

28 March 2014 | 24 pages

Airlines
Western Europe | Germany

Lufthansa (LHAG.DE)

Deep Valuation Highlighted by Depreciation Change; 2 Catalysts

- **Earnings forecasts updated for new depreciation policy** — Lufthansa's recent decision to change its aircraft depreciation policy to airline industry standards will boost reported operating profit by c.€340-350m p.a. and EPS by c.€0.55-0.57 p.a. Our underlying forecasts and assumptions are largely unchanged, apart from c.€15-20m p.a. better financial result due to more associate income and lower net debt.
- **Dividend policy likely to be changed due to new depreciation policy but still likely to be generous** — We estimate that Lufthansa's previous dividend payout policy of 30-40% of operating profit would be equivalent to a 20-30% payout given its new depreciation policy. We estimate DPS can grow from €0.45 in 2013 to €1.20 by 2016 (CAGR of 39% and dividend yield increasing from 2.4% to 6.4% at the current share price). Lufthansa is currently the only flag carrier to pay a dividend.
- **Two major catalysts related to 'SCORE' restructuring** — The 'SCORE' restructuring programme would appear to be on track. We believe there are two main catalysts that could increase the stock market's buy-in to Lufthansa's 2015 operating profit target and therefore the share price: (i) communication and implementation of outstanding 'SCORE' initiatives (c.€880 out of €3bn gross total); and (ii) achieving a satisfactory labour agreement with Lufthansa's pilots' union
- **Lufthansa is the best value of the European flag carriers** — Even though Lufthansa's share price has out-performed YTD, this only partially makes up for under-performance in 2013. One of the most important benefits of the new depreciation policy is that it makes Lufthansa's operating profit and EPS more comparable with its peers. Lufthansa's P/E multiples are the lowest among European flag carriers: e.g. 2015E P/E of 5.1x vs. 7.7x for Air France-KLM and 8.0x for IAG. Our target price of €26.50 per share is unchanged, based on a 25% discount to our SOTP value of €35 per share. Implied target P/Es for Lufthansa is the lowest among its peers – e.g. 2015E implied target P/E of 7.2x vs. 8.1x for Air France-KLM and 10.6x for IAG – suggesting further re-rating potential. We estimate BVPS could increase by c.€8.75 from €13.13 to €21.88 as of end 2013 under the new depreciation policy, which would imply a P/BVPS ratio of 0.86x currently compared to 1.43x under the previous depreciation policy and sector avg of 1.7x.

Lufthansa (EUR)

Year to 31 Dec	2012A	2013A	2014E	2015E	2016E
Sales (€M)	30,135.0	30,028.0	31,043.9	32,199.1	33,405.4
Net Income (€M)	331.1	603.5	1,355.9	1,688.1	1,945.6
Diluted EPS (€)	0.72	1.31	2.94	3.66	4.22
Diluted EPS (Old) (€)	0.72	1.20	2.35	3.05	3.58
PE (x)	25.9	14.3	6.4	5.1	4.4
EV/EBITDA (x)	6.2	7.3	6.1	4.6	3.8
DPS (€)	0.00	0.45	0.70	1.00	1.20
Net Div Yield (%)	0.0	2.4	3.7	5.3	6.4

Estimate Change

Buy	1
Price (27 Mar 14)	€18.74
Target price	€26.50
Expected share price return	41.4%
Expected dividend yield	2.4%
Expected total return	43.8%
Market Cap	€8,638M
	US\$11,906M

Price Performance (RIC: LHAG.DE, BB: LHA GR)



