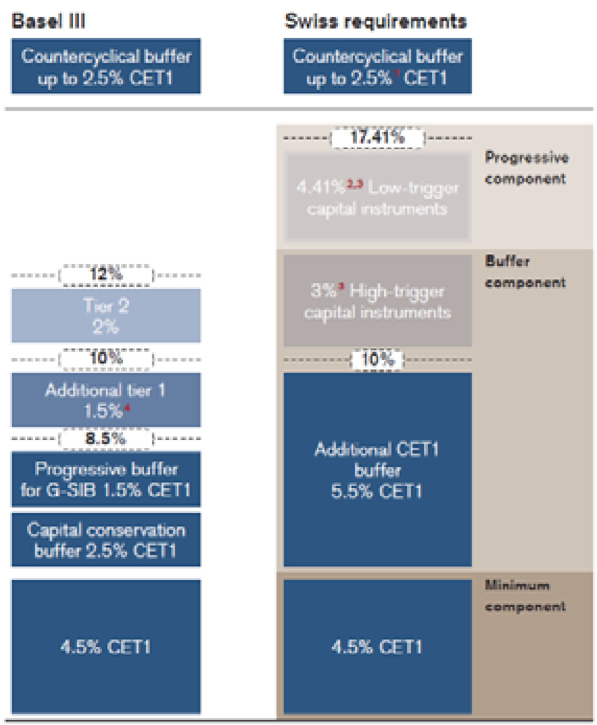
Section 3

Capital adequacy and risk-weighted assets

Recommendation 9: Provide minimum Pillar 1 capital requirements

Capital frameworks for Credit Suisse



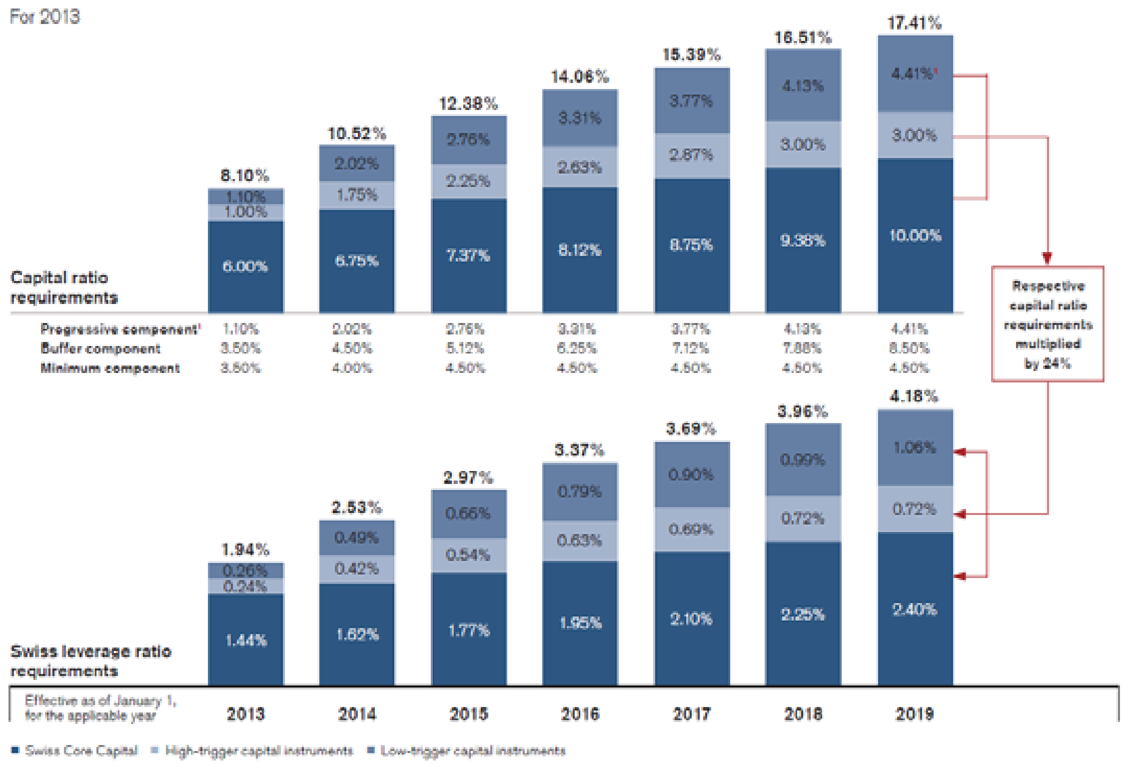
[1] As of September 30, 2013, banks are required to hold CET1 capital in the amount of 1% of RWA pertaining to mortgage loans that finance residential property in Switzerland.

[2] The progressive component requirement is dependent on our size (leverage ratio exposure) and the market share of our domestic systemically relevant business and is subject to potential capital rebates that may be granted by FINMA. For 2014, FINMA reduced our 2019 progressive component requirement from 4.41% to 3.66%.

[3] Counts towards Basel III minimum requirements as tier 1 or tier 2 capital depending on the quality of the underlying instruments.

[4] Additional tier 1 instruments must provide for principal loss absorption through a conversion into common equity or write-down feature. The trigger for such a conversion or write-down must include a CET1 ratio of at least 5.125%.

Swiss capital and leverage ratio phase-in requirements for Credit Suisse



Excludes countercyclical buffer required as of September 30, 2013.

[1] The progressive component requirement is dependent on our size (leverage ratio exposure) and the market share of our domestic systemically relevant business and is subject to potential capital rebates that may be granted by FINMA. For 2014, FINMA reduced our 2019 progressive component requirement from 4.41% to 3.66%, which leads to a total capital ratio requirement of 16.66% and a Swiss leverage ratio requirement of 4.0%.

Basel III phase-in requirements for Credit Suisse

Effective January 1, for the applicable year	2013	2014	2015	2016	2017	2018	2019
Capital ratios							
CET1	3.5% [1]	4.0% [1]	4.5%	4.5%	4.5%	4.5%	4.5%
Capital conservation buffer				0.625% [1]	1.250% [1]	1.875% [1]	2.5%
Progressive buffer for G-SIB				0.375% [1]	0.750% [1]	1.125% [1]	1.5%
Total CET1	**3.5%**	**4.0%**	**4.5%**	**5.5%**	**6.5%**	**7.5%**	**8.5%**
Additional tier 1	1.0% [1]	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Total tier 1	**4.5%**	**5.5%**	**6.0%**	**7.0%**	**8.0%**	**9.0%**	**10.0%**
Tier 2	3.5% [1]	2.5% [1]	2.0%	2.0%	2.0%	2.0%	2.0%
Total capital	**8.0%**	**8.0%**	**8.0%**	**9.0%**	**10.0%**	**11.0%**	**12.0%**
Phase-in deductions from CET1 [2]		20.0% [1]	40.0% [1]	60.0% [1]	80.0% [1]	100.0%	100.0%
Capital instruments subject to phase out	Phased out over 10-year horizon beginning 2013 through 2022						

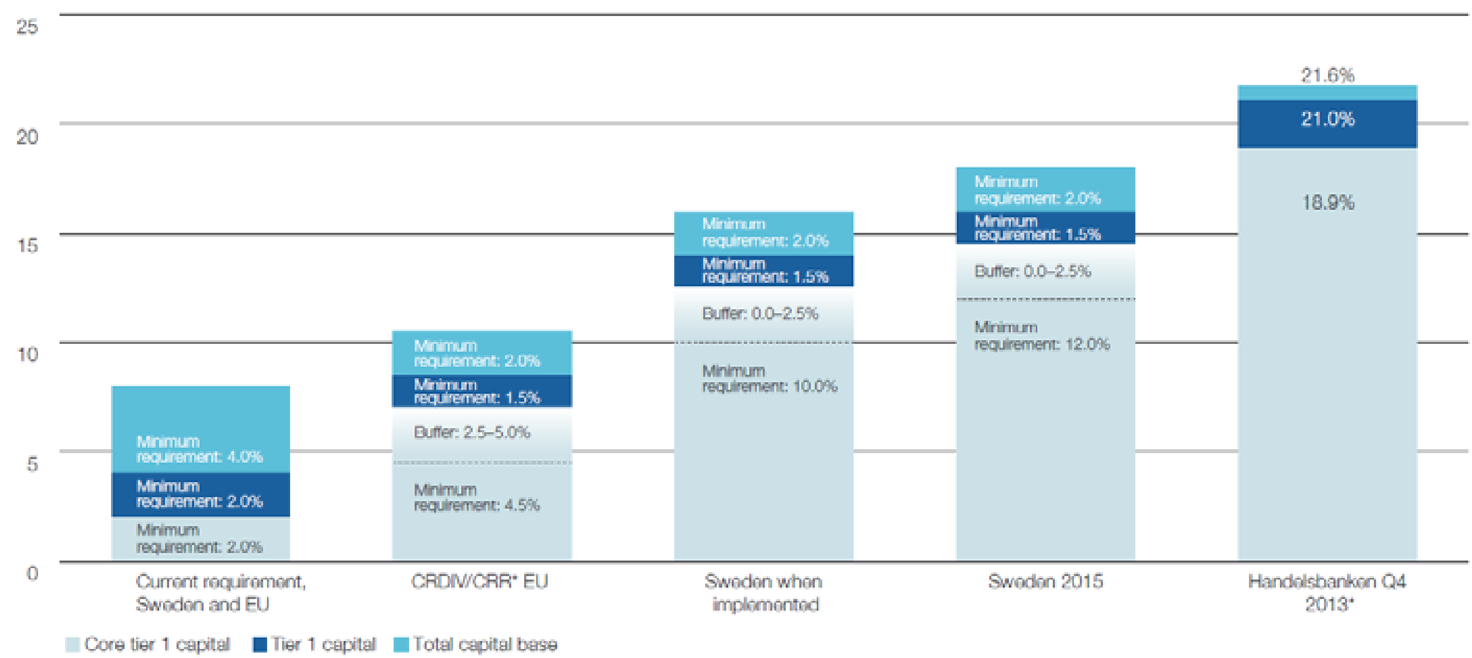
[1] Indicates transition period.

[2] Includes goodwill and other intangible assets, certain deferred tax assets and participations in financial institutions.

Source: Credit Suisse, pp. 101, 104

Recommendation 9: Provide minimum Pillar 1 capital requirements

Proposed new capital requirements for Swedish banks



*According to fully phased-in CRDIV/CRR.

STRICTER REQUIREMENTS IN SWEDEN

In late 2011, the Swedish government, the Swedish Financial Supervisory Authority and the Riksbank (the Swedish central bank) published their views about how the new framework should be implemented in Sweden. The starting point is that Swedish banks need stricter minimum capital requirements than European banks and that the regulations should be introduced more rapidly. In November 2011, the Swedish authorities announced that in 2015 systemically important Swedish banks must have a common equity tier 1 ratio in Pillar 1 of 14.5 per cent, including a countercyclical buffer of 2.5 per cent – the maximum level. This only applied to Pillar 1 and included no other potential common equity capital requirements within the framework of Pillar 2. It is expected that the stricter capital requirements will be implemented in two stages where the Swedish requirements are set 3 percentage points higher than the general EU requirements at the time of implementation, which is expected to take place in 2014, and with full effect with a higher common equity capital requirement of five percentage points from 2015. Sweden also plans to apply a shorter implementation period than proposed by the EU.

FUTURE CAPITAL REQUIREMENTS CRD IV/CRR

On 27 June 2013, the new European CRDIV/CRR regulations were published, based on what is known as the Basel III agreement. New stricter minimum capitalisation requirements are being introduced for the components in the capital base with the highest quality – common equity tier 1 capital and tier 1 capital. In addition to the minimum capital requirements, a capital conservation buffer is being introduced. This is built up during good times to prevent banks from breaching capital requirements during difficult periods. A countercyclical buffer is also required which will vary over a business cycle in order to counteract excessive credit growth. Finally, special buffer requirements for systemically important institutions will be introduced, as well as the option of stating special buffer requirements for exposures that are deemed to constitute a systemic risk.

To avoid restrictions on dividends, for example, these buffers must be covered by capital. The new regulations formally come into effect on 1 January 2014, but the sections that must be implemented through legislation in Sweden will not apply until the date when the Swedish legislation has been passed. Some parts of the regulations can be implemented in stages. All capital and buffer requirements must be implemented in full by 2019 at the latest. There are also certain transitional rules which apply up to and including 2024. However, the regulations can be implemented at a national level earlier.

HIGHER RISK WEIGHTINGS ON SWEDISH MORTGAGE LOANS

As a Pillar 2 supervisory measure, the Swedish Financial Supervisory Authority decided on 21 May to introduce a capital requirement equivalent to a 15 per cent risk weight floor for Swedish mortgage loan portfolios. For Handelsbanken in 2014, this means a capital requirement in Pillar 2 of approximately SEK 8 billion, based on the Bank's Swedish mortgage loan volume at the year-end. If the proposal from the Swedish authorities to increase the total capital requirement of systemically important banks in 2015 by an additional 2 percentage points is implemented, the Bank's margin in Pillar 2 will increase to just over SEK 9 billion.

The decision means that banks must have a buffer capital in Pillar 2 for Swedish mortgage loans corresponding to the difference between the actual risk weight in Pillar 1 and the risk weight floor in Pillar 2. The risk weights in Pillar 1 will not be changed which means that the risk weight floor will not affect the minimum requirements in Pillar 1.

The IRB models reflect the banks' historical losses on mortgage loans and imply a correct calculation of the capital requirement under Pillar 1. The extra capital requirement margin which the Swedish Financial Supervisory Authority has now implemented is intended to address risks which may have arisen in the Swedish housing and mortgage loan market in recent years and which are therefore not fully reflected in the history on which the banks' IRB models are based. It is important to point out that the Swedish Financial Supervisory Authority does not criticise the banks' existing IRB models.

Source: Handelsbanken 2013 Annual Report, pp. 5-6

Recommendation 10: Summarise information contained in the composition of capital templates adopted by the Basel Committee

Status of Capital Adequacy

Status of Mizuho Financial Group's Consolidated Capital Adequacy

(d) Companies that are in the Bank Holding Company's Corporate Group but Not Included in the Scope of Accounting Consolidation and Companies that are Not in the Bank Holding Company's Corporate Group but Included in the Scope of Accounting Consolidation

None as of March 31, 2013 and 2012.

(e) Restrictions on Transfer of Funds or Capital within the Bank Holding Company's Corporate Group

None as of March 31, 2013 and 2012.

■ Composition of Capital

(2) Composition of Capital, etc.

(a) Composition of Capital Disclosure

(As of March 31, 2013 (Basel III))

Composition of Capital Disclosure (International Standard)

As of March 31, 2013 — Millions of yen

			Amounts Excluded under Transitional Arrangements	Basel III Template
Common Equity Tier 1 Capital: Instruments and Reserves	**(1)**			
Directly Issued Qualifying Common Share Capital plus Related Stock Surplus and Retained Earnings		¥4,720,405	¥/	1a+2-1c-26
of which: Capital and Stock Surplus		2,987,127	/	1a
of which: Retained Earnings		1,814,331	/	2
of which: Treasury Stock (-)		4,661	/	1c
of which: National Specific Regulatory Adjustments (Earnings to be Distributed) (-)		76,392	/	26
of which: Other than Above		-	/	
Subscription Rights to Common Shares		2,687	/	1b
Accumulated Other Comprehensive Income and Other Disclosed Reserves		-	752,533	3
Common Share Capital Issued by Subsidiaries and Held by Third Parties (Amount Allowed in Group CET1)		11,042	/	5
Total of Items Included in Common Equity Tier 1 Capital: Instruments and Reserves Subject to Phase-out Arrangements		69,685	/	
of which: Amount Allowed in Group CET1 Capital Subject to Phase-out Arrangements on Common Share Capital Issued by Subsidiaries and Held by Third Parties		69,685	/	
Common Equity Tier 1 Capital: Instruments and Reserves	(A)	4,803,820	/	6
Common Equity Tier 1 Capital: Regulatory Adjustments	**(2)**			
Total Intangible Assets (Net of Related Tax Liability, Excluding Those Relating to Mortgage Servicing Rights)		-	399,235	8+9
of which: Goodwill (Net of Related Tax Liability, Including Those Equivalent)		-	128,902	8
of which: Other Intangibles Other Than Goodwill and Mortgage Servicing Rights (Net of Related Tax Liability)		-	270,332	9
Deferred Tax Assets that Rely on Future Profitability Excluding Those Arising from Temporary Differences (Net of Related Tax Liability)		-	21,662	10
Deferred Gains or Losses on Derivatives under Hedge Accounting		-	84,634	11
Shortfall of Eligible Provisions to Expected Losses		-	31,327	12
Securitization Gain on Sale		-	3,837	13
Gains and Losses due to Changes in Own Credit Risk on Fair Valued Liabilities		-	-	14
Defined-benefit Pension Fund Net Assets (Prepaid Pension Costs)		¥ -	¥270,563	15

Source: Mizuho 2013 Annual Report, p. 227

Composition of Capital Disclosure (International Standard)—(Continued)

As of March 31, 2013 — Millions of yen

			Amounts Excluded under Transitional Arrangements	Basel III Template
Investments in Own Shares (Excluding Those Reported in the Net Assets Section)		¥ -	¥2,589	16
Reciprocal Cross-holdings in Common Equity		-	-	17
Investments in the Capital of Banking, Financial and Insurance Entities that are Outside the Scope of Regulatory Consolidation, Net of Eligible Short Positions, where the Bank does Not Own more than 10% of the Issued Share Capital (Amount above the 10% Threshold)		-	248,376	18
Amount Exceeding the 10% Threshold on Specified Items		-	-	19+20+21
of which: Significant Investments in the Common Stock of Financials		-	-	19
of which: Mortgage Servicing Rights		-	-	20
of which: Deferred Tax Assets Arising from Temporary Differences (Net of Related Tax Liability)		-	-	21
Amount Exceeding the 15% Threshold on Specified Items		-	-	22
of which: Significant Investments in the Common Stock of Financials		-	-	23
of which: Mortgage Servicing Rights		-	-	24
of which: Deferred Tax Assets Arising from Temporary Differences (Net of Related Tax Liability)		-	-	25
Regulatory Adjustments Applied to Common Equity Tier 1 due to Insufficient Additional Tier 1 and Tier 2 to Cover Deductions		-	/	27
Common Equity Tier 1 Capital: Regulatory Adjustments	(B)	-	/	28
Common Equity Tier 1 Capital (CET1)				
Common Equity Tier 1 Capital (CET1) ((A)-(B))	(C)	4,803,820	/	29
Additional Tier 1 Capital: Instruments	**(3)**			
Directly Issued Qualifying Additional Tier 1 Instruments plus Related Stock Surplus of which: Classified as Equity under Applicable Accounting Standards and the Breakdown		-	/	31a 30
Subscription Rights to Additional Tier 1 Instruments		-	/	31b 30
Directly Issued Qualifying Additional Tier 1 Instruments plus Related Stock Surplus of which: Classified as Liabilities under Applicable Accounting Standards		-	/	32 30
Qualifying Additional Tier 1 Instruments plus Related Stock Surplus Issued by Special Purpose Vehicles and Other Equivalent Entities		-	/	30
Additional Tier 1 Instruments Issued by Subsidiaries and Held by Third Parties (Amount Allowed in Group AT1)		12,037	/	34-35
Eligible Tier 1 Capital Instruments Subject to Phase-out Arrangements Included in Additional Tier 1 Capital: Instruments		1,874,825	/	33+35
of which: Directly Issued Capital Instruments Subject to Phase out from Additional Tier 1		1,874,825	/	33
of which: Instruments Issued by Subsidiaries Subject to Phase out		-	/	35
Total of Items Included in Additional Tier 1 Capital: Instruments Subject to Phase-out Arrangements		(90,329)	/	
of which: Foreign Currency Translation Adjustments		(90,329)	/	
Additional Tier 1 Capital: Instruments	(D)	1,796,533	/	36
Additional Tier 1 Capital: Regulatory Adjustments				
Investments in Own Additional Tier 1 Instruments		¥ -	¥ -	37

Not all capital template shown

Recommendation 10: Reconciliation of the accounting balance sheet to the regulatory balance sheet should be disclosed

Assets	Balance Sheet as in published financial statements ($m)	Adjustments ($m)	Balance sheet under scope of regulatory consolidation ($m)	Template and Reconciliation Table Reference
Liquid Assets	39,737	(160)	39,577	
Due from other financial institutions	22,177	-	22,177	
Trading securities	41,288	(2)	41,286	
of which: Financial Institutions capital instruments			24	Table M
Derivative financial instruments	45,878	(1)	45,877	
of which: Financial Institutions equity investments			28	Table H
of which: Other entities equity investments			3	Table K
Available-for-sale assets	28,135	(681)	27,454	
of which: Financial institutions equity instruments			14	Table H
of which: Other entities equity investments			86	Table K
of which: Financial Institutions Additional Tier 1 instruments			18	Table L
Net loans and advances	469,295	-	469,295	
of which: deferred fee income			(380)	Row 26c
of which: collective provision			(2,887)	Table G
of which: individual provisions			(1,467)	Table G
of which: capitalised brokerage			942	Table J
of which: Financial Institutions equity exposures			10	Table H
of which: Other equity exposures			35	Table K
of which: margin lending adjustment			41	Row 26j
Regulatory deposits	2,106	-	2,106	
Due from controlled entities	-	725	725	
of which: Significant investments in the Tier 2 capital of banking, financial and insurance entities that are outside the scope of regulatory consolidation			85	Table M
Shares in controlled entities	-	3,915	3,915	
of which: Investment in deconsolidated financial subsidiaries			3,830	Table H
of which: AT1 significant investment in banking, financial and insurance entities that are outside the scope of regulatory consolidation			85	Table L
Shares in associates	4,123	(9)	4,114	
of which: Financial Institutions			4,098	Table H
of which: Other Entities			16	Table K
Current tax assets	20	(2)	18	
Deferred tax assets	721	(45)	676	Table I
of which: Deferred tax assets that rely on future profitability			33	Table I
Goodwill and other intangible assets	7,690	(2,265)	5,425	
of which: Goodwill			3,290	Table E
of which: Software			2,102	Table F
of which: other intangible assets			33	Table F
Investments backing policy liabilities	32,083	(32,083)	-	
Other assets	7,574	(1,252)	6,322	
Premises and equipment	2,164	(8)	2,156	
Total Assets	**702,991**	**(31,868)**	**671,123**	

Liabilities	Balance Sheet as in published financial statements ($m)	Adjustments ($m)	Balance sheet under scope of regulatory consolidation ($m)	Template and Reconciliation Table Reference
Due to other financial institutions	36,306	-	36,306	
Deposits and other borrowings	439,674	4,927	444,601	
Derivative financial instruments	47,509	4	47,513	
Due to controlled entities	-	1,062	1,062	
Current tax liabilities	972	(145)	827	
Deferred tax liabilities	14	(362)	(348)	Table I
of which: related to intangible assets			4	Table F
of which: related to capitalised expenses			8	Table J
Policy liabilities	32,388	(32,388)	-	
External unit holder liabilities	3,511	(3,511)	-	
Payables and other liabilities	12,594	(335)	12,259	
Provisions	1,228	(189)	1,039	
Bonds and notes	70,376	(749)	69,627	
Loan Capital	12,804	8	12,812	
of which: capitalised debt raising expenses			(45)	Table J
of which: Directly issued qualifying Additional Tier 1 instruments			1,106	Table L
of which: Directly issued capital instruments subject to phase out from Additional Tier 1			5,185	Table L
of which: Directly issued capital instruments subject to phase out from Tier 2			5,778	Table M
of which: instruments issued by subsidiaries subject to phase out			743	Table M
Total Liabilities	**657,376**	**(31,678)**	**625,698**	
Net Assets	**45,615**	**(190)**	**45,425**	

Shareholders equity	Balance Sheet as in published financial statements ($m)	Adjustments ($m)	Balance sheet under scope of regulatory consolidation ($m)	Template and Reconciliation Table Reference
Issued Capital	23,641	272	23,913	Table A
of which: Share reserve			164	Table A & C
Preference share capital	871	-	871	
of which: Directly issued capital instruments subject to phase out from Additional Tier 1			871	Table L
Reserves	(907)	(91)	(998)	Table C
of which: Cash flow hedging reserves			75	Row 11
Retained earnings	21,948	(365)	21,583	Table B
Share capital and reserves attributable to shareholders of the company	**45,553**	**(184)**	**45,369**	
Non-controlling interest	62	(6)	56	Table D
Total Shareholders Equity	**45,615**	**(190)**	**45,425**	

Source: ANZ Pillar 3 2013, p. 15-16

Recommendation 11: Present a flow statement of movements since the prior reporting date in regulatory capital

Citigroup Capital Rollforward Under Current Regulatory Standards (Basel III Transition Arrangements)

In millions of dollars	Three Months Ended June 30, 2014	Six Months Ended June 30, 2014
Tier 1 Common Capital		
Balance, beginning of period[1]	$ 161,615	$ 157,473
Net income	181	4,124
Dividends declared	(130)	(284)
Net increase in treasury stock	(283)	(862)
Net increase in additional paid-in capital[2][3]	175	500
Net change in foreign currency translation adjustment net of hedges, net of tax	17	(509)
Net decrease in unrealized losses on securities AFS, net of tax[4]	201	287
Net increase in defined benefit plans liability adjustment, net of tax[4]	(29)	(35)
Net decrease in cumulative unrealized net gain related to changes in fair value of financial liabilities attributable to own creditworthiness, net of tax	11	12
Net change in goodwill, net of related deferred tax liabilities (DTLs)	(151)	53
Net decrease in other intangible assets other than mortgage servicing rights (MSRs), net of related DTLs	37	89
Net decrease in defined benefit pension plan net assets	23	12
Net decrease in deferred tax assets (DTAs) arising from net operating loss, foreign tax credit and general business credit carry-forwards	270	260
Net decrease in excess over 10%/15% limitations for other DTAs, certain common stock investments and MSRs	33	296
Net decrease in regulatory capital deduction applied to Tier 1 Common Capital due to insufficient Additional Tier 1 Capital to cover deductions	2,084	2,472
Other	235	401
Net increase in Tier 1 Common Capital	$ 2,674	$ 6,816
Tier 1 Common Capital Balance, end of period	$ 164,289	$ 164,289
Additional Tier 1 Capital		
Balance, beginning of period[1]	$ —	$ —
Net increase in qualifying perpetual preferred stock[3]	1,739	2,206
Net decrease in qualifying trust preferred securities	(862)	(863)
Net decrease in cumulative unrealized net gain related to changes in fair value of financial liabilities attributable to own creditworthiness, net of tax	43	49
Net decrease in defined benefit pension plan net assets	89	47
Net decrease in DTAs arising from net operating loss, foreign tax credit and general business credit carry-forwards	1,080	1,039
Net decrease in regulatory capital deduction applied to Tier 1 Common Capital due to insufficient Additional Tier 1 Capital to cover deductions	(2,084)	(2,472)
Other	(5)	(6)
Net change in Additional Tier 1 Capital	$ —	$ —
Tier 1 Capital Balance, end of period	$ 164,289	$ 164,289
Tier 2 Capital		
Balance, beginning of period[1]	$ 19,533	$ 19,275
Net increase in qualifying subordinated debt	23	15
Net decrease in qualifying trust preferred securities	(1,243)	(1,242)
Net change in excess of eligible credit reserves over expected credit losses	(114)	152
Other	(5)	(6)
Net decrease in Tier 2 Capital	$ (1,339)	$ (1,081)
Tier 2 Capital Balance, end of period	$ 18,194	$ 18,194
Total Capital (Tier 1 Capital + Tier 2 Capital)	$ 182,483	$ 182,483

(1) Pro forma presentation based on application of the Final Basel III Rules consistent with current period presentation.

