and will be further informed by the results of a quantitative impact study;
- more comparability with the internal ratings-based (IRB) approach with respect to the definition and treatment of similar exposures; and
- better clarity on the application of the standards.

The Committee is considering replacing references to external ratings, as used in the current standardised approach, with a limited number of risk drivers. These alternative risk drivers vary based on the particular type of exposure and have been selected on the basis that they are simple, intuitive, readily available and capable of explaining risk across jurisdictions.

Given the challenges associated with identifying risk drivers that can be applied globally but which also reflect the local nature of some exposures - such as retail credit and mortgages - the Committee recognises that the proposals are still at an early stage of development. Thus, the Committee seeks respondents' comments and analysis with a view to enhancing the proposals set out in this consultative document.

The key aspects of the proposals are:

- Bank exposures: would no longer be risk-weighted by reference to the bank's external credit rating or that of its sovereign of incorporation, but would instead be based on two risk drivers: the bank's capital adequacy and its asset quality.
- Corporate exposures: would no longer be risk-weighted by reference to the borrowing firm's external credit rating, but would instead be based on the firm's revenue and leverage. Further, risk sensitivity and comparability with the IRB approach would be increased by introducing a specific treatment for specialised lending.
- Retail category: would be enhanced by tightening the criteria to qualify for a preferential risk weight, and by introducing an alternative treatment for exposures that do not meet the criteria.
- Residential real estate: would no longer receive a 35% risk weight. Instead, risk weights would be based on two commonly used loan underwriting ratios: the amount of the loan relative to the value of the real estate securing the loan (ie the loan-to-value ratio) and the borrower's indebtedness (ie a debt-service coverage ratio).
- Commercial real estate: two options are currently under consideration: (a) treating the exposures as unsecured with national discretion for a preferential risk weight under certain conditions; or (b) determining the risk weight based on the loan-to-value ratio.

- Credit risk mitigation: the framework would be amended by reducing the number of approaches, recalibrating supervisory haircuts and updating the corporate guarantor eligibility criteria.

Capital floors: the design of a framework based on standardised approaches - consultative document
December 2014

This consultative paper・ outlines the Basel Committee's proposals to design a capital floor based on standardised, non-internal modelled approaches. The proposed floor would replace the existing transitional capital floor based on the Basel I framework. The floor will be based on revised standardised approaches for credit, market and operational risk, which are currently under consultation.

The floor is meant to mitigate model risk and measurement error stemming from internally-modelled approaches. It would enhance the comparability of capital outcomes across banks, and also ensure that the level of capital across the banking system does not fall below a certain level.

As noted in the Committee's November 2014 report to the G20 Leaders, the Committee is taking steps to reduce variation in capital ratios between banks. The proposed capital floor is part of a range of policy and supervisory measures that aim to enhance the reliability and comparability of risk-weighted capital ratios. The Committee will consider the calibration of the floor alongside its work on finalising the revised standardised approaches.

Fundamental review of the trading book: outstanding issues - consultative document
December 2014

The Basel Committee on Banking Supervision has today issued a consultative paper on outstanding issues for its fundamental review of the trading book capital standards・. In undertaking its review, the Committee's goal is to improve trading book capital requirements and to promote consistent implementation of the rules so that they produce comparable levels of capital across jurisdictions.

Today's consultative paper sets out a limited set of revisions to the Basel Committee's proposed market risk framework, which was published in October 2013. That second consultative proposal put forward a revised market risk framework to address weaknesses in risk measurement under the current framework's internal models-based and standardised approaches.

The Committee has reviewed the comments received on the second consultative paper, including feedback provided in the course of a hypothetical portfolio exercise・ as well as the results of a comprehensive Quantitative Impact Study (QIS) that was conducted to assess the proposed trading book framework. In particular, the Committee notes the concerns expressed about the implementation challenges posed by certain elements of the new framework.