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

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LHAG.DE: Fiscal year end 31-Dec						Price: €18.74; TP: €26.50; Market Cap: €8,641m; Recomm: Buy					
Profit & Loss (€m)	2012	2013	2014E	2015E	2016E	Valuation ratios	2012	2013	2014E	2015E	2016E
Sales revenue	30,135	30,028	31,044	32,199	33,405	PE (x)	25.9	14.3	6.4	5.1	4.4
Cost of sales	-32,396	-31,372	-31,315	-31,807	-32,630	PB (x)	1.0	1.4	0.8	0.7	0.6
Gross profit	-2,261	-1,344	-272	392	776	EV/EBITDA (x)	6.2	7.3	6.1	4.6	3.8
Gross Margin (%)	-7.5	-4.5	-0.9	1.2	2.3	FCF yield (%)	7.1	5.4	-4.7	17.1	19.1
EBITDA (Adj)	2,363	2,463	3,045	3,742	4,147	Dividend yield (%)	0	2.4	3.7	5.3	6.4
EBITDA Margin (Adj) (%)	7.8	8.2	9.8	11.6	12.4	Payout ratio (%)	0	34	24	27	28
Depreciation	-1,754	-1,681	-1,311	-1,344	-1,365	ROE (%)	10.3	-0.4	8.4	13.1	15.1
Amortisation	-85	-84	-84	-84	-84	Cashflow (€m)	2012	2013	2014E	2015E	2016E
EBIT (Adj)	524	698	1,650	2,314	2,698	EBITDA	2,363	2,463	3,045	3,742	4,147
EBIT Margin (Adj) (%)	1.7	2.3	5.3	7.2	8.1	Working capital	226	292	-66	30	84
Net interest	-318	-346	-346	-322	-267	Other	-347	-633	-721	-537	-523
Associates	94	125	140	169	188	Operating cashflow	2,242	2,122	2,258	3,235	3,709
Non-op/Except	579	-276	-344	-74	36	Capex	-2,412	-2,538	-2,900	-2,000	-2,300
Pre-tax profit	879	201	1,100	2,087	2,655	Net acq/disposals	684	789	147	146	145
Tax	-72	-219	-370	-549	-664	Other	92	90	93	95	98
Extraord./Min.Int./Pref.div.	23	-13	-12	-15	-18	Investing cashflow	-1,636	-1,659	-2,660	-1,758	-2,056
Reported net profit	830	-31	718	1,523	1,973	Dividends paid	-131	-14	-207	-323	-461
Net Margin (%)	2.8	-0.1	2.3	4.7	5.9	Financing cashflow	202	-1,078	-37	-1,575	-1,644
Core NPAT	331	604	1,356	1,688	1,946	Net change in cash	808	-615	-439	-98	8
Per share data	2012	2013	2014E	2015E	2016E	Free cashflow to s/holders	606	463	-402	1,477	1,652
Reported EPS (€)	1.81	-0.07	1.56	3.30	4.28	Segmental Costs (€ mn)	2012	2013	2014E	2015E	2016E
Core EPS (€)	0.72	1.31	2.94	3.66	4.22	Personnel Expenses	6,892	7,005	7,118	7,220	7,361
DPS (€)	0	0.45	0.70	1.00	1.20	YoY growth (%)	3.2	1.6	1.6	1.4	2.0
CFPS (€)	4.89	4.61	4.90	7.02	8.04	Fuel Expenses	7,392	7,058	6,843	6,977	7,279
FCFPS (€)	1.32	1.01	-0.87	3.20	3.58	YoY growth (%)	17.8	-4.5	-3.1	2.0	4.3
BVPS (€)	17.97	13.16	23.82	26.67	29.94	Purchased Services	7,829	7,726	8,060	8,410	8,750
Wtd avg ord shares (m)	458	460	461	461	461	YoY growth (%)	0.9	-1.3	4.3	4.3	4.0
Wtd avg diluted shares (m)	458	460	461	461	461	Ownership Costs	2,627	2,546	2,174	2,207	2,229
Growth rates	2012	2013	2014E	2015E	2016E	YoY growth (%)	4.1	-3.1	-14.6	1.5	1.0
Sales revenue (%)	4.9	-0.4	3.4	3.7	3.7	Selling/Distribution/IT	1,061	1,041	1,012	1,022	1,044
EBIT (Adj) (%)	-36.1	33.2	136.4	40.2	16.6	YoY growth (%)	-2.3	-1.9	-2.7	1.0	2.2
Core NPAT (%)	-23.9	82.3	124.7	24.5	15.3	Other Operating Costs	5,648	5,499	5,629	5,762	5,866
Core EPS (%)	-23.9	81.1	124.2	24.5	15.3	YoY growth (%)	-5.3	-2.6	2.4	2.4	1.8
Balance Sheet (€m)	2012	2013	2014E	2015E	2016E	Operating Data	2012	2013	2014E	2015E	2016E
Cash & cash equiv.	4,966	4,696	4,637	4,649	4,657	Passenger (mn)	103.0	105.4	110.2	126.4	145.6
Accounts receivables	4,045	4,255	4,257	4,396	4,541	RPK (mn)	204,802	209,650	221,108	231,180	239,585
Inventory	639	641	624	638	648	ASK (mn)	259,858	262,685	274,430	285,408	293,970
Net fixed & other tangibles	14,914	16,032	21,348	21,779	22,506	Load Factor (%)	78.8	79.8	80.6	81.0	81.5
Goodwill & intangibles	1,568	1,569	1,568	1,518	1,467	Yield per RPK (€)	11.2	10.9	10.7	10.7	10.7
Financial & other assets	2,287	1,891	1,953	1,978	1,986	Unit Revenue per ASK (€)	8.8	8.7	8.6	8.6	8.7
Total assets	28,419	29,084	34,386	34,957	35,805	Unit Op. Costs per ASK (€)	12.2	11.9	11.4	11.1	11.1
Accounts payable	4,222	4,490	4,489	4,560	4,678	Unit Op. Costs per ASK (ex-	9.3	9.2	8.9	8.7	8.6
Short-term debt	972	1,570	572	1,172	672	Gearing Ratio's	2012	2013	2014E	2015E	2016E
Long-term debt	5,928	4,803	6,971	5,694	5,586	Gearing (Net Debt/Net Debt +	19.0	21.7	20.9	15.3	10.4
Provisions & other liab	8,999	12,113	11,304	11,157	10,965	Lease Adj. Gearing (%)	37.4	53.6	39.6	32.6	25.6
Total liabilities	20,121	22,976	23,337	22,583	21,901	EBITDAR/ (Net Interest +	4.1	4.4	5.4	6.9	8.5
Shareholders' equity	8,238	6,056	10,985	12,295	13,806	EBITDA/Net Interest	15.4	12.6	19.5	22.3	30.0
Minority interests	60	52	64	79	97	EBIT/Net Interest	1.6	2.0	4.8	7.2	10.1
Total equity	8,298	6,108	11,049	12,374	13,903						
Net debt	1,934	1,677	2,907	2,217	1,601						
Net debt to equity (%)	23.3	27.5	26.3	17.9	11.5						

For definitions of the items in this table, please click [here](#).

Deep Valuation Highlighted by Depreciation Change; 2 Catalysts

Earnings Model Updated for New Depreciation Policy

Lufthansa's recent decision to change its aircraft depreciation policy to airline industry standards will boost reported operating profit by c.€340-350m p.a. and EPS by c.€0.55-0.57 p.a.

We are changing our earnings model to account for Lufthansa's recently announced change in aircraft depreciation policy. In order to conform to the depreciation policies of other airlines, Lufthansa has changed:

- Aircraft useful life: from 12 years to 20 years (compared to a typical aircraft life of 25 years);
- Residual value: from 15% to 5%;
- Effective aircraft depreciation rate: from 7.1% to 4.75% p.a.

The effects are to reduce the annual depreciation charge by €340m in 2014 and €350m in 2015, to boost operating profit and pre-tax profit by the same amount and to boost net income by c.€255-260m p.a. (and EPS by c.€0.55-0.57 p.a.).

We are increasing our estimates accordingly, mainly for the changed depreciation policy, with some minor other adjustments (e.g. slightly lower finance cost) following 2013 results. Our underlying forecasts and assumptions are largely unchanged

Following 2013 results, our underlying forecasts are generally unchanged but we are raising earnings estimates to reflect the new depreciation policy:

- 2014E: we raise operating profit (excluding project and restructuring costs) to €2.03bn (6.5% margin) compared to €1.68bn before (€347m higher) and 48% higher than our estimate of €1.37bn (4.6% margin) for 2013, adjusted for its new depreciation policy. Our operating profit forecast is slightly above Lufthansa's recent guidance of €1.7-1.9bn but not materially so. Our pre-exceptional EPS forecast is raised from €2.35 to €2.94 for the same reason and would be c.60% higher than 2013 on an adjusted basis.
- 2015E: we raise operating profit (excluding project and restructuring costs) to €2.42bn (7.5% margin) compared to €2.06bn before (€363m higher) and 48% higher than our estimate for 2014E. Our operating profit forecast of €2.42bn is €230m lower than Lufthansa's own adjusted target of €2.65bn, reflecting the fact that there are still execution risks to its 'SCORE' restructuring programme (e.g. outstanding pilot union negotiations and not all initiatives have been announced and implemented so far). Our pre-exceptional EPS forecast is raised from €3.05 to €3.66, 24% higher than our estimate for 2014E.
- 2016E: we raise operating profit (excluding project and restructuring costs) to €2.70bn (8.1% margin) compared to €2.32bn before (€374m higher) and 11% higher than our estimate for 2015E. Implicitly, we continue to expect that Lufthansa should be able to achieve in full its SCORE restructuring benefits by 2016. Our pre-exceptional EPS forecast is raised from €3.58 to €4.22, 15% higher than our estimate for 2014E.

Our 2014 operating profit forecast is slightly above Lufthansa's recent guidance and our 2015 figure is c.€230m below its target, reflecting some execution risk. Nevertheless, we continue to expect Lufthansa to achieve its operating profit target by 2016

Besides the newly changed depreciation policy, the only other change we are making is a slightly lower financial cost (by c.€15-20m p.a.) due to slightly higher associate income (as was the case in the reported 2013 results) and lower net debt at the end of 2013 than we had expected (€1.677bn vs. €2.64bn expected).

