



## Why we like AXA bonds

**Rafael Villarreal, European Credit Research**

+44(0)207595 8918

rafael.villarreal@uk.bnpparibas.com

- 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
<b>Scale</b>								
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%
<b>Profit</b>								
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%
<b>Reserves</b>								
Reserves as a % of NPW	190%	257%	202%	198%	182%	213%	174%	
<b>Solvency</b>								
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%
<b>Financial structure</b>								
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	
<b>Gearing</b>								
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
<b>Growth</b>								
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



## Contacts

**Robert McAdie**, Global Head of Fixed Income Markets Strategy and Research +44 20 7595 8885 robert.mcadie@uk.bnpparibas.com

## European Credit Research

**Olivia Frieser**, Head of Investment Grade Research +44 20 7595 8591 olivia.frieser@uk.bnpparibas.com

**Jean-Yves Guibert**, Head of High Yield and Leveraged Finance Research +44 20 7595 8308 jean-yves.guibert@uk.bnpparibas.com

**Henri Alexaline**, CFA, Senior Credit Analyst Industrials +44 20 7595 8869 henri.alexaline@uk.bnpparibas.com

**Cyril Benayoun**, Senior Credit Analyst HY Industrials: Airlines +44 20 7595 8642 cyril.benayoun@uk.bnpparibas.com

**Jean-Yves Coupin**, CFA, Senior Credit Analyst Consumer/Retail/Services +44 20 7595 8360 jean-yves.coupin@uk.bnpparibas.com

**Luba Fakhrutdinova**, Junior Credit Analyst Banks +44 20 7595 8082 luba.fakhrutdinova@uk.bnpparibas.com

**Heiko Langer**, Senior Credit Analyst Covered Bonds +44 20 7595 8569 heiko.langer@uk.bnpparibas.com

**Norbert Ling**, Graduate Consumer/Retail/Services +44 20 7595 8853 norbert.ling@uk.bnpparibas.com

**Hunter Martin**, CFA, Credit Analyst TMT +44 20 7595 8491 hunter.martin@uk.bnpparibas.com

**Timothy Rea**, Credit Analyst Autos, Aero & Def, Pharma +44 20 7595 8317 timothy.rea@uk.bnpparibas.com

**Phil Spencer**, CFA, Credit Analyst HY Industrials: Paper & Packaging, Chemicals, Manufacturing +44 20 7595 8810 philip.spencer@uk.bnpparibas.com

**Rafael Villarreal**, Senior Credit Analyst Insurance +44 20 7595 8918 rafael.villarreal@uk.bnpparibas.com

**Ivan Zubo**, Credit Analyst Banks +44 20 7595 1428 ivan.zubo@uk.bnpparibas.com

## European Credit Strategy

**Matthew Leeming**, Head of Quantitative & European Credit Strategy +44 20 7595 1230 matthew.leeming@uk.bnpparibas.com

**Pierre-Yves Bretonniere**, Senior Credit Strategist Relative Value & Quantitative Credit Strategy +44 20 7595 8973 pierre-yves.bretonniere@uk.bnpparibas.com

**Mehernosh Engineer**, Senior Credit Strategist Macro Credit Strategy +44 20 7595 8338 mehernosh.engineer@uk.bnpparibas.com

**Paola Lamedica**, Senior Credit Strategist Option & Structured Product Strategy +44 20 7595 8081 paola.lamedica@uk.bnpparibas.com

**Rajeev Shah**, Credit Strategist Macro & Relative Value Credit Strategy +44 20 7595 8175 rajeev.shah@uk.bnpparibas.com

**Greg Venizelos**, Senior Credit Strategist Macro & Relative Value Credit Strategy +44 20 7595 8296 greg.venizelos@uk.bnpparibas.com

## CEEMEA Local Markets Credit Research & Strategy

**Vivek Tawadey**, Head of CEEMEA Local Markets Credit Research & Strategy +44 20 7595 8894 vivek.tawadey@uk.bnpparibas.com

**Maxim Miller**, Credit Analyst CEEMEA Banks +44 20 7595 8894 maxim.miller@uk.bnpparibas.com

**Tatiana Tchambarova**, Credit Analyst CEE Corporates +33(0)1 42 98 68 30 tatiana.tchambarova@bnpparibas.com

## Production

**Barbara Hickling**, Editor/Research Assistant +44 20 7595 8599 barbara.hickling@uk.bnpparibas.com

**Patricia Ivory**, Deputy Editor/Research Assistant +44 20 7595 8260 patricia.ivory@uk.bnpparibas.com

## Desk Analysts – Non-Objective Research

**Giovanni Pini**, Head of ABS Strategy ABS Strategy +44 20 7595 1350 giovanni.pini@uk.bnpparibas.com

**Belle Yang**, Senior Sector Specialist - Credit Trading Special Situations +44 20 7595 8445 belle.yang@uk.bnpparibas.com



## Research Disclaimers: Recommendation System:

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.