To address these challenges, the consultative paper published today outlines several refinements in three broad areas:

- A specified treatment of internal risk transfers (IRTs) of equity risk and interest rate risk between the banking book and the trading book, to supplement the existing treatment of internal transfers of credit risk. IRTs allow banks to focus their derivative hedging activity in the trading book, which may be better suited to execute trades efficiently, as well as to monitor counterparty limits, thereby contributing to better risk management of the bank. At the same time, IRTs, if not appropriately constrained, could provide banks with a mechanism to shift risk between the banking book and trading book so as to take advantage of lower capital requirements in one or the other, creating incentives for capital arbitrage. The Committee's proposal seeks to balance the objectives of a less permeable boundary between the banking book and the trading book; efficiency in risk management practices; and the need for consistent and transparent implementation of the revised boundary across jurisdictions.

- A revised standardised approach that uses as inputs changes in the value of an instrument based on sensitivity to underlying risk factors. This sensitivity-based approach will enable banks to overcome IT system constraints associated with using cash flows as inputs. The updated approach will also allow for a more granular treatment of market risk factors, thus strengthening the standardised approach as a functional fallback or floor for the internal models approach.
- A simpler method for incorporating the concept of liquidity horizons in the internal models approach. Liquidity horizons are the time required to execute transactions that extinguish an exposure to a risk factor, without moving the price of the hedging instruments, in stressed market conditions. Refinements have been made to reduce modelling complexity and data revalidation costs associated with incorporating the risk of varying market liquidity into the expected shortfall model.

Criteria for identifying simple, transparent and comparable securitisations - consultative paper
December 2014

The Basel Committee on Banking Supervision (BCBS) and the International Organization of Securities Commissions (IOSCO) released today a consultative document on Criteria for identifying simple, transparent and comparable securitisations.

The purpose of these criteria is to identify - and to assist the financial industry's development of - simple, transparent and comparable securitisations structures, as well as to help parties involved in a securitisation transaction evaluate the risks of a particular securitisation as part of their due diligence on securitisations.

Criteria promoting simplicity refer to the homogeneity of underlying assets with simple characteristics, and a transaction structure that is not overly complex.

Criteria on transparency provide investors with sufficient information on the underlying assets, the structure of the transaction and the parties involved in the transaction, thereby promoting a more comprehensive and thorough understanding of the risks involved. The manner in which the information is available should not hinder transparency, but instead it should support investors in their assessment.

Criteria promoting comparability could assist investors in their understanding of such investments and enable more straightforward comparison across between securitisation products within an asset class.

The proposed criteria have been mapped to key types of risk in the securitisation process: (i) generic criteria relating to the underlying asset pool (asset risk); (ii) transparency around the securitisation structure (structural risk); and (iii) governance of key parties to the securitisation process (fiduciary and servicer risk).

The proposed approach is a modular one. The criteria published today may be supplemented or expanded (eg with criteria related to credit risk of the underlying securitised assets) based on specific needs and applications, such as investor mandates, regulatory applications or central bank collateral frameworks. The implementation of such criteria, including its potential impact on regulation, is not within the scope of this consultation.

Revisions to the securitisation framework
December 2014

The Basel Committee on Banking Supervision's revisions to the securitisation framework aim to address a number of shortcomings in the Basel II securitisation framework and to strengthen the capital standards for securitisation exposures held in the banking book.

This framework, which will come into effect in January 2018, forms part of the Committee's broader Basel III agenda to reform regulatory standards for banks in response to the global financial crisis and thus contributes to a more resilient banking sector.

The crisis highlighted several weaknesses in the Basel II securitisation framework, including mechanistic reliance on external ratings, lack of risk sensitivity, cliff effects and insufficient

capital for certain exposures. The Committee has revised the securitisation framework to address these issues.

The most significant revisions with respect to the Basel II securitisation framework relate to changes in (i) the hierarchy of approaches; (ii) the risk drivers used in each approach; and (iii) the amount of regulatory capital banks must hold for exposures to securitisations (ie the framework's calibration).