Our detailed financial model, including forecasts by division and airline, can be found later in this note.

The main benefit of the new depreciation policy is easier comparability with other airlines at the operating profit and net income levels

The main benefit of the new depreciation policy, in our view, is that it makes Lufthansa's net income and, therefore, P/E and P/BVPS ratios more comparable to that of its peers, especially Air France-KLM and IAG. We estimate that Lufthansa's P/E has always been 1-2 points higher than peers because of its overly conservative depreciation policy.

The main risk of the new policy is that it is less conservative and could lead to impairment charges and losses on asset disposal. Impairment charges would be minimised if Lufthansa intends to keep its aircraft for the full 20-25 year useful life. Despite its prior conservative depreciation policy, Lufthansa had incurred quite considerable impairment charges but we believe this was a lot to do with declines in market values of some of its unpopular aircraft types – e.g. A340-300s and CRJ-200s.

Dividend Policy Expected to Change but Still Generous

We estimate that Lufthansa's previous dividend payout policy of 30-40% of operating profit would be equivalent to a 20-30% payout given its new depreciation policy

Under its previous depreciation policy, Lufthansa's dividend policy was to pay out 30-40% of reported operating profit, as long as the amount was covered by the net income of the parent company, Deutsche Lufthansa AG. Its pay out of €0.45 per share in respect of 2013 equated to c.30% of reported operating profit (which included one-off costs, restructuring and project costs).

Lufthansa has not yet decided what its new policy will be now that operating profit is being inflated by c.€340-350m p.a. due to less depreciation. This may not be known until a year from now when it reports 2014 results.

We are modeling a payout ratio from 2014 of 20% of reported operating profit. We estimate that, had 2013 operating profit been adjusted for c.€300m lower depreciation under the new policy, DPS of €0.45 (€206m total) would have equated to c. 20% of adjusted operating profit (c.€1.03bn).

Assuming a 20% payout of operating profit, we estimate Lufthansa can grow DPS from €0.45 in 2013 to €1.20 by 2016 (CAGR of 39% and dividend yield increasing from 2.4% to 6.4% at the current share price)

Our new DPS forecasts are as follows based on 20% of reported operating profit:

- 2014E: €0.70 per share (c.55% higher than in 2013 and equivalent to a yield of c.3.7% at the current share price);
- 2015E: €1.00 per share (c.40% higher than our estimate for 2014 and equivalent to a yield of c.5.3% at the current share price);
- 2016E: €1.20 per share (20% higher than our estimate for 2015 and equivalent to a yield of c.6.4% at the current share price).

Excluding one-off restructuring and project costs, we estimate that a 20% pay out policy from operating profit would be equivalent to c.25-27% of clean net income. This is reasonable and comparable to other airlines that pay dividend (e.g. Air France-KLM prior to incurring losses). It would also be similar to the 25% payout ratio that we use for IAG, assuming it starts paying dividend again from 2014.

Figure 1. Lufthansa – Sum-of-the-Parts Valuation (€ millions)

	€ mln	Target EV/Sales	Target EV/EBITDA	Target EV/EBITDAR	Target P/E
Lufthansa's Passenger Airlines	14,094 4.6x EV/EBITDAR 2015E - European airline average	0.6	4.7	4.6	8.2
Lufthansa Cargo (Logistics)	844 4.6x EV/EBITDAR 2015E - European airline average	0.3	4.8	4.6	5.7
Lufthansa Technik (MRO)	4,507 9.1x EV/EBITDA 2015E -European aerospace average	1.0	9.1	9.1	11.7
LSG Sky Chefs (Catering)	1,019 5.0x EV/EBITDA 2015E - Gategroup	0.4	5.2	5.2	8.8
Lufthansa Systems (IT Services)	727 9.5x EV/EBITDA 2015E - Accenture	1.0	9.5	9.5	26.2
Lufthansa Flight Training (LFT)	172 P/E of 10x mid-cycle net income - airline average	1.0	7.5	7.5	8.8
Air Plus	370 P/E of 13x mid-cycle net income - credit card average	1.1	9.8	9.8	11.4
Less: Central Costs Valuation	(529) 4.6x EV/EBITDAR 2015E				
Enterprise Value of core units	21,202		5.5	5.4	9.6
jetBlue (15.85% stake)	288 46.7m shares x current share price	\$8.45			
Other Equity Investments Excluding Brussels Airlines and jetBlue	191 As of end 2013				
Equity Investments Accounted Using the Equity Method	458 As of end 2013				
Group Enterprise Valuation	22,139				
deduct expected year end net debt	(2,217) 2015E Year End				
deduct capitalised leases	(577) 2015E Year End				
deduct minority interests	(79) 2015E Year End				
deduct: expected year end pension provision and deficit	(3,143) 2015E Year End				
Sum of the parts equity valuation	16,123				
No. outstanding shares (mln)	461.1				
SOTP value per share	34.97				
Current Share price	18.74				
Current share price/SOTP valuation	0.54				

Source: Company Reports and Citi Research Estimates

Deep Valuation – Target Price of €26.50 Unchanged

Our target price of €26.50 per share is unchanged, based on a 25% discount to our SOTP value of €35 per share

Our target valuation, which is largely based on EV/EBITDA(R), is unaffected by the change in depreciation policy. We continue to derive an SOTP value of €35 based on 2014 comparable multiples applied to our 2015E EBITDA(R) estimates by division (see Figure 1). We continue to apply a 25% discount to obtain our one year target price of €26.50, reflecting the improbability of Lufthansa realising its SOTP value via disposals or listings.

Now that Lufthansa has adopted the same depreciation of most other airlines, it is more comparable in P/E terms. We estimate that our SOTP value of €35 per share is equivalent to a P/E of 9.6x applied to our 2015E pre-exceptional EPS estimate of €3.66. This would be close to the P/E of 10x that we generally use for valuing flag carrier airlines. Given our 25% discount to SOTP to get a target price of €26.50, our effective target P/E is 7.2x, a 25% discount to 9.6x. We believe this is a very conservative valuation.

Implied target P/Es for Lufthansa is the lowest among its peers – e.g. 2015E implied target P/E of 7.2x vs. 8.1x for Air France-KLM and 10.6x for IAG

Based on our pre-exceptional EPS estimates, our implicit target P/E for Lufthansa is the lowest of the three main European flag carriers:

- Lufthansa: our target price of €26.50 is equivalent to a P/E of 9.0x based on 2014E EPS and 7.2x based on 2015E;
- Air France-KLM: our target price of €11.10 (€8.52 excluding the value of its Amadeus stake, whose contribution does not appear on Air France-KLM's income statement) is equivalent to a P/E of 13.3x for 2014E and 8.1x for 2015E;
- IAG: our target price of €7.00 (€6.60 excluding the value of its Amadeus stake) is equivalent to a P/E of 16.6x for 2014E and 10.6x for 2015E.

