INDEPENDENT EQUITY RESEARCH

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FRENCH BANKS

The liquidity is improving but it remains their Achilles' heel in an unsettled environment following the Cyprus mess on deposits

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ALPHAVALUE

Executive Summary

Question asked

6 years after the beginning of the SubPrime crisis (9 August 2007: BNP Paribas, Axa and Oddo froze their « dynamic » money market funds, triggering a liquidity crisis on the interbank market which forced the ECB to inject close to €100bn in a few days),

5 years after Lehman's bankruptcy (15 September 2008)
and Dexia's first bail-out (October 2008),

2 years after Greece's bail-out (July 2011, « haircut » of 75% on PSI),

18 months after… Dexia's second bail-out (October 2011),

3 months after the failure/nationalisation of the 5th largest Dutch bank (SNS Reaal, February 2013),

2 months after Cyprus' bail-out (March 2013, « haircut » of deposits above €100k),

How fragile are European and French banks ?

2007 Subprimes → 2008 Lehman → 2009 Recession → 2011 Greece → 2013 Cyprus → ?

Executive Summary

Approach

A bank is robust when it can withstand a solvency crisis <u>and</u> a liquidity crisis without external support (State, central bank)

✓ solvency risk explained in a nutshell
✓ liquidity risk explained in a nutshell

Viewpoint

Overview of the listed European and French banking sector (2006-2012)

The two taboos that (the lack of governance in) the EuroZone has clumsily shattered :

✓intangibility of the government debt of a EZ member (Greece, July 2011 <==> solvency)
✓intangibility of customer deposits in a bail-in (Cyprus, March 2013 <==> liquidity)

Belief

The myth of universal banking « à la française » is compromised because it relied on a excessive maturity transformation which has been revealed by the crisis :

✓ trading activities and foreign networks destabilise exponentially
✓ a liquidity risk which is already structurally unbalanced

A bank is robust when it can withstand a solvency crisis <u>and</u> a liquidity crisis without external support (State, central bank)

- between October 2008 and October 2012, European states have granted €5,059bn in government support to the financial sector (o/w €1,616bn were used), or 40% of the E.C. GDP

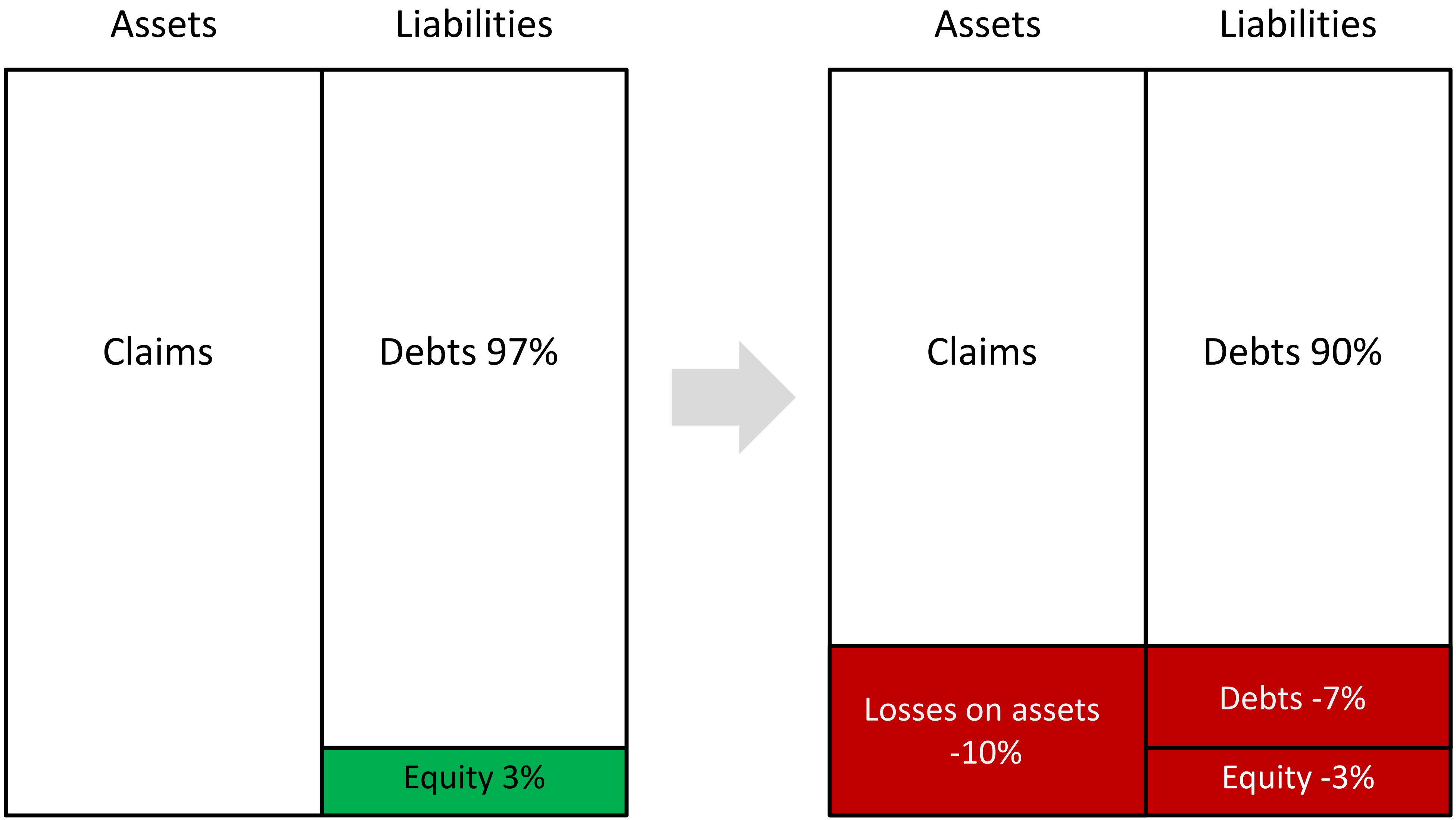
  - For French banks alone, the French government has put up €410bn (360bn for the 4 French G-SIFIs + 53bn for Dexia)

- between December 2011 and February 2012, the ECB has alloted €1,019bn in 3-year refinancing to the European banks (two tranches: 489bn LTRO1 for 500 banks+, 530bn LTRO2 for 800 banks+), or 2% of their aggregated assets (€46trn) and 16% of the banks (8,000)

  - For French banks alone, the ECB/Banque de France funded €232bn (o/w 174bn in LTRO1+2) on 11 December 2012

In a nutshell, it is function of the quality of the bank **assets**

A bank is **insolvent** when its equity capital turns negative (assets < liabilities to third-parties)



Liquidity

In a nutshell, it is function of the quality of the bank **liabilities**

A bank is **illiquid** when it cannot cope with the **maturities** of its third-parties liabilities

Assets | Liabilities

Claims

Debts 97%

Transformation is the essence of the banking business : it entails using **short-term debts** (including sight deposits), to fund **longer term claims** (of which the real economy has an imperative need to be able to function properly)

Equity 3%

Assets | Liabilities

Claims

Debts 97%

o/w too short-dated debts 40%

Losses on assets -15%

interaction

But an excessive **transformation** can quickly snowball into a **liquidity crisis** when there are (even unfounded) doubts on solvency… it's a **bankrun,** or a **market run**

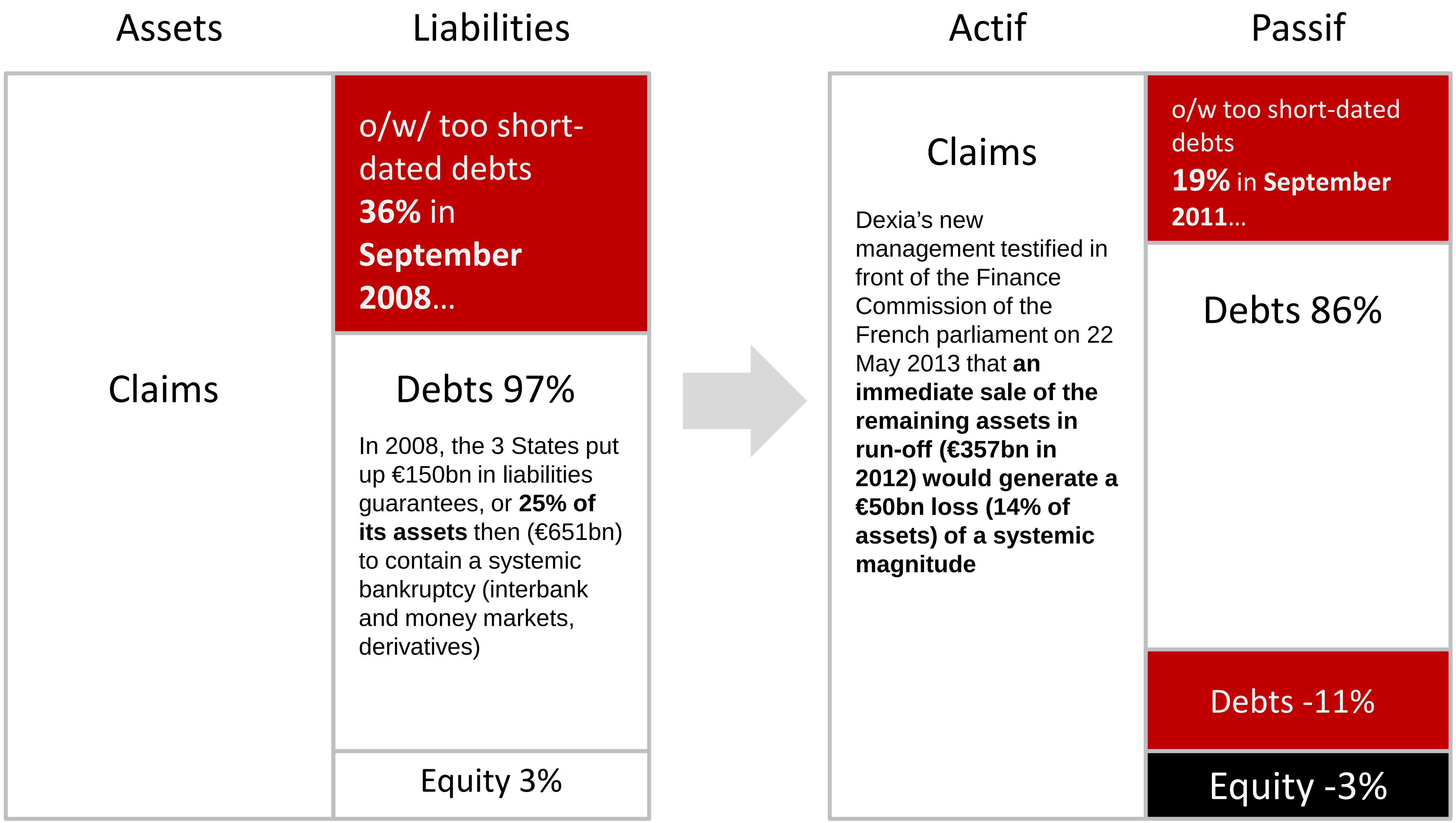
… which triggers distressed asset sales (self-fulfilling illiquidity spiral), generating losses on assets which lead to insolvency…

