

AXA SA (AXAF.PA)

Test Your Own Assumptions With Our Interactive Model

- **We see greater upside than downside risks to our valuation view on AXA** — In this note we present a scenario analysis to test the impact of variability in some of the key drivers affecting AXA's valuation and earnings, such as investment returns and underwriting margins. Although we recognize the significant downside risks to our investment case, we believe AXA offers greater upside risks, with ~39% implied upside potential to our bull case valuation offsetting ~14% implied downside potential to our bear case valuation. Our bear case reflects a scenario of prolonged low yields, a drop in investment asset values and weaker-than-expected technical and underwriting margins. Our bull case assumes stronger investment margins and over-delivery of Ambition AXA targets.
- **Test your own assumptions through our [Interactive Modeling](#) tool** — You may have different opinions on what constitutes a bull or a bear case for AXA, therefore we invite you to test your own assumptions through our new [Interactive Model](#). This is a visual representation and scenario analysis tool for the key components of our AXA earnings model. The model offers the ability to modify multiple drivers across multiple periods and different business divisions and to calculate the impact on earnings and valuation. Scenarios can be combined and compared instantly with our own published view.
- **We continue to believe AXA can close the 'cost of equity' gap with peers** — Trading at 7x 2014e P/E, compared to composites at ~8x, we believe AXA suffers from an unwarranted cost of equity gap. This is due to its perceived greater balance sheet risk and earnings volatility. However, we believe AXA can close this gap over the next few years due to: 1) organic improvement in economic solvency and debt leverage; 2) an earnings trajectory towards the upper end of Ambition AXA targets, beating consensus expectations; 3) evidence of stable and attractive free cash generation, supporting attractive dividend yield and growth.
- AXA remains on the Citi Focus List Europe.

Buy	1
Price (02 Oct 13)	€17.04
Target price	€21.00
Expected share price return	23.2%
Expected dividend yield	4.7%
Expected total return	27.9%
Market Cap	€40,772M
	US\$55,362M

Price Performance

(RIC: AXAF.PA, BB: CS FP)



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AXA SA (AXAF.PA)



AXA SA (EUR)

Year to 31 Dec	2011A	2012A	2013E	2014E	2015E
Profit Before Tax (€M)	5,059.0	6,167.0	7,665.5	8,413.3	8,943.9
Diluted EPS (€)	1.75	1.64	2.05	2.43	2.58
Diluted EPS (Old) (€)	1.75	1.64	2.05	2.43	2.58
PE (x)	9.7	10.4	8.3	7.0	6.6
DPS (€)	0.69	0.72	0.78	0.91	1.02
Net Div Yield (%)	4.0	4.2	4.6	5.4	6.0
Embedded Value Per Share (€)	13.48	15.73	19.16	21.95	24.87
Price / EVPS (x)	1.3	1.1	0.9	0.8	0.7

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See Appendix A-1 for Analyst Certification, Important Disclosures and non-US research analyst disclosures.