Lufthansa's P/E multiples are the lowest among European flag carriers: e.g. 2015E P/E of 5.1x vs. 7.7x for Air France-KLM and 8.0x for IAG

We estimate BVPS could increase by €8.75 from €13.13 to €21.88 as of end 2013 under the new depreciation policy, which would imply a P/BVPS ratio of 0.86x currently compared to 1.43x under the previous depreciation policy

The 'SCORE' restructuring programme would appear to be on track

We believe there are two main catalysts that could increase the stock market's buy-in to Lufthansa's 2015 target and therefore the share price: (i) communication and implementation of outstanding 'SCORE' initiatives; and (ii) achieving a satisfactory labour agreement with Lufthansa's pilots' union

€880m of 'SCORE' initiatives have yet to be announced or implemented. We expect many more announcements this year

Similarly, Lufthansa is trading on the lowest P/E multiples based on our earnings forecasts:

- Lufthansa: at the current share price of €18.74 it is trading on a 2014E P/E of 6.4x and on a 2015E P/E of 5.1x;
- Air France-KLM: at the current share price of €10.67 (€8.09 excluding its Amadeus stake) it is trading on a 2014E P/E of 12.6x and on a 2015E P/E of 7.7x;
- IAG: at the current share price of €5.00 (€4.60 excluding its stake in Amadeus) it is trading on a 2014E P/E of 12.6x and on a 2015E P/E of 8.0x.

Lufthansa should also look more reasonable on the basis of P/BVPS under the new depreciation policy. We estimate that BVPS could be c.€8.75 higher than €13.13 as of end 2013 under the old depreciation policy. We estimate this based on adjusting Lufthansa's aircraft and engine accumulated depreciation of €12.2bn at the end of 2013 by the ratio of the effective depreciation rates of the new and the old depreciation policies (4.75% for the new policy and 7.1% for the old policy). We have made estimated adjustments to our balance sheet (fixed assets and shareholders' equity) for the change to the depreciation policy from 2014. At the current share price of €18.74, we estimate Lufthansa's P/BVPS ratio to be 0.86x as of end 2013 compared to 1.43x under the old policy and compared to a sector average of 1.7x.

'SCORE' Restructuring – Two Major Catalysts

We assess that the 'SCORE' restructuring programme is on track. A further €2.07bn of measures will be implemented in 2014 and 2015 on top of €926m in 2013 and an overall gross total of €3bn.

We believe there are two main catalysts that could boost the share price and the market's buy-in to management's operating profit target of €2.65bn for 2015:

1. Communication and implementation of outstanding 'SCORE' initiatives that are currently in 'idea status' but have not yet been announced or implemented;
2. Achieving a satisfactory labour agreement with Lufthansa's pilots' union, the last main labour group not to have agreed to higher productivity so far.

Unlike for IAG and Air France-KLM, consensus estimates for 2015 imply that the stock market has not yet bought into Lufthansa's 2015 operating profit target. Reuters is showing a consensus operating profit of €2.1bn. Consensus may be distorted, however, by definitional issues around the treatment of project costs, restructuring costs and other one-off items. Nevertheless, it is clear that estimates are a long way short of Lufthansa's target. At €2.42bn, we are c.€230m lower than the target, primarily because of uncertainty over 'SCORE' initiatives not yet launched and the outstanding labour agreement with Lufthansa's pilots.

1) Communication and implementation of outstanding 'SCORE' initiatives

Based on Lufthansa's results presentation, we estimate c.€880m of measures that have not yet been announced, including IT infrastructure outsourcing, ancillary revenue (e.g. baggage fees), MRO set-up at Austrian Airlines and call centres. These latter initiatives could contribute c.€300m. Creation of a separate business unit for 'Miles & More' should help too in boosting revenue.

Lufthansa has been negotiating with its pilots' union for almost 2 years, without success and it is not clear that they will succeed given very entrenched positions on both sides. We believe a strike is very likely

2) Attaining a satisfactory labour agreement with Lufthansa's pilots' union

Lufthansa is adamant that pilots will have to deliver a 5% unit labour cost reduction, just as the cabin and ground staff unions have already agreed. We estimate this could amount to annual savings of at least c.€50m p.a. There are three areas of contention:

- (i) Wage agreement (pilots want +5% p.a., Lufthansa wants a 5% unit cost reduction, including higher productivity, lower pay scales and more seasonal flexibility);
- (ii) 'Transition payments' in lieu of salary to pilots who retire before the normal retirement age of 65 (Lufthansa wants to end this practice, especially for new recruits and younger pilots who are far away from retirement);
- (iii) Lufthansa's termination of all of its defined benefit pension plans in 2013.

The main pilots' union, Vereinigung Cockpit (VC), has a 97% vote mandate from its members to strike. A strike is likely, in our opinion, for which VC must give 48 hours' notice, and could cost up to €20m per day if all pilots' strike.

Lufthansa Financial Model

Figure 2. Lufthansa – Profit and Loss Account, 2005-2016E (€ millions)