The revised hierarchy of approaches reduces reliance on external ratings. It also simplifies and limits the number of approaches. At the top of this hierarchy is the Internal Ratings-Based Approach, which banks may use if their supervisors have approved their use of internal models. This is followed by the External Ratings-Based Approach - where credit ratings are permitted to be used in the jurisdiction - and the Standardised Approach. Additional risk drivers, notably an explicit adjustment to take account of the maturity of a securitisation's tranche, have been introduced in order to address weaknesses in the Basel II framework, which resulted in under-capitalisation of certain exposures.

Net Stable Funding Ratio disclosure standards - consultative document
December 2014

Disclosure requirements for the Net Stable Funding Ratio (NSFR) have been developed to improve the transparency of regulatory funding requirements, reinforce the Principles for Sound Liquidity Risk Management and Supervision, strengthen market discipline, and reduce uncertainty in the markets as the NSFR is implemented.

To promote the consistency and usability of disclosures related to the NSFR, internationally active banks across Basel Committee member jurisdictions will be required to publish their NSFRs according to a common template. This template includes the major categories of sources and uses of stable funding, along with qualitative requirements.

Committee on Payments and Market Infrastructures

Public quantitative disclosure standards for central counterparties
February 2015

To help ensure that the risks of using central counterparties (CCPs) are properly understood, CCPs need to make relevant information publicly available, as stated in the CPSS-IOSCO Principles for financial market infrastructures, published in April 2012. The CPSS and IOSCO published a Disclosure framework in December 2012 to improve the overall transparency of financial market infrastructures. That framework primarily covers qualitative data that need relatively infrequent updating (for example, when there is a change to a CCP's risk management framework). To complement that disclosure framework, the document now being published sets out the quantitative data that a CCP should disclose more frequently.

Taken together with the Disclosure framework, the proposed disclosures in this document are intended to help stakeholders, including authorities, participants (direct, indirect and prospective) and the public, to:

- compare CCP risk controls, including financial resources to withstand potential losses;
- have a clear and accurate understanding of the risks associated with a CCP;
- understand and assess a CCP's systemic importance and its impact on systemic risk; and
- understand and assess the risks of participating in a CCP (directly, and, to the extent relevant, indirectly).

This final report has been revised in light of the comments received on the consultation version of the report, published in October 2013.

Implementation monitoring of PFMIs: Level 2 assessment report for central counterparties and trade repositories - United States
February 2015

The Committee on Payments and Market Infrastructures (CPMI) and the International Organization of Securities Commissions (IOSCO) continue to closely monitor the implementation of the Principles for financial market infrastructures (PFMI). The principles within the PFMI (the Principles) set expectations for the design and operation of key financial market infrastructures to enhance their safety and efficiency and more broadly, to limit systemic risk and foster transparency and financial stability.

This report represents a "Level 2" assessment of the regulatory or oversight framework applied to systemically important central counterparties (CCPs) and trade repositories (TRs) in the United States. Level 2 assessments are peer-reviews that examine whether, and to what degree, the content of the legal and regulatory or oversight framework is complete and consistent with the Principles.

The United States has adopted a rules-based approach for implementing the Principles for both CCPs and TRs. An assessment of these rules found that domestic authorities have made good progress towards completely and consistently implementing the majority of the Principles applicable to systemically important CCPs, while implementation for TRs has been more limited. Recommendations are noted where the assessment has identified gaps or shortcomings between implementation measures and the Principles.

The assessment reflects the status of the legal, regulatory and policy frameworks in the United States as at 18 April 2014.

Level 2 assessment reports for the European Union and Japan have also been published concurrently with this report, and are available on the CPMI and IOSCO websites.

Implementation monitoring of PFMIs: Level 2 assessment report for central counterparties and trade repositories - Japan
February 2015

This The Committee on Payments and Market Infrastructures (CPMI) and the International Organization of Securities Commissions (IOSCO) continue to closely monitor the implementation of the Principles for financial market infrastructures (PFMI). The principles within the PFMI (the Principles) set expectations for the design and operation of key financial market infrastructures to enhance their safety and efficiency and, more broadly, to limit systemic risk and foster transparency and financial stability.

