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STRESS TESTS ON EUROPEAN BANKS

FINANCE: DO THE BIG BANKS HAVE ENOUGH CAPITAL TO COPE WITH ANOTHER SHOCK?

LIKE THE FED IN THE UNITED STATES, CHALLENGES – WITH ALPHAVALUE – HAS TESTED THEIR RESILIENCE

Banks are mortals. And not only in the United States. According to an Ifo study for Eurogroup, if Europeans had to change bank today, their main selection criterion would be the bank's financial health. In this regard, just over two years after the crisis began, nothing has been completely resolved. On 5 July, Jean-Claude Trichet, President of the European Central Bank, spoke of further bank recapitalisations "where needed". The following day, Dominique Strauss-Kahn, managing director of the IMF, said that, "You never recover until you clean up the balance sheets of the banks. This has not been completely done." In order to restore confidence for good, one of the solutions consists of going the whole way, with stress testing. These complicated calculations attempt to answer a simple question: are banks in a strong position, in other words do they have enough capital to hold up against another shock? The US Federal Reserve launched the first such exercise in May. European finance ministers followed suit with the backing of Jean-Claude Trichet, who is steering a major test of banks' resilience between now and September. In the meantime, *Challenges* – with Europe's leading independent financial research firm, AlphaValue – presents the results of stress testing of 31 listed European banks. The results are illuminating, and in some cases surprising.

The central scenario predicted by AlphaValue shows a total capital requirement of €31.3 billion. But if economic conditions deteriorate significantly, which would double banks' impairments between now and 2010 (100% stress test scenario), European banks would need €132.8 billion. Nearly two-thirds of this amount relates to six banks: HSBC (€23.5 billion), UBS (€16.2 billion), Barclays (€15 billion), Dexia (€13.7 billion), BNP Paribas (€10.1 billion) and Natixis (€7.2 billion).

TOP OF THE CLASS REMAIN UNSCATHED

The first question is what are HSBC and BNP Paribas, considered among the top of the class, doing in this list? In the case of BNP Paribas, there are two reasons: at 31 December 2008, the bank already presented a slight shortage of capital, with a Tier 1 capital adequacy ratio (percentage of risk-weighted assets held as capital) of just 7.8% rather than the desired 8%. It is also subject to high impairments, like HSBC, which is highly exposed to mortgages and consumer loans. The second question is: is this serious? This situation is nothing dramatic, as the banks' requirements represent "just" 20% of market capitalisation in the case of BNP Paribas and 22% in the case of HSBC. The two groups' credit quality should allow them to raise these funds without too much difficulty. They could also generate profits by cutting operating expenses in order to increase capital, or reduce their assets, which BNP Paribas began to do in the first quarter of 2009.

Natixis and Dexia have more limited leeway, with capital requirements representing 166% and 130% of their market capitalisation respectively in the "100% stress test" scenario. Dexia's balance sheet has not yet been cleaned up, with a very high level of bond assets with an uncertain value. "If Dexia had to sell these assets at 1 January 2009, it would have sustained losses of €12 billion in addition to the record €3.3 billion loss recorded in its 2008 income statement," explains Christophe Nijdam, one of the two AlphaValue analysts who conducted the stress test. This assumption may seem severe, but the same applies to all of the banks in the sample. In the case of Natixis, this situation is due to impairments relating to €34 billion of compromised assets coupled with a low profitability. The subsidiary of the Caisse d'Épargne and Banque Populaire Groups has also taken the bull by the horns with the announcement on 6 July of a further deal to boost its capital by €1.5 billion.