Citigroup Capital Rollforward Under Basel III (Full Implementation)

In millions of dollars	Three Months Ended June 30, 2014	Six Months Ended June 30, 2014
Tier 1 Common Capital		
Balance, beginning of period	$ 131,925	$ 125,597
Net income	181	4,124
Dividends declared	(130)	(284)
Net increase in treasury stock	(283)	(862)
Net increase in additional paid-in capital[1][2]	175	500
Net change in foreign currency translation adjustment net of hedges, net of tax	17	(509)
Net decrease in unrealized losses on securities AFS, net of tax	1,006	1,434
Net increase in defined benefit plans liability adjustment, net of tax	(144)	(177)
Net decrease in cumulative unrealized net gain related to changes in fair value of financial liabilities attributable to own creditworthiness, net of tax	54	61
Net change in goodwill, net of related deferred tax liabilities (DTLs)	(151)	53
Net decrease in other intangible assets other than mortgage servicing rights (MSRs), net of related DTLs	186	444
Net decrease in defined benefit pension plan net assets	112	59
Net decrease in deferred tax assets (DTAs) arising from net operating loss, foreign tax credit and general business credit carry-forwards	1,350	1,299
Net decrease in excess over 10%/15% limitations for other DTAs, certain common stock investments and MSRs	1,044	3,474
Other	225	354
Net increase in Tier 1 Common Capital	$ 3,642	$ 9,970
Tier 1 Common Capital Balance, end of period	$ 135,567	$ 135,567
Additional Tier 1 Capital		
Balance, beginning of period	$ 8,279	$ 7,815
Net increase in qualifying perpetual preferred stock[2]	1,739	2,206
Net decrease in qualifying trust preferred securities	(2)	(3)
Other	(4)	(6)
Net increase in Additional Tier 1 Capital	$ 1,733	$ 2,197
Tier 1 Capital Balance, end of period	$ 145,579	$ 145,579
Tier 2 Capital		
Balance, beginning of period	$ 17,779	$ 16,637
Net increase in qualifying subordinated debt	23	903
Net change in excess of eligible credit reserves over expected credit losses	(114)	152
Other	(366)	(370)
Net increase (decrease) in Tier 2 Capital	$ (457)	$ 685
Tier 2 Capital Balance, end of period	$ 17,322	$ 17,322
Total Capital (Tier 1 Capital + Tier 2 Capital)	$ 162,901	$ 162,901

Citigroup Risk-Weighted Assets Under Basel III at June 30, 2014[1]

	Advanced Approaches			Standardized Approach		
In millions of dollars	Citicorp	Citi Holdings	Total	Citicorp	Citi Holdings	Total
Credit Risk	$ 741,000	$ 141,000	$ 882,000	$ 1,028,000	$ 111,000	$ 1,139,000
Market Risk	106,000	5,000	111,000	106,000	5,000	111,000
Operational Risk[2]	230,000	58,000	288,000	—	—	—
Total Risk-Weighted Assets	$ 1,077,000	$ 204,000	$ 1,281,000	$ 1,134,000	$ 116,000	$ 1,250,000

(1) Calculated based on the Final Basel III Rules, and with full implementation assumed.

Citigroup provides flow statements by quarter and full year (YTD) for capital under current regulatory standards (Basel III Transition Arrangements) and Basel III (Full Implementation). Citigroup also reports credit, market and operational risk RWAs by primary business segments (Citicorp and Citi Holdings) under fully implemented Basel III rules, presenting both the Advanced Approach and the Standardized Approach.

Source: Citigroup Inc. 10-Q, June 30 2014, pp. 39-45

Recommendation 11: Present a flow statement of movements since the prior reporting date in regulatory capital

Movement in total capital

	2013 $million	2012 $million
Opening Core Tier 1 capital	35,339	31,833
Ordinary shares issued in the year and share premium	22	59
Profit attributable to parent company shareholders for the year	4,090	4,887
Dividends, net of scrip	(2,068)	(1,407)
Decrease/(increase) in goodwill and other intangible assets	1,242	(251)
Foreign currency translation differences	(1,223)	513
Increase in unrealised gains on available-for-sale assets	(82)	(379)
Net effect of regulatory consolidation and change in non-controlling interests	322	–
Movement in eligible other comprehensive income	224	306
Decrease/(increase) in excess of expected loss, net of tax	116	(210)
Decrease/(increase) in securitisation positions	26	(12)
Own credit adjustment, net of tax	(85)	–
Closing Core Tier 1 capital	37,923	35,339
Opening Other Tier 1 capital	5,261	5,179
Increase in tax benefit of excess of expected losses	19	54
Decrease/(increase) in material holdings deducted from capital	15	(31)
Redeemed capital	(925)	–
Other	42	59
Closing Other Tier 1 capital	4,412	5,261
Opening Tier 2 capital	12,091	10,499
Issuance of subordinated loan capital, net of redemptions and foreign currency translation differences	3,218	1,641
Increase in revaluation reserve	254	249
(Increase)/decrease in portfolio impairment provision	(11)	9
Decrease/(increase) in excess of expected losses	97	(264)
Increase/(decrease) in material holdings deducted from capital	15	(31)
Decrease/(increase) in securitisation positions	26	(12)
Closing Tier 2 capital	15,690	12,091
Deductions from total capital	(6)	(3)
Closing total capital	58,019	52,688

Risk-weighted assets and capital ratios

	2013 $million	2012 $million
Credit risk	265,834	246,650
Operational risk	33,289	30,761
Market risk	23,128	24,450
Total risk-weighted assets	322,251	301,861
Capital ratios		
Core Tier 1 capital	11.8%	11.7%
Tier 1 capital	13.1%	13.4%
Total capital	18.0%	17.4%

Source: Standard Chartered 2013 Annual Report, p. 132

Recommendation 12: Qualitatively and quantitatively discuss capital planning within a more general discussion of management's strategic planning

CAPITAL MANAGEMENT

A strong capital position is essential to the Firm's business strategy and competitive position. The Firm's capital strategy focuses on long-term stability, which enables the Firm to build and invest in market-leading businesses, even in a highly stressed environment. Prior to making any decisions on future business activities, senior management considers the implications on the Firm's capital. In addition to considering the Firm's earnings outlook, senior management evaluates all sources and uses of capital with a view to preserving the Firm's capital strength. Maintaining a strong balance sheet to manage through economic volatility is considered a strategic imperative by the Firm's Board of Directors, CEO and Operating Committee. The Firm's balance sheet philosophy focuses on risk-adjusted returns, strong capital and reserves, and robust liquidity.

The Firm's capital management objectives are to hold capital sufficient to:

- Cover all material risks underlying the Firm's business activities;
- Maintain "well-capitalized" status under regulatory requirements;
- Maintain debt ratings that enable the Firm to optimize its funding mix and liquidity sources while minimizing costs;
- Retain flexibility to take advantage of future investment opportunities;
- Maintain sufficient capital in order to continue to build and invest in its businesses through the cycle and in stressed environments; and
- Distribute excess capital to shareholders while balancing other stated objectives.

These objectives are achieved through ongoing monitoring of the Firm's capital position, regular stress testing, and a capital governance framework. Capital management is intended to be flexible in order to react to a range of potential events. JPMorgan Chase has firmwide and LOB processes for ongoing monitoring and active management of its capital position.

Capital strategy and governance

The Firm's CEO and Operating Committee establish principles and guidelines for capital planning, capital issuance, usage and distributions; and, establish capital targets and minimums for the level and composition of capital in both business-as-usual and highly-stressed environments.

The Firm's capital targets and minimums are calibrated to the U.S. Basel III requirements. The Firm's target Tier 1 common ratio under the Basel III Advanced approach, on a fully phased-in basis, is 10%+. This long-term Tier 1 common ratio target level will enable the Firm to retain market access, continue the Firm's strategy to invest in and grow its businesses; and, maintain flexibility to distribute excess capital. The Firm intends to manage its capital so that it achieves the required capital levels and composition during the transition from Basel I to Basel III, in line with, or ahead of, the required timetable.

The Firm's senior management recognizes the importance of a capital management function that supports strategic decision-making. The Firm has established the Capital Governance Committee and the Regulatory Capital Management Office ("RCMO") as key components in support of this objective. The Capital Governance Committee is responsible for reviewing the Firm's Capital Management Policy and the principles underlying capital issuance and distribution alternatives. The Committee is also responsible for governing the capital adequacy assessment process, including overall design, assumptions and risk streams, and ensuring that capital stress test programs are designed to adequately capture the idiosyncratic risks across the Firm's businesses. The RCMO is responsible for reviewing, approving and monitoring the implementation of the Firm's capital policies and strategies, as well as its capital adequacy assessment process. The Board of Director's Risk Policy Committee assesses the Firm's capital adequacy process and its components. This review encompasses determining the effectiveness of the capital adequacy process, the appropriateness of the risk tolerance levels, and the strength of the control infrastructure. For additional discussion on the Board's Risk Policy Committee, see Risk Management on pages 113-173 of this Annual Report.

Internal Capital Adequacy Assessment Process
Semiannually, the Firm completes the Internal Capital Adequacy Assessment Process ("ICAAP"), which provides management with a view of the impact of severe and unexpected events on earnings, balance sheet positions, reserves and capital. The Firm's ICAAP integrates stress testing protocols with capital planning.

The process assesses the potential impact of alternative economic and business scenarios on the Firm's earnings and capital. Economic scenarios, and the parameters underlying those scenarios, are defined centrally and applied uniformly across the businesses. These scenarios are articulated in terms of macroeconomic factors, which are key drivers of business results; global market shocks, which generate short-term but severe trading losses; and idiosyncratic operational risk events. The scenarios are intended to capture and stress key vulnerabilities and idiosyncratic risks facing the Firm. However, when defining a broad range of scenarios, realized events can always be worse. Accordingly, management considers additional stresses outside these scenarios, as necessary. ICAAP results are reviewed by management and the Board of Directors.

Comprehensive Capital Analysis and Review ("CCAR")
The Federal Reserve requires large bank holding companies, including the Firm, to submit a capital plan on an annual basis. The Federal Reserve uses the CCAR and Dodd-Frank Act Wall Street Reform and Consumer Protection Act (the "Dodd-Frank Act") stress test processes to ensure that large bank holding companies have sufficient capital during periods of economic and financial stress, and have robust, forward-looking capital assessment and planning processes in place that address each bank holding company's unique risks to enable them to have the ability to absorb losses under certain stress scenarios. Through the CCAR, the Federal Reserve evaluates each bank holding company's capital adequacy and internal capital adequacy assessment processes, as well as its plans to make capital distributions, such as dividend payments or stock repurchases.

The Firm's CCAR process is integrated into and employs the same methodologies utilized in the Firm's ICAAP process. On January 7, 2013, the Firm submitted its capital plan to the Federal Reserve under the Federal Reserve's 2013 CCAR process. On March 14, 2013, the Federal Reserve informed the Firm that it did not object to the Firm's 2013 capital plan, but asked the Firm to submit an additional capital plan.

On September 18, 2013, the Firm submitted the additional capital plan which addressed the weaknesses the Federal Reserve had identified in the Firm's original 2013 submission. On December 2, 2013, the Federal Reserve informed the Firm it did not object to the Firm's 2013 capital plan, as resubmitted.

On January 6, 2014, the Firm submitted its 2014 capital plan to the Federal Reserve under the Federal Reserve's 2014 CCAR process. The Firm expects to receive the Federal Reserve's final response to its plan no later than March 14, 2014.

For additional information on the Firm's capital actions, see Capital actions on pages 166-167, and Notes 22 and 23 on pages 309 and 310, respectively, of this Annual Report.

Capital Disciplines

The Firm uses three primary capital disciplines:

- *Regulatory capital*
- *Economic capital*
- *Line of business equity*

Capital rollforward
The following table presents the changes in Basel I Tier 1 common, Tier 1 capital and Tier 2 capital for the year ended December 31, 2013.

Year ended December 31, (in millions)	2013
Tier 1 common at December 31, 2012	**$ 140,342**
Net income applicable to common equity	17,118
Dividends declared on common stock	(5,585)
Net issuance of treasury stock	(2,845)
Changes in capital surplus	(776)
Effect of certain items in accumulated other comprehensive income/(loss) excluded from Tier 1 common	(40)
Qualifying noncontrolling minority interests in consolidated subsidiaries	(47)
DVA on structured notes and derivative liabilities	277
Goodwill and other nonqualifying intangibles (net of deferred tax liabilities)	642
Other	(199)
Increase in Tier 1 common	**8,545**
Tier 1 common at December 31, 2013	**$ 148,887**
Tier 1 capital at December 31, 2012	**$ 160,002**
Change in Tier 1 common	8,545
Net issuance of noncumulative perpetual preferred stock	2,100
Redemption of qualifying trust preferred securities	(4,942)
Other	(42)
Increase in Tier 1 capital	**5,661**
Tier 1 capital at December 31, 2013	**$ 165,663**
Tier 2 capital at December 31, 2012	**$ 34,034**
Change in long-term debt and other instruments qualifying as Tier 2	(1,366)
Change in allowance for credit losses	974
Other	(19)
Decrease in Tier 2 capital	**(411)**
Tier 2 capital at December 31, 2013	**$ 33,623**
Total capital at December 31, 2013	**$ 199,286**

JP Morgan follows-up with a detailed outline of capital management under Regulatory Capital, Economic Capital and Line of Business Equity. Several additional EDTF disclosures are incorporated within this section (Recs 9, 11, and 16)

Source: JPMorgan Chase Annual Report 2013, p. 160-163

Recommendation 12: Qualitatively and quantitatively discuss capital planning within a more general discussion of management's strategic planning

5.6.3. Capital planning and stress tests

Capital stress tests have become an especially important tool for forward-looking assessment of bank risks and solvency. A new assessment model, based on a forward-looking approach, is becoming a key element of bank capital adequacy analysis.

This is a prospective assessment, based on unlikely but plausible macroeconomic and idiosyncratic scenarios. This requires robust planning models that can transfer the effects defined in the projected scenarios to the various elements that influence an institution's solvency.

The ultimate purpose of the capital stress tests is to perform a complete assessment of bank risks and solvency so as to determine, in cases where an institution is found not to comply with established regulatory and internal capital targets, whether additional capital is required.

In particular, the Europeanfor the year Central Bank (ECB) has announced that the current Comprehensive Assessment process, which it will carry out over the course of 2014 as a preliminary step before it takes possession as single supervisor (single supervisory mechanism or SSM), will culminate in a stress test. This stress test will be carried out by the European Banking Authority (EBA) in collaboration with the ECB itself and is projected to be completed before November 2014. The objective of this whole process is to remove any doubt about the solvency of the European banking system and provide greater transparency on banks' financial strength and solvency, taking whatever measures may be necessary (including additional capital charges) if the results so require.

Specifically, the next stress test will be performed on a total of 124 banks, covering at least 50% of the banking sector in each country, measured in terms of assets. It will be performed over a three-year horizon and will assess material risks to bank solvency, including credit, market, sovereign and securitisation risk and funding costs.

The capital targets, measured in terms of the Common Equity Tier 1 ratio, will be 8% for the baseline scenario and 5.5% for the adverse scenario. The results are expected to be published at the end of October 2014.

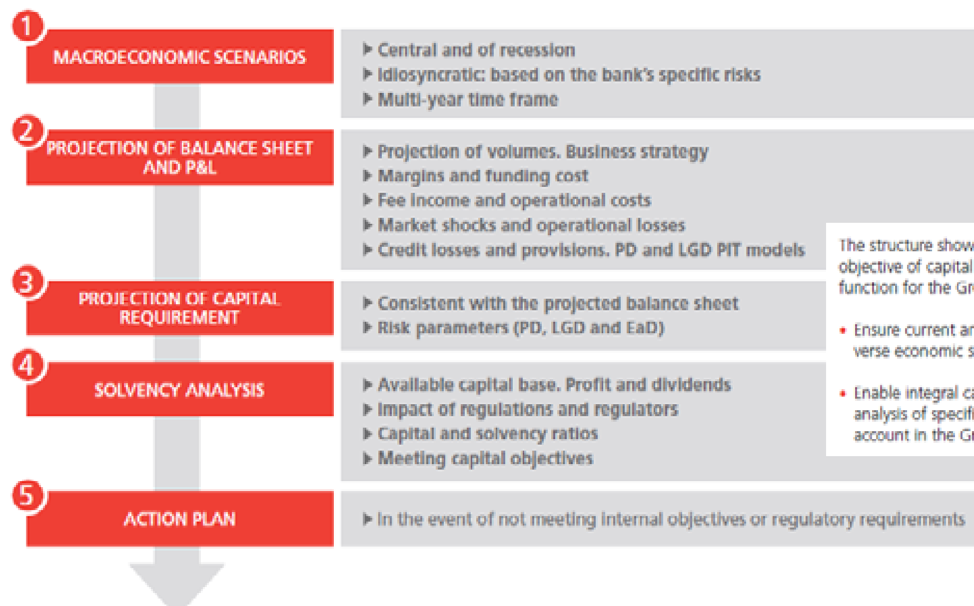
As a complement to these stress tests and as a part of the Comprehensive Assessment process, over the course of 2014 the ECB will conduct a detailed analysis of the banks' balance sheets and asset quality (Asset Quality Review), which will serve as a starting point for the stress testing exercise.

The Santander Group has defined a stress testing and capital planning process not only for the purpose of the various regulatory exercises but as a key tool for the Bank's management and strategy.

The capital planning and stress testing process is designed to assess current and future capital adequacy even in highly adverse but plausible economic scenarios. Based on the Group's initial situation (as defined by its financial statements, capital base, risk parameters and regulatory ratios), estimates are made of its expected performance in different business environments (including severe recessions, as well as "normal" macroeconomic environments) and the Group's capital adequacy ratios are projected over a three-year horizon.

The results provide a comprehensive view of the Group's capital over the chosen time horizon (normally the next three years) in each of the specified business environments. The following measures of regulatory capital, economic capital and available capital are included in the analysis.

The following chart shows the structure of the current capital planning process:



The structure shown above helps to achieve the ultimate objective of capital planning as a strategically important function for the Group, which is to:

- Ensure current and future capital adequacy, even in adverse economic scenarios.
- Enable integral capital management and provide an analysis of specific impacts, so that they can be taken into account in the Group's strategic planning.

Full section not shown.

Source: Santander 2013 Pillar 3 Report, p70-71

Recommendation 13: Provide granular information to explain how risk-weighted assets (RWAs) relate to business activities and related risks

Development of Risk-weighted Assets

The tables below provide an overview of risk-weighted assets on a Basel 2.5 basis broken down by model approach and business division. They include the aggregated effects of the segmental reallocation of infrastructure related positions if applicable as well as reallocations between the segments but exclude the transitional adjustment according to section 64h (3) of the German Banking Act. The comparison period has been adjusted accordingly. Based on a respective BaFin approval in the second quarter 2013, Postbank has been integrated in the Group's advanced measurement approach to determine RWA for operational risk.

Risk-weighted Assets by Model Approach and Business Division

							Dec 31, 2013
in € m.	Corporate Banking & Securities[1]	Global Transaction Banking[1]	Deutsche Asset & Wealth Management	Private & Business Clients	Non-Core Operations Unit	Consolidation & Adjustments and Other	Total
Credit Risk	61,619	35,418	5,809	65,909	22,632	10,832	202,219
Segment reallocation	(658)	1,912	259	553	86	(2,152)	0
Advanced IRBA	55,745	26,140	2,589	42,651	11,957	813	139,894
Central Governments	2,927	896	5	90	253	181	4,353
Institutions	5,438	1,921	80	803	922	12	9,175
Corporates	43,075	22,378	2,398	5,638	7,288	620	81,397
Retail	124	33	106	35,844	1,027	0	37,134
Other	4,181	911	0	276	2,466	0	7,834
Foundation IRBA	0	0	0	5,937	264	0	6,202
Central Governments	0	0	0	0	2	0	2
Institutions	0	0	0	1,059	261	0	1,320
Corporates	0	0	0	4,879	1	0	4,880
Retail	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
Other IRBA	2,596	87	440	8,046	2,897	2,424	16,490
Central Governments	0	0	0	0	0	0	0
Institutions	0	0	0	0	0	0	0
Corporates	1,367	67	0	4,630	2	0	6,067
Retail	0	0	0	0	0	0	0
Other	1,229	20	440	3,415	2,896	2,424	10,424
Standardized Approach	3,935	7,279	2,521	8,722	7,428	9,748	39,633
Central Governments	61	39	0	73	40	0	213
Institutions	28	12	8	116	32	1	198
Corporates	2,929	6,106	937	2,004	2,788	470	15,235
Retail	10	916	49	4,654	2,627	0	8,257
Other	906	206	1,526	1,876	1,940	9,275	15,729
Market Risk	34,473	562	2,085	128	10,011	0	47,259
Internal Model Approach	29,156	562	1,102	0	8,892	0	39,712
Standardized Approach	5,317	0	983	128	1,120	0	7,547
Operational Risk	22,598	832	4,659	6,964	15,839	0	50,891
Advanced measurement approach	22,598	832	4,659	6,964	15,839	0	50,891
Total	118,689	36,811	12,553	73,001	48,483	10,832	300,369

[1] The increase in risk-weighted assets in Global Transaction Banking is primarily due to changes in the organizational structure in the third quarter of 2013, resulting in a respective decrease in Corporate Banking & Securities.