This report represents a "Level 2" assessment of the regulatory or oversight framework applied to systemically important central counterparties (CCPs) and trade repositories (TRs) in Japan. Level 2 assessments are peer-reviews that examine whether, and to what degree, the content of the legal and regulatory or oversight framework is complete and consistent with the Principles.

The Financial Services Agency (FSA) and the Bank of Japan (BOJ) are responsible for the supervision and oversight of CCPs and TRs. These authorities have completely overlapping responsibilities for CCPs and TRs and oversee all aspects of their operations in Japan. CCPs and TRs are supervised by the FSA under the Financial Instruments and Exchange Act (FIEA), which establishes the regulatory framework for CCPs clearing securities and financial derivatives and for TRs. These CCPs and TRs are also overseen by the BOJ under the Bank of Japan Act, as part of the central bank's objective to ensure smooth settlement of funds among banks and other financial institutions.

The PFMIs have been implemented in a complete and consistent manner, and through a high-level policy-based approach adopted by both the FSA and the BOJ, in the Japanese legal, regulatory and policy frameworks for CCPs and TR. Both these policies state simply that the respective authorities will apply the PFMIs in their regulation, supervision or oversight of Japanese CCPs and TRs. The FSA has gone a step further and also incorporated the PFMIs into its supervisory framework by publishing the Supervisory Guidelines. These guidelines, however, do not always mirror those of the PFMIs. Gaps or inconsistencies between the

Supervisory Guidelines and the PFMIs are identified as part of this assessment and are primarily attributable to idiosyncrasies of the Japanese regulatory regime and the structure and practices of Japanese financial markets. As such, these gaps and inconsistencies were not considered in the jurisdictional rating because of the policy-based approach taken by the FSA. Recommendations are noted where these gaps and inconsistencies may potentially result in ambiguous supervisory expectations for CCPs and TRs.

The assessment reflects the status of the legal, regulatory and policy frameworks in Japan as at 18 April 2014.

Level 2 assessment reports for the European Union and the United States have also been published concurrently with this report, and are available on the CPMI and IOSCO websites.

Implementation monitoring of PFMIs: Level 2 assessment report for central counterparties and trade repositories - European Union
February 2015

In a The Committee on Payments and Market Infrastructures (CPMI) and the International Organization of Securities Commissions (IOSCO) continue to closely monitor the implementation of the Principles for financial market infrastructures (PFMI). The principles within the PFMI (the Principles) set expectations for the design and operation of key financial market infrastructures to enhance their safety and efficiency and more broadly, to limit systemic risk and foster transparency and financial stability.

This report represents a "Level 2" assessment of the regulatory or oversight framework applied to systemically important central counterparties (CCPs) and trade repositories (TRs) in the European Union. Level 2 assessments are peer-reviews that examine whether, and to what degree, the content of the legal and regulatory or oversight framework is complete and consistent with the Principles.

In the European Union, different authorities are responsible for the regulatory, supervisory and oversight frameworks applicable to CCPs and TRs. There are overlapping responsibilities between the authorities with supervisory power over CCPs (whose approach to implementing the PFMI is primarily rules-based) and the central banks with oversight authority over CCPs (whose approach to implementing the PFMI is policy-based). For TRs there is no such overlap; the responsibility for regulation of TRs is carried out by one European Union-level authority (primarily via a rules-based approach).

An assessment of the regulatory, supervisory and oversight frameworks for CCPs found that for a number of the participating individual European Union countries, the overlay of supervisory regulations and central bank oversight was sufficient to achieve full consistency with the Principles. For TRs, while a number of the supervisory regulations were found to be consistent or broadly consistent with the Principles, implementation has been more limited.

The assessment reflects the status of the legal, regulatory and policy frameworks in the European Union as at 18 April 2014. Notable changes in the EU framework that have occurred since that date are mentioned in the report but not reflected in the assessment.

Level 2 assessment reports for the Japan and the United States have also been published concurrently with this report, and are available on the CPMI and IOSCO websites.

Statistics on payment, clearing and settlement systems in the CPMI countries - Figures for 2013
December 2014

This is an annual publication that provides data on payments and payment, clearing and settlement systems in the CPMI countries.