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Fiscal year end 31-Dec	2011	2012	2013E	2014E	2015E
Valuation Ratios					
P/E adjusted (x)	9.7	10.4	8.3	7.0	6.6
P/E reported (x)	9.7	10.4	8.3	7.0	6.6
P/BV (x)	1.0	0.9	0.9	0.8	0.8
P/BV adjusted (x)	1.0	0.9	0.9	0.8	0.8
Dividend yield (%)	4.0	4.2	4.6	5.4	6.0
P/Embedded Value (x)	1.3	1.1	0.9	0.8	0.7
Per Share Data (€)					
EPS adjusted	1.75	1.64	2.05	2.43	2.58
EPS reported	1.75	1.64	2.05	2.43	2.58
BVPS	17.38	19.33	19.33	20.94	22.55
BVPS adjusted	17.38	19.33	19.33	20.94	22.55
DPS	0.69	0.72	0.78	0.91	1.02
Embedded Value per share	13.46	15.69	19.11	21.89	24.81
Profit & Loss (€M)					
Pre-tax profit	5,059	6,167	7,666	8,413	8,944
Tax	-1,248	-1,410	-1,783	-1,936	-2,069
Extraord./Min. int./Pref. div.	222	-896	-1,027	-696	-716
Reported net income	4,033	3,861	4,856	5,782	6,159
Adjusted earnings	4,033	3,861	4,856	5,782	6,159
Growth Rates (%)					
Pre-tax profit	-12.6	21.9	24.3	9.8	6.3
EPS adjusted	62.5	-6.1	24.6	18.6	6.1
Dividend	25.5	4.3	8.9	16.6	11.7
Balance Sheet (€M)					
Total assets	730,131	761,849	792,297	826,692	860,368
Investments	434,826	458,661	466,329	482,007	497,601
Goodwill/intangibles	21,301	20,817	20,244	20,065	19,886
Other Assets	139,774	135,209	142,206	148,544	154,751
Separate Account Assets	134,230	147,162	163,517	176,075	188,131
Total liabilities	679,200	705,830	735,817	765,796	794,997
Life policy reserves	341,512	342,378	347,631	359,677	371,541
Non-life policy reserves	42,108	43,406	44,167	45,454	46,778
Total Debt	10,421	10,662	10,612	10,612	10,612
Other Liabilities	150,929	162,222	169,890	173,979	177,935
Separate Account Liabilities	134,230	147,162	163,517	176,075	188,131
Shareholders' funds	50,933	56,019	56,480	60,895	65,372
Profitability/Solvency Ratios (%)					
ROE adjusted	9.8	8.9	10.5	12.0	11.7
ROA adjusted	0.6	0.5	0.6	0.7	0.7
Total debt to capital	17.0	16.0	15.8	14.8	14.0
Total debt to equity	20.5	19.0	18.8	17.4	16.2

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AXA – Scenario Analysis

AXA Interactive Model: Test Your Assumptions

In this note, we present our bear-base-bull scenario analysis for AXA

We believe AXA offers greater upside than downside risks

You may not agree, and you can test your own assumptions through our new [Interactive Modeling tool](#)

This allows you to vary the key assumption drivers in our model to test the effect on earnings and valuation

In this note, we present a scenario analysis of AXA's earnings and valuation prospects, based on a set of bear, base and bull case assumptions. AXA is one of the highest beta stocks in the European Insurance sector, and there remains considerable debate over its value, especially given its earnings sensitivity to investment markets, a perceived relative weakness in its balance sheet strength and the complex global nature of its business.

We try to explore this variability through the medium of a bear-base-bull analysis. This shows a fairly wide range of valuation outcomes for the stock; however, the important conclusion we draw from this work is that in the range of valuation outcomes, we believe AXA offers greater upside than downside risks. By this we mean that the share price appears to us to be pricing in earnings outcomes closer to our bear than our bull case.

You may not agree with this view, or you may have different assumptions for what constitutes a 'bear' or a 'bull' case. With this in mind, we invite you to test your own views through our new Interactive Model for AXA. This displays our key forecasts and valuation, and through a structure of 'branches' allows you to explore the different components of our earnings model.

By clicking through each of these branches you get to some of underlying key drivers and assumptions behind our earnings model, (e.g. life investment margins, P&C loss ratios). You can vary these drivers and view the impact on earnings and valuation – the valuation tool assumes that changes in earnings are reflected proportionally in valuation. The guide in the grey area below gives a more detailed guide to the Interactive Modeling tool and gives a specific example of the impact of varying the 'life technical margin'. Figures 1-4 show some screen snapshots of this example.

A Guide to our [Interactive Modeling Tool](#) for AXA

This model displays the key forecasts for AXA SA for a chosen period, and shows the key components in our model. Our headline forecasts (EPS, Target Price, Net Income) are shown on the left hand side of the model at the base of the chart, below the 'Period' selection drop down. The components of our model that produce these forecasts are shown in the chart branches, ordered by size. Each of these branches can be expanded into a second tier for further detail, and further selections within this second tier will display all the drivers behind our numbers (e.g. margins, assets, ratios). You can modify these drivers and the model will automatically calculate the effect and update the forecasts accordingly. By modifying drivers in different segments you can view the sensitivity of the AXA model to different input assumptions, and ultimately perform your own scenario analysis.