Regulatory Capital Requirements and Risk-weighted Assets

	Dec 31, 2013		Dec 31, 2012	
in € m.	Capital requirements	RWA	Capital requirements	RWA
Counterparty credit risk				
Advanced IRBA				
Central governments	348	4,353	301	3,762
Institutions	734	9,175	716	8,946
Corporates	6,512	81,397	6,532	81,646
Retail (excluding Postbank)	1,787	22,342	1,727	21,583
Retail (Postbank)	1,183	14,792	1,157	14,462
Other non-credit obligation assets	459	5,739	494	6,180
Total advanced IRBA	11,024	137,798	10,926	136,580
Foundation approach				
Central governments	0	2	3	35
Institutions	106	1,320	252	3,156
Corporates	876	10,946	1,465	18,306
Total foundation approach	981	12,268	1,720	21,496
Standardized approach				
Central governments	2	28	0	1
Regional governments and local authorities	5	68	4	55
Other public sector entities	9	118	26	323
Multilateral development banks	0	0	0	0
International organizations	0	0	0	0
Institutions	16	198	18	230
Covered bonds issued by credit institutions	0	3	1	8
Corporates	1,219	15,235	1,491	18,640
Retail	479	5,982	525	6,564
Claims secured by real estate property	182	2,275	218	2,728
Collective investment undertakings	54	670	196	2,444
Other items	738	9,223	1,176	14,702
Past due items	124	1,553	130	1,625
Total standardized approach	2,828	35,354	3,786	47,320
Risk from securitization positions				
Securitizations (IRBA)	627	7,834	1,066	13,325
Securitizations (standardized approach)	98	1,222	117	1,457
Total risk from securitization positions	725	9,057	1,183	14,782
Risk from equity positions				
Equity positions (grandfathered)[1]	242	3,023	262	3,273
Equity positions (IRBA simple risk-weight approach)	375	4,685	436	5,455
Exchange-traded	43	534	51	632
Non-exchange-traded	323	4,033	369	4,616
Non-exchange-traded but sufficiently diversified	9	118	17	207
Total risk from equity positions	617	7,709	698	8,727
Settlement risk	3	34	4	46
Total counterparty credit risk[2]	16,178	202,219	18,316	228,952
Market risk in the trading book				
Internal model approach	3,179	39,738	3,726	46,571
Value-at-Risk	674	8,427	761	9,510
Stressed Value-at-Risk	1,254	15,673	1,641	20,518
Incremental Risk Charge	996	12,446	761	9,509
Comprehensive Risk Measurement (Correlation Trading)	255	3,193	563	7,035
Standardized approach	602	7,521	519	6,487
Interest rate risk – Securitization	473	5,908	429	5,361
Interest rate risk – Nth-to-default derivatives	5	63	14	172
Interest rate risk – Other	1	13	2	26
Equity risk	0	0	0	0
FX risk	16	200	42	524
Commodity risk	0	0	0	0
Other market risk	107	1,338	32	404
Total market risk in the trading book	3,781	47,259	4,245	53,058
Operational risk				
Advanced measurement approach	4,071	50,891	4,128	51,595
Total regulatory capital requirements and RWA	24,030	300,369	26,688	333,605

[1] Other non-credit obligation assets of Postbank have been integrated into the Advanced IRBA category.
[2] Excludes the transitional adjustment according to section 64h (3) of the German Banking Act amounting to € 154 million as of December 31, 2013 and € 236 million as of December 31, 2012.

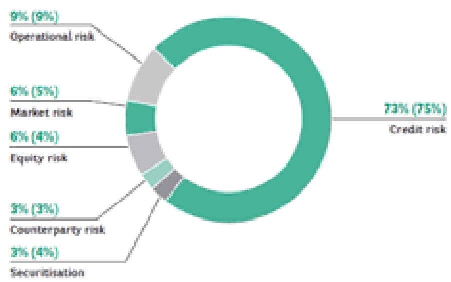
Source: Deutsche Bank Annual Report, pp. 213-215

Recommendation 13: Provide granular information to explain how risk-weighted assets (RWAs) relate to business activities and related risks

KEY RISKS ARISING FROM THE GROUP'S BUSINESS

RISK-WEIGHTED ASSETS BY TYPE OF RISK AT 31 DECEMBER 2013

➤ FIGURE 1: RISK-WEIGHTED ASSETS BY RISK TYPE AT 31 DECEMBER 2013(*)



Total: EUR 560 billion at 31 December 2013
(EUR 552 billion at 31 December 2012)

(*) *Numbers between brackets correspond to the breakdown as of 31 December 2012*

Most of the Group's exposures give rise to credit risk. Market risk in the trading book is limited to 6% of the Group's risk-weighted assets. Pursuant to article 64 of the 2013 Notice "Methods for calculating the capital ratio" issued by the ACPR, the non-deducted portion of investments in insurance companies has been weighted as exposure to equity risk from 2013, thereby increasing the risk-weighted assets of the Investment Solutions division (in the positive amount of approximately EUR 20 billion). In addition, the split of risk-weighted assets by division reflects the Group's diversified business mix, with almost 61% devoted to Retail Banking (including 37% for the Domestic Markets) and 28% for Corporate and Investment Banking.

➤ TABLE 1: RISK-WEIGHTED ASSETS(*) BY RISK TYPE AND BUSINESS

	31 December 2013								
	Retail Banking			Corporate & Investment Banking					
In millions of euros	Domestic Markets	Personal Finance	International Retail Banking	Advisory and Capital Markets	Corporate Banking	Investment Solutions	Other activities	Total	
Credit risk	190,827	44,330	76,130	10,092	73,882	12,020	3,377	410,658	See section 5.4
Securitisation	671	0	176	10,752	363	864	2,803	15,629	See section 5.5
Counterparty risk	2,593	15	389	13,238	1	252	20	16,508	See section 5.6
Equity risk	2,005	163	215	1,057	1,590	21,187	9,048	35,265	See section 5.7
Market risk	131	6	272	22,409	1,286	208	6,896	31,208	See section 5.7
Operational risk	12,583	3,894	6,120	16,968	4,468	5,539	792	50,364	See section 5.10
TOTAL	**208,810**	**48,408**	**83,302**	**74,516**	**81,590**	**40,070**	**22,936**	**559,632**	See section 5.2

	31 December 2012								
	Retail Banking			Corporate & Investment Banking					
In millions of euros	Domestic Markets	Personal Finance	International Retail Banking	Advisory and Capital Markets	Corporate Banking	Investment Solutions	Other activities	Total	
Credit risk	196,279	43,647	72,492	8,631	75,855	11,084	3,163	411,151	See section 5.4
Securitisation	1,113	57	212	12,141	126	1,047	4,380	19,076	See section 5.5
Counterparty risk	3,878	13	468	15,750	54	346	24	20,533	See section 5.6
Equity risk	2,308	205	163	469	1,698	2,032	17,504	24,377	See section 5.7
Market risk	208	97	298	21,633	1,696	461	1,155	25,548	See section 5.7
Operational risk	13,105	4,829	5,814	16,414	3,692	6,015	1,285	51,154	See section 5.10
TOTAL	**216,889**	**48,848**	**79,447**	**75,038**	**83,121**	**20,985**	**27,511**	**551,839**	See section 5.2

(*) *Information on risks categories is provided in section 5.3*

Source: BNP Paribas Annual Report 2013, p227-228

Recommendation 14: Present a table showing the capital requirements for each method used to calculate the measurement in credit, market and operational risk

TABLE 6: PILLAR 1 RISK-WEIGHTED ASSETS AND CAPITAL REQUIREMENT

Explanations for the changes in 2013 can be found in the various appropriate sections.

In millions of euros	31 December 2013		31 December 2012		Variation	
	Risk-weighted assets	Capital Requirement	Risk-weighted assets	Capital Requirement	Risk-weighted assets	Capital Requirement
Credit risk	410,658	32,853	411,151	32,892	(493)	(39)
Credit risk - IRB approach	**198,867**	**15,910**	**172,409**	**13,793**	**26,458**	**2,117**
Central governments and central banks	3,622	290	3,244	260	377	30
Corporates	146,304	11,705	121,986	9,759	24,318	1,946
Institutions	11,166	893	10,326	826	840	67
Retail	37,625	3,010	36,749	2,940	876	70
Real estate loans	*12,181*	*974*	*10,772*	*862*	*1,409*	*113*
Revolving exposures	*5,362*	*429*	*5,851*	*468*	*(489)*	*(39)*
Other exposures	*20,082*	*1,607*	*20,126*	*1,610*	*(44)*	*(4)*
Other non credit-obligation assets	150	12	104	8	46	4
Credit risk - Standardised approach	**211,791**	**16,943**	**238,742**	**19,099**	**(26,951)**	**(2,156)**
Central governments and central banks	3,189	255	3,742	299	(553)	(44)
Corporates	87,463	6,997	112,909	9,033	(25,446)	(2,036)
Institutions	8,189	655	8,508	681	(319)	(26)
Retail	80,694	6,455	80,589	6,447	105	8
Real estate loans	*27,143*	*2,171*	*26,276*	*2,102*	*867*	*69*
Revolving exposures	*2,112*	*169*	*3,137*	*251*	*(1,025)*	*(82)*
Other exposures	*51,439*	*4,115*	*51,176*	*4,094*	*263*	*21*
Other non credit-obligation assets	32,256	2,581	32,994	2,639	(737)	(58)
Banking book securitisation positions	15,629	1,250	19,076	1,526	(3,447)	(276)
Securitisation positions - IRB approach	14,588	1,167	17,153	1,372	(2,565)	(205)
Securitisation positions - Standardised approach	1,041	83	1,923	154	(883)	(71)
Counterparty risk	16,508	1,321	20,533	1,643	(4,025)	(322)
Counterparty risk - IRB approach	**15,234**	**1,219**	**18,633**	**1,491**	**(3,399)**	**(272)**
Central governments and central banks	370	30	222	18	148	12
Corporates	11,427	914	15,117	1,209	(3,690)	(295)
Institutions	3,437	275	3,294	264	143	11
Counterparty risk - Standardised approach	**1,274**	**102**	**1,900**	**152**	**(627)**	**(50)**
Central governments and central banks	0	0	27	2	(27)	(2)
Corporates	1,036	83	1,610	129	(574)	(46)
Institutions	225	18	254	20	(29)	(2)
Retail	13	1	9	1	3	0
Real estate loans	*0*	*0*	*9*	*1*	*(9)*	*(1)*
Other exposures	*13*	*1*	*0*	*0*	*13*	*1*
Equity risk	35,265	2,821	24,377	1,950	10,888	871
Internal model	32,900	2,632	21,496	1,720	11,404	912
Listed equities	*2,487*	*199*	*7,734*	*619*	*(5,248)*	*(420)*
Other equity exposures	*27,554*	*2,204*	*7,321*	*586*	*20,233*	*1,619*
Private equity exposures in diversified portfolios	*2,859*	*229*	*6,441*	*515*	*(3,581)*	*(287)*
Simple weighting method	1,531	122	1,733	138	(202)	(16)
Listed equities	*5*	*0*	*21*	*2*	*(16)*	*(1)*
Other equity exposures	*442*	*35*	*468*	*37*	*(27)*	*(2)*
Private equity exposures in diversified portfolios	*1,084*	*87*	*1,244*	*99*	*(160)*	*(13)*
Standardised approach	834	67	1,148	92	(314)	(25)
Market risk	31,208	2,497	25,548	2,044	5,660	453
Internal model	28,637	2,291	22,633	1,811	6,004	480
VaR	*6,346*	*508*	*5,440*	*435*	*906*	*72*
Stressed VaR	*14,889*	*1,191*	*11,179*	*894*	*3,709*	*297*
Incremental Risk Charge	*6,007*	*480*	*3,421*	*274*	*2,586*	*206*
Comprehensive Risk Measure	*1,395*	*112*	*2,593*	*208*	*(1,197)*	*(96)*
Standardised approach	1,751	140	2,652	212	(900)	(72)
Trading book securitisation positions	820	66	263	21	557	44
Operational risk	50,364	4,029	51,154	4,092	(790)	(63)
Advanced Measurement Approach (AMA)	36,873	2,950	35,586	2,847	1,287	103
Standardised approach	8,920	713	9,518	761	(598)	(48)
Basic indicator approach	4,571	366	6,050	484	(1,479)	(118)
TOTAL	**559,632**	**44,771**	**551,839**	**44,147**	**7,793**	**623**

Source: BNP Paribas Annual Report 2013, p245

3.4. Regulatory capital requirements

The table below presents the minimum regulatory credit risk capital requirements, including counterparty credit risk, as at 31 December 2013, calculated as 8 per cent of RWA based on the approaches described in sections 3.1 and 3.2. The regulatory credit risk capital requirement below of $21,266 million is substantially lower, even with the inclusion of market risk $1,850 million (Table 41) and operational risk $2,663 million (Table 45), than total capital resources of $58,019 million in Table 3.

Table 15: Regulatory capital requirements

	2013				2012			
Credit Risk Capital Requirements	Regulatory capital requirement $million	Risk-weighted assets $million	EAD before the effect of CRM $million	Risk-weighted asset density[4] %	Regulatory capital requirement $million	Risk-weighted assets $million	EAD before the effect of CRM $million	Risk-weighted asset density[4] %
IRB Exposure Class								
Central governments or central banks	1,474	18,428	124,782	15%	1,383	17,282	128,587	13%
Institutions	1,530	19,121	130,640	15%	1,400	17,506	105,794	17%
Corporates	9,814	122,674	176,394	70%	8,731	109,143	166,920	65%
Retail, of which	2,174	27,177	92,786	29%	2,385	29,812	97,214	31%
Secured by real estate collateral	547	6,834	59,520	11%	643	8,033	62,654	13%
Qualifying revolving retail	503	6,295	17,503	36%	593	7,413	18,379	40%
Retail SME	90	1,129	1,970	57%	71	890	1,629	55%
Other retail	1,034	12,919	13,793	94%	1,078	13,476	14,552	93%
Securitisation positions	315	3,943	27,473	14%	290	3,627	26,057	14%
Non-credit obligation assets	56	697	696	100%	53	660	660	100%
Total IRB	15,363	192,040	552,771	35%	14,242	178,030	525,232	34%
Standardised Exposure Class								
Central governments or central banks	151	1,892	3,886	49%	47	587	1,664	35%
Multilateral development banks	-	-	10,074	0%	-	-	7,849	0%
Institutions	16	204	612	33%	108	1,355	3,123	43%
Corporates	1,420	17,753	31,039	88%	1,017	12,715	20,980	61%
Retail	1,028	12,849	17,996	75%	1,064	13,300	19,277	69%
Secured on real estate property	766	9,571	18,815	51%	751	9,391	18,226	52%
Past due items	107	1,340	1,285	135%	103	1,288	1,211	106%
Items belonging to regulatory high risk categories	40	502	386	150%	63	782	573	136%
Other items[1]	1,129	14,107	16,653	85%	1,198	14,980	17,803	84%
Total Standardised	4,657	58,218	100,746	66%	4,351	54,398	90,706	60%
Counterparty credit risk capital component (credit risk in the trading book)[2]	1,246	15,576	59,057	26%	1,138	14,222	56,447	25%
Concentration risk capital component[3]	-	-	-	-	-	-	-	-
Total	21,266	265,834	712,574	38%	19,731	246,650	672,385	37%

[1] Other items include cash, equity holdings, fixed assets, prepayments and accrued income

[2] Counterparty credit risk includes assets which are assessed under both approaches. Exposures of $57,195 million with $15.5 million RWA are based on the IRB approach

[3] The concentration risk capital component is the additional capital requirement to be held where exposures in the Trading Book to a counterparty exceeds 25 per cent of capital resources

[4] Risk-weighted asset density is calculated using exposure as defined within the current PRA handbook, and not 'EAD before the effect of CRM' as presented in the above table. 'EAD before the effect of CRM' is a prudent view of the maximum loss and is gross of any valuation adjustments

Key points

- The growth in credit risk capital requirements during 2013 was driven mainly by increased exposures to corporates. This arose from asset growth in the Wholesale Banking business in Hong Kong, Singapore and the Americas, UK and Europe region. Additionally, it was also impacted by a change in parental support policy and negative credit grade migration, largely as a result of a small number of large accounts being downgraded.
- Exposure to institutions increased due to higher lending in the Americas, UK and Europe and Other APR regions. The decrease in IRB retail secured by real estate was mainly due to a decrease in the mortgage portfolio in Korea as a result of asset sales to Korea Housing Finance Corporation under a mortgage purchase programme.
- Capital requirements have also been impacted as the Group now fully consolidates Permata, its joint venture, for regulatory purposes.

Source: Standard Chartered 2013 Pillar 3, p. 23

Recommendation 14: Table showing the capital requirements for each method used to calculate the measurement in credit, market and operational risk

"Table 2: Detailed segmentation of Basel III exposures and risk-weighted assets" provides a breakdown of our RWA and includes the enhanced risk coverage for stricter market and counterparty credit risk requirements introduced through the implementation of Basel III. Table 2 and subsequent tables provide a breakdown according to BIS-defined exposure segments as follows:

- *Sovereigns (central governments and central banks as defined under Swiss regulations)*, consisting of exposures relating to sovereign states and their central banks, the BIS, the International Monetary Fund, the EU (including the European Central Bank) and eligible multilateral development banks.
- *Banks (as defined under Swiss regulations)*, consisting of exposures to legal entities holding a banking license. This segment also includes securities firms subject to supervisory and regulatory arrangements, including risk-based capital requirements, which are comparable to those applied to banks according to the framework. The BIS regulation also includes in this segment exposures to public sector entities with tax-raising power or entities whose liabilities are fully guaranteed by a public entity.
- *Corporates*, consisting of all exposures that do not fit into any of the other exposure segments listed below. This segment includes private commercial entities such as corporations, partnerships or proprietorships, insurance companies, funds, exchanges and clearing houses.
- *Central counterparties* – A central counterparty (CCP) is a clearing house that interposes itself between counterparties to contracts traded in one or more financial markets, becoming the buyer to every seller and the seller to every buyer and thereby ensuring the future performance of open contracts. A CCP becomes counterparty to trades with market participants through novation, an open offer system, or another legally binding arrangement.

Retail – Residential mortgages (claims secured on residential real estate as defined under Swiss regulations), consisting of residential mortgages, regardless of exposure size, if the obligor occupies or rents out the mortgaged property.

Retail – Lombard lending, consisting of loans made against the pledge of eligible marketable securities or cash.

Retail – Other retail, consisting of exposures to small businesses, private clients and other retail customers without mortgage financing.

Table 2 also shows the gross and net exposure at default (EAD) er risk type and exposure segment for the current disclosure eriod, which form the basis for the calculation of the RWA as vell as the capital requirement per exposure category. The Basel credit risk-related components "Credit valuation adjustment CVA)" and "Stressed expected positive exposure (sEPE)" are disosed separately in the table below, as is the net EAD and RWA or central counterparties.

→ **Refer to the table "Basel III RWA by risk type, exposure and reporting segment" in the "Capital management" section of this report for more information on RWA by business division and Corporate Center**

Table 2: Detailed segmentation of Basel III exposures and risk-weighted assets

	31.12.13									
	Basel III (phase-in)									
	Gross EAD	Net EAD			RWA			Capital requirement		
CHF million	Total	Advanced IRB / model-based approach	Standard-ized approach	Total	Advanced IRB / model-based approach	Standard-ized approach	Total	Advanced IRB / model-based approach	Standard-ized approach	Total[6]
Credit risk	644,448	460,505	164,328	624,833	97,472	26,783	124,255	8,349	2,294	10,643
Sovereigns	148,381	33,863	114,518	148,381	840	266	1,106	72	23	95
Banks	67,515	54,396	5,950	60,346	11,615	1,981	13,596	995	170	1,165
Corporates	143,106	118,279	18,848	137,127	34,659	13,606	48,265	2,969	1,165	4,134
Central counterparties	18,107		18,106	18,106		1,793	1,793		154	154
Retail	230,410	217,831	6,868	224,699	19,855	3,346	23,200	1,701	287	1,987
Residential mortgages	133,552	128,563	4,646	133,209	14,667	1,680	16,346	1,256	144	1,400
Lombard lending	92,661	87,293		87,293	4,437		4,437	380		380
Other retail	4,197	1,975	2,222	4,197	751	1,666	2,417	64	143	207
Counterparty credit risk by exposure segment (excl. sEPE)	607,518	424,369	164,290	588,660	66,969	20,992	87,960	5,736	1,798	7,534
Stressed EPE[1]	22,579	22,579		22,579	6,202		6,202	531		531
Counterparty credit risk by exposure segment (incl. sEPE)	630,097	446,948	164,290	611,239	73,171	20,992	94,163	6,267	1,798	8,065
Securitization / re-securitization in the banking book	12,569	11,928		11,928	8,352		8,352	715		715
Equity instruments in the banking book[2]	1,522	1,522		1,522	4,999		4,999	428		428
Credit valuation adjustment (CVA)					10,598	5,696	16,294	908	488	1,396
Settlement risk	260	107	37	144	352	95	447	30	8	38
Non-counterparty-related risk	19,491		19,491	19,491		12,634	12,634		1,082	1,082
Market risk	2,098	1,966		1,966	13,727		13,727	1,176		1,176
Value-at-risk (VaR)					1,746		1,746	150		150
Stressed value-at-risk (SVaR)					2,604		2,604	223		223
Add-on for risks-not-in-VaR (RniV)					2,025		2,025	173		173
Incremental risk charge (IRC)					1,377		1,377	118		118
Comprehensive risk measure (CRM)					4,176		4,176	358		358
Securitization / re-securitization in the trading book[3]	2,098	1,966		1,966	1,799		1,799	154		154
Operational risk					77,941		77,941	6,676		6,676
of which: incremental RWA[4]					22,500		22,500	1,927		1,927
Total Swiss SRB	666,036	462,471	183,818	646,289	189,141	39,417	228,557[5]	16,201	3,376	19,577

1 Majority relates to exposures with Banks and Corporates. 2 Simple risk-weight method. 3 In line with Basel III Pillar 1 requirements, RWA related to securitization / re-securitization in the trading book are newly presented as market risk RWA. Previously, these RWA were presented as credit risk RWA. Prior periods were restated for this change in presentation. 4 Incremental RWA reflect the effect of the supplemental operational risk capital analysis mutually agreed to by UBS and FINMA. 5 Refer to the "Capital management" section of this report for more information on the difference between phase-in and fully applied RWA numbers. 6 As we are required to comply with regulations based on the Basel III framework as applicable for Swiss systemically relevant banks (SRB), our capital disclosures are based on the Swiss SRB Basel III capital charge of 8.6% for 2013.

Source: UBS Annual Report 2013, p567-568

Recommendation 15a: Tabulation of credit risk in the banking book for major Basel asset class portfolios.