REVENUE	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014E	2015E	2016E
Passenger	11,542	12,925	15,367	17,730	16,225	20,233	21,544	22,855	22,838	23,718	24,668	25,693
Cargo	2,739	2,830	2,718	2,882	1,928	2,770	2,917	2,662	2,418	2,442	2,500	2,581
Maintenance & Engineering	1,819	2,047	2,185	2,216	2,297	2,373	2,305	2,429	2,598	2,718	2,800	2,856
Catering	1,708	1,776	1,869	1,763	1,589	1,716	1,738	1,933	1,909	1,893	1,949	1,988
Systems	257	271	281	279	244	232	230	256	265	273	281	287
TOTAL REVENUE	18,065	19,849	22,420	24,870	22,283	27,324	28,734	30,135	30,028	31,044	32,199	33,405
% Change	6.5%	9.9%	13.0%	10.9%	(10.4)%	22.6%	5.2%	4.9%	(0.4)%	3.4%	3.7%	3.7%
Profit on sale of fixed assets	331	74	19	(71)	46	261	(20)	747	29	0	0	0
Other miscellaneous operating income	1,214	1,325	1,552	2,040	2,485	2,394	2,344	2,038	2,013	1,922	1,922	1,922
OTHER OPERATING INCOME	1,545	1,399	1,571	1,969	2,531	2,655	2,324	2,785	2,042	1,922	1,922	1,922
OPERATING EXPENSES												
Changes in stocks and own work capitalised	127	152	119	178	225	165	139	113	158	158	158	158
Fuel	(2,662)	(3,355)	(3,860)	(5,377)	(3,645)	(5,158)	(6,276)	(7,392)	(7,058)	(6,843)	(6,977)	(7,279)
Other Materials Expenses	(1,929)	(2,187)	(2,408)	(2,414)	(2,402)	(2,571)	(2,559)	(2,612)	(2,652)	(2,712)	(2,773)	(2,818)
Purchased Services	(4,274)	(4,610)	(5,085)	(5,636)	(6,315)	(7,395)	(7,760)	(7,829)	(7,726)	(8,060)	(8,410)	(8,750)
Wages and Salaries	(3,912)	(4,007)	(4,468)	(4,685)	(4,909)	(5,444)	(5,380)	(5,575)	(5,528)	(5,617)	(5,697)	(5,809)
Social Security and Pension Costs	(941)	(1,022)	(1,030)	(1,007)	(1,087)	(1,215)	(1,298)	(1,317)	(1,477)	(1,501)	(1,522)	(1,552)
Restructuring Charges & Project Costs								(160)	(345)	(380)	(110)	0
Depreciation	(1,046)	(1,002)	(1,099)	(1,229)	(1,409)	(1,592)	(1,631)	(1,754)	(1,681)	(1,311)	(1,344)	(1,365)
Amortisation of Intangibles	(52)	(49)	(105)	(60)	(66)	(90)	(91)	(85)	(84)	(84)	(84)	(84)
Goodwill Amortisation/Impairment	(300)	0	0	0	0	0	0	0	0	0	0	0
Aircraft Leases	(142)	(150)	(200)	(280)	(281)	(246)	(136)	(113)	(74)	(72)	(72)	(72)
Selling Costs	(875)	(895)	(933)	(925)	(748)	(822)	(742)	(713)	(694)	(654)	(652)	(664)
Other operating expenses	(2,885)	(3,045)	(3,336)	(4,021)	(3,849)	(4,371)	(4,551)	(4,172)	(4,059)	(4,140)	(4,224)	(4,293)
Total Operating Expenses	(18,891)	(20,170)	(22,405)	(25,456)	(24,486)	(28,739)	(30,285)	(31,609)	(31,220)	(31,215)	(31,707)	(32,530)
RESULT FROM OPERATING ACTIVITIES	719	1,078	1,586	1,383	328	1,240	773	1,311	850	1,750	2,414	2,798
Less: Net Book Gains From Disposal of Assets	(149)	(34)	(18)	29	19	61	32	33	23	0	0	0
Less: Net Book Gains From Disposal of Holdings	(182)	(40)	(1)	42	(65)	(322)	(12)	(780)	(52)	0	0	0
Less: Other Non-periodic items	189	(159)	(189)	(100)	(95)	(103)	27	(40)	(123)	(100)	(100)	(100)
OPERATING RESULT	577	845	1,378	1,354	187	876	820	524	698	1,650	2,314	2,698
Operating Margin	3.2%	4.3%	6.1%	5.4%	0.8%	3.2%	2.9%	1.7%	2.3%	5.3%	7.2%	8.1%
OPERATING RESULT EXCLUDING RESTRUCTURING/PROJECT CHARGES	577	845	1,378	1,354	187	876	820	684	1,043	2,030	2,424	2,698
Operating Margin	3.2%	4.3%	6.1%	5.4%	0.8%	3.2%	2.9%	2.3%	3.5%	6.5%	7.5%	8.1%
Income from subsidiaries and associated companies	156	305	354	20	58	104	71	94	125	140	169	188
Extraordinary Income from subsidiaries and associates	291	0	0	(113)	(140)	0	0	0	0	0	0	0
Net Interest	(248)	(254)	(194)	(172)	(325)	(357)	(288)	(318)	(346)	(346)	(322)	(267)
Write-down of investments classified as current assets	(43)	(84)	(133)	(314)	(93)	(9)	(110)	(48)	(83)	(64)	(64)	(64)
Financial Result	156	(33)	27	(579)	(500)	(262)	(327)	(272)	(304)	(270)	(217)	(143)
REPORTED RESULT FROM ORDINARY ACTIVITIES	875	1,045	1,613	804	(172)	978	446	1039	546	1,480	2,197	2,655
MEMO: CIR ORDINARY RESULT	485	896	1,538	1,202	(80)	623	603	460	822	1,824	2,271	2,619
TAXATION-ACTUAL	(25)	(164)	(118)	(109)	(35)	(221)	(72)	(104)	(264)	(370)	(549)	(664)
DEFERRED TAXATION	(238)	(66)	(238)	(86)	164	386	(85)	32	45	0	0	0
Effective Tax Rate	30.1%	22.0%	22.1%	24.3%	75.0%	(16.9)%	35.2%	6.9%	40.1%	25.0%	25.0%	25.0%
NET PROFIT FOR THE YEAR	612	815	1,257	609	(43)	1143	289	967	327	1,110	1,647	1,991
Profit from Discontinued Operations		82	503	0	0	0	(285)	36	0	0	0	0
Minorities	(159)	(94)	(105)	(10)	(12)	(12)	(17)	(13)	(13)	(12)	(15)	(18)
NET INCOME	453	803	1,655	599	(55)	1,131	(13)	990	314	1,098	1,633	1,973
DIVIDEND	(229)	(321)	(572)	(321)	0	(275)	(114)	0	(207)	(323)	(461)	(553)
TRANSFER TO RETAINED EARNINGS	224	482	1,083	278	(55)	856	(127)	990	107	775	1,172	1,419
Earnings Per Share(€)												
EPS- Pre-exceptionals, Pre-Goodwill Amortisation	0.68	1.23	2.13	1.95	(0.16)	0.99	0.95	0.72	1.31	2.94	3.66	4.22
EPS Growth	368.0%	81.3%	73.9%	(8.6)%	(108.1)%	(732.2)%	(4.4)%	(23.8)%	81.1%	124.2%	24.5%	15.3%
EPS - Pre-exceptional (Fully-diluted)	0.66	1.22	2.12	1.94	(0.16)	0.99	0.95	0.72	1.31	2.94	3.66	4.22
EPS- Total	0.99	1.75	3.61	1.31	(0.12)	2.47	(0.03)	2.16	0.68	2.38	3.54	4.28
EPS - Total (Fully-diluted)	0.95	1.75	3.60	1.30	(0.12)	2.47	(0.03)	2.16	0.68	2.38	3.54	4.28
Weighted Average Number of Shares(m)	457.8	457.8	457.9	457.9	457.9	457.9	457.9	458.4	460.2	461.1	461.1	461.1
Fully-Diluted Number of Shares (m)	492.3	460.4	460.4	460.4	460.4	458.3	458.2	458.4	460.2	461.1	461.1	461.1
Dividend per Share (€)	0.50	0.70	1.25	0.70	0.00	0.60	0.25	0.00	0.45	0.70	1.00	1.20

Source: Company Reports and Citi Research Estimates

Figure 3. Lufthansa – Quarterly Profit and Loss Account, 2012-2014E (€ millions)

