



Why we like AXA bonds

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- **AXA has a diversified profile and substantial earnings and capital which protect bondholders.**
- **AXA would not be affected under most stress test scenarios but if it was, it would be at manageable levels.**
- **Several AXA bonds listed in this note still offer value, particularly when viewed as Upper Tier 2 rather than Tier 1.**

- There are several reasons why we continue to recommend AXA bonds, even though the rally has begun and late starters have missed some of the upside.
- The reasons fall into three main categories: 1) the strong fundamentals of the group; 2) the bond yields; and 3) the adjustment required to appreciate the type of bond being held for junior subordinated bonds.
- We discount the cash flows for various bonds and compare the values to the current prices.
- We expect AXA to call institutional Tier 1 bonds at the first call date.

Strong fundamentals

- We are not going to go into details here as they are all in the *European Insurance Primer Statistical Update* just published, but AXA remains globally one of the largest and most diversified groups in the sector.
- It is also one of the largest insurers in the world by market capitalisation (€25bn), surpassing some of the leading North American groups (e.g. MET €24.7bn. PRU €18.1bn and MFCCN €16bn) and most European groups bar Allianz and ING, even though its market capitalisation is deeply below book value, shareholders' equity was at the last reporting date above €40bn.
- AXA produces average pre-tax profits of €6bn p.a., which is easily said but not many groups can generate that much income and it is derived from life insurance, non-life insurance and asset management operations located around the globe. In the last reporting period, life and savings produced about 61% of the income and non-life insurance and

international insurance 34%, with the rest deriving from other operations.

- In life assurance, the main contributors in H1 2011 were Switzerland, France, the United States and Japan, which accounted for 87% of net income.
- In non-life insurance, France, Germany, Switzerland, Belgium and the division that groups Mediterranean and Latin American countries, accounted for 85% of net income. In International Insurance the business is by nature spread around the world, but this is about 10% of the total if seen together with non-life insurance.
- This diversification is not replicated by many groups globally.
- The stress test on holdings of sovereign bonds of peripheral European countries, which we published on 7 October 2011, did not show AXA as being impacted in the majority of scenarios and when it did, it was at manageable levels. This, we can understand, is a concern for shareholders, as income could be lost but equity is protected.
- The T1 bondholders have €6bn of income and €24bn of tangible equity as protection (€30bn). The LT2 bondholders have those €30bn plus €7.4bn in perpetual subordinated debt. And senior bondholders have €37.4bn and LT2 of €6.5bn, or €43.9bn.

Bond prices and potential returns

AXA's subordinated bonds – prices

Description	Current price	Estimated price to call	Up/(down)
AXASA 5.777% Perp 16	74.25	87.46	13.21
AXASA 6.211% Perp 17	74.25	87.49	13.24
AXASA 5.25% 2040-20	77.30	82.82	5.52
AXASA 6.772% Perp 19	68.5	87.7	19.2
AXASA 6.6862% Perp 26	65.89	81.35	15.46
AXASA 6.463% Perp 18	69.0	87.2	18.2
AXASA 6.379% Perp 36	73.0	74.3	1.3

Source: BNP Paribas, Bloomberg

- We use a discount rate of 9% for Tier 1 on the basis that 10% is approximately the average of AXA's ROE and that Tier 1 is not as exposed to loss as shareholders' equity.
- We also take into account that the Tier 1 is mostly an Upper Tier 2, as discussed in the next section.
- We use a discount rate of 8% for Lower Tier 2, but believe this could be lower still given the protection just discussed.
- We value the bonds to the call.



- The points picked up on the first AXA bond are 9.75% but the return, if bought and held to the call, would be 18%.
 - The second bond's return is very similar to this given the prices and close call dates.
 - Even with a low coupon and a discount rate of 8%, the third (LT2) bond would provide a return of 7.1%. If the discount rate were 7%, the return would jump to 14.6%.
 - The 6.6862% would provide a return of 23% if bought at this level and held to the call (discounted at 9%).
 - The 6.463% would provide a return on investment of 26%, if held to the call date.
 - The 6.379% has its attraction, providing a yield above 9% for a period to the call in 2036. There are not many long dated bonds with this level of protection and while the return is no greater (given the discount rate and the current price) than this yield, it is nonetheless attractive to companies with long term liabilities, particularly when seen as a likely UT2 rather than a Tier 1 under most scenarios. The reason for this is explained below.
- share buybacks, it would have to be an operating loss.
 - According to rough calculations, AXA would need to produce a loss that would consume €6bn of pre-tax profit and €8bn of equity (which €8bn on a pre-tax basis is €11bn). This means an operating pre-tax loss of about €17bn.
 - Cancellation of a coupon therefore (Tier 1 feature), requires a loss of about €21bn and Mandatory deferral (UT2) requires an operating loss of €17bn-€18bn.
 - We consider this probability remote and that makes us view the Tier 1 bonds as Upper Tier 2.