Equity -3%

Liquidity and solvency interconnectedness

Like all businesses, a bank« fails » first and foremost on a cash squeeze

Dexia was « solvent » (T1 9.1% 2008 and 13.1% 2011) when it « failed » twice on a liquidity crisis



Overview of the listed European and French banking sector (2006-2012)

French comparative resilience in 2008, debatable since then

37 listed banks over 13 countries (54% of €46trn in assets, 8,000 banks in UE)

Profit & Loss account (€M)

37 European banks (inc. FR)		2006	2007	2008	2009	2010	2011	2012
Net banking income	€M	434 895	474 605	393 336	496 882	542 049	527 426	503 364
Gross operating profit	€M	195 899	203 401	127 179	214 572	240 172	221 833	200 713
Loan losses	€M	-27 691	-40 230	-85 589	-150 878	-101 505	-96 259	-94 692
Operating profit	€M	150 878	141 081	-18 020	26 919	107 433	61 841	64 287
Operating margin	%	35,3 %	31,0 %	6,13 %	8,56 %	21,6 %	19,9 %	16,9 %
Banking cost/income ratio	%	58,3 %	60,5 %	72,1 %	61,1 %	59,7 %	61,9 %	64,3 %
Net income (group share)	€M	119 263	113 924	-7 959	48 273	76 481	28 666	18 324
ROA (return on assets: NIGS/total assets)	**bp**	**63,92**	**50,94**	**-3,12**	**21,04**	**31,80**	**11,44**	**7,39**

4 French banks (BNP, SG, CA, NAT)		2006	2007	2008	2009	2010	2011	2012
Net banking income	€M	70 785	75 771	68 132	83 645	96 802	95 564	84 768
Gross operating profit	€M	29 042	27 200	19 308	30 833	39 366	37 343	28 102
Loan losses	€M	- 2 148	- 4 771	- 13 389	- 21 308	- 12 915	- 17 150	- 12 060
Operating profit	€M	24 592	19 848	2 500	6 036	22 439	14 448	7 876
Operating margin	%	34,8%	26,2%	4,6%	7,6%	23,7%	17,6%	14,9%
Banking cost/income ratio	%	62,1%	67,5%	75,8%	66,9%	62,9%	64,5%	70,9%
Net income (group share)	€M	18 332	13 912	3 256	5 928	14 755	8 527	1 757
ROA (return on assets: NIGS/total assets)	**bp**	**44,53**	**29,60**	**6,01**	**11,65**	**28,47**	**15,86**	**3,18**

Balance sheet (€m)

37 European banks		**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	
Equity (group share)	€M	683 771	789 666	755 002	959 302	1 066 733	1 086 899	1 132 476	
Minority interests	€M	55 748	62 012	61 219	63 346	64 598	60 628	62 767	
Customers deposits	€M	5 870 998	7 032 735	7 227 044	7 735 219	8 408 085	8 562 719	8 810 211	
Interbank market	€M	2 137 178	2 652 328	2 550 120	2 081 312	1 822 328	1 984 410	1 943 978	
Other short term liabilities at fair value (inc.derivatives)	€M	5 616 783	6 795 292	9 815 238	6 669 023	7 262 659	8 236 688	7 734 475	
Debt securities	€M	2 967 542	3 542 069	3 510 335	3 676 966	3 586 362	3 309 675	3 209 861	
Insurance liabilities/technical reserves	€M	661 968	723 634	680 054	842 851	951 983	962 012	1 040 031	
Hybrids (preferreds, subordinated debts,...)	€M	385 974	433 993	546 314	542 980	522 213	459 218	450 844	
Loans and credits to customers	€M	6 635 154	8 188 644	9 048 908	9 383 922	9 813 330	9 747 892	9 601 102	
Trading portfolio/financial assets at fair value	**€M**	**6 676 371**	**8 521 577**	**10 874 176**	**7 493 181**	**7 765 037**	**8 409 204**	**8 244 307**	**= 33,2%**
o/w derivatives	€M	1 793 938	2 884 935	6 327 523	3 495 332	3 522 842	4 599 381	4 186 523	
Total assets	**€M**	**18 658 116**	**22 363 922**	**25 501 665**	**22 940 341**	**24 048 088**	**25 054 735**	**24 808 665**	**= 100,0%**

4 French banks		**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	
Equity (group share)	€M	123 058	129 180	133 302	161 091	172 159	171 958	184 294	
Minority interests	€M	13 146	14 716	15 438	21 029	21 501	20 896	18 451	
Customers deposits	€M	966 550	1 066 320	1 176 660	1 411 582	1 479 593	1 456 575	1 414 931	
Interbank market	€M	549 638	612 392	568 482	540 089	506 480	541 723	522 189	
Other short term liabilities at fair value (inc.derivatives)	€M	1 564 815	1 859 124	2 523 530	1 826 907	1 847 225	2 138 712	2 244 541	
Debt securities	€M	439 716	523 067	498 218	567 349	560 980	446 635	520 609	
Insurance liabilities/technical reserves	€M	368 839	394 322	382 080	427 029	468 382	487 869	526 397	
Hybrids (preferreds, subordinated debts,...)	€M	72 098	74 491	96 265	105 521	99 166	84 548	67 497	
Loans and credits to customers	€M	1 024 547	1 193 322	1 346 972	1 527 658	1 604 178	1 586 237	1 458 808	
Trading portfolio/financial assets at fair value	**€M**	**1 803 726**	**2 100 511**	**2 571 067**	**1 875 727**	**1 903 904**	**2 041 593**	**2 178 846**	**= 39,4%**
o/w derivatives	€M	465 608	651 112	1 477 061	933 103	904 595	1 227 946	1 193 613	
Total assets	**€M**	**4 116 350**	**4 700 444**	**5 414 534**	**5 087 959**	**5 181 768**	**5 377 975**	**5 528 717**	**= 100,0%**

Balance sheet (%)

37 European banks		2006	2007	2008	2009	2010	2011	2012
Loan to deposit (ratio)	%	113%	116%	125%	121%	117%	114%	109%
Loan + trading to deposit (ratio)	%	227%	238%	276%	218%	209%	212%	203%
Loan + trading (exc. derivatives) to deposit (ratio)	%	196%	197%	188%	173%	167%	158%	155%
Customers deposits	%	31,5%	31,4%	28,3%	33,7%	35,0%	34,2%	35,5%
Interbank market	%	11,5%	11,9%	10,0%	9,1%	7,6%	7,9%	**7,8%**
Other short term liabilities at fair value (inc. derivatives)	%	30,1%	30,4%	38,5%	29,1%	30,2%	32,9%	**+31,2%**
o/w derivatives	%	9,6%	12,9%	24,8%	15,2%	14,6%	18,4%	**-16,9%**
Debt securities	%	15,9%	15,8%	13,8%	16,0%	14,9%	13,2%	12,9%
Insurance liabilities/technical reserves	%	3,5%	3,2%	2,7%	3,7%	4,0%	3,8%	4,2%
Hybrids (preferreds, subordinated debt,…) + minority interests	%	2,4%	2,2%	2,4%	2,6%	2,4%	2,1%	2,1%
Equity (group share)	%	3,7%	3,5%	3,0%	4,2%	4,4%	4,3%	**4,6%**
Total assets	**%**	**100,0%**	**100,0%**	**100,0%**	**100,0%**	**100,0%**	**100,0%**	**100,0%**