Quarter Ending	Mar	Jun	Sep	Dec	Full Year 2012	Mar	Jun	Sep	Dec	Full Year 2013	MarE	JunE	SepE	DecE	Full Year 2014E
Total Turnover															
Passenger	5,040	6,183	6,628	5,708	23,559	5,069	6,164	6,659	5,621	23,513	5,077	6,445	6,989	5,908	24,418
Cargo	662	690	653	683	2,688	599	619	583	641	2,442	606	625	589	647	2,466
Maintenance & Engineering	1,026	990	986	1,011	4,013	994	1,046	1,069	1,071	4,180	1,074	1,083	1,106	1,108	4,371
Catering	568	635	694	606	2,503	569	640	680	625	2,514	550	635	699	642	2,525
Systems	146	155	147	161	609	150	154	168	168	640	162	167	173	173	675
Consolidation Adjustment	(823)	(763)	(796)	(855)	(3,237)	(753)	(787)	(855)	(866)	(3,261)	(789)	(829)	(892)	(903)	(3,412)
Net Turnover	6,619	7,890	8,312	7,314	30,135	6,628	7,836	8,304	7,260	30,028	6,680	8,124	8,664	7,575	31,044
Annual Growth (%)	2.8%	3.5%	2.9%	10.9%	4.9%	0.1%	(0.7)%	(0.1)%	(0.7)%	(0.4)%	0.8%	3.7%	4.3%	4.3%	3.4%
Passenger Revenue	4,607	5,727	6,194	5,238	21,766	4,646	5,728	6,208	5,161	21,743	4,653	5,989	6,516	5,421	22,579
Cargo Revenue	633	661	629	654	2,577	580	602	567	626	2,375	587	608	572	629	2,396
Traffic Revenue	5,240	6,388	6,823	5,892	24,343	5,226	6,330	6,775	5,787	24,118	5,240	6,597	7,088	6,050	24,975
Other Revenue	1,379	1,502	1,489	1,422	5,792	1,402	1,506	1,529	1,473	5,910	1,440	1,528	1,576	1,525	6,069
Net Turnover	6,619	7,890	8,312	7,314	30,135	6,628	7,836	8,304	7,260	30,028	6,680	8,124	8,664	7,575	31,044
Other Operating Income	516	453	477	1,339	2,785	541	446	456	599	2,042	418	508	542	455	1,922
Total Operating Revenue	7,135	8,343	8,789	8,653	32,920	7,169	8,282	8,760	7,859	32,070	7,098	8,632	9,206	8,030	32,966
Fuel	(1,624)	(1,941)	(2,002)	(1,825)	(7,392)	(1,660)	(1,815)	(1,931)	(1,652)	(7,058)	(1,500)	(1,787)	(1,867)	(1,689)	(6,843)
Fees and Charges	(1,200)	(1,332)	(1,388)	(1,247)	(5,167)	(1,174)	(1,334)	(1,406)	(1,240)	(5,154)	(1,215)	(1,411)	(1,491)	(1,313)	(5,430)
Other Materials Expenses	(1,301)	(1,285)	(1,376)	(1,312)	(5,274)	(1,234)	(1,277)	(1,400)	(1,229)	(5,140)	(1,237)	(1,308)	(1,438)	(1,272)	(5,256)
Personnel Expenses	(1,734)	(1,665)	(1,708)	(1,785)	(6,892)	(1,740)	(1,814)	(1,731)	(1,720)	(7,005)	(1,739)	(1,853)	(1,773)	(1,754)	(7,118)
Restructuring Charges & Project Costs	0	0	0	(160)	(160)	(64)	(7)	(127)	(147)	(345)	(95)	(95)	(95)	(95)	(380)
Depreciation & Amortisation	(463)	(432)	(450)	(494)	(1,839)	(490)	(441)	(493)	(342)	(1,766)	(335)	(343)	(352)	(364)	(1,395)
Other Operating Expenses	(1,192)	(1,358)	(1,176)	(1,159)	(4,885)	(1,271)	(1,131)	(1,089)	(1,262)	(4,753)	(1,199)	(1,199)	(1,199)	(1,199)	(4,794)
Total Operating Expenses	(7,514)	(8,013)	(8,100)	(7,982)	(31,609)	(7,633)	(7,819)	(8,177)	(7,592)	(31,221)	(7,319)	(7,996)	(8,215)	(7,685)	(31,215)
REPORTED RESULT FROM OPERATING ACTIVITIES	(379)	330	689	671	1,311	(464)	463	583	267	849	(221)	636	991	345	1,750
Less: Total Non-Periodic Items	(2)	31	(41)	(775)	(787)	105	(32)	6	(231)	(152)	(25)	(25)	(25)	(25)	(100)
Operating Profit	(381)	361	648	(104)	524	(359)	431	589	36	697	(246)	611	966	320	1,650
Operating Margin	-5.8%	4.6%	7.8%	-1.4%	1.7%	-5.4%	5.5%	7.1%	0.5%	2.3%	-3.7%	7.5%	11.1%	4.2%	5.3%
Operating Profit Excluding Restructuring/Project Charges	(381)	361	648	56	684	(295)	438	716	183	1,042	(151)	706	1,061	415	2,030
Operating Margin	-5.8%	4.6%	7.8%	0.8%	2.3%	-4.5%	5.6%	8.6%	2.5%	3.5%	-2.3%	8.7%	12.2%	5.5%	6.5%
Ordinary Income from subsidiaries & associates	(23)	54	46	17	94	(4)	37	69	23	125	(5)	43	76	26	140
Extraordinary Income from subsidiaries & associates	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Net Interest	(83)	(78)	(80)	(77)	(318)	(83)	(79)	(95)	(89)	(346)	(87)	(87)	(87)	(87)	(346)
Write-Down of Current Assets	(16)	(132)	128	(28)	(48)	(29)	(82)	42	(14)	(83)	0	0	0	(64)	(64)
Financial Result	(122)	(156)	94	(88)	(272)	(116)	(124)	16	(80)	(304)	(91)	(44)	(11)	(124)	(270)
Reported Profit on ordinary activities before tax	(501)	174	783	583	1,039	(580)	339	599	187	545	(312)	592	980	221	1,480
CIR Ordinary Result Before Tax	(487)	337	614	(4)	460	(382)	396	690	117	821	(242)	662	1,050	355	1,824
Extraordinary Items	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pre-Tax Profit	(501)	174	783	583	1,039	(580)	339	599	187	545	(312)	592	980	221	1,480
Taxation	105	25	(138)	(64)	(72)	125	(81)	(144)	(119)	(219)	78	(148)	(245)	(55)	(370)
Profit from Discontinued Operations	2	34	0	0	36	0	0	0	0	0	0	0	0	0	0
Minorities	(3)	(4)	(3)	(3)	(13)	(4)	(3)	(4)	(2)	(13)	(5)	(4)	(4)	1	(12)
Net Result	(397)	229	642	516	990	(459)	255	451	66	313	(239)	440	731	166	1,098