This version of the statistical update contains data for 2013 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 2014.

Principles for financial market infrastructures: Assessment methodology for the oversight expectations applicable to critical service providers
December 2014

The Committee on Payments and Market Infrastructures (CPMI) and the International Organization of Securities Commissions (IOSCO) have published the Assessment methodology for the oversight expectations applicable to critical service providers・.

The Principles for financial market infrastructures, published by the then Committee on Payment and Settlement Systems (CPSS) and IOSCO in April 2012, include an annex on the oversight expectations applicable to critical service providers (Annex F). The operational reliability of a financial market infrastructure (FMI) may be dependent on the continuous and adequate functioning of third-party service providers that are critical to an FMI's operations, such as information technology and messaging providers. Although an FMI remains ultimately responsible for its operational reliability, a regulator, supervisor or overseer of an FMI may use Annex F to establish expectations specifically targeted at critical service providers.

The final document establishes an assessment methodology and provides guidance for authorities in assessing an FMI's critical service providers against the oversight expectations set out in Annex F. The assessment methodology also provides guidance to critical service providers in complying with the oversight expectations. The document was issued for consultation in December 2013.

Speeches

Financial reform and the role of regulators: Evolving markets, evolving risks, evolving regulation

Speech by Jaime Caruana, General Manager of the BIS, at the Global Association of Risk Professionals (GARP) 16th Annual Risk Management Convention, New York, 24 February 2015.

The role of the financial regulator is threefold. First, to complete the reforms to repair the cracks in the system exposed by the global financial crisis. Second, to implement regulations consistently. And third, to monitor evolving markets and evolving risks.

Confronted by the complexity of the financial system and the changing nature of risks, officials and private risk managers alike need to respect the limits of their understanding and models, no matter how sophisticated. Being prepared with robust capital, liquidity and risk assessment is of the essence. Risk management requires adopting a broad perspective, understanding the limits and operating with enough room for manoeuvre to deal with the unexpected.

Macroprudential policy: opportunities and challenges

Speech by Mr Jaime Caruana, General Manager of the BIS, at the Tenth High-Level Meeting for the Middle East and North Africa region on "Global banking standards and regulatory and supervisory priorities" jointly organised by the Basel Committee on Banking Supervision, the BIS's Financial Stability Institute and the Arab Monetary Fund, Abu Dhabi, United Arab Emirates, 9 December 2014.

Policymakers now have a unique opportunity to build a macroprudential perspective into the post-crisis framework for financial stability. But this also poses new challenges. Sound macroprudential policy requires a deeper knowledge of how effectively the various tools will work, and also how they might interact with monetary and fiscal policy. Moreover, the shift in credit intermediation away from banks to the bond market gives rise to new sources of potential vulnerability that could be difficult to address with existing prudential instruments

How much capital is enough?

Opening Remarks by Mr Jaime Caruana, General Manager of the BIS, prepared for the IESE Business School conference on "Challenges for the future of banking: regulation, supervision and the structure of banking", London, 26 November 2014.

The benefits of higher bank capital - absorbing losses, resolving incentive problems and internalising externalities related to systemic risk - are widely understood. There are of course also some costs such as higher funding costs and lower lending, especially during the transition to stronger capital requirements. But various analyses suggest that these costs are not as high as feared.

Since the agreement in 2010 to implement Basel III, lending standards globally have not been unusually tight, while lending spreads have widened little or not at all. Most banks have adjusted to the higher requirements by retaining earnings and issuing new equity, rather than by cutting back on lending. A notable exception to these patterns has been European banks, which until recently have been slow to recognise losses and restructure their balance sheets.

Moreover, longer-term economic impact studies suggest that banks' current capital ratios are still comfortably below the level at which the costs of higher capital begin to outweigh the benefits. In other words, there is room for further safeguards, as reflected in the initiative to set standards for additional loss-absorbing capacity in resolution.

While leverage in the banking system has fallen, leverage and risk-taking have been on the rise in other areas of the financial system, including through shadow banking and corporate bond issuance. Financial stability will require attention that goes beyond banking.