Further adjustments required for junior bonds

- The difference between Lower Tier 2 (LT2) and Upper Tier 2 (UT2) subordinated bonds in insurance, is that while both have a coupon deferral option (never used), the former is dated and the latter undated. Any coupon deferred would be cumulative and in many cases compounding as well.
- The difference between Upper Tier 2 and Tier 1 in insurance, is that while they are both undated, the UT2 has a cumulative coupon deferral and the Tier 1 does as well - except in certain circumstances.
- We have reported this before, but would like to provide an update of the estimates required for an Upper Tier 2 to turn into a Tier 1.
- For AXA to cancel a coupon it would need to be technically insolvent (Solvency Event). AXA's capital is €38bn minimum and its requirements under the current legislation would be about €25bn, so there is a €13bn excess and €6bn in pre-tax profit. This means a pre-tax loss of €21bn. We see this erosion as extremely unlikely.
- For AXA to trigger a Mandatory Coupon deferral and this would be a deferral, not a cancellation, thus making it similar to an UT2 bond, it would need to break-even or produce a loss **and** see its Adjusted Equity Amount (AEA) **and** Adjusted Capital Amount (ACA), fall by 10% over a period of 2.5 years.
- Since the AEA and ACA do not include fx translation reserves and revaluation reserves, the loss has to come from dividends, share buybacks and operating losses.
- Since management would not effectively place the company in administration through dividends and



Appendix 1 – Selected financial measures for AXA Group

AXA								
In €bn	2005	2006	2007	2008	2009	2010	H1 11	Avg/CAGR
Scale								
Assets	576.6	727.6	723.2	673.6	708.6	731.9	705.7	3.7%
Technical Reserves	426.7	537.7	540.2	502.2	509.9	517.7	512.5	3.4%
Debt	11.5	16.5	18.1	21.0	16.4	16.6	16.2	6.4%
Reported Shareholders' Funds	36.0	43.1	41.7	34.2	43.7	47.7	43.1	3.3%
Tangible Shareholders' Funds	19.3	23.9	18.4	9.7	20.5	24.2	24.1	4.2%
Third-party AuM	569.0	689.0	659.0	416.0	418.0	461.0	438.0	
Net premiums	66.6	67.9	82.3	81.4	81.3	79.7	42.3	4.5%
P&C	18.9	18.8	25.5	26.5	26.6	26.1	15.9	9.9%
Life	44.0	47.9	56.8	54.9	54.7	53.6	26.4	3.4%
Re	3.7	1.2	0.0	0.0	0.0	0.0	0.0	-92.8%
Premium retention ratio	95.6%	93.9%	95.2%	95.8%	96.1%	96.4%	95.7%	95.5%
Profit								
Pre-tax profit	5.5	6.4	7.5	5.7	5.1	5.5	3.4	6.046
Net income	4.2	5.1	5.7	0.9	3.5	2.7	2.5	3.784
ROE	12.1%	13.3%	14.4%	2.7%	9.8%	6.6%	11.9%	10.1%
Pre-tax profit as a % of assets	1.03%	0.99%	1.04%	0.82%	0.74%	0.77%	0.95%	0.9%
Reserves								
Reserves as a % of NPW	190%	257%	202%	198%	182%	213%	174%	
Solvency								
Capital available (BNP Paribas)	28.0	36.6	31.7	22.9	33.0	37.3	38.0	5.7%
Capital required (BNP Paribas)	27.1	32.2	28.9	25.3	27.0	26.5	31.0	2.5%
Excess over required (EUR bn)	0.9	4.4	2.8	-2.4	6.1	10.9	7.0	
Solvency ratio	103%	114%	110%	91%	123%	141%	123%	114.8%
TSF	71%	74%	64%	38%	76%	91%	78%	70.3%
Perpetuals	13%	22%	25%	26%	23%	29%	24%	23.2%
Dated subordinated debt	19%	17%	21%	26%	24%	21%	21%	21.3%
Financial structure								
Tangible Shareholders' Funds	19.3	23.9	18.4	9.7	20.5	24.2	24.1	
Hybrids and perpetual subordinated	3.6	7.2	7.2	6.5	6.2	7.7	7.4	
Dated subordinated	5.1	5.6	6.1	6.7	6.4	5.5	6.5	
Senior debt	2.8	3.8	4.7	7.8	3.9	3.4	2.3	
Gearing								
Gearing on RSF	29%	28%	30%	38%	27%	26%	27%	29.3%
Gearing on TSF	37%	41%	50%	68%	44%	41%	40%	46.0%
Debt capacity based on earnings	11.2	13.0	14.4	13.0	13.3	14.4	15.5	13.5
Core financing debt outstanding	11.5	16.5	18.1	21.0	16.4	16.6	16.2	16.6
Subordinated debt outstanding	8.7	12.8	13.4	13.2	12.6	13.2	13.9	12.5
Growth								
Growth in premiums	3%	8%	23%	-1%	0%	-2%	-6%	3.4%
Growth in assets	14.4%	26.3%	-0.6%	-6.9%	5.2%	3.3%	-3.6%	5.5%
Growth in RSF	16.7%	9.6%	-3.2%	-17.9%	27.6%	9.0%	-9.6%	4.6%

Source: Company's annual and interim reports and accounts, BNP Paribas



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Type	Terminology	Horizon
Credit Trend (1)	Positive/ Stable/ Negative	6 months
Investment Recommendation (2)	Buy/ Add/ Hold/ Reduce/ Sell (*)	Up to 6 months

(1) Credit Trend is based on underlying Credit fundamentals, business environment and industry trends;

(2) Investment Recommendations are as follows:

(*) **BUY** – Maximise exposure based on improving financial profile and/or significant under-valuation.

ADD – Overweight exposure within industry sector/index, based on improving financial profile, and/or defensive characteristics and/or cheap valuation.

HOLD – Maintain position based on stable credit fundamentals and/or average expected return characteristics within peer group.

REDUCE – Underweight exposure within industry sector/index based on weakening financial profile, increased volatility and/or rich valuation.

SELL – Sell exposure/Maximise protection largely based on deteriorating credit fundamentals, negative headline/event risks and/or significant over-valuation.

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