Source: Company Reports and Citi Research Estimates

Figure 4. Lufthansa – Balance Sheet, 2005-2016E (€ millions)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014E	2015E	2016E
ASSETS												
Net Intangible Fixed Assets	162	172	455	487	1,240	1,306	962	953	953	952	902	851
Goodwill	591	589	594	595	599	605	613	615	616	616	616	616
Aircraft	7,262	7,405	8,380	8,764	10,444	11,153	11,592	11,838	12,354	17,656	18,198	19,035
Other Tangible Assets	1,448	1,505	1,773	1,931	2,157	2,120	2,118	2,081	2,058	2,043	1,902	1,762
Net Investments & Financial Assets	1,988	1,963	1,892	1,920	1,993	2,509	2,275	2,158	1,800	1,862	1,887	1,895
Long-Term Securities	176	553	298	509	349	250	134	19	20	20	20	20
Deferred Tax Assets	188	242	98	100	104	143	93	96	661	661	661	661
Repairable Aircraft Spare Parts	503	540	586	669	810	877	840	899	959	988	1,017	1,048
Total Fixed Assets (Net)	12,318	12,969	14,076	14,975	17,696	18,963	18,627	18,659	19,421	24,797	25,203	25,888
Total Fixed Assets (Gross)	23,267	23,995	25,976	27,315	30,792	32,796	33,287	33,527	33,912	35,222	35,631	36,341
Stocks	439	457	511	581	646	662	620	639	641	624	638	648
Accounts Receivable and Other Assets	2,844	3,105	4,101	3,477	3,518	4,129	4,150	4,045	4,255	4,257	4,396	4,541
Assets Held for Sale	73	392	25	97	93	186	686	110	71	71	71	71
Securities	2,425	2,083	1,528	1,834	3,303	4,283	3,111	3,530	3,146	3,146	3,146	3,146
Cash	1,173	455	2,079	1,444	1,136	1,097	887	1,436	1,550	1,491	1,503	1,511
Total Current Assets	6,954	6,492	8,244	7,433	8,696	10,357	9,454	9,760	9,663	9,589	9,754	9,917
TOTAL ASSETS	19,272	19,461	22,320	22,408	26,392	29,320	28,081	28,419	29,084	34,386	34,957	35,805
LIABILITIES AND SHAREHOLDERS' EQUITY												
Shareholders' Funds	4,332	4,623	6,845	6,856	6,094	8,242	7,949	8,238	6,056	10,985	12,295	13,806
Minority Interests	190	280	55	63	108	98	95	60	52	64	79	97
Shareholders' Equity	4,522	4,903	6,900	6,919	6,202	8,340	8,044	8,298	6,108	11,049	12,374	13,903
Pension Provisions	4,022	3,814	2,461	2,400	2,710	2,571	2,165	2,076	4,718	3,718	3,143	2,568
Deferred Tax Provision	614	633	749	813	663	405	364	242	146	153	161	169
Other Long-Term Provisions	413	329	361	291	620	643	578	586	581	581	581	581
Deferred Income	104	63	66	64	1,000	1,087	1,156	1,163	1,187	1,187	1,187	1,187
Long-term Debt	2,363	2,730	3,098	3,161	6,109	6,227	5,808	5,947	4,823	6,991	5,714	5,606
Other Long-term Liabilities	286	301	426	169	312	221	183	348	574	839	1,146	1,401
Total Long-Term Liabilities	7,802	7,870	7,161	6,898	11,414	11,154	10,254	10,362	12,029	13,469	11,933	11,512
Short-Term Provisions	1,984	2,558	3,232	3,566	3,028	3,270	3,177	3,523	3,496	3,415	3,528	3,648
Short-Term Debt	1,242	241	271	478	751	980	632	972	1,570	572	1,172	672
Creditors	3,365	3,353	3,935	3,568	3,738	4,170	4,211	4,222	4,490	4,489	4,560	4,678
Deferred Income	87	104	289	388	1,008	1,066	939	933	961	961	961	961
Other Liabilities	270	432	532	591	251	340	108	109	430	430	430	430
Liabilities Related to Assets Held for Sale	0	0	0	0	0	0	716	0	0	0	0	0
Total Current Liabilities	6,948	6,688	8,259	8,591	8,776	9,826	9,783	9,759	10,947	9,868	10,651	10,390
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	19,272	19,461	22,320	22,408	26,392	29,320	28,081	28,419	29,084	34,386	34,957	35,805

Source: Company Reports and Citi Research Estimates

Figure 5. Lufthansa – Cash Flow Statement, 2005-2016E (€ millions)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014E	2015E	2016E
Operating Result	577	845	1,378	1,354	187	876	820	524	698	1,650	2,314	2,698
<i>Operating Margin</i>	3.2%	4.3%	6.1%	5.4%	0.8%	3.2%	2.9%	1.7%	2.3%	5.3%	7.2%	8.1%
Depreciation & Amortisation	1,094	1,051	1,204	1,289	1,475	1,682	1,722	1,839	1,765	1,395	1,428	1,449
EBITDA	1,671	1,896	2,582	2,643	1,662	2,558	2,542	2,363	2,463	3,045	3,742	4,147
<i>EBITDA Margin</i>	9.2%	9.6%	11.5%	10.6%	7.5%	9.4%	8.8%	7.8%	8.2%	9.8%	11.6%	12.4%
Memo: Notional Pension Interest	(200)	(176)	(154)	(119)	(183)	(182)	(147)	(136)	(190)	(190)	(154)	(128)
Memo: Lease Rentals	142	150	200	280	281	246	136	113	74	72	72	72
Memo: EBITDAR	1,613	1,870	2,628	2,804	1,760	2,622	2,531	2,340	2,347	2,927	3,660	4,091
<i>Memo: EBITDAR Margin</i>	8.9%	9.4%	11.7%	11.3%	7.9%	9.6%	8.8%	7.8%	7.8%	9.4%	11.4%	12.2%
Net Interest	(53)	(63)	(29)	(36)	(67)	(137)	(113)	(153)	(196)	(156)	(168)	(138)
Taxation	(65)	(123)	(274)	(123)	48	(110)	(265)	(34)	(92)	(185)	(259)	(384)
Decrease (Increase) in Working Capital	(51)	64	875	398	(131)	440	(194)	226	292	(66)	30	84
CASH FLOW FROM OPERATIONS	1,502	1,774	3,154	2,882	1,512	2,751	1,970	2,402	2,467	2,638	3,345	3,709
Dividends Received	75	106	153	71	74	74	118	92	90	93	95	98
Capital Spending	(1,738)	(1,657)	(1,771)	(2,161)	(2,437)	(2,309)	(2,469)	(2,412)	(2,538)	(2,900)	(2,000)	(2,300)
Disposals/Other	598	525	770	(318)	(65)	290	474	684	789	147	146	145
FREE CASH FLOW	437	748	2,306	475	(916)	806	93	766	808	(22)	1,587	1,652
Dividends Paid	(137)	(232)	(325)	(580)	(333)	(18)	(296)	(131)	(14)	(207)	(323)	(461)
Equity Issued	0	0	0	0	0	0	0	0	0	0	0	0
Net Debt from acquisitions/pension transfer	(562)	(565)	(1,565)	(283)	(971)	(293)	(528)	(261)	(537)	(1,000)	(575)	(575)
NET CASH SURPLUS (REQUIREMENT)	(262)	(49)	416	(388)	(2,220)	495	(731)	374	257	(1,230)	689	616
Closing Net Debt (Cash)	(169)	(120)	(536)	(148)	2,072	1,577	2,308	1,934	1,677	2,907	2,217	1,601