EAD of Advanced IRBA Credit Exposures by PD Grade (including Postbank)

	iAAA–iAA 0.00–0.04 %	iA 0.04–0.11 %	iBBB 0.11–0.5 %	iBB 0.5–2.27 %	iB 2.27–10.22 %	iCCC 10.22–99.99 %	Default[1]	Total	Dec 31, 2013 Delta Total to previous year
Central Governments									
EAD gross in € m.	74,299	5,162	3,676	1,893	606	126	55	85,815	(9,847)
EAD net in € m.	81,527	6,462	3,504	603	113	90	55	92,354	(10,845)
Average PD in %	0.00	0.06	0.30	1.40	5.31	13.04	100.00	0.11	0.07 ppt
Average LGD in %	48.67	40.71	43.23	13.80	43.35	38.31	34.93	47.65	(0.61)ppt
Average RW in %	0.83	22.37	48.90	32.84	136.69	170.16	25.65	4.71	1.07 ppt
EL/EAD net in %	0.00	0.03	0.13	0.13	2.19	4.98	N/M	0.02	0.00 ppt
Institutions									
EAD gross in € m.	16,869	27,549	12,297	2,098	1,070	196	294	60,373	(5,995)
EAD net in € m.	17,872	28,258	11,499	1,776	1,019	195	294	60,913	(4,944)
Average PD in %	0.03	0.07	0.32	1.10	4.64	21.66	100.00	0.77	0.13 ppt
Average LGD in %	38.53	26.98	23.23	21.71	12.42	6.27	4.40	29.09	3.39 ppt
Average RW in %	8.46	11.72	25.15	42.61	47.81	34.73	50.16	15.06	1.48 ppt
EL/EAD net in %	0.01	0.02	0.07	0.23	0.56	1.66	N/M	0.05	0.00 ppt
Corporates									
EAD gross in € m.	63,599	57,266	65,756	50,198	22,020	4,520	10,596	273,955	(20,508)
EAD net in € m.	66,663	57,687	62,670	44,726	18,912	3,859	10,235	264,751	(16,439)
Average PD in %	0.03	0.07	0.25	1.11	4.70	21.56	100.00	4.79	1.18 ppt
Average LGD in %	27.06	34.75	32.13	26.18	20.41	19.12	25.27	29.13	(1.31)ppt
Average RW in %	8.64	18.26	33.75	53.42	70.92	107.07	24.59	30.74	1.71 ppt
EL/EAD net in %	0.01	0.02	0.08	0.30	1.02	4.26	N/M	0.22	0.01 ppt
Retail Exposures Secured by Real Estate Property									
EAD gross in € m.	1,357	10,556	47,510	65,038	20,654	5,892	2,550	153,558	59,756
EAD net in € m.	1,357	10,556	47,485	64,936	20,576	5,844	2,518	153,271	59,201
Average PD in %	0.04	0.08	0.28	1.12	4.10	20.19	100.00	3.53	(1.84)ppt
Average LGD in %	12.93	13.13	11.07	10.67	9.47	9.97	17.27	10.90	(9.72)ppt
Average RW in %	1.63	3.08	6.04	14.97	29.33	56.69	9.44	14.69	(7.92)ppt
EL/EAD net in %	0.00	0.01	0.03	0.12	0.39	1.98	N/M	0.19	(0.26)ppt
Qualifying Revolving Retail Exposures									
EAD gross in € m.	175	998	1,890	1,075	288	83	28	4,537	(72,898)
EAD net in € m.	175	998	1,890	1,075	288	83	28	4,537	(72,784)
Average PD in %	0.04	0.08	0.24	1.04	4.54	19.65	100.00	1.64	(2.21)ppt
Average LGD in %	47.43	46.95	46.81	45.40	48.01	49.99	51.09	46.69	37.22 ppt
Average RW in %	1.34	2.54	6.19	18.73	57.26	130.55	8.55	13.69	0.65 ppt
EL/EAD net in %	0.02	0.04	0.11	0.48	2.22	9.51	N/M	0.49	0.29 ppt
Other Retail Exposures									
EAD gross in € m.	197	1,336	6,877	12,920	6,687	1,934	2,542	32,493	20,790
EAD net in € m.	411	1,537	7,101	13,041	6,666	1,917	2,409	33,081	21,378
Average PD in %	0.03	0.08	0.29	1.16	4.65	19.68	100.00	9.88	1.93 ppt
Average LGD in %	40.35	43.53	41.09	42.25	42.29	40.13	52.36	42.66	(8.76)ppt
Average RW in %	4.54	9.42	22.11	46.39	65.31	90.86	4.68	42.29	2.17 ppt
EL/EAD net in %	0.01	0.03	0.12	0.49	1.95	7.84	N/M	1.15	(0.17)ppt
Total IRBA Exposures									
EAD gross in € m.	156,496	102,867	138,005	133,222	51,325	12,751	16,065	610,731	(28,702)
EAD net in € m.	168,004	105,497	134,148	126,157	47,573	11,987	15,540	608,906	(24,432)
Average PD in %	0.02	0.07	0.27	1.12	4.43	20.52	100.00	3.61	0.52 ppt
Average LGD in %	38.71	31.11	24.88	19.90	18.79	18.17	27.86	26.21	(1.01)ppt
Average RW in %	4.76	14.97	22.60	32.36	51.72	79.38	19.50	21.69	1.10 ppt
EL/EAD net in %	0.01	0.02	0.06	0.22	0.88	3.72	N/M	0.21	0.00 ppt

EAD net for Advanced IRBA Credit Exposures by PD Grade with Central Governments (excluding derivatives and SFTs)

in € m. (unless stated otherwise) — Dec 31, 2013

Internal rating	PD range in %	EAD net	Average PD in %	Average LGD in %	RWA	Average RW in %	EL/EAD in %
iAAA	> 0.00 ≤ 0.01	75,749	0.00	49.89	264	0.35	0.00
iAA+	> 0.01 ≤ 0.02	589	0.02	29.73	28	4.81	0.01
iAA	> 0.02 ≤ 0.03	189	0.03	29.68	18	9.49	0.01
iAA–	> 0.03 ≤ 0.04	148	0.04	27.84	26	17.34	0.01
iA+	> 0.04 ≤ 0.05	965	0.05	49.95	134	13.94	0.02
iA	> 0.05 ≤ 0.07	1,304	0.07	49.45	469	35.93	0.03
iA–	> 0.07 ≤ 0.11	1,659	0.09	48.59	563	33.93	0.04
iBBB+	> 0.11 ≤ 0.18	339	0.14	42.56	71	20.97	0.06
iBBB	> 0.18 ≤ 0.30	848	0.23	41.15	313	36.83	0.09
iBBB–	> 0.30 ≤ 0.50	1,509	0.39	49.05	820	54.33	0.19
iBB+	> 0.50 ≤ 0.83	87	0.64	29.15	50	57.98	0.17
iBB	> 0.83 ≤ 1.37	22	1.07	47.89	23	103.98	0.51
iBB–	> 1.37 ≤ 2.27	377	1.76	2.79	32	8.55	0.05
iB+	> 2.27 ≤ 3.75	44	2.92	47.83	60	136.12	1.39
iB	> 3.75 ≤ 6.19	22	4.82	45.88	31	139.79	2.40
iB–	> 6.19 ≤ 10.22	45	7.95	36.40	62	138.37	2.89
iCCC+	> 10.22 ≤ 16.87	88	13.00	38.22	150	169.45	4.87
iCCC	> 16.87 ≤ 27.84	0	22.00	0.10	0	0.58	0.02
iCCC–	> 27.84 ≤ 99.99	0	31.00	8.06	0	50.39	2.50
Default	100	55	100.00	34.93	14	25.65	N/M
Total		84,040	0.11	49.05	3,127	3.72	0.02

EAD net for Advanced IRBA Credit Exposures by PD Grade with Institutions (excluding derivatives and SFTs)

in € m. (unless stated otherwise) — Dec 31, 2013

Internal rating	PD range in %	EAD net	Average PD in %[1]	Average LGD in %	RWA	Average RW in %	EL/EAD in %
iAAA	> 0.00 ≤ 0.01	2,036	0.02	41.53	311	15.27	0.01
iAA+	> 0.01 ≤ 0.02	108	0.03	41.53	15	13.59	0.01
iAA	> 0.02 ≤ 0.03	3,483	0.03	43.72	195	5.59	0.01
iAA–	> 0.03 ≤ 0.04	4,313	0.04	40.19	317	7.34	0.02
iA+	> 0.04 ≤ 0.05	2,774	0.05	34.39	284	10.24	0.02
iA	> 0.05 ≤ 0.07	7,220	0.07	25.66	585	8.10	0.02
iA–	> 0.07 ≤ 0.11	4,713	0.09	28.23	655	13.89	0.03
iBBB+	> 0.11 ≤ 0.18	865	0.14	34.93	259	29.91	0.05
iBBB	> 0.18 ≤ 0.30	1,097	0.23	25.28	310	28.25	0.06
iBBB–	> 0.30 ≤ 0.50	3,319	0.39	31.43	1,222	36.81	0.12
iBB+	> 0.50 ≤ 0.83	307	0.64	30.66	131	42.65	0.20
iBB	> 0.83 ≤ 1.37	299	1.07	37.81	220	73.64	0.40
iBB–	> 1.37 ≤ 2.27	222	1.76	18.83	104	46.80	0.33
iB+	> 2.27 ≤ 3.75	114	2.92	23.75	83	72.51	0.69
iB	> 3.75 ≤ 6.19	784	4.82	10.69	349	44.57	0.52
iB–	> 6.19 ≤ 10.22	17	7.95	22.98	16	91.92	1.83
iCCC+	> 10.22 ≤ 16.87	7	13.00	38.50	13	186.27	5.01
iCCC	> 16.87 ≤ 27.84	141	22.00	3.36	25	18.12	0.74
iCCC–	> 27.84 ≤ 99.99	0	31.00	20.03	0	111.29	6.21
Default	100	272	100.00	4.56	143	52.33	N/M
Total		32,092	1.20	32.06	5,235	16.31	0.06

EAD net for Advanced IRBA Credit Exposures by PD Grade with Corporates (excluding derivatives and SFTs)

in € m. (unless stated otherwise) — Dec 31, 2013

Internal rating	PD range in %	EAD net	Average PD in %[1]	Average LGD in %	RWA	Average RW in %	EL/EAD in %
iAAA	> 0.00 ≤ 0.01	3,084	0.03	24.81	196	6.35	0.01
iAA+	> 0.01 ≤ 0.02	5,448	0.03	19.67	296	5.25	0.01
iAA	> 0.02 ≤ 0.03	7,555	0.03	18.29	420	5.56	0.01
iAA–	> 0.03 ≤ 0.04	11,213	0.04	31.29	922	8.22	0.01
iA+	> 0.04 ≤ 0.05	11,167	0.05	28.56	1,293	11.58	0.01
iA	> 0.05 ≤ 0.07	14,927	0.07	31.29	2,349	15.73	0.02
iA–	> 0.07 ≤ 0.11	17,690	0.09	35.62	3,705	20.95	0.03
iBBB+	> 0.11 ≤ 0.18	18,121	0.14	31.90	4,512	24.90	0.04
iBBB	> 0.18 ≤ 0.30	18,145	0.23	32.54	5,984	32.98	0.07
iBBB–	> 0.30 ≤ 0.50	16,884	0.39	31.05	6,885	40.78	0.11
iBB+	> 0.50 ≤ 0.83	9,958	0.64	32.21	5,436	54.60	0.20
iBB	> 0.83 ≤ 1.37	11,819	1.07	28.10	6,835	57.83	0.30
iBB–	> 1.37 ≤ 2.27	9,062	1.76	24.59	5,625	62.07	0.43
iB+	> 2.27 ≤ 3.75	6,452	2.92	19.94	3,969	61.51	0.84
iB	> 3.75 ≤ 6.19	5,167	4.79	21.45	3,948	76.42	1.02
iB–	> 6.19 ≤ 10.22	3,935	7.94	15.90	2,664	67.71	1.28
iCCC+	> 10.22 ≤ 16.87	1,140	13.00	14.58	809	70.94	1.89
iCCC	> 16.87 ≤ 27.84	738	21.95	23.77	1,035	140.38	5.19
iCCC–	> 27.84 ≤ 99.99	802	31.00	12.15	569	70.92	3.77
Default	100	9,975	100.00	25.77	2,405	24.11	N/M
Total		183,284	6.44	28.70	59,847	32.65	0.23

N/M – Not meaningful
[1] Higher average PD in % than defined for the internal rating scales iAAA and iAA+ results for Institutions and Corporates exposure subject to a PD floor of 3 basis points.

Members of the User Group noted that it would be helpful for DB to provide additional narrative to discuss notable concentrations or changes in credit risk exposures from year to year

Source: Deutsche Bank Annual Report 2013, p. 121-125

Recommendation 15b: Map non-retail banking book credit portfolios, internal ratings grades and PD bands against external credit rating.

CREDIT QUALITY OF AIRB EXPOSURE - BUSINESS AND GOVERNMENT PORTFOLIOS (RISK RATING METHOD) [1]

($ millions)

				Q4/13						
CIBC rating	PD bands	Standard & Poor's equivalent	Moody's Investors Service equivalent	EAD	Notional of undrawn commitments	Exposure weighted-average EAD %	Exposure weighted-average PD %	Exposure weighted-average LGD %	Exposure weighted-average risk weight %	RWA
Corporate										
Investment grade										
10	0.01%-0.03%	AAA	Aaa	1,159	275	50%	0.03%	19%	4%	52
21	0.01%-0.03%	AA+	Aa1	4,750	199	80%	0.04%	13%	3%	146
24	0.04%-0.05%	AA	Aa2	446	44	80%	0.04%	33%	7%	31
27	0.05%-0.06%	AA-	Aa3	1,542	945	80%	0.05%	36%	14%	216
31	0.07%-0.09%	A+	A1	3,185	642	79%	0.08%	24%	14%	436
34	0.09%-0.12%	A	A2	4,028	2,085	76%	0.11%	40%	29%	1,167
37	0.13%-0.16%	A-	A3	5,922	3,635	77%	0.14%	43%	35%	2,049
41	0.17%-0.22%	BBB+	Baa1	11,935	7,866	76%	0.18%	38%	38%	4,478
44	0.23%-0.30%	BBB	Baa2	11,750	6,449	75%	0.26%	38%	44%	5,198
47	0.31%-0.42%	BBB-	Baa3	9,996	5,766	73%	0.37%	37%	50%	4,998
				54,713	27,906	75%	0.20%	35%	34%	18,770
Non-investment grade										
51	0.43%-0.61%	BB+	Ba1	9,478	5,256	57%	0.50%	35%	52%	4,944
54	0.62%-1.09%	BB	Ba2	9,125	4,392	56%	0.72%	30%	52%	4,730
57	1.10%-1.92%	BB-	Ba3	7,349	3,391	57%	1.46%	28%	60%	4,418
61	1.93%-3.99%	B+	B1	4,166	1,393	52%	2.40%	29%	67%	2,789
64	4.00%-7.27%	B	B2	2,519	691	51%	5.59%	31%	91%	2,284
67	7.28%-12.11%	B-	B3	532	212	54%	9.10%	29%	112%	595
				33,169	15,435	56%	1.54%	31%	60%	19,760
Watch list										
70	12.12%-20.67%	CCC+	Caa1	332	126	50%	15.53%	20%	97%	323
75	12.12%-20.67%	CCC to CCC-	Caa2 to Caa3	77	7	57%	15.53%	54%	249%	192
80	20.68%-99.99%	CC to C	Ca	116	22	57%	30.08%	50%	266%	309
				525	155	51%	18.74%	32%	157%	824
Default										
90	100.00%	D	C	531	16	48%	100.00%	42%	289%	1,537
				531	16	48%	100.00%	42%	289%	1,537
				88,938	43,512	68%	1.40%	33%	46%	40,891
Sovereign										
Investment grade										
00	0.01%-0.015%	AAA	Aaa	13,325	187	80%	0.01%	5%	1%	144
10	0.016%-0.025%	AAA	Aaa	7,885	1,096	77%	0.02%	8%	2%	149
21	0.016%-0.025%	AA+	Aa1	2,164	1,216	78%	0.02%	6%	2%	38
24	0.016%-0.025%	AA	Aa2	679	526	79%	0.02%	30%	5%	35
27	0.026%-0.035%	AA-	Aa3	1,684	1,409	78%	0.03%	17%	6%	90
31	0.036%-0.05%	A+	A1	1,227	802	78%	0.04%	25%	7%	90
34	0.06%-0.065%	A	A2	501	477	79%	0.06%	17%	9%	43
37	0.066%-0.08%	A-	A3	366	230	76%	0.07%	17%	12%	43
41	0.09%-0.13%	BBB+	Baa1	523	372	80%	0.09%	24%	15%	76
44	0.14%-0.22%	BBB	Baa2	123	55	71%	0.16%	49%	37%	46
47	0.23%-0.42%	BBB-	Baa3	85	23	79%	0.29%	40%	33%	28
				28,462	6,393	78%	0.02%	9%	3%	782
Non-investment grade										
51	0.43%-0.61%	BB+	Ba1	68	7	65%	0.50%	45%	71%	48
54	0.62%-1.09%	BB	Ba2	422	255	34%	0.72%	6%	8%	32
57	1.10%-1.92%	BB-	Ba3	19	4	49%	1.46%	19%	47%	9
61	1.93%-3.99%	B+	B1	3	3	69%	2.40%	40%	100%	3
64	4.00%-7.27%	B	B2	16	2	63%	5.59%	44%	156%	25
67	7.28%-12.11%	B-	B3	2	-	-	9.10%	39%	100%	2
				530	271	35%	0.91%	13%	22%	119
Watch list										
70	12.12%-20.67%	CCC+	Caa1	-	-	-	-	-	-	-
75	12.12%-20.67%	CCC to CCC-	Caa2 to Caa3	-	-	-	-	-	-	-
80	20.68%-99.99%	CC to C	Ca	-	-	-	-	-	-	-
				-	-	-	-	-	-	-
Default										
90	100.00%	D	C	-	-	-	-	-	-	-
				-	-	-	-	-	-	-
				28,992	6,664	76%	0.04%	9%	3%	901

CREDIT QUALITY OF AIRB EXPOSURE - BUSINESS AND GOVERNMENT PORTFOLIOS (RISK RATING METHOD) (continued) [1]

($ millions)

				Q4/13						
CIBC rating	PD bands	Standard & Poor's equivalent	Moody's Investors Service equivalent	EAD	Notional of undrawn commitments	Exposure weighted-average EAD %	Exposure weighted-average PD %	Exposure weighted-average LGD %	Exposure weighted-average risk weight %	RWA
Banks										
Investment grade										
10	0.01%-0.03%	AAA	Aaa	1,916	-	-	0.03%	9%	2%	42
21	0.01%-0.03%	AA+	Aa1	515	84	-	0.04%	25%	6%	32
24	0.04%-0.05%	AA	Aa2	7,435	-	-	0.04%	15%	7%	512
27	0.05%-0.06%	AA-	Aa3	7,967	-	-	0.05%	21%	8%	648
31	0.07%-0.09%	A+	A1	17,894	-	-	0.08%	13%	7%	1,299
34	0.09%-0.12%	A	A2	5,101	6	80%	0.11%	22%	16%	816
37	0.13%-0.16%	A-	A3	14,295	100	80%	0.14%	9%	10%	1,447
41	0.17%-0.22%	BBB+	Baa1	5,136	436	75%	0.18%	20%	20%	1,016
44	0.23%-0.30%	BBB	Baa2	2,624	525	79%	0.26%	15%	16%	415
47	0.31%-0.42%	BBB-	Baa3	822	78	66%	0.37%	24%	31%	255
				63,705	1,229	72%	0.10%	15%	10%	6,482
Non-investment grade										
51	0.43%-0.61%	BB+	Ba1	235	-	-	0.50%	10%	44%	96
54	0.62%-1.09%	BB	Ba2	585	-	-	0.72%	14%	16%	103
57	1.10%-1.92%	BB-	Ba3	254	-	-	1.46%	4%	11%	96
61	1.93%-3.99%	B+	B1	337	1	70%	2.40%	17%	41%	29
64	4.00%-7.27%	B	B2	253	1	70%	5.59%	40%	-	139
67	7.28%-12.11%	B-	B3	-	-	-	9.10%	-	-	-
				1,664	2	70%	1.88%	11%	23%	463
Watch list										
70	12.12%-20.67%	CCC+	Caa1	9	3	70%	15.53%	30%	156%	14
75	12.12%-20.67%	CCC to CCC-	Caa2 to Caa3	-	-	-	-	-	-	-
80	20.68%-99.99%	CC to C	Ca	-	-	-	-	-	-	-
				9	3	70%	15.53%	30%	156%	14
Default										
90	100.00%	D	C	-	-	-	-	-	-	-
				-	-	-	-	-	-	-
				65,378	1,234	68%	0.15%	15%	11%	6,959
				183,308	51,410	69%	0.74%	23%	27%	48,751
Commercial mortgages (Slotting approach)										
Strong				7,127	52	60%			70%	4,989
Good				448	15	60%			90%	404
Satisfactory				293	70	50%			115%	337
Weak				60	-	-			250%	150
Default				2	-	-			-	-
				7,930	137	55%			74%	5,880
Total business and government				191,238	51,547	69%			74%	54,631

1 Gross credit exposure after credit valuation adjustments for financial guarantors and credit risk mitigation, and before allowance for credit losses.

Source: CIBC Q4 2013 Supplementary Information Package, p42

Recommendation 16: RWA flow statement for each risk type

Basel III RWA movement by key driver, risk type and reporting segment

CHF billion	Wealth Management	Wealth Management Americas	Retail & Corporate	Global Asset Management	Investment Bank	CC – Core Functions	CC – Non-core and Legacy Portfolio	Group
Total RWA balance as of 31.12.12 (pro-forma)	19	24	32	4	65	17	103	262
Credit risk RWA movement during 2013:	*1*	*(1)*	*(1)*	*0*	*(7)*	*(1)*	*(32)*	*(41)*
Methodology changes and model parameter updates	1	0	0	0	(3)	(1)	(3)	(6)
Acquisitions and disposals of business operations	0	0	0	0	0	0	0	0
Book quality	0	0	0	0	1	0	(4)	(3)
Book size	1	(1)	(1)	0	(4)	0	(24)	(29)
Foreign currency translation effects	0	0	0	0	(1)	0	(2)	(4)
Non-counterparty-related risk RWA movement during the year 2013:	*0*	*0*	*0*	*0*	*0*	*1*	*0*	*0*
Exposure movements	0	0	0	0	0	1	0	0
Foreign currency translation effects	0	0	0	0	0	0	0	0
Market risk RWA movement during 2013:	*0*	*0*	*0*	*0*	*1*	*(3)*	*(15)*	*(17)*
Methodology changes	0	0	0	0	0	0	(1)	(1)
Model parameter updates	0	0	0	0	0	0	0	0
Regulatory add-ons	0	0	0	0	0	0	1	1
Movement in risk levels	0	0	0	0	1	(3)	(15)	(17)
Operational risk RWA movement during 2013:	*2*	*2*	*0*	*0*	*4*	*8*	*9*	*25*
Incremental RWA	3	4	1	0	6	3	7	23
Other model parameter updates	(1)	(2)	0	0	(2)	5	2	2
Total movement	3	1	0	0	(2)	5	(39)	(33)
Total RWA balance as of 31.12.13 (phase-in)	21	24	31	4	63	21	64	229

RWA movement by key driver, risk type and reporting segment

The following pages include information about the definitions of key driver categories and underlying judgments and assumptions.

Credit risk

The decrease of CHF 41 billion in credit risk RWA was mainly driven by reductions in book size in both Corporate Center – Non-core and Legacy Portfolio and the Investment Bank, primarily due to the aforementioned sale of securitization exposures, trade compressions and reduced derivative exposures, and a net improvement in book quality, primarily driven by economic CVA hedges in Corporate Center – Non-core and Legacy Portfolio.

Market risk

Substantially all of the decrease of CHF 17 billion in market risk RWA was the result of reduced market risk exposures. Only a small amount resulted from changes in methodology or routine model parameter updates.

→ **Refer to "Corporate Center – Non-core and Legacy Portfolio" in the "Risk management and control" section of this report for more information on RWA by portfolio composition and exposure category**

Key drivers of RWA movement by risk type

We employ a range of analyses in our RWA monitoring framework to identify the key drivers of movements in the positions. This includes a top-down identification approach for several sub-components of the RWA movement, leveraging information available from our monthly detailed calculation, substantiation and control processes. Particular attention is paid to identifying and segmenting items within the day-to-day control of the business and those items that are driven by changes in risk models or regulatory methodology. We transitioned to Basel III in the first quarter of 2013. As RWA as of 31 December 2012 represent Basel III pro-forma information, certain 2013 movements were allocated to the various movement types on a best efforts basis only.

Credit risk RWA movements

Methodology changes and model parameter updates

Represents RWA movements arising from the implementation of new models and from parameter changes to existing models. This movement type also includes regulatory methodology changes, reviews of modeling assumptions and refinements to our Basel III (pro-forma) calculations applied until January 2013. The RWA impact of model and methodology changes is estimated based on the portfolio at the time of the implementation of the change. Methodology changes and model parameter updates were not segregated due to a combination of the aforementioned complexity associated with the transition from Basel III (pro-forma) to Basel III, inherent complexity related to some components of credit risk and materiality aspects.

Acquisitions and disposals of business operations

Represents the movement in RWA as a result of the disposal or acquisition of business operations, quantified based on the credit risk exposures as at the end of the month preceding a disposal or following an acquisition. Acquisition and disposal of exposures in the ordinary course of business are reflected under book size.

Book quality

Represents RWA movements resulting from changes in the underlying credit quality of counterparties. These are caused by changes to risk parameters which arise from actions such as, but not limited to, model recalibration, change in counterparty external rating or new credit hedges.

Book size

Represents RWA movements arising in the normal course of business, such as growth in credit exposures or reduction in book size from sales and write-offs. The amounts reported for each business division and Corporate Center may also include the effect of transfers and allocations of exposures between business divisions reflected in the period. Currently, the movement in book size is estimated based on amounts derived from the other four drivers. We will continue to refine our underlying RWA reporting and intend to provide more granular information in the future.

Foreign currency translation effects

Represents RWA movements as a result of changes in exchange rates of the transaction currencies versus the Swiss franc.

Exposure movements

Represents RWA movements arising in the normal course of business, such as purchase or sale of relevant underlying exposures.

Foreign currency translation effects

Represents foreign currency translation effects on RWA movements as a result of changes in exchange rates of the transaction currencies versus the Swiss franc.

Market risk RWA movements

Methodology changes

Represents methodology changes to the calculation driven by regulatory and internal policy decisions. In some cases, the effects of methodology changes have been assessed at the time of implementation, and may not reflect the effects for the entire year 2013. Further, methodology changes may, on occasion, be implemented at the same time as parameter updates and changes in regulatory add-ons, the effects of which cannot be fully disaggregated.

Model parameter updates

Includes routine updates to model parameters such as the roll-forward of the five-year historical data used for VaR. The effect of each parameter update, assessed at the point of implementation, has been used to approximate the combined effect over the year.

Regulatory add-ons

Represents entirely the "Risks-not-in-VaR (RniV)" add-on described in the "Risk management and control" section of this report. The effect of the annual recalibration has been calculated by applying the old and new multiplication factors to the year-end VaR- and SVaR-based RWA.