= 22,1%

4 French banks		2006	2007	2008	2009	2010	2011	2012
Loan to deposit (ratio)	%	106%	112%	114%	108%	108%	109%	103%
Loan + trading to deposit (ratio)	%	293%	309%	333%	241%	237%	249%	257%
Loan + trading (exc. derivatives) to deposit (ratio)	%	244%	248%	207%	175%	176%	165%	173%
Customers deposits	%	23,5%	22,7%	21,7%	27,7%	28,6%	27,1%	25,6%
Interbank market	%	13,4%	13,0%	10,5%	10,6%	9,8%	10,1%	**9,4%**
Other short term liabilities at fair value (inc. derivatives)	%	38,0%	39,6%	46,6%	35,9%	35,6%	39,8%	**+40,6%**
o/w derivatives	%	11,3%	13,9%	27,3%	18,3%	17,5%	22,8%	**-21,6%**
Debt securities	%	10,7%	11,1%	9,2%	11,2%	10,8%	8,3%	9,4%
Insurance liabilities/technical reserves	%	9,0%	8,4%	7,1%	8,4%	9,0%	9,1%	9,5%
Hybrids (preferreds, subordinated debt,…) + minority interests	%	2,1%	1,9%	2,1%	2,5%	2,3%	2,0%	1,6%
Equity (group share)	%	3,0%	2,7%	2,5%	3,2%	3,3%	3,2%	**3,3%**
Total assets	**%**	**100,0%**	**100,0%**	**100,0%**	**100,0%**	**100,0%**	**100,0%**	**100,0%**

= 28,4%

Achilles' heel

28,4% -22,1% = 6pp

French banks : no immediate solvency problem, but…
a structurally unbalanced **liquidity** is worsened by trading and foreign networks

Imbalance of deposits (€M)

37 European banks		2006	2007	2008	2009	2010	2011	2012
Deposits minus loans (amount)	€M	-764 156	-1 155 909	-1 821 863	-1 648 703	-1 405 245	-1 185 173	-790 891
Deposits minus loans minus trading (exc. derivatives) (amount)	€M	-5 646 588	-6 792 551	-6 368 516	-5 646 552	-5 647 440	-4 994 996	-4 848 675
Structural imbalance multiplied by (number of times)		7x	6x	3x	3x	4x	4x	6x

4 French banks		2006	2007	2008	2009	2010	2011	2012
Deposits minus loans (amount)	€M	-57 997	-127 002	-170 312	-116 076	-124 585	-129 662	-43 877
Deposits minus loans minus trading (exc. derivatives) (amount)	€M	-1 396 115	-1 576 401	-1 264 318	-1 058 700	-1 123 894	-943 309	**-1 029 110**
Structural imbalance multiplied by (number of times)		24x	12x	7x	9x	9x	7x	23x

Cited reasons for the French structural imbalance : « you get out of it what you put in it, though »

✓French money market UCITS (#1 in Europe, €320bn o/w 80% invested in EZ short-dated bank wholesale/volatile funding)
✓Life insurance, preferred investment of French HNWI (€1,400bn, high fee-generation for in-house insurance subsidiaries)
✓Livret A (€250bn) and LDD (€90bn) : cannibalisation of deposits with the 65% CDC's regulated savings drain → « it's the biter bit »

Exacerbated by factors which relay more risk/volatility than sustainable growth :

✓ Investment banking (trading portfolio to be financed with highly volatile short-dated market sources/« wholesale funding »)
✓ Foreign networks (few local deposits, lots of local loans -- the gap is wholesale-funded)

Imbalance of customers deposits – adjusted by cash buffers/deposits with central banks

37 European banks		2006	2007	2008	2009	2010	2011	2012
Deposits minus loans minus trading (ex. derivatives) plus cash balances with central banks (amount)	€M	- 5 448 688	- 6 485 707	- 5 870 201	- 5 008 610	- 4 950 226	- 3 964 384	- 3 579 749
Deposits minus loans minus trading (exc. derivatives) (reminder)	€M	- 5 646 588	- 6 792 551	- 6 368 516	- 5 646 552	- 5 647 440	- 4 994 996	- 4 848 675
Imbalance adjusted by deposits with central banks / total assets	%	-28,3%	-28,2%	-22,5%	-21,3%	-20,1%	-15,6%	-14,2%
Cash balances/deposits with central banks	€M	197 900	306 844	498 315	637 942	697 214	1 030 612	**1 268 926**

x 6 (2012/2006)

4 French banks		2006	2007	2008	2009	2010	2011	2012
Deposits minus loans minus trading (ex. derivatives) plus cash balances with central banks (amount)	€M	- 1 370 598	- **1 526 141**	- 1 159 806	- 949 984	- 1 034 753	- 806 930	- **780 918**
Deposits minus loans minus trading (exc. derivatives) (reminder)	€M	- 1 396 115	- **1 576 401**	- 1 264 318	- 1 058 700	- 1 123 894	- 943 309	- **1 029 110**
Imbalance adjusted by deposits with central banks / total assets		-33,3%	-32,5%	-21,4%	-18,7%	-20,0%	-15,0%	-14,1%
Cash balances/deposits with central banks	€M	25 517	50 260	104 512	108 716	89 141	136 379	**248 192**

x 10 (2012/2006)

Market worries around the liquidity of French banks have forced them to substantially increase their cash buffers/deposits with central banks (inc. ECB), which are low earning assets, generating a liquidity overcost which strains badly a banking model that was alleged as being more resilient

✓Cash buffers of €26bn with central banks in 2006 hiked… to €248bn in 2012 (4,5% of total assets < 5,1% for the 37 Europeans banks)

✓At 1%(e), it's a €2.5bn annual opportunity cost in NBI for the four French banks…

DEXIA

Imbalance of customers deposits

Adjusted by cash buffers/deposits with central banks

Forensic of a predictable disaster :
ALEA DEXIA EST, REQUIESCAT IN PACE (R.I.P.)

		2006	2007	2008	2009	2010	2011	2012
Deposits minus loans minus trading (ex. derivatives) plus cash balances with central banks (amount)	€M	(139 541)	(144 669)	**(267 713)**	(240 441)	(231 269)	**(151 974)**	(140 079)
Deposits minus loans minus trading (exc. derivatives) (reminder)	€M	(142 906)	(153 504)	(270 161)	(243 114)	(234 535)	(156 821)	(141 133)
Imbalance adjusted by deposits with central banks / total assets	%	-24,6%	-23,9%	**-41,1%**	-41,6%	-40,8%	**-36,8%**	-39,2%
Cash balances/deposits with central banks	€M	3 365	8 835	2 448	2 673	3 266	4 847	1 054

NATIXIS

Imbalance of customers deposits

Adjusted by cash buffers/deposits with central banks

Aggregated assets	Aggregated imbalance
10%	**22%**
(€528bn/€5,529bn)	(€175bn/€781bn)

		2006	2007	2008	2009	2010	2011	2012
Deposits minus loans minus trading (ex. derivatives) plus cash balances with central banks (amount)	€M	(166 486)	**(180 566)**	(154 285)	(141 375)	(129 511)	**(185 346)**	(174 904)
Deposits minus loans minus trading (exc. derivatives) (reminder)	€M	(166 809)	(181 527)	(156 044)	(144 889)	(141 678)	(190 913)	(209 601)
Imbalance adjusted by deposits with central banks / total assets	%	-36,3%	**-34,7%**	-27,8%	-31,5%	-28,3%	**-36,5%**	-33,1%
Cash balances/deposits with central banks	€M	323	961	1 759	3 514	12 167	5 567	**34 697**

SOCIETE GENERALE

Imbalance of customers deposits

Adjusted by cash buffers/deposits with central banks

Aggregated assets	Aggregated imbalance
23%	**31%**
(€1,251bn/€5,529bn)	(€241bn€781bn)

		2006	2007	2008	2009	2010	2011	2012
Deposits minus loans minus trading (ex. derivatives) plus cash balances with central banks (amount)	€M	(350 997)	**(390 591)**	(263 531)	(281 889)	(313 888)	(193 467)	**(240 067)**
Deposits minus loans minus trading (exc. derivatives) (reminder)	€M	(360 355)	(401 893)	(277 276)	(296 283)	(327 969)	(237 430)	(307 658)
Imbalance adjusted by deposits with central banks / total assets	%	-36,7%	**-36,4%**	-23,3%	-27,5%	-27,7%	-16,4%	**-19,2%**
Cash balances/deposits with central banks	€M	9 358	11 302	13 745	14 394	14 081	**43 963**	**67 591**

BNP PARIBAS
The bank for a changing world

Imbalance of customers deposits

Adjusted by cash buffers/deposits with central banks

Aggregated assets	Aggregated imbalance
35%	**44%**
(€1,907bn/€5,529bn)	(€347bn/€781bn)

		2006	2007	2008	2009	2010	2011	2012
Deposits minus loans minus trading (ex. derivatives) plus cash balances with central banks (amount)	€M	(667 935)	**(774 379)**	(669 119)	(485 273)	**(557 684)**	(433 724)	**(346 817)**
Deposits minus loans minus trading (exc. derivatives) (reminder)	€M	(677 577)	(792 921)	(708 338)	(541 349)	(591 252)	(492 106)	(450 007)
Imbalance adjusted by deposits with central banks / total assets	%	-46,4%	**-45,7%**	-32,2%	-23,6%	**-27,9%**	-22,1%	-18,2%
Cash balances/deposits with central banks	€M	9 642	18 542	39 219	56 076	33 568	58 382	**103 190**

CRÉDIT AGRICOLE

Imbalance of customers deposits

Adjusted by cash buffers/deposits with central banks

Aggregated assets	Aggregated imbalance
33%	**3%**
(€1,842bn/€5,529bn)	(€19bn/€781bn)