To modify a driver (example):

1. From the 'Period' drop down in the top left corner of the model, ensure 2014 is selected.
2. Next select *Life & Savings* to expand the underlying drivers; then select *Net Technical Margin*.
3. In the window, select *Net Technical Margin / Total Reserves (%)* to open the modifiable chart.
4. Click and drag the 2014 chart handle to modify the driver to 0.3% and see the outputs update.
5. The Target Price should change to €21.57
6. Try combining multiple scenarios to gauge their impact.

See Figures 1-4 for snapshots of this example.

Figure 1. The key earnings components in our interactive model
Click on 'Life & Savings' to move to the second tier of detail



Source: Citi Research estimates

Figure 3. Drivers of the 'net technical margin'
Click on 'net technical margin / total reserves (%)' to adjust this variable



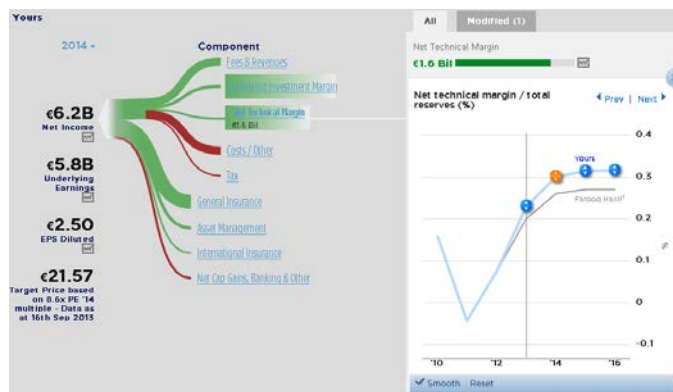
Source: Citi Research estimates

Figure 2. Breakdown of life & savings earnings
Click on 'net technical margin' to see the underlying drivers



Source: Citi Research estimates

Figure 4. Moving the technical margin to 30bps
The model updates earnings and valuation to reflect your adjustments



Source: Citi Research estimates

Our Scenario Analysis

Our scenario analysis suggests ~14% downside potential to our bear case and ~39% upside potential to our bull case from AXA's current share price

The key drivers in our bear-base-bull view are...

Life investment margins, affected by uncertainty over the effects of low yields...

AXA is one of our Most Preferred names in the European Insurance Sector and remains on the Citi Focus List Europe. As we have discussed, we recognize the high degree of uncertainty in some of the macro and company-specific factors affecting AXA's fundamentals – especially the influence of asset returns. Nevertheless, we believe our bear-base-bull analysis suggests that the market is taking an overly negative view of these factors, and that AXA offers an attractive valuation risk-reward. At the current price, there is ~14% implied downside potential to our bear case as opposed to ~39% upside potential to our bull case – see Figure 5.

Our scenario analysis varies some of the key assumptions in our model to represent reasonable downside and upside earnings scenarios for AXA. As we stated earlier, this is an exercise investors can repeat for themselves with their own assumptions, using our [Interactive Model](#). The key variables in our analysis are as follows:

- **Life insurance investment margins:** AXA has a target range of 70-80bps (on general account reserves) over the medium term; however, there is some uncertainty over the downside risks to this target in a prolonged low yield environment. Our bull case assumes AXA reaches the upper end of this target range (80bps); our bear case assumes that margins fall below the target range to 65bps.

Life technical margins, affected by mortality experience and the VA business...

■ **Life technical margin.** This variable is driven by two factors: 1) reserving and hedging experience in the US variable annuities business, and 2) mortality and life 'underwriting' profits across the Group. It is our view that AXA is likely to see a significant improvement in both of these factors in the next 2-3 years, helping to lift technical margins. In our bear case, we assume a technical margin of 10bps, which is close to the level in 2012, and implies no improvement. In our bull case we assume the technical margin rises to 30bps, similar to pre-crisis levels.