REASSURANCE FROM FRENCH BANKS

The big banks that passed the stress test without difficulty include two Spanish banks (Santander and BBVA), one Italian bank (Mediobanca), one German bank (Deutsche Bank) and the Swedish banks, which have made it through unscathed. The Swedish central bank, which performed its own stress test in early June, also states that its banking system should pull through. This view is shared by Christian Noyer, Governor of the Banque de France, and Christine Lagarde, France's Finance Minister. They reassert that "French banks are solid". However, according to the stress test, French banks are lacking €35.5 billion. It must be said, this is based on the scenario of a required Tier 1 ratio of 8%, which is not standard required by regulations but an expectation demanded by the markets during a period of crisis. If pressure eases off slightly, to – let say - 6%, the requirements of BNP Paribas, for example, should decrease significantly. Société Générale believes to be in a strong enough position to cope with the shock. "With a Tier 1 ratio of 9.2%, we are in a position to cope with a severe credit squeeze," explains the bank, which – like others – confirms that it is carrying out its own stress tests. Like other European regulatory and supervisory bodies, France's Commission Bancaire is in the process of putting banks' financial statements to the test. While US Treasury Secretary Timothy Geithner has published the nominative results of the Fed's work, there is nothing to suggest that the European authorities will also take the plunge. In the United States, stress testing – which showed that a dozen or so banks needed to raise \$75 billion – was initially welcomed by Wall Street, which had expected the worst. But one month later, on 9 June, US Congress sounded the alarm bells, stating that US banks would have to undergo further tests if the unemployment rate continues to rise.

CAREFUL APPLICATION

This demonstrates the limitations of the exercise, which is based on assumptions that can prove to be false, with the system beginning to crack where it had not been expected. Stress tests, long practiced by regulators and banks' internal departments, have not enabled them to identify the risk relating to subprime loans, or the liquidity risk, or to predict the effects of contagion from one banking system to another. These tests should therefore not give a false sense of security. "It is like simulating a forest fire on a computer, in the middle of a heat wave and with strong winds, to conclude that the pyromaniacs can be let off the hook," explains Christophe Nijdam. "It would be better to stop playing with fire." Or, in the words of the Governor of the Banque de France, "A high level of vigilance is needed in order to avoid the syndrome of things returning to normal."

Irène Inchauspé

OBJECTIVE ANALYSIS FROM ALPHAValue

AlphaValue, Europe's leading independent financial research firm, was the ideal partner to perform the stress test on European banks. Founded in late 2007 by Christophe Rocca Serra, Pierre-Yves Gauthier and André Le Grand, the company has 22 experienced financial analysts with an average of 20 years' experience and covers around 500 European listed stocks. The research firm, which works with a number of international investors, is therefore renowned for its professionalism. Its shareholding structure, majority-owned by the co-founders, ensures the independence that is vital in conducting stress tests objectively. Christophe Nijdam and David Grinsztajn, who headed this study, are members of the Société Française des Analystes Financiers and held a variety of positions, mainly at international investment banks, before joining AlphaValue. They spent several weeks looking at the financial statements of around 30 listed banks without the investigative resources of the sector's supervisory bodies, such as the Commission Bancaire in France. Their work is not the result of an audit assignment, but of financial analysis based on collecting "open" information and rational, standardised and objective handling of this data.

SENSITIVITY TABLE TO STRESS SCENARIOS AND TIER ONE LEVEL ASSUMPTIONS

	Variations from the base case	Requirement at 4% Tier 1 €m	Number of banks undercapitalised	Requirement at 6% Tier 1 €m	Number of banks undercapitalised	Requirement at 8% Tier 1 €m	Number of banks undercapitalised
Base case scenario	0%	5,450	2	13,776	4	31,251	10
Stress Scenario	+25%	8,033	2	17,288	4	43,516	14
Stress Scenario	+50%	10,615	2	24,055	8	69,172	17
Stress Scenario	+75%	13,347	3	32,053	9	100,007	19
Stress Scenario	+100%	18,747	6	50,809	12	132,835	21