		2006	2007	2008	2009	2010	2011	2012
Deposits minus loans minus trading (ex. derivatives) plus cash balances with central banks (amount)	€M	(185 180)	**(180 605)**	(72 871)	(41 447)	(33 670)	5 607	(19 130)
Deposits minus loans minus trading (exc. derivatives) (reminder)	€M	(191 374)	(200 060)	(122 660)	(76 179)	(62 995)	(22 860)	(61 844)
Imbalance adjusted by deposits with central banks / total assets	%	-14,7%	-12,8%	-4,4%	-2,7%	-2,1%	0,3%	-1,0%
Cash balances/deposits with central banks	€M	6 194	19 455	**49 789**	34 732	29 325	28 467	**42 714**

French banks : « it's the liquidity, stupid! »

Following the H2 11 liquidity squeeze, they had committed to lose weight, though…

(excluding Natixis)	€Bn	Société Générale	Crédit Agricole SA	BNP Paribas	
Total assets IFRS	2011	1.181	1.724	1.965	
	2012	1.251	1.842	1.907	
	Change 2011/2012	+70	+118	-58	+130
Funded assets	2011	601	1.030	972	
	2012	652	1.032	974	
	Change 2011/2012	+51	+2	+2	+55
Deposits with central banks	2011	44	28	58	Δ -29
	2012	68	43	103	
	Change 2011/2012	+24	+15	+45	+84
Risk-weighted assets (« RWA »)	2011	349	334	614	
	2012	324	293	552	
	Change 2011/2012	-25	-41	-62	-128

- With a €29bn slimming in funded assets (adjusted by deposits with central banks), we are a long way from the €400bn+ trimming estimated as necessary by some analysts (McKinsey, etc.)
- As to the decrease of €128bn in RWA, 2/3 of it is attributable to increases in deposits with central banks

Review based on the ECB statistics

EZ banks lack €1,205bn to comply with the future 1-year transformation ratio

(Net Stable Funding Ratio, NSFR) on 01/01/2018 :

French banks	€433bn	(5% of their total assets)
Italian banks	347bn	(8%)
Spanish banks	195bn	(5%)
Irish banks	138bn	(11%)
Greek banks	92bn	(21%)

French banks : « it's the liquidity, stupid! »

What others say

Second deputy governor of the French central bank
Feb 28th, 2013 ; at Breakfast conference of the Association of French corporate treasurers (AFTE)

He hinted that the French banks could not comply with the future 30-day liquidity ratio (Liquidity Coverage Ratio, LCR) on 01/01/2015 without the ECB LTROs which boost the numerator (deposits with the ECB accounting for high quality liquid assets, HQLA) and enhance the denominator (3-year maturity LTROs which provide funding longer than the 30-day cut-off for outflows)

Christophe NIJDAM,
Equity Analyst,
Alphavalue

“ Moreover, they could not comply although the LCR had already been susbtantially alleviated by the Basel Committee on 06/01/2013, from 100% to 60% (actually, it's been eased down to a 48% level when using the same computation perimeter as before, since the HQLA definition has been enlarged and the funding outflow assumptions as well as the drawdown assumptions on committed credit lines have been loosened)

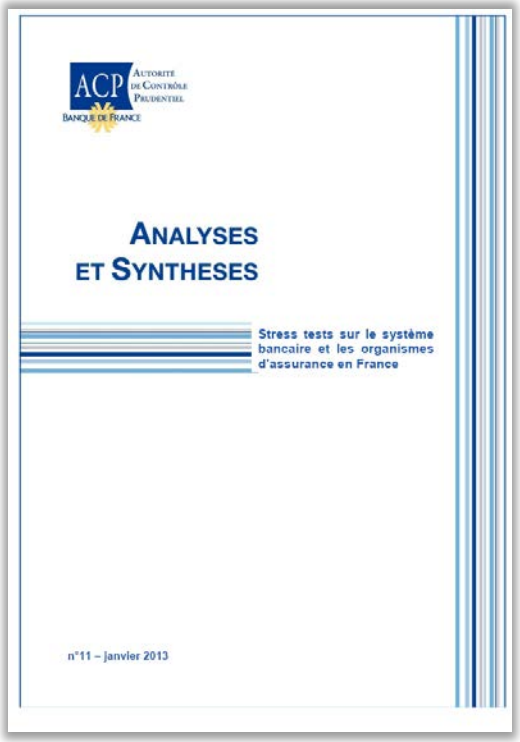
“ According to the September 2012 EBA's Quantitative Impact Study (QIS) carried out on 2011 balance sheets : Group 1 (big banks) LCR = 91% worldwide / 72% Europe / < 50% France (a rumor which was never refuted)

“ The LTROs improved in one shot the LCR of French banks by close to €250bn (+74bn in ECB deposits/-174bn in ECB 3-year loans on 11/12/2012), a figure to be compared with a prevailing opinion which put the LCR deficit at €400bn+ (also corrobated by McKinsey's order of magnitude)

“ Not to forget that French banks had long been subject to a (differently graded) 30-day liquidity ratio (which proved completely useless to forwarn the liquidity squeeze of H2 11 upstream… Last, but not least, the French 5-year transformation ratio – similar in some sort to the future 1-year NSFR – was repealed in… 2007! How's that for an excellent timing ☺)

- ✓ **Performed on 2011 balance sheets by the French banking supervisor (ACP)**
- ✓ Confirmation of the absence of immediate solvency problems (but assumptions for macro stress-testing are already obsolete/too optimistic at +0.2% growth in 2013 GDP compared to what is most likely today : -0.3% growth in 2013 GDP(e))
- ✓ 1st time that liquidity is stress-tested : out of 7 banks, **a first one « fails » after a week, a second one goes belly up after 3 months…**
- ✓ ACP report : **« the liquidity stress tests have confirmed the relative [sic!] vulnerability which is constituted by the dependency of French banks to the short-dated wholesale funding market »**

But « there is nothing to worry about *Madame la Marquise* » (a famous French traditional song) because…


ACP Autorité de Contrôle Prudentiel
Banque de France

Analyses et Synthèses

Stress tests sur le système bancaire et les organismes d'assurance en France

n°11 – janvier 2013

ACP report :

« this reliance is offset (…) by large collateral reserves eligible with the European Central Bank [sic!] »

In one swift swoon, the ECB role got promoted, unbeknownst to its own freewill, from **lender** of last resort to lender **of first resort**…

What other people have to say about them : Moody's, 21/05/2013

- ✓ **« The funding profiles of the large French banks are weaker than those of their international peers because they continue to depend on more confidence-sensitive wholesale funding »**

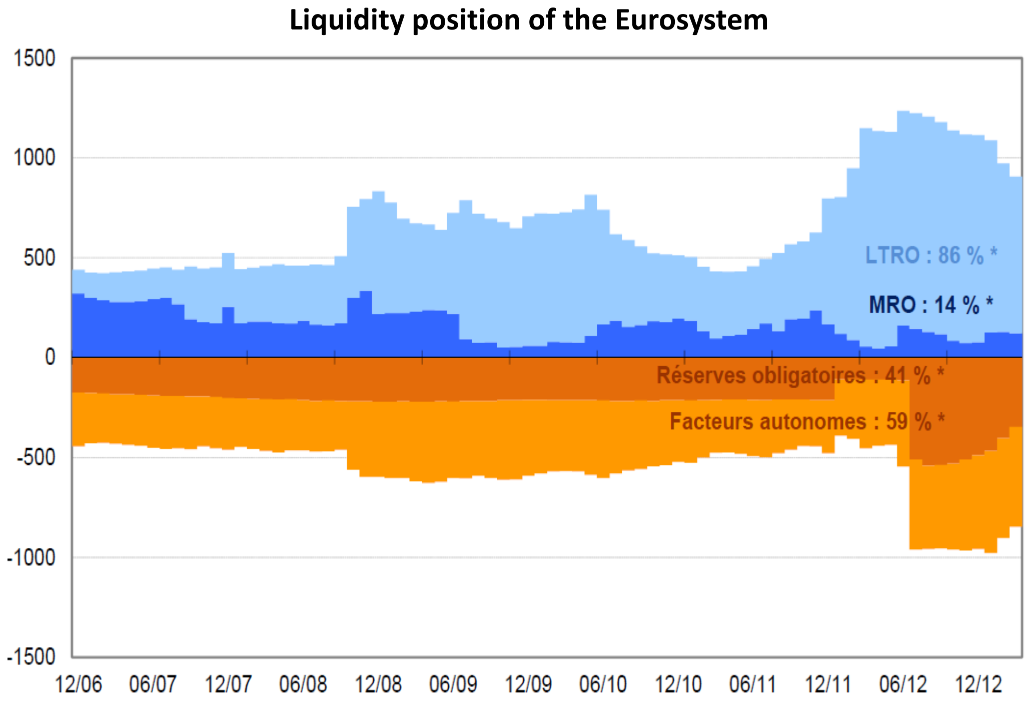
- ✓ « Some of the reasons for the dependence are structural and include strong competition for bank deposits from alternative savings products and **large trading** and investment **portfolios that add to wholesale funding needs** »

- ✓ « Despite enhancements in matching short-term liabilities with liquid assets and in extending funding profiles, BNP, SG, Groupe CA and Groupe BPCE have **substanstial funding exposures of €1.2 trillion* in aggregate at end-2012** »