The P&C combined ratio; we assume AXA beats its 2015 target of 96% in our base case...

■ **P&C combined ratio.** A better-than-expected combined ratio performance is one of the key drivers of our base case view that AXA can beat earnings estimates. Our base case estimate for 2014e is a combined ratio of 95.6% – we assume that this falls to 95% by 2015e, helped by a lower expense margin. In our scenario analysis, we look at symmetrical upside and downside scenarios to this by 1.5ppts subtracted from / added to the P&C combined ratio.

P&C investment returns....

■ **P&C investment return.** Rather like the life investment margin, we look at a bear and bull scenario for investment returns in the P&C business, assuming a symmetrical 50bps subtracted from / added to our base case assumption for 2014e of a ~3.3% investment return. Our bear case is below the level of P&C investment return reported by the Group over the past decade and implies a scenario of prolonged low yields, whereas our bull case models yields rising back to levels experienced pre-2009.

...and the impact of a negative market scenario leading to lower realized gains

■ **Realised gains.** Although realized gains are not part of AXA's underlying earnings, we vary realized capital gains in our scenario analysis to reflect the impact of market risk. In our bear case we assume realized gains fall by €250mn, reflecting a negative market scenario of falling equity and fixed income prices. In our bull case we do not uplift our central realized gains estimate of €550mn.

We show the output of our bear-base-bull analysis in Figure 5, which illustrates our view of AXA's positive risk-reward, i.e. greater upside than downside risk. In Figures 6-7 we show the key stepping stones in our bull-bear modeling for AXA's valuation and 2014e earnings.

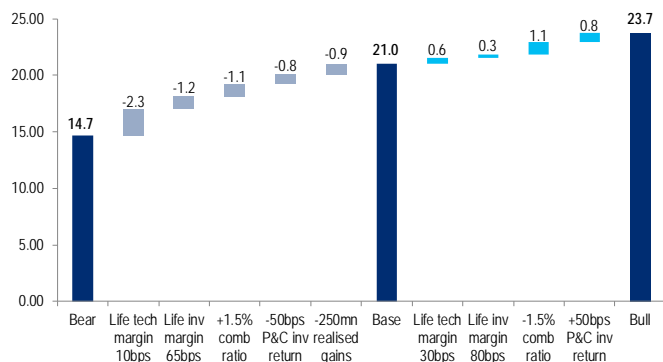
Figure 5. Bull, base and bear case valuations for AXA compared with the current share price

Our scenario analysis suggests greater upside than downside risks, with ~39% upside potential to our bull case and ~14% downside potential to our bear case



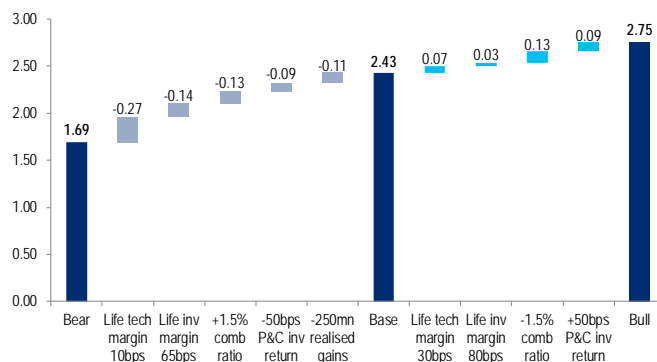
Source: Factset, Citi Research estimates

Figure 6. Our bull-base-bear valuations



Source: Citi Research estimates

Figure 7. Our bull-base-bear 2014e EPS



Source: Citi Research estimates

Figure 8. Our bear-base-bull assumptions

Drivers	Assumptions 2014e		
	Bear	Base	Bull
Life - technical margin (bps)	10	26	30
Life - investment margin (bps)	65	77	80
P&C - CoR	97.1%	95.6%	94.1%
P&C - loss ratio	72.8%	71.3%	69.8%
P&C - investment return	2.78%	3.28%	3.78%
Realized gains in €mn	300	550	550