STRESS TEST CHALLENGES-ALPHAVALUE OF 31 BIGGEST LISTED EUROPEAN BANKS

Bank	Country	Total assets as of 31/12/08 €bn*	Tier 1 equity as of 31/12/08 €bn*	Surplus / Lack of capital as of 31/12/08 as % of Tier 1 equity	Capital raised from 01/01/09 as % of Tier 1 equity	Pre-provisions Earnings capacity 2009-2010 as % of Tier 1 equity	GDP driven impairments 2009-2010 as % of Tier 1 equity	AFS reserves as of 31/12/08 as % of 1 Tier equity	Capital Requirement base case scenario €bn*	Capital Requirement base case scenario as % of market cap. (15/06/09)	Capital requirement stress test scenario €bn*	Capital requirement stress test scenario as % of market cap. (15/06/09)	
Allied Irish Banks	IRL	182 143	9 906	-8.1%	+35.3%	+40.2%	-45.5%	-0.2%	-	-	2 365	131%	
Banca Monte Dei Paschi Siena	I	214 391	6 608	-55.9%	-	+47.6%	-26.0%	+3.1%	2 060	32%	3 778	59%	
Banco Comercial Portugues	P	94 404	4 780	-12.8%	-	+29.5%	-25.0%	+4.5%	184	5%	1 380	37%	
Banco De Sabadell	E	80 378	4 284	-9.8%	+7.0%	+36.7%	-43.4%	-3.9%	570	11%	2 429	45%	
Banco Espirito Santo	P	74 224	3 946	-13.3%	+30.4%	+33.2%	-16.0%	-7.6%	-	-	-	-	
Banco Popular Espanol	E	110 376	7 411	+0.4%	+5.4%	+43.8%	-33.1%	+0.2%	-	-	1 216	16%	
Bank of Ireland	IRL	194 116	12 649	+33.4%	-	+25.1%	-22.2%	-16.8%	-	-	336	19%	
Barclays	GB	2 344 574	43 968	+6.9%	-	+32.6%	-35.4%	-2.8%	-	-	14 959	54%	
BBVA	E	542 650	22 364	-1.3%	-	+63.7%	-25.1%	+5.1%	-	-	-	-	
BNP Paribas (Fortis not included)	F	2 075 551	41 799	-1.0%	+12.0%	+29.2%	-32.2%	*****	-	-	10 125	20%	
Commerzbank (Dresdner not incl.)	D	625 196	22 500	+21.1%	-	+9.9%	-22.1%	-9.9%	201	3%	5 170	85%	
Crédit Agricole	F	1 653 220	30 700	+7.0%	-	+36.7%	-24.0%	*****	-	-	1 279	5%	
Credit Suisse	CH	774 553	22 639	+39.8%	-	-32.3%	-6.0%	*****	-	-	1 026	3%	
Danske Bank	DK	475 925	11 864	+13.1%	+29.4%	+41.0%	-37.9%	*****	-	-	-	-	
Deutsche Bank	D	2 202 423	31 094	+20.8%	-	+4.7%	-11.0%	-2.8%	-	-	-	-	
Deutsche Postbank	D	231 282	4 997	-22.6%	-	-5.5%	-15.3%	*****	2 170	55%	2 934	74%	
Dexia (FSA not included)	B	651 001	16 126	+24.2%	-	+6.0%	-20.6%	-73.6%	10 328	98%	13 655	130%	
DnB Nor	N	205 682	7 868	-37.1%	-	+32.3%	-37.5%	n/a	3 327	44%	6 279	83%	
HSBC	GB	1 824 884	68 835	+3.7%	+18.7%	+57.2%	-45.1%	-23.4%	-	-	23 523	22%	
Intesa Sanpaolo	I	636 133	27 074	-13.2%	-	+46.8%	-19.7%	-6.3%	-	-	3 284	12%	
KBC Groep	B	355 317	13 643	+17.1%	+11.0%	+13.5%	-42.4%	-8.3%	1 243	25%	7 025	141%	
Mediobanca	I	64 468	5 670	+22.3%	-	+17.6%	-10.4%	-9.8%	-	-	-	-	
Natixis	F	555 760	13 400	+2.7%	+26.1%	-4.2%	-39.0%	*****	1 931	45%	7 153	166%	
Nordea	S	474 074	15 760	-8.3%	+15.9%	+30.8%	-8.3%	*****	-	-	-	-	
Santander	E	1 039 633	45 108	+8.8%	-	+52.6%	-29.4%	+2.5%	-	-	-	-	
Société Générale	F	1 130 003	30 323	+8.8%	+5.6%	+22.3%	-23.7%	*****	-	-	3 223	13%	
Skandinaviska Enskilda Bank	S	231 732	7 611	+4.3%	+18.3%	+26.8%	-9.6%	*****	-	-	-	-	
Svenska Handelsbanken	S	199 251	7 001	+23.9%	+3.6%	+28.6%	-4.1%	*****	-	-	-	-	
Swedbank	S	167 215	6 844	+24.9%	+16.7%	+34.4%	-22.2%	*****	-	-	-	-	
UBS	CH	1 333 432	21 942	+27.1%	-	-37.2%	-31.9%	*****	9 237	32%	16 241	57%	
Unicredit	I	1 045 612	34 150	-20.1%	+8.8%	+50.9%	-26.8%	-2.0%	-	-	5 455	15%	
Total 31 European banks		21 789 603	602 864						31 251		132 835		
Number of banks									10	Number of banks			21