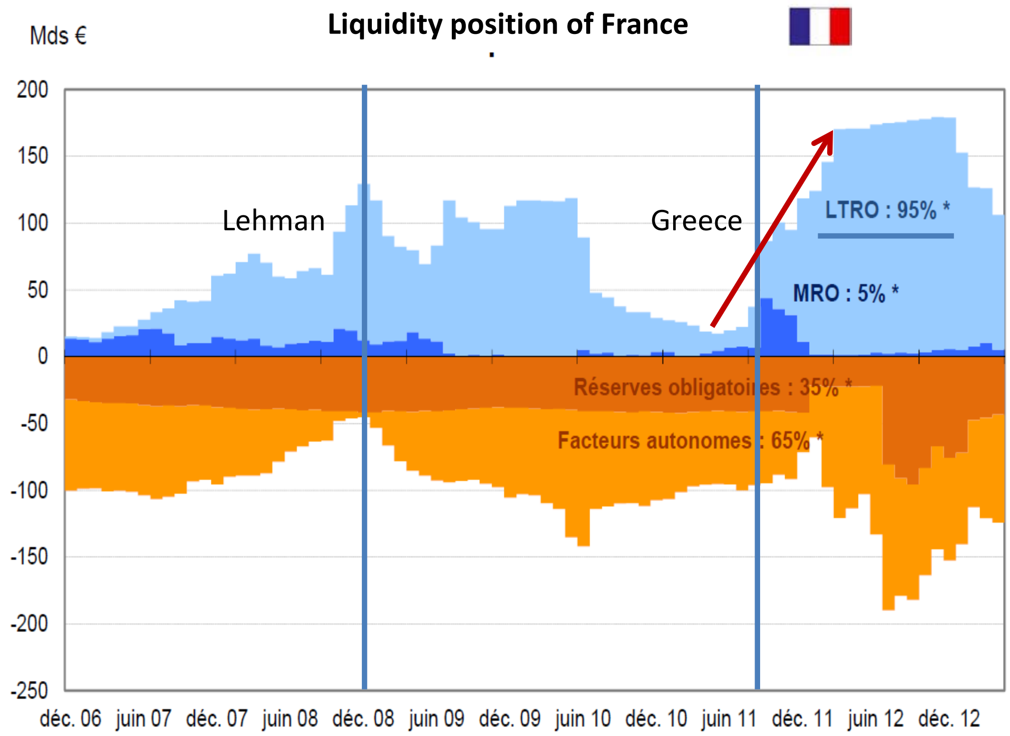
- ✓ «(…) although **liquidity buffers** have increased significantly, they **still rank in the lower range among international peers**. Further, these buffers **consist to some extent of less liquid central bank eligible assets** as opposed to cash and marketable securities »

** This €1,200bn figure cross-checks with our €1,029bn estimate (page 11) as it covers a larger perimeter of banks (CRACM, Banques Populaires & Caisses d'Epargne) than ours(BNP, SG, CASA, Natixis)*

3 years of lost time without having learnt the harsh lesson of Lehman on liquidity (2008-2011)



* Moyenne de la dernière période de constitution



* Moyenne de la dernière période de constitution

BANQUE DE FRANCE
EUROSYSTÈME

Speech of Christian Noyer, Governor of the French central bank. Tokyo, October 3rd 2011

« **Moreover, the French banks have suffered from two specific vulnerabilities, one which is for real,** the other one being excessive. **The real vulnerability has to do with their dependency towards dollar funding, tied up to the importance of their international activities, <u>a circumstance that maybe took a long time for them to address efficiently.</u>**

They are currently rectifying this situation through both deleveraging and reduction of their assets. Simultaneously and in order to facilitate this transitory period, as this problem overflowes more largely to European institutions, the Eurosystem, in a joint effort with other central banks in the world, has decided to proceed with three special operations to provide dollar liquidity for a three-month maturity.

More excessive are the worries about the French banks' exposure to the peripheric sovereign risk. »

French banks

A record dependency to the ECB's waterhole in 2011

ECB									
€bn	Euro Zone	France	FR/€Z	Euro Zone	France	FR/€Z	Euro Zone	France	FR/€Z
date	loans	loans	%	deposits	deposits	%	net	net	%
2000	216,6	23,5	10,8%	0,8	0,0	0,0%	215,8	23,5	10,9%
2001	195,4	15,7	8,0%	0,8	0,1	12,5%	194,6	15,6	8,0%
2002	216,2	10,6	4,9%	0,2	0,0	0,0%	216,0	10,6	4,9%
2003	281,1	10,3	3,7%	0,1	0,0	0,0%	281,0	10,3	3,7%
2004	340,8	14,0	4,1%	0,6	0,0	0,0%	340,2	14,0	4,1%
2005	391,3	20,4	5,2%	0,4	0,0	0,0%	390,9	20,4	5,2%
2006	433,3	18,2	4,2%	0,1	0,0	0,0%	433,2	18,2	4,2%
2007	451,9	30,5	6,7%	2,6	0,0	0,0%	449,3	30,5	6,8%
2008	797,2	76,1	9,5%	205,8	6,1	3,0%	591,4	70,0	11,8%
2009	674,5	99,0	14,7%	75,6	21,6	28,6%	598,9	77,4	12,9%
2010	648,1	92,8	14,3%	115,5	25,8	22,3%	532,6	67,0	12,6%
2011	**891,7**	**142,1**	**15,9%**	**454,2**	**31,9**	**7,0%**	**437,5**	**110,2**	**25,2%**
2012	1397,0	231,6	16,6%	440,3	97,1	22,1%	956,7	134,5	14,1%

Source: Banque de France

French banks
Communicating vases between the ECB and the US Money Market Funds (US MMF)

ECB

€bn date	Euro Zone loans	France loans	FR/€Z %	Euro Zone deposits	France deposits	FR/€Z %	Euro Zone net	France net	FR/€Z %
18/01/2011	655,0	50,7	7,7%	140,0	7,3	5,2%	515,0	43,4	8,4%
08/02/2011	640,9	48,1	7,5%	120,5	11,8	9,8%	520,4	36,3	7,0%
08/03/2011	600,9	47,3	7,9%	107,2	8,1	7,6%	493,7	39,2	7,9%
12/04/2011	570,9	44,6	7,8%	102,5	10,1	9,9%	468,4	34,5	7,4%
10/05/2011	566,7	40,1	7,1%	99,6	7,6	7,6%	467,1	32,5	7,0%
14/06/2011	568,1	38,2	6,7%	94,6	3,9	4,1%	473,5	34,3	7,2%
12/07/2011	592,0	40,4	6,8%	106,4	7,9	7,4%	485,6	32,5	6,7%
09/08/2011	627,2	42,9	6,8%	135,9	10,6	7,8%	491,3	32,3	6,6%
13/09/2011	703,2	66,8	9,5%	231,6	19,9	8,6%	471,6	46,9	9,9%
11/10/2011	785,5	124,0	15,8%	331,6	27,4	8,3%	453,9	96,6	21,3%
08/11/2011	817,9	141,3	17,3%	382,6	32,5	8,5%	435,3	108,8	25,0%
13/12/2011	891,7	142,1	15,9%	454,2	31,9	7,0%	437,5	110,2	25,2%
17/01/2012	1081,3	168,5	15,6%	610,1	67,4	11,0%	471,2	101,1	21,5%
14/02/2012	1088,9	176,1	16,2%	707,5	74,1	10,5%	381,4	102,0	26,7%
13/03/2012	1239,5	198,1	16,0%	840,5	92,7	11,0%	399,0	105,4	26,4%
10/04/2012	1433,4	222,1	15,5%	987,1	124,2	12,6%	446,3	97,9	21,9%
08/05/2012	1418,0	222,7	15,7%	985,4	161,2	16,4%	432,6	61,5	14,2%
12/06/2012	1411,8	223,0	15,8%	983,6	158	16,1%	428,2	65,0	15,2%
10/07/2012	1518,1	226,6	14,9%	981,5	138,7	14,1%	536,6	87,9	16,4%
07/08/2012	1507,7	226,8	15,0%	554,6	102,3	18,4%	953,1	124,5	13,1%
11/09/2012	1487,9	227,5	15,3%	539,1	120,4	22,3%	948,8	107,1	11,3%
09/10/2012	1461,1	229,0	15,7%	514,4	108,2	21,0%	946,7	120,8	12,8%
13/11/2012	1418,1	229,9	16,2%	465,4	103,3	22,2%	952,7	126,6	13,3%
11/12/2012	1397,0	231,6	16,6%	440,3	97,1	22,1%	956,7	134,5	14,1%
15/01/2013	1395,5	230,5	16,5%	445,0	86,7	19,5%	950,5	143,8	15,1%
12/02/2013	1361,5	202,6	14,9%	392,1	83,2	21,2%	969,4	119,4	12,3%
12/03/2013	1244,5	176,3	14,2%	350,8	78,8	22,5%	893,7	97,5	10,9%
09/04/2013	1176,2	175,1	14,9%	339,3	86,3	25,4%	836,9	88,8	10,6%
07/05/2013	n.d.	154,1		n.d.	71,1		n.d.	83,0	

09/08/2011: SG -20%
08/2012: « Draghi effect »