Source: Citi Research estimates

We believe the market is applying an unwarranted high COE to AXA

Based on our risk-reward view, despite its strong relative performance over the year, we believe the market continues to apply an unjustifiably high 'cost of equity' to AXA. After strong FY12 and 1H13 results, we believe further restructuring and earnings catalysts over the next 18 months to 2 years will support the share price. In particular, we would highlight:

We expect AXA to improve balance sheet strength organically, closing the gap with peers

■ **Further closing the 'balance sheet gap' with peers.** As we illustrate in Figure 9, we expect AXA to reach reasonable capital and leverage buffers organically over the next few years, such as a ~200% Solvency 2 ratio (adjusted to include the US business under a Solvency 2 regime) and a debt leverage ratio of ~35%. These represent reasonable buffers, in our view, and we believe downside capital risks at AXA are starting to become remote.

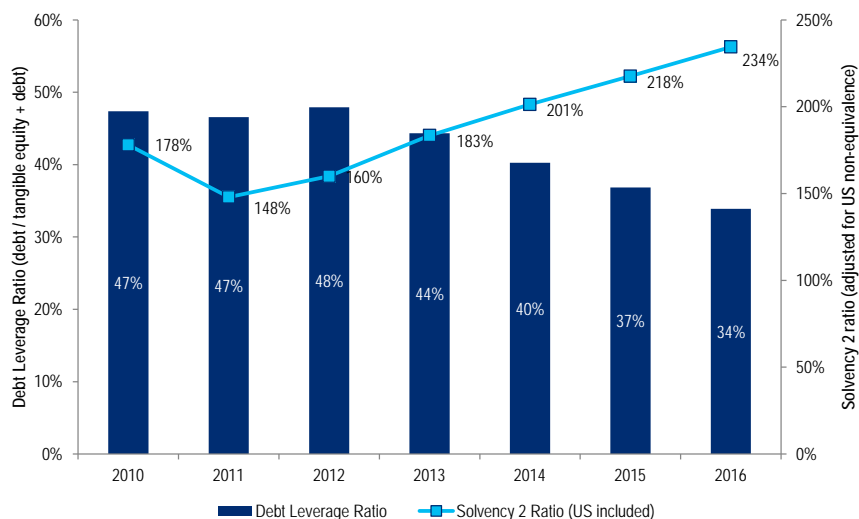
Our earnings estimates beyond 2014e are above consensus

■ **Further positive earnings momentum.** Our earnings estimates are above consensus from 2014e onwards, pricing in a view that AXA is on a trajectory towards the upper end of its 5-10% underlying earnings CAGR Ambition AXA target (2010-15). The main drivers behind this include the P&C combined ratio coming through stronger than target (at ~95% by 2015e, compared with a target of ~96%), stability in life investment margins, further improvements in US variable annuity experience and continued positive net inflows in asset management. Much of the earnings improvement will be supported by further cost restructuring, with ~€0.8bn of cost-saving measures to be implemented from 1H13 (out of a total target of €1.7bn between 2010 and 2015). We believe AXA has executed strongly on its Ambition AXA restructuring plans so far, and we expect this to continue with the supportive backdrop of a more positive macroeconomic outlook.

We also believe AXA produces attractive free cash flow

■ **Free cash flow generation.** A key aspect of our positive view is AXA's relatively high level of free cash flow generation. We forecast a 'holding company free cash flow yield' of ~9% compared to ~7% for the European Insurance sector. This definition only counts free cash flow remitted to the group holding company and ignores surplus cash generation that is retained in operating subsidiaries (e.g. for regulatory or business reasons). We believe this can support an attractive dividend policy, with a 2014e dividend yield of ~5%.

Figure 9. Solvency 2 capital ratio and debt leverage forecasts



Source: Company data, Citi Research estimates (2013-16)

AXA SA

Company description

AXA's principal activity is the provision of insurance and related financial services. The company operates through four divisions: life insurance, non life insurance, asset management and other financial services. The group operates globally under a holding company structure.