Movement in risk levels

Represents changes as a result of movements in risk levels that are derived after accounting for the movements in the above three specific drivers. This includes changes in positions, effects of market moves on risk levels and currency translation effects. The amounts reported for each business division and Corporate Center may also include the effect of transfers and allocations of exposures between business divisions reflected in the period.

Operational risk RWA movements

Incremental RWA

Represents RWA movements relating to changes in the incremental RWA resulting from the supplemental operational risk capital analysis mutually agreed to by UBS and FINMA.

Other model parameter updates

Represents RWA movements arising from the regular update of our advanced measurement approach (AMA) model.

Source: UBS 2013 Annual Report, pp. 241-243

Recommendation 16: RWA flow statement for each risk type

The tables below provide an analysis of key drivers for RWA movements on a Basel 2.5 basis observed for credit, market and operational risk in the reporting period.

Development of Risk-weighted Assets for Credit Risk

	Dec 31, 2013		Dec 31, 2012	
in € m.	Counterparty credit risk	thereof: derivatives and repo-style transactions	Counterparty credit risk	thereof: derivatives and repo-style transactions
Credit risk RWA balance, beginning of year	228,952	35,274	262,460	50,973
Book Size	(4,516)	(2,167)	(11,898)	(9,516)
Book Quality	(9,701)	(2,247)	N/M	N/M
Model Updates	(2,061)	0	(7,302)	(4,180)
Methodology and Policy	0	0	0	0
Acquisition and Disposals	(5,467)	(3)	(12,670)	(1,567)
Foreign exchange movements	(4,988)	(1,403)	(1,639)	(436)
Credit risk RWA balance, end of year	202,219	29,454	228,952	35,274

N/M – Not meaningful

We have slightly re-designed the classifications of key drivers for the RWA credit risk development table in order to be fully aligned with the recommendations of the Enhanced Disclosure Task Force (EDTF). The figures for December 31, 2012 have been adjusted accordingly. Only for December 31, 2012 RWA movements in relation to book size and book quality have been provided cumulatively in the category "book size". The main changes encompass: We split out "book quality" from "book size", where "book quality" mainly represents the effects from portfolio rating migrations, loss given default, model parameter re-calibrations as well as collateral coverage activities. Organic changes in our portfolio size and composition is considered in the category "book size". "Model updates" include model refinements and advanced model roll out. RWA movements resulting from externally, regulatory-driven changes, e.g. applying new regulations, are now considered in the "methodology and policy" section. "Acquisition and disposals" is reserved to show significant exposure movements which can be clearly assigned to new businesses and disposal-related activities.

The decrease in RWA for counterparty credit risk by 11.7 % since December 31, 2012 mainly reflects the reduction efforts resulting from de-risking activities. The respective impact is reflected in the category "acquisition and disposal" but also in "book quality" and "book size", mainly in relation to re-calibrations, increased collateral and netting coverage or process enhancements. The decrease in the category "model updates" primarily shows the impact of additional BaFin approvals received mainly for Postbank where certain exposures in the exposure classes "institutions" and "corporates" are newly assigned to the advanced IRBA.

Development of Risk-weighted Assets for Market Risk

in € m.	Dec 31, 2013	Dec 31, 2012
Market risk RWA balance, beginning of year	53,058	68,095
Movement in risk levels	(8,598)	(322)
Market data changes and recalibrations	1,136	(2,577)
Model updates	542	(707)
Methodology and policy	1,200	(11,215)
Acquisitions and disposals	0	0
Foreign exchange movements	(79)	(216)
Market risk RWA balance, end of year	47,259	53,058

The analysis for market risk covers movements in our internal models for value-at-risk, stressed value-at-risk, incremental risk charge and comprehensive risk measure as well as results from the market risk standardized approach, e.g. for trading securitizations and nth-to-default derivatives or trading exposures for Postbank.

The € 5.8 billion (11 %) RWA decrease for market risk since December 31, 2012 was primarily driven by decreases in the category of "movement in risk levels", with some offset from "market data changes" and "methodology and policy". Risk levels were significantly lower within the internal value-at-risk and stressed value-at-risk models coming from reductions across most asset classes but particularly within credit spread exposures. Reductions were also seen in the comprehensive risk measure due to de-risking within NCOU but there were some increases in the incremental risk. The market risk RWA movements due to changes in market data levels, volatilities, correlations, liquidity and ratings are included under the "market data changes and recalibrations" category. The increase in the first nine months of 2013 was due to an increase within the incremental risk charge, based on a more conservative parameter choice within the calculation. In the "methodology and policy" category we reflect regulatory driven changes to our market risk RWA models and calculations. Changes to our market risk RWA internal models, such as methodology enhancements or risk scope extensions, are included in the category of "model updates". Significant new businesses and disposals would be assigned to the line item "acquisition and disposal", which was not applicable in this reporting period.

Development of Risk-weighted Assets for Operational Risk

in € m.	Dec 31, 2013	Dec 31, 2012
Operational risk RWA balance, beginning of year	51,595	50,695
Loss profile changes (internal and external)	2,623	3,496
Expected loss development	(959)	(1,115)
Forward looking risk component	(515)	(2,671)
Model updates	1,885	1,551
Methodology and policy	0	0
Acquisitions and disposals	(3,738)	(361)
Operational risk RWA balance, end of year	50,891	51,595

In the second quarter of 2013 BaFin approved the integration of Postbank into our Group regulatory capital calculation. Given that, the applied acquisition add-on for Postbank was removed and the risk profile of Postbank was incorporated in our Advanced Measurement Approach Model. This resulted in a RWA benefit of € 3.8 billion (incl. diversification effects) compared to year-end 2012. The acquisition add-on of € 109 million for DB Investment Services (former Xchanging Transaction Bank) was calculated based on their Advanced Measurement Approach Model and the integration of DB Investment Services in our Advanced Measurement Approach Model is planned for 2014.

Model Updates of € 1.9 billion containing the implementation of a model enhancement with respect to loss frequency which led to a RWA increase of € 2.4 billion offset in part by a RWA decrease of € 500 million driven by model tail recalibration. Due to an increase of the expected loss as calculated by our Advanced Measurement Approach Model, we were allowed to deduct a higher expected loss, which led to a RWA benefit of € 959 million. The remaining changes originated from changes in the forward looking risk component (qualitative adjustment) and movements in the loss profile of used internal and external data.

Source: Deutsche Bank Annual Report 2013, p. 217-218

Recommendation 17: Put Basel Pillar 3 back-testing requirements into context, including assessment of model performance and validation against default and loss.

Wholesale credit models

For wholesale portfolios, we disclose performance for models covering sovereign obligors, banks and corporates. As explained on page 42, we operate global models for the first two of these customer groups. In the case of corporates, we have aggregated data on models covering a customer population ranging from large multinational companies to medium-sized and smaller corporates. The PD analysis for this group includes mainly advanced IRB exposures but also a small element of foundation IRB.

In table 24 below, the data for sovereigns and banks are based on such a small number of defaults that the comparison of estimated with actual results, even where these are available, is not fully reflective of a model's performance. To mitigate this characteristic of low-default portfolios, additional analysis is carried out on these models at annual validation. This analysis shows that they discriminate risk well and are conservatively calibrated. The latter reflects both a prudent modelling approach and the conservatism required by regulations. As noted on page 43 the sovereign exposures are subject to an explicit regulatory floor applied for the calculation of regulatory capital.

The basis of preparation of this table has been further enhanced, compared with the prior year, primarily through the alignment of the data collection period across all local models and improved data collection in the Banks model. Within table 24, for back-testing purposes, a customer's CRR/PD is observed at a point in time and then their default or non-default status in the following one-year period is recorded against that PD grade. The PD presentation here is expressed for all exposure classes on an obligor count basis, as model performance is judged on this basis in validation. The LGD and EAD refer to observations for the defaulted population, being the appropriate focus of an assessment of these models' performance.

Table 24: IRB models – estimated and actual values (wholesale)

	PD[1]		LGD[2]		EAD[3]	
	Estimated %	Actuals %	Estimated %	Actuals %	Estimated %	Actuals %
2013						
Sovereigns model[4]	**4.14**	–	–	–	–	–
Banks model[5]	**3.18**	**0.20**	**40.01**	–	**0.06**	**0.04**
Corporates models[6]	**2.63**	**1.20**	**33.09**	**18.69**	**0.54**	**0.48**
2012						
Sovereigns model[4]	3.56	0.09	–	–	–	–
Banks model[5]	3.60	0.37	55.00	–	0.01	0.01
Corporates models[6]	2.79	1.41	40.46	37.30	2.45	2.27

1 *Estimated PD for all models is average PD calculated on the number of obligors covered by the model(s).*
2 *Average LGD values are EAD-weighted.*
3 *Expressed as a percentage of total EAD which includes all defaulted and non-defaulted exposures for the relevant population.*
4 *No defaults have been observed in the Sovereign portfolio since 31 December 2012.*
5 *Banks figures are calculated based on two observed defaults. There are no resolved cases since 31 December 2011, hence actual LGD is not yet crystallised.*
6 *In 2012, covered the combined populations of the global large corporates model and all regional IRB models for large, medium and small corporates, extended in 2013 to include non-bank financial institutions.*

Table 25 below expands upon the estimated and actual corporate PD in table 24, as sufficient defaults in this population make analysis at this level meaningful. This analysis is conducted as part of regular validation to ensure that, throughout the entire population, there is a satisfactory degree of conservative performance at all grades. Table 25 is not comparable with table 19 (c) on page 47, mainly because table 25 is a distribution of facility limits, rather than exposure value, and for a back-testing population that does not exactly match the exposure class population of table 19 (c).

Table 25: IRB models – corporate PD models – performance by CRR grade

	Corporates[1]				
	Facility[2] %	Defaulted[3] %	Estimated PD[4] %	Actual PD[5] %	Diff. in PD %
2013					
CRR 0.1[6]	**0.00**	**0.00**	**0.01**	**0.00**	**0.01**
CRR 1.1	**4.83**	**0.00**	**0.02**	**0.00**	**0.02**
CRR 1.2	**7.47**	**0.00**	**0.04**	**0.00**	**0.04**
CRR 2.1	**20.85**	**0.00**	**0.07**	**0.00**	**0.07**
CRR 2.2	**10.38**	**0.01**	**0.13**	**0.03**	**0.10**
CRR 3.1	**10.79**	**0.07**	**0.22**	**0.16**	**0.06**
CRR 3.2	**9.49**	**0.13**	**0.37**	**0.22**	**0.15**
CRR 3.3	**8.33**	**0.15**	**0.63**	**0.27**	**0.36**
CRR 4.1	**6.40**	**0.35**	**0.87**	**0.48**	**0.39**
CRR 4.2	**5.84**	**0.93**	**1.20**	**0.80**	**0.40**
CRR 4.3	**4.22**	**0.47**	**1.65**	**0.67**	**0.98**
CRR 5.1	**4.18**	**0.72**	**2.25**	**0.76**	**1.49**
CRR 5.2	**3.07**	**0.97**	**3.05**	**1.03**	**2.02**
CRR 5.3	**1.85**	**2.77**	**4.20**	**1.89**	**2.31**
CRR 6.1	**0.98**	**4.37**	**5.75**	**3.28**	**2.47**
CRR 6.2	**0.46**	**5.74**	**7.85**	**3.77**	**4.08**
CRR 7.1	**0.44**	**12.69**	**10.00**	**7.95**	**2.05**
CRR 7.2	**0.15**	**7.84**	**13.00**	**8.68**	**4.32**
CRR 8.1	**0.15**	**9.48**	**19.00**	**11.44**	**7.56**
CRR 8.2	**0.07**	**14.94**	**36.00**	**13.70**	**22.30**
CRR 8.3	**0.05**	**13.12**	**75.00**	**13.64**	**61.36**
Total	**100.00**				

1 *In 2012, covered the combined populations of the global large corporates model and all regional IRB models for large, medium and small corporates, extended in 2013 to include non-bank financial institutions.*
2 *Total facility limits for each CRR grade, expressed as a percentage of total limits granted.*
3 *Defaulted facilities as a percentage of total facility limits at that grade.*
4 *The estimated PD is before application of the 0.03% regulatory floor required under BIPRU 4.4.64.*
5 *Actual PD is based on the number of defaulted obligors covered by the model(s), without taking into account the size of the facility granted or the exposures to the obligor.*
6 *The top band of the wholesale CRR master scale is not available to entities in the corporates exposure class, but restricted to the strongest central governments, central banks and institutions.*

Table 26: IRB models – estimated and actual values (retail)[1,2]

	PD		LGD[3]		EAD	
	Estimated %	Actuals %	Estimated %	Actuals %	Estimated US$m	Actuals US$m
2013						
UK[4]						
HSBC residential mortgage	**0.55**	**0.38**	**17.30**	**6.40**	**322.8**	**309.6**
HSBC credit card	**1.54**	**1.27**	**88.10**	**84.10**	**180.9**	**178.4**
HSBC personal loans	**3.57**	**2.35**	**85.40**	**73.00**	**79.4**	**76.2**
Business Banking (Retail SME)	**2.39**	**2.61**	**78.00**	**70.00**	**105.4**	**103.6**
Hong Kong[5]						
HSBC personal residential mortgage	**0.71**	**0.03**	**1.84**	**0.43**	**8.3**	**8.0**
HSBC credit card	**0.63**	**0.33**	**91.41**	**84.58**	**64.2**	**68.0**
HSBC personal instalment loans	**2.2**	**1.99**	**90.07**	**96.16**	**26.2**	**24.0**
US						
Consumer Lending real estate first lien	**7.74**	**8.22**	**67.13**	**64.93**	**148.6**	**140.5**
Mortgage Services real estate first lien	**10.15**	**9.68**	**60.04**	**62.92**	**65.0**	**62.2**
HSBC Mortgage Corporation first lien	**4.64**	**4.43**	**49.85**	**37.17**	**28.9**	**28.9**
2012						
UK[4]						
HSBC residential mortgage	0.45	0.41	7.50	7.20	–	–
HSBC credit card	1.63	1.42	90.80	90.40	205.20	205.40
Hong Kong[5]						
HSBC personal residential mortgage	0.82	0.04	0.87	0.21	–	–
HSBC credit card	0.69	0.32	89.23	83.94	58.41	59.24
US						
Consumer Lending real estate first lien	8.77	9.99	52.03	76.10	–	–
Mortgage Services real estate first lien	14.92	10.99	56.36	63.54	–	–

1 *All Retail estimated PD values are based on the total number of accounts not in default for the given observation period, while LGD and EAD values are based on the analysis of defaulted accounts only.*
2 *The information provided in this table is not comparable with that in table 21 due to the stated differences in basis of preparation.*
3 *LGD values represent the amount of loss as a percentage of EAD, based on a recovery period starting at the date of default and ending for the UK, 16 months from the date of default; for Hong Kong, 24 months; for the CML portfolios, 30 months, and for HSBC Mortgage Corporation, 36 months.*
4 *UK excludes the First Direct division of HSBC Bank plc.*
5 *Hong Kong excludes Hang Seng Bank.*

Retail credit models

In the case of retail portfolios, we do not operate global models and disclose information on our most material local risk rating systems.

The actual and estimated values are derived from the model monitoring and calibration processes performed at a local level. Within the discipline of our Global standards, our regions adopt back-testing criteria specific to local conditions in order to assess the accuracy of their models.

The UK estimated values are based on model outputs including misalignment buffers for PD, downturn adjustments for EAD and LGD, and regulatory floors. In conducting back-testing, the actual LGD value for our UK residential mortgages is supplemented by the latest LGD estimate to determine the percentage of loss for those defaulted accounts which are still in the workout process. UK estimates in table 26 remain conservative and higher than actual outcomes with the exception of the Business Banking PD, whose under-estimation has since been addressed, with the latest monitoring showing a 1% over-estimation.

The Hong Kong estimated PD and LGD values include additional conservatism and stressed factors to reflect downturn conditions, especially in the case of the residential mortgage model, although they do not include any regulatory floors. For back-testing purposes, the estimated LGD value for our Hong Kong residential mortgages uses a performance period of two years in order to make a more accurate assessment of actual losses. Except for the under-estimation in the HSBC credit card EAD and HSBC personal instalment loans LGD models, all Hong Kong retail model estimates have been close to, or higher than, actual outcomes. Redevelopment of the underperforming models is due to be completed within 2014.

In the US, the risk profile of our portfolios has undergone significant change in recent years, not only due to the difficult economic environment, increasing levels of loan modifications and regulatory measures including the foreclosure moratoria, but also through the Group's strategic decision to run off the CML portfolios.

Source: HSBC 2013 Pillar 3, pp. 59-63

Narrative shown above is incomplete. For full discussion, see HSBC Pillar 3 Report

Recommendation 17: Put Basel Pillar 3 back-testing requirements into context, including assessment of model performance and validation against default and loss.

Default Definition and Model Validation

A prerequisite for the development of rating methodologies and the determination of risk parameters is a proper definition, identification and recording of the default event of a customer. We apply a default definition in accordance with the requirements of Section 125 SolvV as confirmed by the BaFin as part of the IRBA approval process.

As an important element of our risk management framework we regularly validate our rating methodologies and credit risk parameters. Whereas the rating methodology validation focuses on the discriminatory power of the models, the risk parameter validation for PD, LGD and EAD analyzes the predictive power of those parameters when compared against historical default and loss experiences.

According to our standards, and in line with the SolvV-defined minimum requirements, the parameters PD, LGD and EAD are reviewed annually. The validation process for parameters as used by us excluding Postbank is coordinated and supervised by a validation working group composed of members from Finance, Risk Analytics & Living Wills and Credit Risk Management. Risk parameter validations consist of quantitative analyzes of internal historical data and are enriched by qualitative assessments in case data for validation is not statistically sufficient for deriving reliable validation results. A recalibration of specific parameter settings is triggered based on validation results if required. In addition to annual validations, ad hoc reviews are performed where appropriate as a reaction to quality deterioration at an early stage due to systematic changes of input factors (i.e., changes in payment behavior) or changes in the structure of the portfolio. The reviews conducted in 2013 for advanced IRBA rating systems triggered recalibrations as shown in the table below. 66 new risk parameters are applied due to newly approved rating systems or due to increased granularity in existing risk parameter settings (including Postbank). None of the recalibrations individually nor the impact of all recalibrations in the aggregate materially impacted our regulatory capital requirements.

Analogously at Postbank the results of the estimations of the input parameters PD, CCF and LGD are reviewed annually. Postbank's model validation committee is responsible for supervising the annual validation process of all models. Via a cross committee membership Deutsche Bank senior managers join Postbank committees and vice versa, to ensure a joint governance.

Validation results for risk parameters used in our advanced IRBA

2013	PD		LGD		EAD	
	Count	EAD in %	Count	EAD in %	Count	EAD in %
Appropriate	136	80.8	150	87.3	50	52.2
Overly conservative	8	7.9	6	7.5	21	43.6
Progressive	10	11.3	6	5.1	8	4.2
Total	**154**	**100.0**	**162**	**100.0**	**79**	**100.0**

Thereof already recalibrated and introduced in 2013

Overly conservative	3	5.2	2	1.0	7	38.6
Progressive	6	6.9	4	5.1	4	3.5
Total	**9**	**12.1**	**6**	**6.0**	**11**	**42.1**

2012	PD		LGD		EAD	
	Count	EAD in %	Count	EAD in %	Count	EAD in %
Appropriate	104	91.4	100	89.8	40	79.5
Overly conservative	6	1.8	18	4.1	29	15.9
Progressive	16	6.8	11	6.1	5	4.6
Total	**126**	**100.0**	**129**	**100.0**	**74**	**100.0**

Thereof already recalibrated and introduced in 2012

Overly conservative	1	0.1	17	3.5	24	15.3
Progressive	1	0.1	7	2.0	5	4.6
Total	**2**	**0.2**	**24**	**5.5**	**29**	**19.9**

The validations during 2013 largely confirm our parameter settings. Negatively validated PD and LGD parameters with high materiality are caused by three rating systems. For one Postbank rating system contributing around 6 % of EAD (for both PD and LGD) the PD parameter proved to be too progressive and the LGD parameter is overly conservative. Whereas PDs were already increased, it was decided to keep the LGD setting until next validation. For another Postbank rating system contributing around 5 % of EAD (for both PD and LGD), PDs were overly conservative and LGD progressive, both parameters were already amended. For a third DB rating system contributing to around 3.5 % of EAD, the progressive PD parameters will be mitigated by re-rating of effected exposures which was already started in 2013. One EAD parameter used in DB contributing 35 % of the free limit was overly conservative and was reduced by 3 %-points still keeping a high level of conservatism. All other negatively validated parameters are applied to smaller portfolios.

Out of the 59 risk parameters, where a change was suggested during 2013 by the conducted validation, 26 were already introduced in 2013. Out of the remaining 33 parameter changes 18 are scheduled for implementation in the first quarter 2014. Further investigations showed that one parameter setting could be retained due to changed portfolio composition. The remaining 14 parameter settings are planned to be implemented during 2014. Some of these parameter changes require pending approval from BaFin prior to introduction. Out of the 85 risk parameters where a change was suggested during 2012 by the conducted validation, 55 were already introduced in 2012. The remaining 30 parameter changes were implemented in 2013.

According to the methodology described above, the following table provides a comparison of EL estimates for loans, commitments and contingent liabilities as of year-end 2012 through 2008, with actual losses recorded for the financial years 2013 till 2009, by regulatory exposure class for advanced IRBA exposures. Postbank is firstly reflected in the comparison of EL estimates as of year end 2010 with actual losses recorded for the financial year 2011.

Comparison of expected loss estimates for loans, commitments and contingent liabilities with actual losses recorded by regulatory exposure class for advanced IRBA exposures

in € m.	Dec 31, 2012 Expected loss	2013 Actual loss	Dec 31, 2011 Expected loss	2012 Actual loss[1]	Dec 31, 2010 Expected loss[2]	2011 Actual loss[2]	Dec 31, 2009 Expected loss	2010 Actual loss	Dec 31, 2008 Expected loss	2009 Actual loss
Central governments	3	18	1	0	2	0	2	0	2	0
Institutions	10	1	7	14	22	2	16	1	21	16
Corporates	351	717	445	393	449	363	471	358	591	1,665
Retail exposures secured by real estate property	284	223	294	224	222	359	118	101	120	140
Qualifying revolving retail exposures	23	7	23	12	2	30	2	5	2	7
Other retail exposures	404	370	418	385	390	301	301	282	311	315
Total expected loss and actual loss in the advanced IRBA	**1,075**	**1,336**	**1,188**	**1,028**	**1,088**	**1,055**	**910**	**747**	**1,047**	**2,143**

[1] The December 31, 2012 actual loss amounts have been restated due to alignment of Postbank's calculation model to the Group's approach.
[2] The 2010 Expected Loss and 2011 Actual Loss figures have been restated to limit disclosure to Postbank's advanced IRBA exposure only.

The following table provides a year-to-year comparison of the actual loss by regulatory exposure class. Postbank is firstly included in the reporting period 2011.

Year-to-year comparison of the actual loss by IRBA exposure class

in € m.	2013	2012[1]	2011	2010	2009
Central governments	18	0	0	0	0
Institutions	1	14	2	1	16
Corporates	717	393	363	358	1,665
Retail exposures secured by real estate property	223	224	359	101	140
Qualifying revolving retail exposures	7	12	30	5	7
Other retail exposures	370	385	301	282	315
Total actual loss by IRBA in the advanced IRBA	**1,336**	**1,028**	**1,055**	**747**	**2,143**

[1] The December 31, 2012 actual loss amounts have been restated due to alignment of Postbank's calculation model to the Group's approach.

Narrative shown above is incomplete. For full discussion, see DB Annual Report

Source: Deutsche Bank Annual Report 2013, p116-118

Section 4

Liquidity and Funding

Recommendation 18a: Describe how the bank manages its potential liquidity needs (1 of 2)

Overview

Citi's funding and liquidity objectives are to maintain adequate liquidity to (i) fund its existing asset base; (ii) grow its core businesses in Citicorp; (iii) maintain sufficient excess liquidity, structured appropriately, so that it can operate under a wide variety of market conditions, including market disruptions for both short- and long-term periods; and (iv) satisfy regulatory requirements. Citigroup's primary liquidity objectives are established by entity, and in aggregate, across three major categories:

- the parent entity, which includes the parent holding company (Citigroup) and Citi's broker-dealer subsidiaries that are consolidated into Citigroup (collectively referred to in this section as "parent");
- Citi's significant Citibank entities, which consist of Citibank, N.A. units domiciled in the U.S., Western Europe, Hong Kong, Japan and Singapore (collectively referred to in this section as "significant Citibank entities"); and
- other Citibank and Banamex entities.

At an aggregate level, Citigroup's goal is to maintain sufficient funding in amount and tenor to fully fund customer assets and to provide an appropriate amount of cash and high-quality liquid assets (as discussed further below), even in times of stress. The liquidity framework provides that entities be self-sufficient or net providers of liquidity, including in conditions established under their designated stress tests.