Source: Banque de France

US MMF

€mds date	$1 .420 mds Europe %	France %	1,30 $/1€ Europe €mds	France €mds	FR/Eur %
févr-11	49,6%	13,3%	541,8	145,3	26,8%
mai-11	51,5%	15,1%	562,5	164,9	29,3%
juin-11	48,9%	14,4%	534,1	157,3	29,4%
juil-11	47,2%	14,1%	515,6	154,0	29,9%
août-11	42,1%	11,2%	459,9	122,3	26,6%
sept-11	37,7%	6,7%	411,8	73,2	17,8%
oct-11	34,9%	5,5%	381,2	60,1	15,8%
nov-11	33,4%	2,0%	364,8	21,8	6,0%
déc-11	31,7%	1,0%	346,3	10,9	3,2%
janv-12	33,1%	2,6%	361,6	28,4	7,9%
févr-12	31,3%	3,5%	341,9	38,2	11,2%
mars-12	30,8%	3,4%	336,4	37,1	11,0%
avr-12	30,0%	3,3%	327,7	36,0	11,0%
mai-12	28,2%	3,0%	308,0	32,8	10,6%
juin-12	24,2%	2,2%	264,3	24,0	9,1%
juil-12	26,3%	3,1%	287,3	33,9	11,8%
août-12	26,1%	2,7%	285,1	29,5	10,3%
sept-12	28,0%	3,9%	305,8	42,6	13,9%
oct-12	30,1%	5,0%	328,8	54,6	16,6%
nov-12	30,8%	5,1%	336,4	55,7	16,6%
déc-12	27,9%	6,4%	304,8	69,9	22,9%
janv-13	31,8%	6,8%	347,4	74,3	21,4%
févr-13	32,7%	8,0%	357,2	87,4	24,5%
mars-13	29,5%	6,7%	322,2	73,2	22,7%
avr-13	31,8%	7,9%	347,4	86,3	24,8%

Source: Fitch

French banks

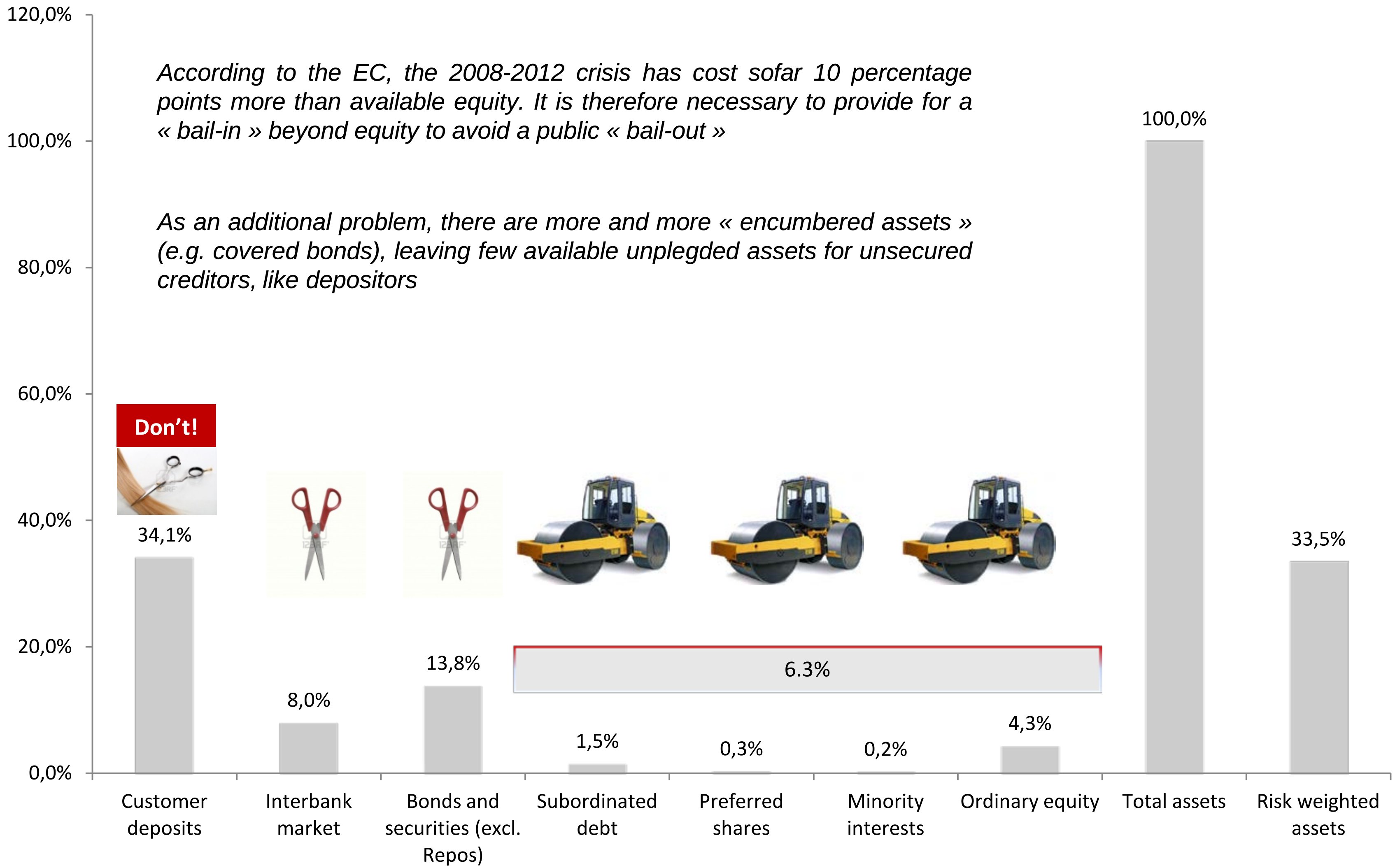
The communicating vases between ECB and US MMF are a dangerous game (cf. H2 11)

Bad habits die hard… → business (almost) as usual…

ECB €bn	Euro Zone (net)	France (net)	FR/€Z %	US MMF €bn	Europe	France	FR/EC %
May 2011	467,1	32,5	7%	May 2011	562,5	164,9	29%
December 2011	437,5	110,2	25%	December 2011	346,3	10,9	3%
05/11-12/11	**-29,6**	**+77,7**	**+18pp**	**05/11-12/11**	**-216,2**	**-154,0**	**-26pp**
December 2012	956,7	134,5	14%	December 2012	304,8	69,9	17%
12/11-12/12	+519,2	+24,3	-11pp	12/11-12/12	-41,5	+59,0	+13pp
April 2013	836,9	88,8	11%	April 2013	347,4	86,3	25%
12/12-04/13	-119,8	-45,7	-3pp	12/12-04/13	+42,6	+16,4	+8pp
05/11-04/13	+369,8	+56,3	+4pp	05/11-04/13	-215,1	-78,6	-4pp
12/11-04/13	**+399,4**	**-21,4**	**-14pp**	**12/11-04/13**	**+1,1**	**+75,4**	**+22pp**

37 listed banks in 13 European countries with €25tn in assets (2011 numbers)

Shattering the confidence of depositors (which represent -- by far -- the biggest funding brick for banks) is potentially an error of a systemic nature



After Cyprus

What's Brussels could be up to for deposit treatment in a banking resolution plan