Investment strategy

We rate AXA Buy based on: 1) its large valuation discount to the sector and its composite peer group and our view that this is not warranted by its relative capital position of balance sheet quality. 2) Its relatively high free cash flow and dividend potential. 3) Potential earnings upside from restructuring initiatives - we particularly expect better profitability improvements in its general insurance business to offset market-related pressures in life & savings.

Valuation

We value AXA at €21 per share, using a sum-of-the-parts valuation methodology. This takes estimates of sustainable returns on capital for each business division and applies appropriate multiples to 2013e allocated capital.

We value the life business at 0.8x EV, consistent with an 8% ROEV. We value the non-life insurance business at 1.6x capital, consistent with an 19% ROC. We value the asset management business at 12x P/E, consistent with the 10-13x range applied to peers. We deduct double leverage and group debt at 1x value.

Risks

The following risks might impede the share price from reaching our target price: 1) Continued volatility in investment markets, which could be exacerbated by the group's higher than average leverage; 2) A material further sharp downward shift in global bond yields impacting investment returns and impacting traditional life and US VA business; 3) Higher corporate bond defaults than would be anticipated in current spreads; 4) Finally, the earnings story is dependent on achieving the targets set on the June 1st 2011 investor day. If the impact of these risk factors is less negative than we currently anticipate, then the share price could exceed our target price.

Appendix A-1

Analyst Certification

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AXA SA (AXAF.PA)

Ratings and Target Price History

Fundamental Research

Analyst: Farooq Hanif

Covered since January 24 2013



	Date	Rating	Target Price	Closing Price
1	16-Dec-10	2H	*13.50	12.73
2	2-Mar-11	2H	*14.50	14.71
3	20-Jun-11	2H	*15.00	15.00
4	6-Oct-11	2H	*11.20	10.50

* Indicates change

	Date	Rating	Target Price	Closing Price
5	7-Oct-11	Stock rating system changed		
6	13-Oct-11	2H	*13.00	11.00
7	6-Feb-13	*1	*17.00	13.04
8	5-Jun-13	1	*18.50	15.41

	Date	Rating	Target Price	Closing Price
9	9-Aug-13	1	*20.00	17.40
10	16-Sep-13	1	*21.00	18.00

Rating/target price changes above reflect Eastern Standard Time

AXA SA (AXAF.PA)

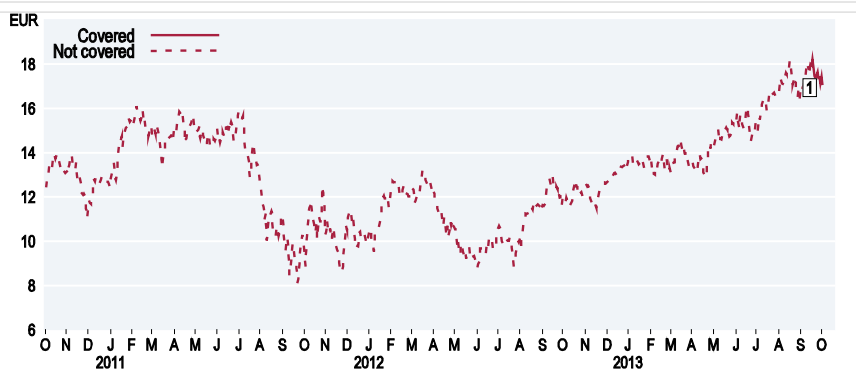
Ratings and Target Price History

Best Ideas Research

Relative Call (3 Month)

Analyst: Farooq Hanif

Covered since January 24 2013



	Date	Rating	Target Price	Closing Price
1	13-Sep-13	*ADD MP	-	17.77

* Indicates change

Rating/target price changes above reflect Eastern Standard Time

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<i>Data current as of 30 Sep 2013</i>	12 Month Rating			Relative Rating		
	Buy	Hold	Sell	Buy	Hold	Sell
Citi Research Global Fundamental Coverage	48%	40%	12%	6%	87%	6%
<i>% of companies in each rating category that are investment banking clients</i>	55%	50%	43%	64%	51%	48%

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