Citi's primary sources of funding include (i) deposits via Citi's bank subsidiaries, which are Citi's most stable and lowest cost source of long-term funding, (ii) long-term debt (primarily senior and subordinated debt) primarily issued at the parent and certain bank subsidiaries, and (iii) stockholders' equity. These sources may be supplemented by short-term borrowings, primarily in the form of secured financing transactions.

As referenced above, Citigroup works to ensure that the structural tenor of these funding sources is sufficiently long in relation to the tenor of its asset base. The goal of Citi's asset/liability management is to ensure that there is excess tenor in the liability structure so as to provide excess liquidity after funding the assets. The excess liquidity resulting from a longer-term tenor profile can effectively offset potential decreases in liquidity that may occur under stress. This excess funding is held in the form of high-quality liquid assets, which Citi generally refers to as its "liquidity resources," and is described further below.

High-Quality Liquid Assets

In billions of dollars	Parent			Significant Citibank Entities			Other Citibank and Banamex Entities			Total		
	Dec. 31, 2013	Sept. 30, 2013	Dec. 31, 2012	Dec. 31, 2013	Sept. 30, 2013	Dec. 31, 2012	Dec. 31, 2013	Sept. 30, 2013	Dec. 31, 2012	Dec. 31, 2013	Sept. 30, 2013	Dec. 31, 2012
Available cash	$38.4	$40.7	$33.2	$ 82.6	$ 84.1	$ 25.1	$15.6	$11.5	$11.2	$136.6	$136.3	$ 69.5
Unencumbered liquid securities	28.1	24.2	33.7	181.2	172.9	173.0	77.8	76.2	83.5	287.1	273.3	290.2
Total	$66.5	$64.9	$66.9	$263.8	$257.0	$198.1	$93.4	$87.7	$94.7	$423.7	$409.6	$359.7

Note: Amounts above are estimated based on Citi's current interpretation of the definition of "high-quality liquid assets" under the Basel Committee on Banking Supervision's final Basel III Liquidity Coverage Ratio rules (see "Risk Factors—Liquidity Risks" above and "Liquidity Management, Measurement and Stress Testing" below). All amounts in the table above are as of period-end and may increase or decrease intra-period in the ordinary course of business.

As set forth in the table above, Citigroup's liquidity resources at December 31, 2013 increased from both September 30, 2013 and December 31, 2012. At the end of 2012, Citi had purposefully decreased its liquidity resources, primarily through long-term debt reductions and a one-time cash outflow on deposits related to the expiration of the FDIC's Transaction Account Guarantee program. The growth in Citi's liquidity resources during 2013 was primarily driven by increased deposits (see "Deposits" below), credit card securitization issuances through Citibank, N.A. and a continued reduction of Citi Holdings assets, partially offset by *Global Consumer Banking* and *Securities and Banking* lending growth.

The following table shows further detail of the composition of Citi's liquidity resources by type of asset for each of the periods indicated. For securities, the amounts represent the liquidity value that potentially could be realized and thus excludes any securities that are encumbered, as well as the haircuts that would be required for securities sales or financing transactions.

In billions of dollars	Dec. 31, 2013	Sept 30, 2013	Dec. 31, 2012
Available cash	$136.6	$136.3	$ 69.5
U.S. Treasuries	89.4	77.8	93.2
U.S. Agencies/Agency MBS	59.2	58.3	62.8
Foreign Government[1]	123.0	121.2	120.8
Other Investment Grade[2]	15.5	16.0	13.4
Total	$423.7	$409.6	$359.7

(1) Foreign government also includes foreign government agencies, multinationals and foreign government guaranteed securities. Foreign government securities are held largely to support local liquidity requirements and Citi's local franchises and, as of December 31, 2013, principally included government bonds from Brazil, Hong Kong, India, Japan, Korea, Poland, Mexico, Singapore, Taiwan and the United Kingdom.
(2) Includes contractual committed facilities from central banks in the amount of $1 billion and $0.9 billion at the end of the fourth and third quarters of 2013, respectively.

As evident from the table above, as of December 31, 2013, more than 80% of Citi's liquidity resources consisted of available cash, U.S. government securities and high-quality foreign sovereign debt securities, with the remaining amounts consisting of U.S. agency securities, agency MBS and investment grade debt.

Citi's liquidity resources as set forth above do not include additional potential liquidity in the form of Citigroup's borrowing capacity from the various Federal Home Loan Banks (FHLB), which was approximately $30 billion as of December 31, 2013 and is maintained by pledged collateral to all such banks. The liquidity resources shown above also do not include Citi's borrowing capacity at the U.S. Federal Reserve Bank discount window or international central banks, which capacity would be in addition to the resources noted above.

In general, Citigroup can freely fund legal entities within its bank vehicles. Citigroup's bank subsidiaries, including Citibank, N.A., can lend to the Citigroup parent and broker-dealer entities in accordance with Section 23A of the Federal Reserve Act. As of December 31, 2013, the amount available for lending to these entities under Section 23A was approximately $17 billion (unchanged from September 30, 2013), provided the funds are collateralized appropriately.

Source: Citigroup Inc. 2013 Annual Report, pp. 98-102

Recommendation 18a: Describe how the bank manages its potential liquidity needs (2 of 2)

Deposits

Deposits are the primary and lowest cost funding source for Citi's bank subsidiaries. The table below sets forth the end of period deposits, by business and/or segment, and the total average deposits for each of the periods indicated.

In billions of dollars	Dec. 31, 2013	Sept. 30, 2013	Dec. 31, 2012
Global Consumer Banking			
North America	**$170.2**	**$168.6**	$165.2
EMEA	**13.1**	**12.5**	13.2
Latin America	**47.7**	**47.5**	48.6
Asia	**101.4**	**101.6**	110.0
Total	**$332.4**	**$330.2**	$337.0
ICG			
Securities and Banking	**$110.1**	**$112.6**	$114.4
Transaction Services	**463.7**	**452.8**	408.7
Total	**$573.8**	**$565.4**	$523.1
Corporate/Other	**26.1**	**18.0**	2.5
Total Citicorp	**$932.3**	**$913.6**	$862.6
Total Citi Holdings (1)	**36.0**	**41.8**	68.0
Total Citigroup Deposits (EOP)	**$968.3**	**$955.4**	$930.6
Total Citigroup Deposits (AVG)	**$956.4**	**$922.1**	$928.9

(1) Included within Citi's end-of-period deposit balance as of December 31, 2013 were approximately $30 billion of deposits related to Morgan Stanley Smith Barney (MSSB) customers that, as previously disclosed, will be transferred to Morgan Stanley, with remaining balances transferred in the amount of approximately $5 billion per quarter through the end of the second quarter of 2015.

End-of-period deposits increased 4% year-over-year and 1% quarter-over-quarter. The increase during 2013 reflected, in part, elevated levels of market liquidity and strong corporate balance sheets, but also was driven by underlying business growth.

Global Consumer Banking deposits decreased 1% year-over-year, as growth in consumer checking and savings balances was offset by reductions in Citi's higher cost time deposits. Corporate deposits increased 10% year-over-year, as continued strong deposit flows led to 13% growth in *Transaction Services*. This deposit growth in *Transaction Services* was offset by a 4% decline in *Securities and Banking* deposits driven by reduced deposit balances with counterparties in Citi's Markets businesses, while deposits increased in the Private Bank. *Corporate/Other* deposits also increased year-over-year as Citi issued tenored time deposits to further diversify its funding sources.

Average deposits increased 3% year-over-year and 4% quarter-over-quarter, despite the transfer of approximately $26 billion of deposits relating to MSSB to Morgan Stanley during the second half of 2013.

Operating balances represented 80% of Citicorp's total deposit base as of December 31, 2013, compared to 79% at September 30, 2013 and 78% at December 31, 2012. Citi defines operating balances as checking and savings accounts for individuals, as well as cash management accounts for corporations; by comparison, time deposits have fixed rates for the term of the deposit and generally lower margins. This shift to operating balances, combined with overall market conditions and prevailing interest rates, continued to reduce Citi's cost of deposits during 2013. Excluding the impact of FDIC assessments and deposit insurance, the average rate on Citi's total deposits was 0.50% at December 31, 2013, compared with 0.53% at September 30, 2013, and 0.65% at December 31, 2012.

Long-Term Debt

Long-term debt (generally defined as original maturities of one year or more) continued to represent the most significant component of Citi's funding for the parent entities and was a supplementary source of funding for the bank.

Long-term debt is an important funding source for Citi's parent entities due in part to its multi-year maturity structure. The weighted-average maturities of unsecured long-term debt issued by Citigroup and its affiliates (including Citibank, N.A.) with a remaining life greater than one year (excluding remaining trust preferred securities outstanding) was approximately 7.0 years as of December 31, 2013, roughly unchanged from the prior quarter and prior-year periods.

Citi's long-term debt outstanding includes benchmark debt and what Citi refers to as customer-related debt, consisting of structured notes, such as equity- and credit-linked notes, as well as non-structured notes. Citi's issuance of customer-related debt is generally driven by customer demand and supplements benchmark debt issuance as a source of funding for Citi's parent entities.

Long-Term Debt Outstanding

The following table sets forth Citi's total long-term debt outstanding for the periods indicated:

In billions of dollars	Dec. 31, 2013	Sept 30, 2013	Dec. 31, 2012
Parent	**$164.7**	**$168.6**	$188.2
Benchmark Debt:			
Senior debt	**98.5**	**100.4**	109.5
Subordinated debt	**28.1**	**28.0**	27.6
Trust preferred	**3.9**	**4.3**	10.1
Customer-Related Debt:			
Structured debt	**22.2**	**22.0**	23.0
Non-Structured debt	**7.8**	**9.2**	10.8
Local Country and Other (1)(2)	**4.2**	**4.7**	7.2
Bank	**$ 56.4**	**$ 53.0**	$ 51.3
FHLB Borrowings	**14.0**	**14.3**	16.3
Securitizations (3)	**33.6**	**30.3**	24.8
Local Country and Other (2)	**8.8**	**8.4**	10.2
Total long-term debt	**$221.1**	**$221.6**	$239.5

Note: Amounts represent the current value of long-term debt on Citi's Consolidated Balance Sheet which, for certain debt instruments, includes consideration of fair value, hedging impacts and unamortized discounts and premiums.

(1) Includes securitizations of $0.2 billion in each period presented.

(2) Local country debt includes debt issued by Citi's affiliates in support of their local operations.

(3) Of the approximately $33.6 billion of total bank securitizations at December 31, 2013, approximately $32.4 billion related to credit card securitizations.

As part of its liquidity and funding strategy, Citi has considered, and may continue to consider, opportunities to repurchase its long-term and short-term debt pursuant to open market purchases, tender offers or other means. Such repurchases decrease Citi's overall funding costs. During 2013, Citi repurchased an aggregate of approximately $8.0 billion of its outstanding long-term and short-term debt primarily pursuant to selective public tender offers and open market purchases. Citi also redeemed $7.3 billion of trust preferred securities during the year, including $3.0 billion related to the exchange of trust preferred securities previously held by the U.S. Treasury and FDIC (for details on Citi's remaining outstanding trust preferred securities, see Note 18 to the Consolidated Financial Statements).

As set forth in the table above, Citi's overall long-term debt decreased $18 billion year-over-year, although the pace of reductions slowed during the second half of 2013. At year-end 2013, long-term debt outstanding had generally stabilized at $221 billion, as continued reductions in parent debt were offset by increases at the bank. In the bank, the increase in long-term debt during the year was driven by increased securitizations, specifically $11.5 billion of credit card securitizations by the Citibank Credit Card Issuance Trust (CCCIT), given the lower cost of this funding. Going into 2014, Citi expects to maintain its total long-term debt outstanding at approximately these levels, with a modest further reduction in parent debt partially offset by continued increased securitization activities at the bank. Overall, changes in Citi's long-term debt outstanding will continue to reflect the funding needs of its businesses. It also will depend on the market and economic environment and any regulatory changes, such as prescribed levels of debt required to be maintained by Citi pursuant to the U.S. banking regulators orderly liquidation authority (for additional information, see "Risk Factors-Regulatory Risks" above).

Long-Term Debt Issuances and Maturities

The table below details Citi's long-term debt issuances and maturities (including repurchases and redemptions) during the periods presented:

	2013		2012		2011	
In billions of dollars	Maturities (1)	Issuances (1)	Maturities	Issuances	Maturities	Issuances
Parent	**$46.0**	**$30.7**	$ 75.3	$17.3	$43.3	$20.4
Benchmark Debt:						
Senior debt	**25.6**	**17.8**	34.9	9.1	21.9	8.0
Subordinated debt	**1.0**	**4.6**	1.8	—	—	—
Trust preferred	**6.4**	—	5.9	—	1.9	—
Customer-Related Debt:						
Structured debt	**8.5**	**7.3**	8.2	8.0	5.5	8.8
Non-Structured debt	**3.7**	**1.0**	22.1	—	11.4	2.0
Local Country and Other	**0.8**	—	2.4	0.2	2.6	1.6
Bank	**$17.8**	**$23.7**	$ 42.3	$10.4	$45.7	$10.6
TLGP	—	—	10.5	—	9.8	—
FHLB borrowings	**11.8**	**9.5**	2.7	8.0	13.0	6.0
Securitizations	**2.4**	**11.5**	25.2	0.5	16.1	0.7
Local Country and Other	**3.6**	**2.7**	3.9	1.9	6.8	3.9
Total	**$63.8**	**$54.4**	$117.6	$27.7	$89.0	$31.0

(1) 2013 maturities include buybacks and the redemption via exchange of approximately $3.0 billion of trust preferred securities previously held by the U.S. Treasury and FDIC. Issuance includes the exchange of these trust preferred securities for approximately $3.3 billion of subordinated debt.

The table below shows Citi's aggregate long-term debt maturities (including repurchases and redemptions) during 2013, as well as its aggregate expected annual long-term debt maturities, as of December 31, 2013:

	Maturities	Expected Long-Term Debt Maturities as of December 31, 2013						
In billions of dollars	2013	2014	2015	2016	2017	2018	Thereafter	Total
Parent	**$46.0**	**$24.6**	**$20.4**	**$21.5**	**$21.2**	**$14.3**	**$62.7**	**$ 164.7**
Benchmark Debt:								
Senior debt	**25.6**	13.7	12.6	16.1	14.5	10.1	31.5	98.5
Subordinated debt	**1.0**	4.0	0.7	1.5	3.8	1.3	16.8	28.1
Trust preferred	**6.4**	—	—	—	—	—	3.9	3.9
Customer-Related Debt:								
Structured debt	**8.5**	3.6	4.1	3.1	2.2	1.7	7.5	22.2
Non-Structured debt	**3.7**	1.4	2.2	0.6	0.7	0.4	2.5	7.8
Local Country and Other	**0.8**	1.9	0.8	0.2	—	0.8	0.5	4.2
Bank	**$17.8**	**$18.8**	**$11.3**	**$13.1**	**$ 3.1**	**$ 6.6**	**$ 3.5**	**$ 56.4**
FHLB borrowings	**11.8**	8.0	2.0	4.0	—	—	—	14.0
Securitizations	**2.4**	8.0	7.6	7.5	2.3	6.3	1.9	33.6
Local Country and Other	**3.6**	2.8	1.7	1.6	0.8	0.3	1.6	8.8
Total long-term debt	**$63.8**	**$43.4**	**$31.7**	**$34.6**	**$24.3**	**$20.9**	**$66.2**	**$ 221.1**

Source: Citigroup Inc. 2013 Annual Report, pp. 98-102

Recommendation 18b: Provide a quantitative analysis of the components of the liquidity reserve held to meet these needs, ideally by providing averages as well as period-end balances

TABLE 64 **SUMMARY OF LIQUID ASSETS BY TYPE AND CURRENCY**[1,2]

(billions of Canadian dollars, except as noted) *As at*

	Bank-owned liquid assets	Securities received as collateral from securities financing and derivative transactions	Total liquid assets		Encumbered liquid assets	Unencumbered liquid assets
						October 31, 2013
Canadian government obligations	$ 16.7	$ 27.3	$ 44.0	13%	$ 25.3	$ 18.7
NHA MBS	42.6	0.6	43.2	13	7.9	35.3
Provincial government obligations	4.3	5.4	9.7	3	5.9	3.8
Corporate issuer obligations	6.5	4.0	10.5	3	0.6	9.9
Equities	20.1	3.0	23.1	7	4.8	18.3
Other marketable securities and/or loans	2.8	0.2	3.0	1	0.3	2.7
Total Canadian dollar-denominated	$ 93.0	$ 40.5	$ 133.5	40%	$ 44.8	$ 88.7
Cash and due from Banks	20.6	–	20.6	6	0.5	20.1
U.S. government obligations	1.7	28.6	30.3	9	28.6	1.7
U.S. federal agency obligations, including U.S. federal agency mortgage-backed obligations	26.0	4.9	30.9	9	7.7	23.2
Other sovereign obligations	27.4	23.8	51.2	16	3.1	48.1
Corporate issuer obligations	41.7	2.6	44.3	13	5.1	39.2
Equities	8.0	1.7	9.7	3	0.8	8.9
Other marketable securities and/or loans	6.0	5.5	11.5	4	5.8	5.7
Total non-Canadian dollar-denominated	$ 131.4	$ 67.1	$ 198.5	60%	$ 51.6	$ 146.9
Total	$ 224.4	$ 107.6	$ 332.0	100%	$ 96.4	$ 235.6
						October 31, 2012
Canadian government obligations	$ 17.9	$ 25.1	$ 43.0	14%	$ 23.9	$ 19.1
NHA MBS	31.3	1.3	32.6	11	6.3	26.3
Provincial government obligations	3.8	4.0	7.8	3	4.1	3.7
Corporate issuer obligations	5.2	3.1	8.3	3	0.8	7.5
Equities	21.7	4.1	25.8	9	4.3	21.5
Other marketable securities and/or loans	2.8	0.1	2.9	1	–	2.9
Total Canadian dollar-denominated	$ 82.7	$ 37.7	$ 120.4	41%	$ 39.4	$ 81.0
Cash and due from Banks	11.4	–	11.4	3	–	11.4
U.S. government obligations	4.3	24.2	28.5	9	26.3	2.2
U.S. federal agency obligations, including U.S. federal agency mortgage-backed obligations	30.4	2.7	33.1	11	7.1	26.0
Other sovereign obligations	24.7	24.8	49.5	16	1.8	47.7
Corporate issuer obligations	32.8	2.6	35.4	12	2.9	32.5
Equities	3.7	1.8	5.5	2	1.1	4.4
Other marketable securities and/or loans	8.1	9.3	17.4	6	10.3	7.1
Total non-Canadian dollar-denominated	$ 115.4	$ 65.4	$ 180.8	59%	$ 49.5	$ 131.3
Total	$ 198.1	$ 103.1	$ 301.2	100%	$ 88.9	$ 212.3

[1] Positions stated include gross asset values pertaining to secured borrowing/lending and reverse-repurchase/repurchase transactions.

[2] Liquid assets include collateral received that can be rehypothecated or otherwise redeployed.

Liquid assets are held in The Toronto-Dominion Bank and multiple domestic and foreign subsidiaries and branches and are summarized in the table below:

TABLE 65 **SUMMARY OF UNENCUMBERED LIQUID ASSETS BY BANK, SUBSIDIARIES, AND BRANCHES**

(billions of Canadian dollars) *As at*

	October 31 2013	October 31 2012
The Toronto-Dominion Bank (Parent)	$ 57.7	$ 56.9
Major bank subsidiaries	142.9	120.2
Bank foreign branches	34.6	34.8
Other subsidiaries	0.4	0.4
Total	$ 235.6	$ 212.3

TABLE 66 **SUMMARY OF AVERAGE LIQUID ASSETS BY TYPE AND CURRENCY**[1]

(billions of Canadian dollars, except as noted) *Average for the year ended*

	Bank-owned liquid assets	Securities received as collateral from securities financing and derivative transactions[2]	Total liquid assets		Encumbered liquid assets	Unencumbered liquid assets[2]
						October 31, 2013
Canadian government obligations	$ 15.0	$ 28.8	$ 43.8	14%	$ 23.8	$ 20.0
NHA MBS	39.8	0.5	40.3	12	7.8	32.5
Provincial government obligations	4.0	5.6	9.6	3	5.4	4.2
Corporate issuer obligations	6.6	3.5	10.1	3	0.6	9.5
Equities	21.4	4.0	25.4	8	5.3	20.1
Other marketable securities and/or loans	1.6	0.2	1.8	1	0.3	1.5
Total Canadian dollar-denominated	$ 88.4	$ 42.6	$ 131.0	41%	$ 43.2	$ 87.8
Cash and due from Banks	19.0	–	19.0	6	0.1	18.9
U.S. government obligations	3.0	28.6	31.6	10	29.9	1.7
U.S. federal agency obligations, including U.S. federal agency mortgage-backed obligations	25.7	5.2	30.9	10	7.8	23.1
Other sovereign obligations	25.2	20.9	46.1	14	2.5	43.6
Corporate issuer obligations	37.0	2.4	39.4	12	4.9	34.5
Equities	5.3	1.8	7.1	2	1.1	6.0
Other marketable securities and/or loans	7.5	8.0	15.5	5	8.2	7.3
Total non-Canadian dollar-denominated	$ 122.7	$ 66.9	$ 189.6	59%	$ 54.5	$ 135.1
Total	$ 211.1	$ 109.5	$ 320.6	100%	$ 97.7	$ 222.9

[1] Positions stated include gross asset values pertaining to secured borrowing/lending and reverse-repurchase/repurchase transactions.

[2] Liquid assets include collateral received that can be rehypothecated or otherwise redeployed.

Average liquid assets held in The Toronto-Dominion Bank and multiple domestic and foreign subsidiaries and branches are summarized in following table:

TABLE 67 **SUMMARY OF AVERAGE UNENCUMBERED LIQUID ASSETS BY BANK, SUBSIDIARIES, AND BRANCHES**

(billions of Canadian dollars) *Average for the year ended*

	October 31, 2013
The Toronto-Dominion Bank (Parent)	$ 60.0
Major bank subsidiaries	131.0
Bank foreign branches	31.5
Other subsidiaries	0.4
Total	$ 222.9

Source: TD Annual Report 2013, p92-93

Recommendation 18c: Provide an explanation of possible limitations on the use of the liquidity reserve maintained in any material subsidiary or currency

Liquid asset ratio (LAR)

The liquid asset ratio (LAR) ensures that a proportion of the Group's total assets are held in liquid assets, on a consolidated currency basis.

Liquid assets are the total cash (less restricted balances), treasury bills, loans and advances to banks (including net unsecured interbank and trade finance) and debt securities (less illiquid securities). Illiquid securities are debt securities that cannot be sold or exchanged easily for cash without substantial loss in value.

The Group LAR remained at similar levels as in the previous year, reflecting an increase in liquid assets holdings to match balance sheet growth.

The following table sets an analysis of the Group's liquid assets by geographic region:

2013

	Hong Kong $million	Singapore $million	Korea $million	Other Asia Pacific $million	India $million	Middle East & Other S Asia $million	Africa $million	Americas, UK & Europe $million	Total $million
Cash and balances at central banks	2,099	2,074	687	12,716	700	2,439	1,621	31,998	54,534
Restricted balances	(6)	(2,028)	(542)	(4,361)	(478)	(1,591)	(644)	(296)	(9,946)
Loans and advances to banks – net of non-performing loans	17,652	4,501	4,192	14,804	399	2,273	742	41,499	86,062
Deposits by banks	(2,091)	(4,792)	(1,479)	(6,926)	(459)	(1,574)	(566)	(26,639)	(44,526)
Treasury bills	10,244	3,627	6,794	1,618	2,167	1,620	2,777	2,557	31,404
Debt securities	20,273	11,391	5,271	15,179	2,495	4,387	2,803	24,274	86,073
of which :									
Issued by governments	4,256	2,988	3,664	12,590	1,760	3,784	1,307	3,525	33,874
Issued by banks	11,207	3,750	935	1,560	327	265	267	13,860	32,171
Issued by corporate and other entities	4,810	4,653	672	1,029	408	338	1,229	6,889	20,028
Illiquid securities and other assets	(170)	(348)	–	–	(769)	(43)	–	(1,051)	(2,381)
Liquid assets	48,001	14,425	15,123	33,030	4,055	7,511	6,733	72,342	201,220
Total assets	141,261	117,296	62,018	110,753	22,747	41,914	19,346	159,045	674,380
Liquid assets to total asset ratio (%)	34.0	12.3	24.4	29.8	17.8	17.9	34.8	45.5	29.8

Liquidity Coverage Ratio (LCR) and Net Stable Funding Ratio (NSFR)

The Group monitors the LCR and NSFR in line with the Bank of International Settlements' BCBS238 guidelines. The Group already meets the Basel III requirements for both the NSFR and the LCR, well ahead of the required implementation date. As at 31 December 2013 both Group LCR and NSFR were between 110 and 120 per cent.