Table A: Summary table

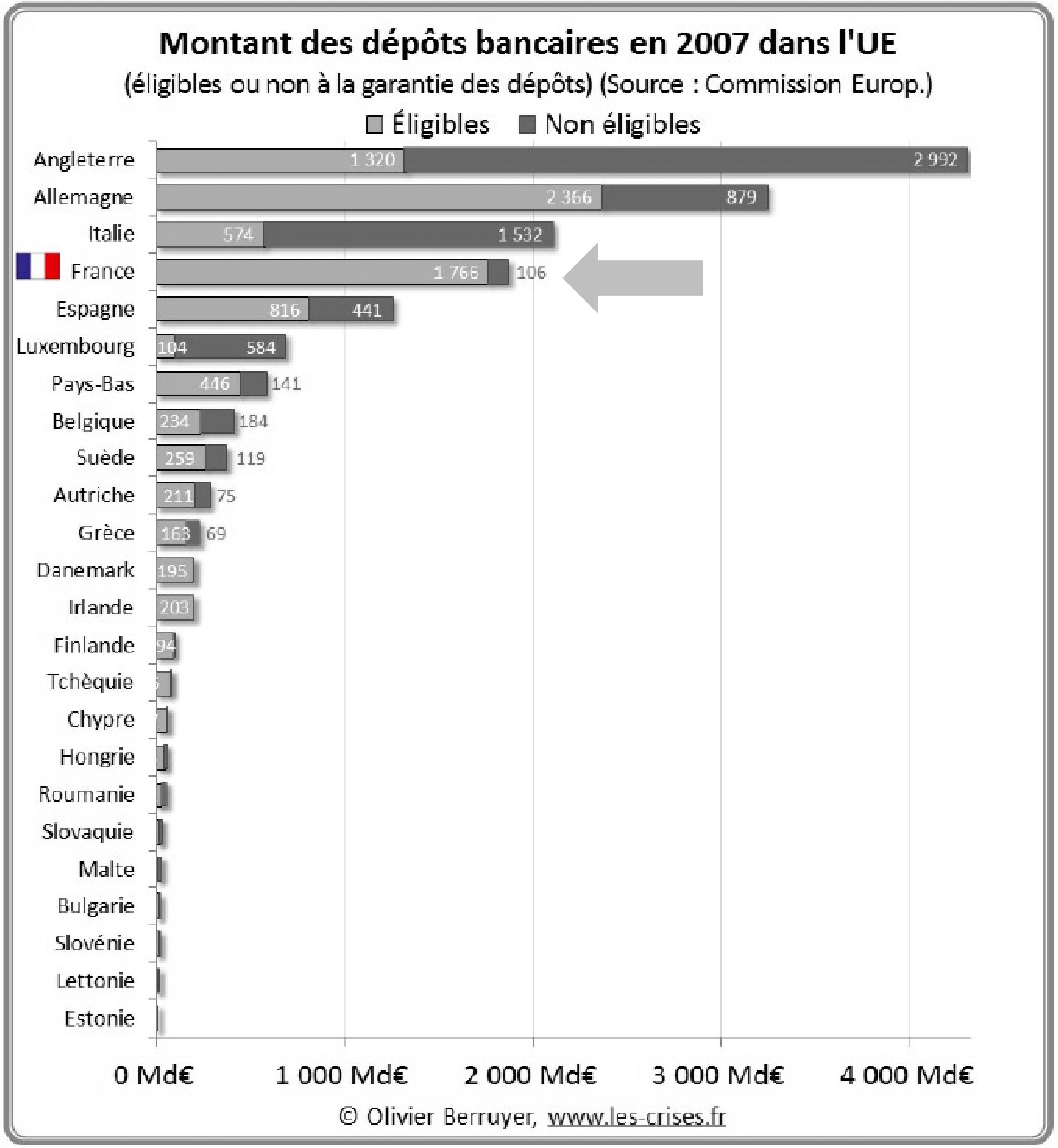
source: European Commission, « Impact of introducing deposit preference in the Bank Recovery and Resolution Directive », 7 May 2013	Option 1			Option 2			Option 3		
	No Depositor preference			Covered deposits/DGS preference			Eligible Depositor preference		
SMALL BANKS									
Share of bail-in-able liabilities on balance sheet (excluding capital)	69%			34%			22%		
	Loss 10%	Loss 15%	Loss 25%	Loss 10%	Loss 15%	Loss 25%	Loss 10%	Loss 15%	Loss 25%
capital (7.5%)	100%	100%	100%	100%	100%	100%	100%	100%	100%
DGS/covered deposits	4%	11%	25%	0%	0%	0%	0%	0%	0%
eligible uncovered dep. (above 100K€)	4%	11%	25%	7%	22%	51%	0%	0%	0%
unsecured debt & non-eligible dep.	4%	11%	25%	7%	22%	51%	11%	34%	80%
AVERAGE BANKS									
Share of bail-in-able liabilities on balance sheet (excluding capital)	56%			36%			31%		
	Loss 10%	Loss 15%	Loss 25%	Loss 10%	Loss 15%	Loss 25%	Loss 10%	Loss 15%	Loss 25%
capital (5.5%)	100%	100%	100%	100%	100%	100%	100%	100%	100%
DGS/covered deposits	8%	17%	35%	0%	0%	0%	0%	0%	0%
eligible uncovered dep. (above 100K€)	8%	17%	35%	13%	26%	54%	0%	0%	0%
unsecured debt & non-eligible dep.	8%	17%	35%	13%	26%	54%	15%	31%	63%
LARGE BANKS									
Share of bail-in-able liabilities on balance sheet (excluding capital)	48%			29%			24%		
	Loss 10%	Loss 15%	Loss 25%	Loss 10%	Loss 15%	Loss 25%	Loss 10%	Loss 15%	Loss 25%
capital (3.6%)	100%	100%	100%	100%	100%	100%	100%	100%	100%
DGS/covered deposits	13%	24%	45%	0%	0%	0%	0%	0%	0%
eligible uncovered dep. (above 100K€)	13%	24%	45%	22%	39%	74%	0%	0%	0%
unsecured debt & non-eligible dep.	13%	24%	45%	22%	39%	74%	27%	48%	89%

This table reads as follows :

In the case of big banks, a loss representing 25% of liabilities implies a 100% loss for equity and an 89% loss (« bail-in haircut ») for unsecured debts when all deposits are considered as having seniority in the proceeds of a bank resolution/orderly liquidation. This is this kind of table which could induce Brussels to crush customer deposits above €100k (or even require a haircut on « guaranteed » deposits when there isn't enough money in the deposit insurance scheme). One notices that it is the existence of the 2B2F institutions (as opposed to smaller banks) which drives to this kind of suicidal reasoning

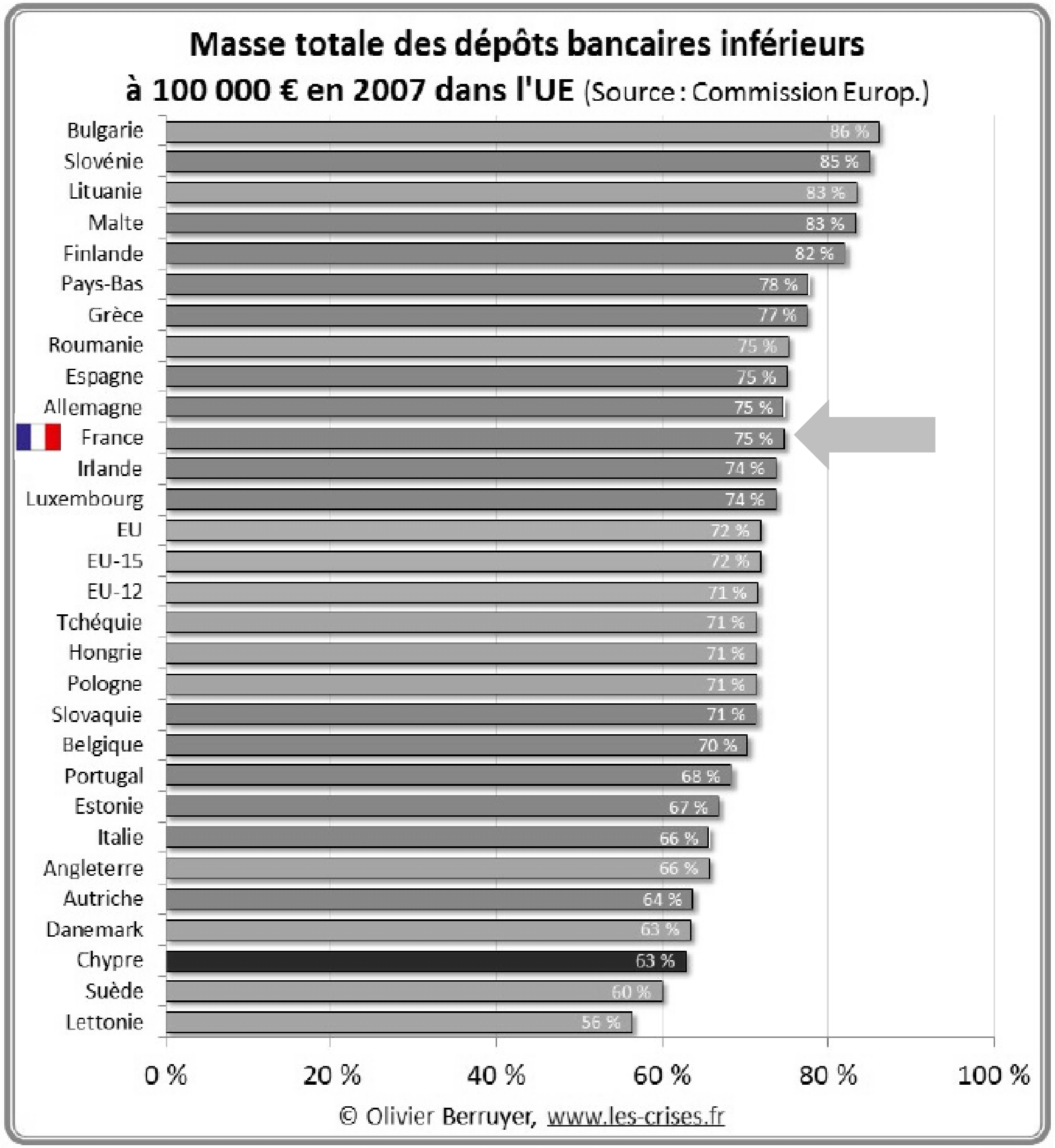
Good news :

Most of the French deposits would be « eligible » for the deposit insurance scheme…