### IMPORTANT DISCLOSURES: Please see important disclosures in the text of this report.

The information and opinions contained in this report have been obtained from, or are based on, public sources believed to be reliable, but no representation or warranty, express or implied, is made that such information is accurate, complete or up to date and it should not be relied upon as such. This report does not constitute a prospectus or other offering document or an offer or solicitation to buy or sell any securities or other investment. Information and opinions contained in the report are published for the assistance of recipients, but are not to be relied upon as authoritative or taken in substitution for the exercise of judgement by any recipient, are subject to change without notice and not intended to provide the sole basis of any evaluation of the instruments discussed herein. Any reference to past performance should not be taken as an indication of future performance. To the fullest extent permitted by law, no BNP Paribas group company accepts any liability whatsoever (including in negligence) for any direct or consequential loss arising from any use of or reliance on material contained in this report. All estimates and opinions included in this report are made as of the date of this report. Unless otherwise indicated in this report there is no intention to update this report. BNP Paribas SA and its affiliates (collectively "BNP Paribas") may make a market in, or may, as principal or agent, buy or sell securities of the issuers mentioned in this report or derivatives thereon. BNP Paribas may have a financial interest in the issuers mentioned in this report, including a long or short position in their securities and/or options, futures or other derivative instruments based thereon, or vice versa. BNP Paribas, including its officers and employees may serve or have served as an officer, director or in an advisory capacity for any issuer mentioned in this report. BNP Paribas may, from time to time, solicit, perform or have performed investment banking, underwriting or other services (including acting as adviser, manager, underwriter or lender) within the last 12 months for any issuer referred to in this report. BNP Paribas may be a party to an agreement with the issuer relating to the production of this report. BNP Paribas may, to the extent permitted by law, have acted upon or used the information contained herein, or the research or analysis on which it was based, before its publication. BNP Paribas may receive or intend to seek compensation for investment banking services in the next three months from or in relation to an issuer mentioned in this report. Any issuer mentioned in this report may have been provided with sections of this report prior to its publication in order to verify its factual accuracy. Information about conflicts of interest relevant to this report is available at the BNP Paribas Global Markets website at: <https://globalmarkets.bnpparibas.com/fiweb/ResearchPolicy.html>

BNP Paribas is incorporated in France with limited liability. Registered Office 16 Boulevard des Italiens, 75009 Paris. This report was produced by a BNP Paribas group company. This report is for the use of intended recipients and may not be reproduced (in whole or in part) or delivered or transmitted to any other person without the prior written consent of BNP Paribas. By accepting this document you agree to be bound by the foregoing limitations.

**Analyst Certification:** Each analyst responsible for the preparation of this report certifies that (i) all views expressed in this report accurately reflect the analyst's personal views about any and all of the issuers and securities named in this report, and (ii) no part of the analyst's compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed herein.

### Certain countries within the European Economic Area:

This report is solely prepared for professional clients. It is not intended for retail clients and should not be passed on to any such persons.

This report has been approved for publication in the United Kingdom by BNP Paribas London Branch. BNP Paribas London Branch is authorised and supervised by the Autorité de Contrôle Prudentiel and authorised and subject to limited regulation by the Financial Services Authority. Details about the extent of our authorisation and regulation by the Financial Services Authority are available on request.

This report has been approved for publication in France by BNP Paribas, a credit institution licensed as an investment services provider by the Autorité de Contrôle Prudentiel whose head office is 16, Boulevard des Italiens 75009 Paris, France.

This report is being distributed in Germany either by BNP Paribas London Branch or by BNP Paribas Niederlassung Frankfurt am Main, regulated by the Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin).

**United States:** This report is being distributed to US persons by BNP Paribas Securities Corp., or by a subsidiary or affiliate of BNP Paribas that is not registered as a US broker-dealer to US major institutional investors only. BNP Paribas Securities Corp., a subsidiary of BNP Paribas, is a broker-dealer registered with the Securities and Exchange Commission and a member of the Financial Industry Regulatory Authority and other principal exchanges. BNP Paribas Securities Corp. accepts responsibility for the content of a report prepared by another non-US affiliate only when distributed to US persons by BNP Paribas Securities Corp.

**Japan:** This report is being distributed to Japanese based firms by BNP Paribas Securities (Japan) Limited or by a subsidiary or affiliate of BNP Paribas not registered as a financial instruments firm in Japan, to certain financial institutions defined by article 17-3, item 1 of the Financial Instruments and Exchange Law Enforcement Order. BNP Paribas Securities (Japan) Limited is a financial instruments firm registered according to the Financial Instruments and Exchange Law of Japan and a member of the Japan Securities Dealers Association and the Financial Futures Association of Japan. BNP Paribas Securities (Japan) Limited accepts responsibility for the content of a report prepared by another non-Japan affiliate only when distributed to Japanese based firms by BNP Paribas Securities (Japan) Limited. Some of the foreign securities stated on this report are not disclosed according to the Financial Instruments and Exchange Law of Japan.

**Hong Kong:** This report is being distributed in Hong Kong by BNP Paribas Hong Kong Branch, a branch of BNP Paribas whose head office is in Paris, France. BNP Paribas Hong Kong Branch is regulated as a Registered Institution by Hong Kong Monetary Authority for the conduct of Advising on Securities [Regulated Activity Type 4] under the Securities and Futures Ordinance.

© BNP Paribas (2011). All rights reserved.