Liquidity management – stress scenarios

The Group conducts a range of liquidity related stress analyses, both for internal and regulatory purposes.

Internally, three stress tests are run routinely: an acute eight-day name-specific stress, a 30-day market-wide stress and a more chronic 90-day combined name-specific and market-wide stress. Liquidity and funding risks are also considered as part of the Group's wider periodic scenario analysis, including reverse stress testing. In addition, the Group runs a range of stress tests to meet regulatory requirements, as defined by the PRA and local regulators.

The eight-day stress is specifically designed to determine a minimum quantity of marketable securities that must be held at all times in all countries. This stress is computed daily, and the minimum marketable securities requirement is observed daily. This is intended to ensure that, in the unlikely event of an acute loss of confidence in the Group or any individual entity within it, there is sufficient time to take corrective action. Every country must pass, on a stand-alone basis, with no presumption of Group support. As at 31 December 2013 all countries passed the stress test.

The Group's resilience to market-wide disruption, such as loss of interbank money or foreign exchange markets, is tested using the 30-day market-wide stress scenario, and is monitored by country ALCOs.

Finally, the 90-day stress test considers more prolonged stresses that affect markets across a number of the Group's main footprint countries and in which the Group itself may come under some sustained pressure. This pressure may be unwarranted or may be because the Group is inextricably linked with those markets/countries. This stress is managed at a Group rather than individual country level. It tests the adequacy of contingency funding arrangements beyond the marketable securities held to cover the eight-day stress, including the ability to support countries from elsewhere in the Group.

Our country stress testing considers potential currency mismatches between outflows and inflows. Particular focus is paid to mismatches in less liquid currencies and those which are not freely convertible. Mismatches are controlled by management action triggers set by Group Market Risk (GMR). Group-wide stress tests also consider the portability of liquidity surpluses between Group entities, taking account of regulatory restrictions on large and intra-group exposures.

Standard Chartered Bank's credit ratings as at end of December 2013 were AA- (Fitch), A+ (S&P) and A1 (Moody's). A downgrade in credit rating would increase derivative collateral requirements and outflows due to conditional liabilities. The impact of a two-notch downgrade results in an estimated outflow of $1.2 billion.

Primary sources of funding

A substantial portion of our assets are funded by customer deposits, largely made up of current and savings accounts. Of total customer deposits, 42.5 per cent are retail deposits and 57.5 per cent wholesale customer deposits (31 December 2012: retail 43.1 per cent, wholesale customer deposits 56.9 per cent). Wholesale customer deposits are widely diversified by type and maturity and represent a stable source of funds for the Group. In addition, the short-term nature of our wholesale assets results in a balance sheet that is funded conservatively (64 per cent of wholesale banking loans and advances have a contractual maturity of less than one year).

The ALCO in each country monitors trends in the balance sheet and ensures that any concerns that might impact the stability of these customer deposits are addressed effectively. The ALCO also reviews balance sheet plans to ensure that projected asset growth is matched by growth in customer deposits.

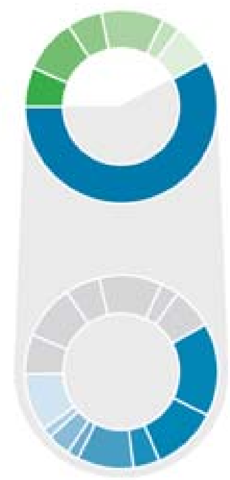
Customer assets are as far as possible funded in the same currency. Where mismatches arise, they are controlled by limits in each country on the amount of foreign currency that can be swapped to local currency and vice versa. Such limits are therefore a means of controlling reliance on foreign exchange markets, which minimises the risk that obligations could not be met in the required currency in the event that access to foreign exchange markets becomes restricted. In sizing the limits we consider a range of factors including:

- The size and depth of local Foreign Exchange markets
- The local regulatory environment, particularly the presence or risk of imposition of foreign exchange controls

We maintain access to wholesale funding markets in all major financial centres and countries in which we operate. This seeks to ensure that we have market intelligence, maintain stable funding lines and can obtain optimal pricing when we perform our interest rate risk management activities.

Debt refinancing levels are low. In the next 12 months approximately $6.7 billion of the Group's senior and subordinated debt is falling due for repayment either contractually or callable by the Group. Further details of the Group's senior and subordinated debt by geography are provided in note 2 to the financial statements on page 248.

The table below shows the diversity of funding by type and by geography. Customer deposits make up 58 per cent of total liabilities as at 31 December 2013, the majority of which are current accounts, savings accounts and time deposits. Our largest customer deposit base by geography is Hong Kong, which holds 27.1 per cent of Group customer accounts.



Group's composition of liabilities	31.12.13
Customer accounts	58.0%
Deposits by bank	6.6%
Derivative financial instruments	9.1%
Other liabilities	5.8%
Debt securities in issue	10.6%
Subordinated liabilities and other borrowed funds	3.0%
Total equity	6.9%
Total	100.0%

Geographic distribution of customer accounts	31.12.13
Hong Kong	27.1%
Singapore	19.0%
Korea	7.8%
Other Asia Pacific	16.5%
India	3.3%
MESA	6.7%
Africa	2.9%
Americas, UK & Europe	16.7%
Total	100.0%

Members of the EDTF User Group noted few examples of leading practice for this recommendation. The example from Standard Chartered (shown) quantifies liquid assets by region and provides a qualitative description of liquidity management across subsidiaries and currencies; however, it does not separate activities in key UK, European and US markets (GBP, EUR and USD currencies), which users would view as an opportunity for improvement in subsequent reports

Source: Standard Chartered 2013 Annual Report, pp. 116, 118-119

Recommendation 19a: Summarise encumbered and unencumbered assets in a tabular format by balance sheet categories

Encumbered and unencumbered assets

(Unaudited)

The table on page 225, 'Analysis of on-balance sheet encumbered and unencumbered assets', summarises the total on and off-balance sheet assets that are capable of supporting future funding and collateral needs and shows the extent to which these assets are currently pledged for this purpose. The objective of this disclosure is to facilitate an understanding of available and unrestricted assets that are valued on a liquidity and funding risk basis and could be used to support potential future funding and collateral needs.

The disclosure is not designed to identify assets which would be available to meet the claims of creditors or to predict assets that would be available to creditors in the event of a resolution or bankruptcy.

An asset is defined as encumbered if it has been pledged as collateral against an existing liability, and as a result is no longer available to the Group to secure funding, satisfy collateral needs or be sold to reduce the funding requirement. An asset is therefore categorised as unencumbered if it has not been pledged against an existing liability. Unencumbered assets are further analysed into four separate sub-categories; 'readily realisable assets', 'other realisable assets', 'reverse repo/stock borrowing receivables and derivative assets' and 'cannot be pledged as collateral'.

At 31 December 2013, the Group held US$1,824bn of unencumbered assets that could be used to support potential future funding and collateral needs, representing 83% of the total assets that can support funding and collateral needs (on and off-balance sheet). Of this amount, US$754bn (US$723bn on-balance sheet) were assessed to be readily realisable.

Analysis of on-balance sheet encumbered and unencumbered assets

(Unaudited)

	Encumbered	Unencumbered				
	Assets pledged as collateral US$m	Readily realisable assets US$m	Other realisable assets US$m	Reverse repos/stock borrowing receivables & derivative assets US$m	Cannot be pledged as collateral US$m	Total US$m
At 31 December 2013						
Cash and balances at central banks	–	161,240	269	–	5,090	166,599
Items in the course of collection from other banks	–	–	–	–	6,021	6,021
Hong Kong Government certificates of indebtedness	–	–	–	–	25,220	25,220
Trading assets	99,326	142,211	14,654	20,438	26,563	303,192
– Treasury and other eligible bills	3,402	17,976	206	–	–	21,584
– debt securities	83,563	57,850	–	–	231	141,644
– equity securities	8,373	55,156	363	–	–	63,892
– loans and advances to banks	1,796	2,813	6,151	5,263	11,861	27,884
– loans and advances to customers	2,192	8,416	7,934	15,175	14,471	48,188
Financial assets designated at fair value	19	2,706	1,883	–	33,822	38,430
– Treasury and other eligible bills	–	–	–	–	50	50
– debt securities	19	826	776	–	10,968	12,589
– equity securities	–	1,874	1,103	–	22,734	25,711
– loans and advances to banks	–	6	4	–	66	76
– loans and advances to customers	–	–	–	–	4	4
Derivatives	–	–	–	282,265	–	282,265
Loans and advances to banks	162	8,342	80,231	91,475	31,311	211,521
Loans and advances to customers	32,218	102,203	854,724	86,346	4,813	1,080,304
Financial investments	54,473	289,093	31,096	–	51,263	425,925
– Treasury and other eligible bills	2,985	72,849	2,052	–	226	78,112
– debt securities	51,488	210,516	25,720	–	50,949	338,673
– equity securities	–	5,728	3,324	–	88	9,140
Assets held for sale	–	–	4,050	–	–	4,050
Other assets	990	16,134	14,216	–	19,599	50,939
Current tax assets	–	–	–	–	985	985
Prepayments and accrued income	–	–	–	–	11,006	11,006
Interest in associates and joint ventures	–	12	16,356	–	272	16,640
Goodwill and intangible assets	–	–	–	–	29,918	29,918
Property, plant and equipment	38	654	6,353	–	3,802	10,847
Deferred tax	–	–	–	–	7,456	7,456
	187,226	722,595	1,023,832	480,524	257,141	2,671,318

Source: HSBC Annual Report 2013, p223, 225

Recommendation 19a: Summarise encumbered and unencumbered assets in a tabular format by balance sheet categories

Business review *Risk and balance sheet management*

Encumbrance

The Group reviews all assets against the criteria of being able to finance them in a secured form (encumbrance) but certain asset types lend themselves more readily to encumbrance. The typical characteristics that support encumbrance are an ability to pledge those assets to another counterparty or entity through operation of law without necessarily requiring prior notification, homogeneity, predictable and measurable cash flows, and a consistent and uniform underwriting and collection process. Retail assets including residential mortgages, credit card receivables and personal loans display many of these features.

From time to time the Group encumbers assets to serve as collateral to support certain wholesale funding initiatives. The three principal forms of encumbrance are own asset securitisations, covered bonds and securities repurchase agreements.

The Group categorises its assets into three broad groups; assets that are:

- already encumbered and used to support funding currently in place via own asset securitisations, covered bonds and securities repurchase agreements.
- not currently encumbered but can for instance be used to access funding from market counterparties or central bank facilities as part of the Group's contingency funding.
- not currently encumbered. In this category, the Group has in place an enablement programme which seeks to identify assets which are capable of being encumbered and to identify the actions to facilitate such encumbrance whilst not impacting customer relationships or servicing.

The Group's encumbrance ratios are set out below.

Encumbrance ratios	2013 %	2012 %	2011 %
Total	17	18	19
Excluding balances relating to derivative transactions	19	22	26
Excluding balances relating to derivative and securities financing transactions	11	13	19

Key points

- The Groups total encumbrance ratio dropped to 17%.
- 31% of the Group's residential mortgage portfolio was encumbered as at 31 December 2013.
- Unencumbered financial assets covered unsecured liabilities excluding derivatives.
- In addition to the £451.4 billion on-balance sheet assets available to support future funding and collateral requirements there is £12.7 billion net off-balance sheet collateral available from reverse repurchase and derivative collateral transactions.

Funding risk continued

Encumbrance continued

Balance sheet encumbrance

	Encumbered assets relating to:						Encumbered	Unencumbered				
	Debt securities in issue		Other secured liabilities			Total	assets	Readily realisable (2)				
	Securitisations and conduits	Covered bonds	Derivatives	Repos	Secured deposits	encumbered assets (1)	% of related assets	Liquidity portfolio	Other	Other realisable (3)	Cannot be encumbered (4)	Total
2013	£bn	£bn	£bn	£bn	£bn	£bn	%	£bn	£bn	£bn	£bn	£bn
Cash and balances at central banks	—	—	—	—	—	—	—	74.3	8.4	—	—	82.7
Loans and advances to banks	5.8	0.5	10.3	—	—	16.6	60	0.1	10.9	—	—	27.6
Loans and advances to customers												
- UK residential mortgages	14.6	16.2	—	—	—	30.8	28	60.8	18.6	—	—	110.2
- Irish residential mortgages	9.3	—	—	—	1.2	10.5	70	0.7	3.8	—	0.1	15.1
- US residential mortgages	—	—	—	—	3.5	3.5	18	9.5	6.7	—	—	19.7
- UK credit cards	3.4	—	—	—	—	3.4	52	—	3.1	—	—	6.5
- UK personal loans	3.4	—	—	—	—	3.4	38	—	5.5	—	—	8.9
- other	13.5	—	18.1	—	0.8	32.4	14	4.4	9.6	175.6	10.2	232.2
Reverse repurchase agreements and stock borrowing	—	—	—	—	—	—	—	—	—	—	76.5	76.5
Debt securities	0.9	—	5.5	55.6	2.7	64.7	57	17.0	31.9	—	—	113.6
Equity shares	—	—	0.5	5.3	—	5.8	66	—	3.0	—	—	8.8
Settlement balances	—	—	—	—	—	—	—	—	—	—	5.5	5.5
Derivatives	—	—	—	—	—	—	—	—	—	—	288.0	288.0
Intangible assets	—	—	—	—	—	—	—	—	—	—	12.4	12.4
Property, plant and equipment	—	—	—	—	0.4	0.4	5	—	—	7.5	—	7.9
Deferred tax	—	—	—	—	—	—	—	—	—	—	3.5	3.5
Prepayments, accrued income and other assets	—	—	—	—	—	—	—	—	—	—	8.6	8.6
Assets of disposal groups	—	—	—	—	—	—	—	—	—	—	0.2	0.2
	50.9	16.7	34.4	60.9	8.6	171.5		166.8	101.5	183.1	405.0	1,027.9
Own asset securitisations								17.4				
Total liquidity portfolio								184.2				
Liabilities secured												
Intra-Group - used for secondary liquidity	(19.1)	—	—	—	—	(19.1)						
Intra-Group - other	(18.4)	—	—	—	—	(18.4)						
Third-party (5)	(7.8)	(9.0)	(42.7)	(85.1)	(6.0)	(150.6)						
	(45.3)	(9.0)	(42.7)	(85.1)	(6.0)	(188.1)						

Notes:

(1) Encumbered assets are those on the balance sheet that have been pledged to provide security for the liability shown above and are therefore not available to secure funding or to meet other collateral needs.

(2) Unencumbered readily realisable assets are those assets on the balance sheet that can be readily used to meet funding or collateral requirements and comprise:
(a) Liquidity portfolio: cash balances at central banks, high quality debt securities and loans that have been pre-positioned with central banks. In addition, the liquidity portfolio includes securitisations of own assets which has reduced over the years and has been replaced by loans.
(b) Other readily realisable assets: other liquidity reserves, including assets that have been enabled for use with central banks; and unencumbered debt securities.

(3) Unencumbered other realisable assets are those assets on the balance sheet that have no restrictions for funding and collateral purposes but are not readily realisable in their current form. These assets include loans that could be prepositioned with central banks but have not been subject to internal and external documentation review and diligence work.

(4) Assets that cannot be encumbered comprise:
(a) derivatives, reverse repurchase agreements and trading related settlement balances.
(b) non-financial assets such as intangibles, prepayments and deferred tax.
(c) assets in disposal groups.
(d) loans that cannot be pre-positioned with central banks based on criteria set by the central banks, primarily US, including date of origination and level of documentation.
(e) non-recourse invoice financing balances and certain shipping loans whose terms and structure prohibit their use as collateral.

(5) In accordance with market practice the Group employs its own assets and securities received under reverse repo transactions as collateral for repos.

Source: RBS Annual Report 2013, p. 225-226

Recommendation 19a: Summarise encumbered and unencumbered assets in a tabular format by balance sheet categories

Liquid and encumbered assets

Our policy is to hold a pool of high quality unencumbered liquid assets that will be immediately available to meet outflows determined under the stress scenario. Liquid assets are cash, short-term bank deposits, high quality marketable securities and other assets that can be readily pledged at central banks and in repo markets or converted into cash in a timely fashion. Encumbered assets comprise assets pledged as collateral and other assets that we consider restricted for legal or other reasons. Unencumbered assets comprise assets that are readily available in the normal course of business to secure funding or meet collateral needs and other assets that are not subject to any restrictions on their use to secure funding or as collateral.

Liquid assets net of encumbrances constitute our unencumbered pool of liquid assets and are summarized in the following table:

$ millions, as at October 31	Gross liquid assets		Encumbered liquid assets [2]		Unencumbered liquid assets 2013	Unencumbered liquid assets 2012 [1]
	CIBC owned assets	Third-party assets	CIBC owned assets	Third-party assets		
Cash and deposits with banks	$ 6,309 [3]	$ –	$ 782	$ –	$ 5,527	$ 3,954
Securities	70,361 [4]	53,644 [5]	14,103	32,536	77,366	70,486
NHA mortgage-backed securities	56,814 [6]	–	34,143	–	22,671	18,914
Mortgages	11,365 [7]	–	11,365	–	–	–
Credit cards	4,599 [8]	–	4,599	–	–	–
Other assets	3,061 [9]	–	2,727	–	334	406
	$ 152,509	$ 53,644	$ 67,719	$ 32,536	$ 105,898	$ 93,760

(1) Certain information has been reclassified to conform to the presentation adopted in the current year.
(2) Excludes intraday pledges to the Bank of Canada related to the Large Value Transfer System as these are normally released at the end of the settlement cycle each day.
(3) Comprises cash, non-interest bearing deposits and interest-bearing deposits with contractual maturities of less than 30 days.
(4) Comprises trading, AFS and FVO securities. Excludes securities in our structured credit run-off business, private debt and private equity securities of $1,621 million (2012: $1,461 million).
(5) Comprises $3,417 million (2012: $3,311 million) of cash collateral on securities borrowed, $25,311 million (2012: $25,163 million) of securities purchased under resale agreements, $24,157 million (2012: $15,396 million) of securities borrowed against securities lent, and $759 million (2012: $849 million) of securities received for derivatives collateral.
(6) Includes securitized and transferred residential mortgages under the Canada Mortgage Bond and the Government of Canada's Insured Mortgage Purchase programs, and securitized mortgages that were not transferred to external parties including those in the Covered Bond Programme. These are reported in Loans on our consolidated balance sheet.
(7) Comprises mortgages, excluding NHA mortgage-backed securities, included in the Covered Bond Programme.
(8) Comprises assets held in consolidated trusts supporting funding liabilities.
(9) Comprises $2,727 million (2012: $4,120 million) of cash pledged for derivatives collateral and $334 million (2012: $406 million) of gold and silver certificates.

The table presented above represents the carrying value of CIBC's liquid assets, which are intended to be used as a source of liquidity under the stress scenario. The liquidity value of liquid assets is determined by applying asset haircut assumptions under the stress scenario, consistent with those used by the Bank of Canada and the Federal Reserve Bank of New York, and applicable regulatory guidelines.

Our unencumbered liquid assets increased by $12.1 billion or 13% from October 31, 2012, primarily due to increases in CIBC-owned trading and AFS securities, NHA mortgage-backed securities securitized but not sold and interest-bearing deposits with banks.

In addition to the above, we have access to the Bank of Canada Emergency Lending Assistance (ELA) program through the pledging of non-mortgage assets. We do not include ELA borrowing capacity as a source of available liquidity when evaluating surplus liquidity.

The following table summarizes unencumbered liquid assets held by CIBC parent bank and significant subsidiaries:

$ millions, as at October 31	2013	2012 [1]
CIBC parent bank	$ 78,761	$ 65,872
Broker/dealer [2]	15,049	16,020
Other significant subsidiaries	12,088	11,868
	$ 105,898	$ 93,760

(1) Certain information has been reclassified to conform to the presentation adopted in the current year.
(2) Relates to CIBC World Markets Inc. and CIBC World Markets Corp.

Asset encumbrance

The following table provides a summary of our total encumbered and unencumbered assets:

	$ millions, as at October 31	CIBC owned assets	Third-party assets	Total assets	Encumbered: Pledged as collateral	Encumbered: Other	Unencumbered: Available as collateral	Unencumbered: Other
2013	Cash and deposits with banks	$ 6,379	$ –	$ 6,379	$ 11	$ 771	$ 5,597 [1]	$ –
	Securities	71,982	–	71,982	14,103	–	56,258	1,621
	Securities borrowed or purchased under resale agreements	–	28,728	28,728	17,164	–	11,562	–
	Loans	246,654	–	246,654	50,107	422	22,671	173,454
	Other							
	Derivative instruments	19,947	–	19,947	–	–	–	19,947
	Customers' liability under acceptances	9,720	–	9,720	–	–	–	9,720
	Land, building and equipment	1,719	–	1,719	–	–	–	1,719
	Goodwill	1,733	–	1,733	–	–	–	1,733
	Software and other intangible assets	756	–	756	–	–	–	756
	Investments in equity-accounted associates and joint ventures	1,713	–	1,713	–	–	–	1,713
	Other assets	9,058	–	9,058	2,727	–	334	5,997
		$ 369,661	$ 28,728	$ 398,389	$ 84,114	$ 1,193	$ 96,422	$ 216,660
2012	Cash and deposits with banks	$ 4,727	$ –	$ 4,727	$ 14	$ 436	$ 4,277 [1]	$ –
	Securities	65,334	–	65,334	8,113	–	55,760	1,461
	Securities borrowed or purchased under resale agreements	–	28,474	28,474	14,360	–	14,114	–
	Loans	242,296	–	242,296	52,687	755	18,914	169,940
	Other							
	Derivative instruments	27,039	–	27,039	–	–	–	27,039
	Customers' liability under acceptances	10,436	–	10,436	–	–	–	10,436
	Land, building and equipment	1,683	–	1,683	–	–	–	1,683
	Goodwill	1,701	–	1,701	–	–	–	1,701
	Software and other intangible assets	656	–	656	–	–	–	656
	Investments in equity-accounted associates and joint ventures	1,635	–	1,635	–	–	–	1,635
	Other assets	9,404	–	9,404	4,120	–	406	4,878
		$ 364,911	$ 28,474	$ 393,385	$ 79,294	$ 1,191	$ 93,471	$ 219,429

(1) Includes $70 million (2012: $323 million) of interest-bearing deposits with contractual maturities greater than 30 days.

Source: CIBC Annual Report 2013, p66-67

Recommendation 19b: Collateral received that can be hypothecated or otherwise redeployed

35 Assets pledged and collateral

Assets pledged

The Group pledges assets mainly for repurchase agreements and other securities financing. Certain pledged assets may be encumbered, meaning they have the right to be sold or repledged. The encumbered assets are parenthetically disclosed on the consolidated balance sheet.

Assets pledged

end of	2013	2012
Assets pledged (CHF million)		
Total assets pledged or assigned as collateral	142,952	151,419
of which encumbered	92,300	90,745

Collateral

The Group receives cash and securities in connection with resale agreements, securities borrowing and loans, derivative transactions and margined broker loans. A substantial portion of the collateral and securities received by the Group was sold or repledged in connection with repurchase agreements, securities sold not yet purchased, securities borrowings and loans, pledges to clearing organizations, segregation requirements under securities laws and regulations, derivative transactions and bank loans.