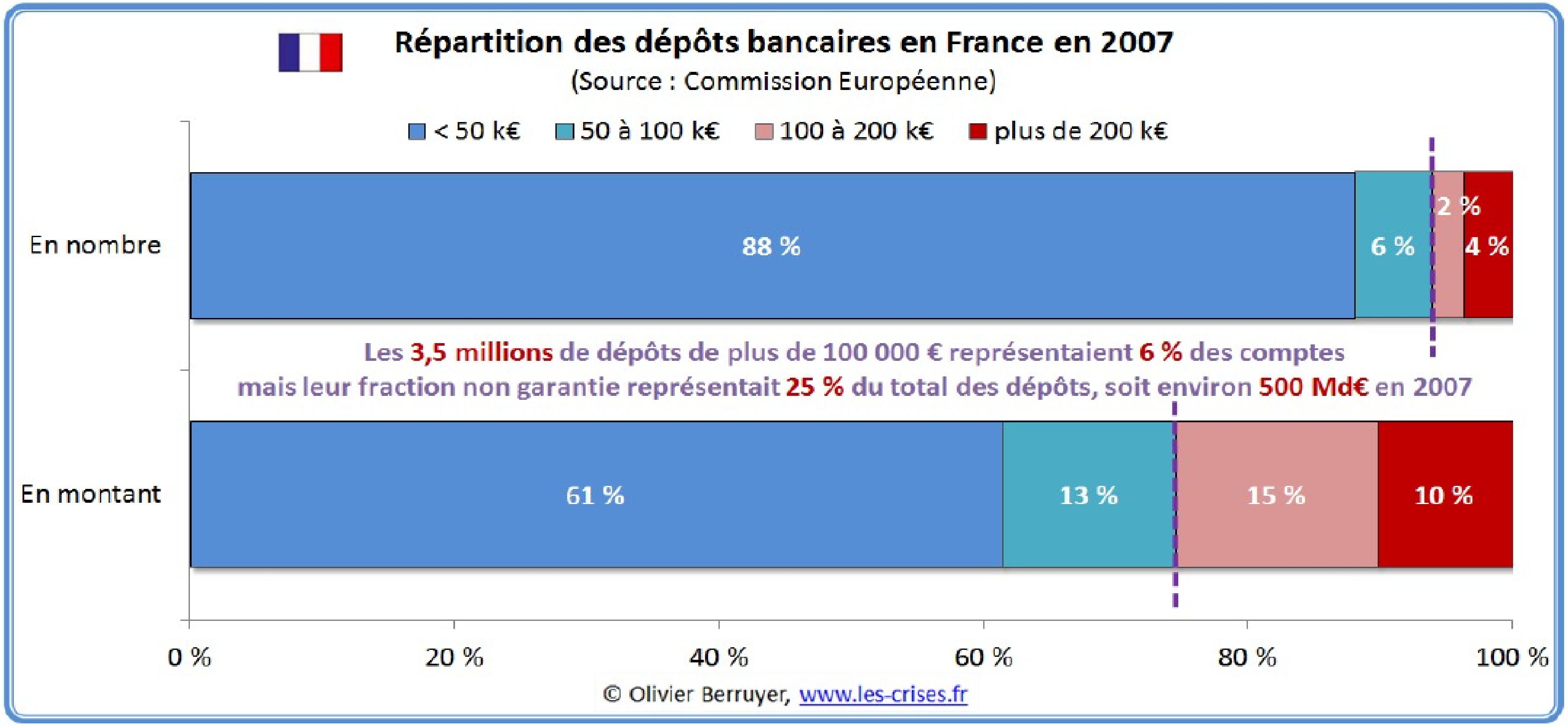


Bad news :

6% of the number of deposit accounts above the €100k represent 25% of the amount of deposits



After Cyprus
The case of French customers deposits



- ✓ What do you think you are going to do next if you are the boss of a SME which has more than €100k in deposits ?
- ✓ What should you do if you are a family head and that you have more than €100k in deposits because you have not yet been able to become a homeowner (property bubble) ?
- ✓ It's the typical « prisoner's dilemma »

After Cyprus

Liquidity remains the Achilles' heel of the universal banks « à la française »

- ✓ There is a potential risk that financial markets go faster – once again – than the Basel 3 regulatory agenda by requiring from the big G-SIFIs (20 so-called universal banks, including 4 French, out of the 28 worldwide!) that they comply with liquidity ratios, not at the 60% level (actually equivalent to only 48%...) in 2015, but at the 100% benchmark as early as 2014…

- ✓ It's exactly the type of pressure the markets have already succesfully applied with the CT1 solvency ratio (7% in 2019 under Basel 3 but imposed by the markets at the 9-10% benchmark as soon as 2013)

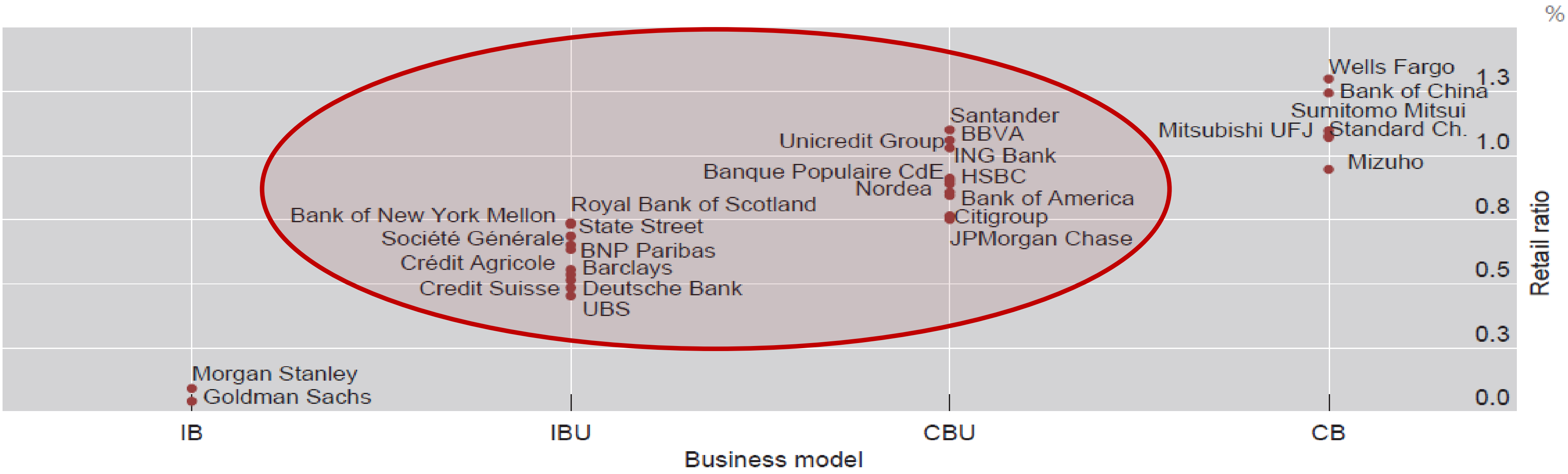
- ✓ The Swedish banks have clearly understood that message and have communicated for more than a year on their future LCR (which is not only already and substantially higher than 100% but also complied with currency by currency…), although Swedish banks are not exempt from criticisms either (RWA on property loans)

- ✓ Meanwhile, French banks decline to be transparent on this subject (« there is no better disinfectant than sunshine »)

- ✓ As a result, every time there is a market scare, investors find a safe haven in Nordic bank paper in a frenetic « flight to liquidity »

G-SIBs distribution according to business model

Distribution as of end-2010 Graph 1



Retail ratio = (net customer loans + customer deposits) / total assets. The composition of the four groups is based on various factors, including significance of trading and derivatives business and funding structure characteristics. This explains why the three Japanese banks and Standard Chartered are classified as commercial banks (CB) and not as commercial banking-oriented universal banks (CBU), despite their retail ratios being lower than for some banks in the CBU group.

IB = investment banks: Goldman Sachs and Morgan Stanley.

IBU = investment banking-oriented universal banks: Bank of New York Mellon, Barclays, BNP Paribas, Crédit Agricole, Credit Suisse, Deutsche Bank, Royal Bank of Scotland, Société Générale, State Street and UBS.

CB = commercial banks: Bank of China, Mitsubishi UFJ FG, Mizuho FG, Standard Chartered, Sumitomo Mitsui FG and Wells Fargo.

CBU = commercial banking-oriented universal banks: Bank of America, Banque Populaire CdE, BBVA, Citigroup, HSBC, ING Bank, JPMorgan Chase, Nordea, Santander and Unicredit Group.

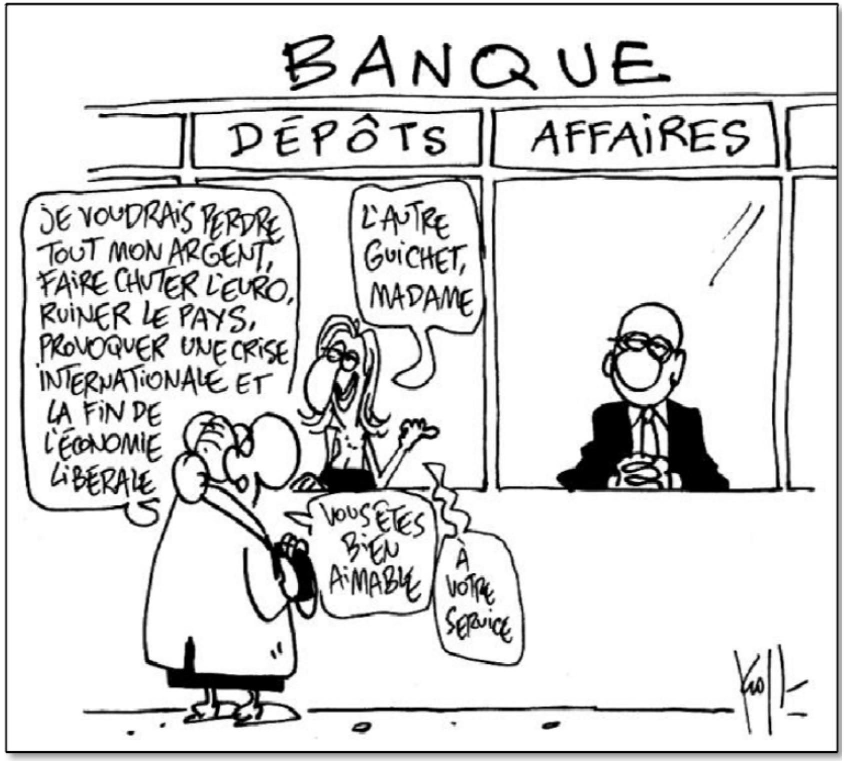
Source: Merck Martel et al (2012).

Source: BIS N° 412, April 2013

Cyprus

The second historical error after Greece : a germ for a new liquidity crisis ?

Commercial banking	Investment banking



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- I woul like to lose all my savings, make the Euro tumble, ruin my country, trigger an international crisis and the end of true capitalism
- Go to the next window, Ma'am…

EcoFin
Summit
21 June 2013