* Exchange rate on 15/06/2009 for EUR 1: USD 1.39, GBP 0.85, CHF 1.51, SEK 10.83, DKK 7.45, NOK 8.91

***** AFS reserves already taken into account for calculating Tier 1 equity

METHODOLOGY

AlphaValue covers 39 European banks. The study concerns 31 banks. It does not include EFG International, Julius Baer (insignificant lending business), Hypo Real Estate, Lloyds Banking Group, Royal Bank of Scotland (partially nationalised), Standard Chartered (limited operations in Europe), Fortis or SNS Reaal (no precise enough data about impairments in the fourth quarter of 2008 and the first quarter of 2009).

Total assets: figures to 31 December 2008

Tier 1 equity: prudential regulatory Tier 1 capital used to calculate the Tier 1 ratio at end-2008. This capital should represent at least 4% of risk-weighted assets. However, a higher level is demanded by the market and regulators, which currently stands at around 8%. The figures in the table are expressed as a percentage of this capital.

Surplus/lack of capital: difference between each bank's ratio relative to the standard of 8% at end-2008.

Capital raised: capital increases (including hybrid securities included in the Tier 1 calculation) carried out between 1 January 2009 and 31 May 2009.

Pre-provisions Earnings capacity (2009-10): corresponding to double gross operating income before reserves and depreciation booked in 2008, minus half of 2008 trading profits. This excludes other sources of income such as exceptional gains on asset sales or the contribution from equity associates. It is expressed after normative tax at a rate of 30%.

GDP driven impairments (2009-10): calculated by deriving counterparties' risk-related losses over the last six months (fourth quarter of 2008 and first quarter of 2009) on the basis of expected GDP growth in 2009 and 2010 (Eurostat estimates at 3 June 2009). This is expressed after normative tax at a rate of 30%.

AFS reserves: unrealised capital gains/losses on the portfolio of available-for-sale assets at end-2008 where not already taken into account in calculating the regulatory Tier 1 ratio.

Capital requirement (base case scenario): capital requirement resulting from the sum of the starting capital deficit or surplus, capital-raising operations carried out between 1 January 2009 and 31 May 2009, earnings capacity and impairments expected for the next two years (2009-10), adjusted for any AFS reserves and assuming that no dividends are paid. This is the sum of the percentages of the columns described above, multiplied by starting Tier 1 capital.

Capital requirement (stress test scenario): same calculation as before, but doubling impairment costs. This allows us to assess each bank's sensitivity to a diversion from the base case scenario.

Capital requirement as % of market capitalisation: any shortfall in capital is compared with the bank's market capitalisation at 15 June 2009 in order to assess its ability to raise these funds on the market. However, there are other ways of achieving the same objective, such as asset sales, issuing hybrid securities, reducing commitments and cutting operating expenses.