Collateral

end of	2013	2012
Collateral (CHF million)		
Fair value of collateral received with the right to sell or repledge	359,517	402,793
of which sold or repledged	267,896	292,514

Other information

end of	2013	2012
Other information (CHF million)		
Cash and securities restricted under foreign banking regulations	18,130	14,340
Swiss National Bank required minimum liquidity reserves	2,447	2,441

Source: Credit Suisse Annual Report 2013, p. 327

Recommendation 20: Consolidated total assets, liabilities and off-balance sheet commitments by remaining contractual maturity

Analysis of the earliest contractual maturity of assets

Dec 31, 2013

in € m.	On demand (incl. Overnight and one day notice)	Up to one month	Over 1 month to no more than 3 months	Over 3 months but no more than 6 months	Over 6 months but no more than 9 months	Over 9 months but no more than 1 year	Over 1 year but not more than 2 years	Over 2 years but no more than 5 years	Over 5 years	Total
Cash and deposits with banks	86,474	6,911	50	131	1,383	26	55	38	70	95,139
Central bank funds sold	0	0	0	0	0	0	0	0	0	0
Securities purchased under resale agreements	529	10,359	6,437	4,917	3,449	665	999	8	0	27,363
with banks	304	3,564	786	1,028	0	0	77	8	0	5,766
with customers	225	6,795	5,651	3,890	3,449	665	923	0	0	21,596
Securities borrowed	20,648	171	0	0	0	0	0	22	30	20,870
with banks	1,664	0	0	0	0	0	0	0	0	1,664
with customers	18,983	171	0	0	0	0	0	22	30	19,205
Financial assets at fair value through profit or loss – trading	738,021	101,913	17,680	6,432	2,658	1,027	4,086	6,393	21,046	899,257
Trading assets	210,070	0	0	0	0	0	0	0	0	210,070
Fixed-income securities and loans	143,947	0	0	0	0	0	0	0	0	143,947
Equities and other variable-income securities	61,393	0	0	0	0	0	0	0	0	61,393
Other trading assets	4,730	0	0	0	0	0	0	0	0	4,730
Positive market values from derivative financial instruments	504,590	0	0	0	0	0	0	0	0	504,590
Financial assets designated at fair value through profit or loss	23,360	101,913	17,680	6,432	2,658	1,027	4,086	6,393	21,046	184,597
Securities purchased under resale agreements	8,485	84,607	13,783	3,789	2,054	749	1,914	1,081	301	116,764
Securities borrowed	14,875	14,187	3,424	0	0	0	0	0	0	32,485
Fixed-income securities and loans	0	3,109	474	2,531	598	273	2,106	5,128	10,806	25,025
Equities and other variable-income securities	0	10	0	0	1	0	16	0	9,872	9,898
Other financial assets designated at fair value through profit or loss	0	0	0	111	6	5	50	185	67	424
Positive market values from derivative financial instruments qualifying for hedge accounting	0	15	82	163	31	37	227	1,562	1,895	4,011
Financial assets available for sale	0	1,533	1,641	1,900	749	737	4,756	20,317	16,692	48,326
Fixed-income securities and loans	0	1,533	1,641	1,900	749	737	4,572	20,317	14,962	46,413
Equities and other variable-income securities	0	0	0	0	0	0	183	0	1,730	1,913
Loans	18,458	41,810	21,623	20,283	9,662	9,730	26,867	64,249	163,899	376,582
to banks	322	4,043	5,152	4,236	1,752	882	2,610	4,053	389	23,440
to customers	18,136	37,767	16,470	16,047	7,909	8,848	24,258	60,196	163,510	353,142
Retail	3,911	13,715	2,973	5,204	3,257	3,177	9,294	24,055	124,745	190,331
Corporates and other customers	14,226	24,052	13,497	10,844	4,652	5,671	14,961	36,139	38,770	162,810
Other financial assets	87,181	780	353	216	93	103	40	0	3,541	92,307
Total financial assets	951,311	163,492	47,865	34,042	18,025	12,326	37,031	92,588	207,173	1,563,854
Other assets	19,633	3,374	988	703	372	254	426	1,064	20,733	47,546
Total assets	970,944	166,866	48,852	34,745	18,397	12,581	37,457	93,652	227,906	1,611,400

Analysis of the earliest contractual maturity of liabilities

Dec 31, 2013

in € m.	On demand (incl. Overnight and one day notice)	Up to one month	Over 1 month to no more than 3 months	Over 3 months but no more than 6 months	Over 6 months but no more than 9 months	Over 9 months but no more than 1 year	Over 1 year but not more than 2 years	Over 2 years but no more than 5 years	Over 5 years	Total
Deposits	290,284	66,181	117,026	16,936	7,290	6,258	4,849	8,203	10,721	527,750
Due to banks	61,302	15,357	9,993	6,987	1,503	1,154	2,801	5,982	9,099	114,176
Due to customers	228,982	50,824	107,034	9,949	5,788	5,104	2,048	2,222	1,623	413,574
Retail	89,689	5,874	90,186	3,695	2,825	2,478	1,144	1,065	194	197,149
Corporates and other customers	139,294	44,950	16,848	6,254	2,963	2,626	904	1,157	1,429	216,425
Trading liabilities	539,232	0	0	0	0	0	0	0	0	539,232
Trading securities	54,951	0	0	0	0	0	0	0	0	54,951
Other trading liabilities	853	0	0	0	0	0	0	0	0	853
Negative market values from derivative financial instruments	483,428	0	0	0	0	0	0	0	0	483,428
Financial liabilities designed at fair value through profit or loss (without loan commitments and financial guarantees)	25,428	12,690	39,535	1,639	654	770	1,835	4,673	2,717	89,911
Securities sold under repurchase agreements	22,870	11,887	38,221	639	26	0	0	0	0	73,642
Long-term debt	531	16	774	479	425	637	1,387	2,649	2,443	9,342
Other financial liabilities designated at fair value through profit or loss	2,028	757	540	521	202	133	449	2,023	274	6,927
Investment contract liabilities	0	25	50	50	50	692	72	1,255	5,871	8,067
Negative market values from derivative financial instruments qualifying for hedge accounting	0	1	19	17	13	5	57	181	323	616
Central bank funds purchased	2,056	0	0	0	0	400	0	0	0	2,456
Securities sold under repurchase agreements	6,477	3,227	703	519	0	0	0	0	0	10,926
Due to banks	6,405	2,077	469	447	0	0	0	0	0	9,399
Due to customers	72	1,150	234	71	0	0	0	0	0	1,528
Securities loaned	2,079	27	0	0	0	0	0	0	198	2,304
Due to banks	215	15	0	0	0	0	0	0	0	230
Due to customers	1,865	12	0	0	0	0	0	0	198	2,075
Other short term borrowings	36,693	6,950	9,252	5,076	408	1,388	0	0	0	59,767
Long-term debt	0	8,903	6,692	5,685	4,690	5,395	17,636	42,665	41,417	133,082
Debt securities - senior	0	2,704	4,026	4,251	3,804	5,009	15,751	37,412	30,500	103,457
Debt securities - subordinated	0	62	2,318	871	152	241	763	620	2,550	7,578
Other long-term debt - senior	0	6,133	337	336	705	126	920	3,919	8,033	20,508
Other long-term debt - subordinated	0	5	10	227	28	19	201	714	334	1,539
Trust Preferred Securities	0	1,101	3,219	483	107	280	1,544	5,018	174	11,926
Other financial liabilities	131,965	525	3,374	91	350	226	468	254	107	137,362
Total financial liabilities	1,034,216	99,602	179,871	30,496	13,562	15,413	26,461	62,249	61,528	1,523,400
Other liabilities	32,841	0	0	0	0	0	0	0	0	32,841
Total equity	0	0	0	0	0	0	0	0	54,966	54,966
Total liabilities and equity	1,067,057	99,602	179,871	30,496	13,562	15,413	26,461	62,249	116,494	1,611,207
Off-balance sheet commitments given	5,249	11,088	11,871	15,458	9,783	14,173	26,565	74,145	23,957	192,290
Banks	9	1,327	1,580	2,280	1,074	1,025	1,980	1,250	314	10,841
Retail	567	372	218	481	743	629	2,321	759	7,393	13,484
Corporates and other customers	4,673	9,390	10,073	12,696	7,966	12,519	22,264	72,136	16,250	167,986

Source: Deutsche Bank Annual Report 2013, p. 193-197

Recommendation 20: Consolidated total assets, liabilities and off-balance sheet commitments by remaining contractual maturity

Residual Contractual Maturities of Balance Sheet Items and Off-Balance-Sheet Commitments

The following tables present balance sheet items and off-balance-sheet commitments by residual contractual maturity as at October 31, 2013 and 2012. The information gathered from this maturity analysis is a component of liquidity and funding management. However, this maturity profile does not represent how the Bank manages its interest rate risk nor its liquidity risk and funding needs. The Bank considers factors other than contractual maturity in the assessment of liquid assets or in determining expected future cash flows.

In the normal course of business, the Bank enters into various off-balance-sheet commitments. The credit instruments used to meet the funding needs of its clients represent the maximum amount of additional credit the Bank could be obligated to extend if the commitments were fully drawn.

The Bank also has future minimum commitments under leases for premises as well for other contracts, mainly contracts for outsourced IT services. Most of the lease commitments are related to operating leases.

Assets

As at October 31, 2013

	1 month or less	Over 1 month to 3 months	Over 3 months to 6 months	Over 6 months to 9 months	Over 9 months to 12 months	Over 1 year to 2 years	Over 2 years to 5 years	Over 5 years	No specified maturity	Total
Cash and deposits with financial institutions	1,177	203	–	–	–	–	–	–	2,216	3,596
Securities										
At fair value through profit or loss	286	1,151	770	10	2,234	4,233	7,335	10,374	17,607	44,000
Available-for-sale	365	36	64	103	60	607	4,917	3,193	399	9,744
	651	1,187	834	113	2,294	4,840	12,252	13,567	18,006	53,744
Securities purchased under reverse repurchase agreements and securities borrowed	7,142	5,039	3,814	1,330	347	–	–	–	3,777	21,449
Loans and acceptances[1]										
Residential mortgage	871	968	1,289	2,271	1,732	7,503	20,976	698	265	36,573
Personal and credit card	254	322	500	624	513	1,652	5,619	1,447	17,058	27,989
Business and government	4,050	1,492	1,063	1,421	908	1,463	3,427	901	9,675	24,400
Customers' liability under acceptances	8,104	843	7	–	–	–	–	–	–	8,954
Allowances for credit losses	–	–	–	–	–	–	–	–	(578)	(578)
	13,279	3,625	2,859	4,316	3,153	10,618	30,022	3,046	26,420	97,338
Other										
Derivative financial instruments	321	338	156	148	151	705	1,580	2,505	–	5,904
Due from clients, dealers and brokers[1]									1,101	1,101
Investments in associates and joint ventures									684	684
Premises and equipment									404	404
Goodwill									1,064	1,064
Intangible assets									898	898
Other assets	144	63	219	115	113	64	127	77	1,100	2,022
	465	401	375	263	264	769	1,707	2,582	5,251	12,077
	22,714	10,455	7,882	6,022	6,058	16,227	43,981	19,195	55,670	188,204

(1) Amounts collectible on demand are considered to have no specified maturity.

Liabilities, Equity and Off-Balance-Sheet Commitments

As at October 31, 2013

	1 month or less	Over 1 month to 3 months	Over 3 months to 6 months	Over 6 months to 9 months	Over 9 months to 12 months	Over 1 year to 2 years	Over 2 years to 5 years	Over 5 years	No specified maturity	Total
Deposits[1][2]										
Personal	801	970	1,808	2,043	1,479	4,457	8,272	355	22,467	42,652
Business and government	840	189	247	143	153	308	450	80	29,274	31,684
Deposit-taking institutions	141	314	–	–	–	–	–	–	617	1,072
Unsecured senior debt	3,349	1,835	1,895	617	1,506	8,891	4,725	518	–	23,336
Covered bonds	–	1,043	–	–	–	–	2,099	–	–	3,142
	5,131	4,351	3,950	2,803	3,138	13,656	15,546	953	52,358	101,886
Other										
Acceptances	8,104	843	7	–	–	–	–	–	–	8,954
Obligations related to securities sold short[3]	258	210	413	–	818	1,183	4,199	8,260	3,568	18,909
Obligations related to securities sold under repurchase agreements and securities loaned	8,968	3,349	5,366	773	–	–	–	–	1,290	19,746
Derivative financial instruments	245	580	345	140	160	590	1,380	1,418	–	4,858
Due to clients, dealers and brokers[1]									2,442	2,442
Liabilities related to transferred receivables[4]	14	490	362	402	283	1,108	7,274	5,390	–	15,323
Securitization – Credit card[3]	–	–	–	–	–	1,280	–	–	–	1,280
Other liabilities – Other items[1][5]	152	63	155	1	588	97	120	173	1,870	3,219
	17,741	5,535	6,648	1,316	1,849	4,258	12,973	15,241	9,170	74,731
Subordinated debt	543	–	–	–	–	350	1,500	33	–	2,426
Equity									9,161	9,161
	23,415	9,886	10,598	4,119	4,987	18,264	30,019	16,227	70,689	188,204
Commitments										
Letters of guarantee and documentary letters of credit	8	404	43	254	265	1,150	1,054	65	–	3,243
Credit card receivables[6]									6,332	6,332
Backstop liquidity and credit enhancement facilities	–	15	2,050	15	–	2,098	–	886	–	5,064
Commitments to extend credit[7]	813	507	1,175	1,740	1,613	7,423	6,507	294	18,172	38,244
Lease commitments and other contracts	62	120	174	169	163	453	696	550	–	2,387
Other guarantee	–	–	–	–	–	–	–	–	29	29

(1) Amounts payable upon demand or notice are considered to have no specified maturity.
(2) The *Deposits* item is presented in greater detail than it is on the Consolidated Balance Sheet.
(3) Amounts have been disclosed according to the remaining contractual maturity of the underlying security.
(4) These amounts mainly include liabilities related to the securitization of mortgage loans.
(5) The *Other liabilities* item is presented in greater detail than it is on the Consolidated Balance Sheet.
(6) These amounts are unconditionally revocable at the Bank's discretion at any time.
(7) These amounts include $15.9 billion that is unconditionally revocable at the Bank's discretion at any time.

Source: National Bank of Canada, pp. 140-141

Recommendation 21: Discussion of bank's funding strategy

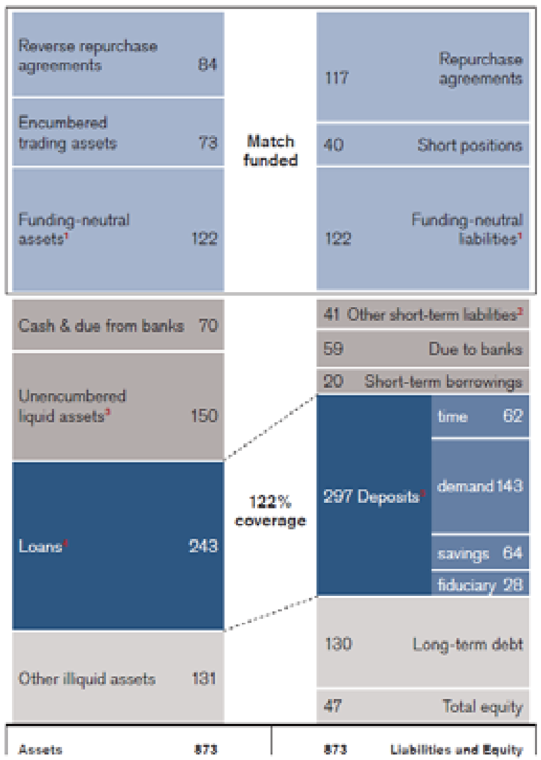
FUNDING SOURCES AND USES

We fund our balance sheet primarily through core customer deposits, long-term debt and shareholders' equity. We monitor the funding sources, including their concentrations, according to their currency, tenor, geography and maturity, and whether they are secured or unsecured. A substantial portion of our balance sheet is ○ match funded and requires no unsecured funding. Match funded balance sheet items consist of assets and liabilities with close to equal liquidity durations and values so that the liquidity and funding generated or required by the positions are substantially equivalent.

Cash and due from banks and ○ reverse repurchase agreements are highly liquid. A significant part of our assets, principally unencumbered trading assets that support the securities business, is comprised of securities inventories and collateralized receivables that fluctuate and are generally liquid. These liquid assets are available to settle short-term liabilities.

Balance sheet funding structure

as of December 31, 2013 (CHF billion)



[1] Primarily includes brokerage receivables/payables, positive/negative replacement values and cash collateral.
[2] Primarily includes excess of funding neutral liabilities (brokerage payables) over corresponding assets.
[3] Primarily includes unencumbered trading assets, unencumbered investment securities and excess reverse repurchase agreements, after haircuts.
[4] Excludes loans with banks.
[5] Excludes due to banks and certificates of deposit.

Loans, which comprise the largest component of our illiquid assets, are funded by our core customer deposits, with an excess coverage of 22% as of the end of 2013, compared to 20% as of the end of 2012, reflecting an increase in core customer deposits that more than offset an increase in loans. We fund other illiquid assets, including real estate, private equity and other long-term investments as well as a ○ haircut for the illiquid portion of securities, with long-term debt and equity, in which we try to maintain a substantial funding buffer.

Our core customer deposits totaled CHF 297 billion as of the end of 2013, an increase of 4% compared to CHF 285 billion as of the end of 2012 and an increase of 7% compared to CHF 278 billion as of the end of 2011, reflecting growth in the customer deposit base in Private Banking & Wealth Management in 2013 and 2012. Core customer deposits are from clients with whom we have a broad and longstanding relationship. Core customer deposits exclude deposits from banks and certificates of deposit. We place a priority on maintaining and growing customer deposits, as they have proved to be a stable and resilient source of funding even in difficult market conditions. Our core customer deposit funding is supplemented by the issuance of long-term debt.

▸ Refer to the chart "Balance sheet funding structure" and "Balance sheet and off-balance sheet" for further information.

Funding management

Treasury is responsible for the development, execution and regular updating of our funding plan. The plan reflects projected business growth, development of the balance sheet, future funding needs and maturity profiles as well as the effects of changing market conditions.

Interest expense on long-term debt, excluding structured notes, is monitored and managed relative to certain indices, such as the ○ London Interbank Offered Rate (LIBOR), that are relevant to the financial services industry. This approach to term funding best reflects the sensitivity of both our liabilities and our assets to changes in interest rates. Our average funding cost, which is allocated to the divisions, remained largely unchanged compared to the end of 2012.

We continually manage the impact of funding spreads through careful management of our liability maturity mix and opportunistic issuance of debt. The effect of funding spreads on interest expense depends on many factors, including the absolute level of the indices on which our funding is based.

We diversify our long-term funding sources by issuing structured notes, which are debt securities on which the return is linked to commodities, stocks, indices or currencies or other assets, as well as covered bonds. We generally hedge structured notes with positions in the underlying assets or ○ derivatives.

We also use other collateralized financings, including ○ repurchase agreements and securities lending agreements. The level of our repurchase agreements fluctuates, reflecting market opportunities, client needs for highly liquid collateral, such as US treasuries and agency securities, and the impact of balance sheet and ○ risk-weighted asset (RWA) limits. In addition, matched book trades, under which securities are purchased under agreements to resell and are simultaneously sold under agreements to repurchase with comparable maturities, earn spreads, are relatively risk free and are generally related to client activity.

Our primary source of liquidity is funding through consolidated entities. The funding through non-consolidated special purpose entities (SPEs) and asset securitization activity is immaterial.

Source: Credit Suisse 2013 Annual Report, p. 96-97

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Funding

Our business activities generate asset and liability portfolios that are highly diversified with respect to market, product, tenor and currency. This reduces our exposure to individual funding sources and provides a broad range of investment opportunities, reducing liquidity risk.

Our wealth management businesses and Retail & Corporate provide significant, cost-efficient and reliable sources of funding. These include core deposits and pledging a portion of our portfolio of Swiss residential mortgages as collateral to generate long-term funding through Swiss Pfandbriefe and our own covered bond program. In addition, we have a number of short-, medium- and long-term funding programs under which we issue senior unsecured and structured notes, as well as short-term secured debt – generally for the highest-quality assets. These programs allow institutional and private investors in Europe, the US and Asia Pacific to customize their investments in UBS's debt. Collectively, these broad product offerings and funding sources, together with the global scope of our business activities, support our funding stability.

Funding management

Group Treasury regularly monitors our funding status, including concentration risks, to ensure we maintain a well-balanced and diversified liability structure. Our funding activities are planned by analyzing the overall liquidity and funding profile of our balance sheet, taking into account the amount of stable funding that would be needed to support ongoing business activities through periods of difficult market conditions.

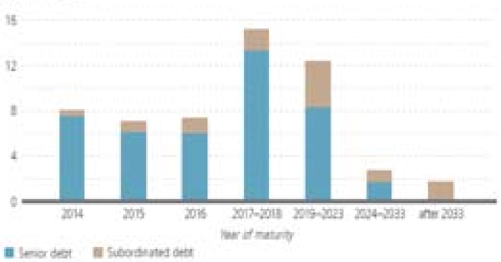
Changes in sources of funding during the reporting period

During 2013, the composition of our funding sources moved towards less reliance on wholesale funding. The implementation of our strategy has driven a reduction in secured funding needs, as well as lower issuances of short-term and structured debt and the repurchase of unsecured debt. At the same time, our Retail & Corporate and wealth management businesses continued to attract new customer deposits. In 2013, total customer deposits increased to CHF 391 billion from CHF 374 billion, or 59% of our total funding sources compared with 50% as of 31 December 2012. Our ratio of customer deposits to outstanding loan balances was 136%, compared with 133% as of 31 December 2012.

Long-term debt[1] – contractual maturities

CHF billion

As of 31.12.13

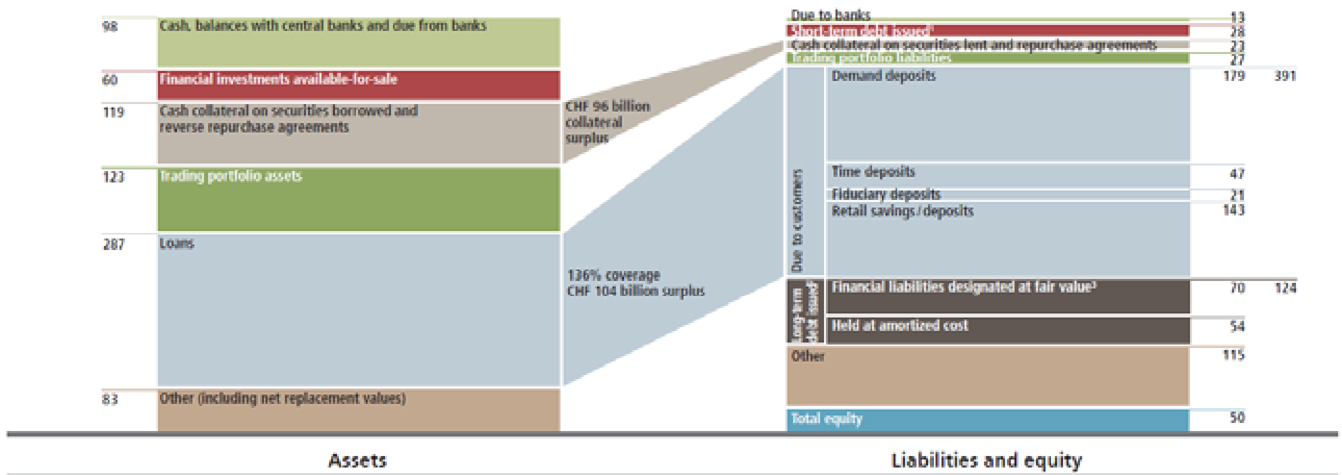


1 Excluding structured debt

UBS asset funding

CHF billion, except where indicated

As of 31.12.13



1 Short-term debt issued is comprised of certificates of deposit, commercial paper, acceptances and promissory notes, and other money market paper. 2 Long-term debt issued also includes debt with a remaining time to maturity of less than one year. 3 Including structured over-the-counter debt instruments.

UBS: funding by product and currency

	In CHF billion											
	All currencies		All currencies[1]		CHF[1]		EUR[1]		USD[1]		Others[1]	
	31.12.13	31.12.12	31.12.13	31.12.12	31.12.13	31.12.12	31.12.13	31.12.12	31.12.13	31.12.12	31.12.13	31.12.12
Securities lending	9.5	9.2	1.4	1.2	0.3	0.4	0.3	0.2	0.6	0.5	0.2	0.2
Repurchase agreements	13.8	38.6	2.1	5.2	0.0	0.1	0.5	1.1	1.3	3.3	0.3	0.6
Due to banks	12.9	23.0	1.9	3.1	0.5	0.5	0.2	0.2	0.7	0.7	0.6	1.6
Short-term debt issued[2]	27.6	32.5	4.2	4.3	0.3	0.3	0.2	0.8	3.2	2.7	0.5	0.6
Retail savings / deposits	143.1	134.3	21.7	18.0	13.6	11.8	1.0	0.8	7.1	5.4	0.0	0.0
Demand deposits	179.0	163.0	27.1	21.8	8.9	8.0	5.4	4.1	8.9	6.4	3.9	3.2
Fiduciary deposits	21.5	25.0	3.3	3.3	0.1	0.1	0.6	0.8	2.2	2.0	0.4	0.5
Time deposits	47.3	51.3	7.2	6.9	0.4	0.2	0.3	0.5	4.0	3.7	2.5	2.5
Long-term debt issued[3]	123.9	164.2	18.8	22.0	3.0	2.7	5.6	7.3	7.9	9.0	2.2	2.9
Cash collateral payables on derivative instruments	49.1	71.1	7.4	9.5	0.3	0.3	3.4	5.0	2.8	3.2	0.9	0.9
Prime brokerage payables	32.5	35.6	4.9	4.8	0.0	0.1	0.7	0.5	3.3	3.3	0.8	0.8
Total	660.2	747.7	100.0	100.0	27.3	24.6	18.3	21.4	42.0	40.1	12.4	13.9

1 As a percent of total funding sources. 2 Short-term debt issued is comprised of deposit, commercial paper, acceptances and promissory notes, and other money market papers. 3 Long-term debt issued also includes debt with a remaining time to maturity of less than one year.

Source: UBS 2013 Annual Report, pp. 216-218