Source: Company Reports and Citi Research Estimates

Figure 6. Lufthansa – Financial Statistics, 2005-2016E

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014E	2015E	2016E
Returns												
Return on Book Equity-Average(%)	10.9%	17.9%	28.9%	8.7%	(0.8)%	15.8%	(0.2)%	12.2%	4.4%	12.9%	14.0%	15.1%
Return on Capital Employed-Average(%)	6.3%	8.3%	10.5%	6.9%	1.7%	5.1%	4.1%	3.2%	3.9%	7.2%	8.8%	10.0%
Leverage												
Balance Sheet Net Debt/(Net Debt + Equity) %	(4.1)%	(2.7)%	(8.5)%	(2.2)%	25.4%	16.1%	22.5%	19.0%	21.7%	20.9%	15.3%	10.4%
Overall Net Debt/(Net Debt + Equity) %	53.7%	51.4%	34.0%	39.6%	53.6%	42.6%	41.2%	37.4%	53.6%	39.6%	32.6%	25.6%
Off Balance Sheet Value/Fleet Value(%)												
EBITDA/Net Interest	31.5	30.1	89.0	73.4	24.8	18.7	22.5	15.4	12.6	19.5	22.3	30.0
EBITDAR/(Net Interest + Aircraft Rentals)	2.9	3.3	4.9	4.5	2.5	3.5	4.4	4.1	4.4	5.4	6.9	8.5

Source: Company Reports and Citi Research Estimates

Figure 7. Lufthansa – Operating Statistics, 2005-2016E

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014E	2015E	2016E
Passenger Operations												
RPKs (millions)	108,185	110,330	130,848	154,110	160,335	191,051	207,560	204,802	209,650	221,108	231,180	239,585
Annual Growth	4.0%	2.0%	18.6%	17.8%	4.0%	19.2%	8.6%	(1.3)%	2.4%	5.5%	4.6%	3.6%
ASKs (millions)	144,182	146,719	169,151	195,397	206,194	241,372	268,936	259,858	262,685	274,430	285,408	293,970
Annual Growth	2.5%	1.8%	15.3%	15.5%	5.5%	17.1%	11.4%	(3.4)%	1.1%	4.5%	4.0%	3.0%
Passenger Load Factor	75.0%	75.2%	77.4%	78.9%	77.8%	79.2%	77.2%	78.8%	79.8%	80.6%	81.0%	81.5%
Passenger Yield Per RPK(cents)	10.7	11.7	11.7	11.5	10.1	10.6	10.4	11.2	10.9	10.7	10.7	10.7
Annual Change	3.4%	9.8%	0.2%	(2.0)%	(12.0)%	4.7%	(2.0)%	7.5%	(2.4)%	(1.5)%	(0.5)%	0.5%
Passenger Revenue Per ASK(cents)	8.0	8.8	9.1	9.1	7.9	8.4	8.0	8.8	8.7	8.6	8.6	8.7
Annual Change	4.9%	10.0%	3.1%	(0.1)%	(13.3)%	6.5%	(4.4)%	9.8%	(1.1)%	(0.6)%	0.0%	1.1%
Cargo Operations												
Freight RTKs (millions)	7,829	8,103	9,030	9,555	8,680	10,479	10,921	10,202	10,279	10,539	10,845	11,140
Annual Growth	(1.7)%	3.5%	11.4%	5.8%	(9.2)%	20.7%	4.2%	(6.6)%	0.8%	2.5%	2.9%	2.7%
Freight ATKs (millions)	12,038	11,969	13,397	15,141	14,359	15,420	16,377	15,249	14,898	15,081	15,382	15,690
Annual Growth	1.3%	(0.6)%	11.9%	13.0%	(5.2)%	7.4%	6.2%	(6.9)%	(2.3)%	1.2%	2.0%	2.0%
Freight Load Factor	65.0%	67.7%	67.4%	63.1%	60.4%	68.0%	66.7%	66.9%	69.0%	69.9%	70.5%	71.0%
Freight Yield Per RTK(cents)	35.2	35.1	30.3	30.4	22.5	26.7	26.9	26.3	23.8	23.4	23.3	23.4
Annual Change	13.3%	(0.1)%	(13.7)%	0.4%	(26.1)%	18.7%	1.0%	(2.2)%	(9.8)%	(1.5)%	(0.5)%	0.5%
Freight Revenue Per ATK(cents)	22.8	23.6	20.3	19.0	13.4	18.0	17.8	17.5	16.2	16.2	16.3	16.5
Annual Change	10.1%	3.9%	(14.2)%	(6.2)%	(29.5)%	33.8%	(0.8)%	(2.0)%	(7.0)%	(0.2)%	0.4%	1.2%
Total Group Operations												
Total RTKs (millions)	18,658	19,147	22,127	24,981	24,729	29,603	31,697	30,702	31,264	32,671	33,985	35,122
Annual Growth	1.5%	2.6%	15.6%	12.9%	(1.0)%	19.7%	7.1%	(3.1)%	1.8%	4.5%	4.0%	3.3%
Total ATKs (millions)	26,284	26,465	30,110	34,447	34,732	39,268	42,949	40,924	40,852	42,195	43,582	44,735
Annual Growth	2.0%	0.7%	13.8%	14.4%	0.8%	13.1%	9.4%	(4.7)%	(0.2)%	3.3%	3.3%	2.6%
Overall Load Factor	71.0%	72.3%	73.5%	72.5%	71.2%	75.4%	73.8%	75.0%	76.5%	77.4%	78.0%	78.5%
Overall Traffic Yield Per RTK(cents)	76.5	82.3	81.7	82.5	73.4	77.7	77.2	83.1	80.8	80.1	79.9	80.5
Annual Change	6.7%	7.5%	(0.7)%	1.0%	(11.0)%	5.9%	(0.7)%	7.7%	(2.8)%	(0.9)%	(0.2)%	0.7%
Overall Operating Cost Per ATK(cents)	51.6	55.5	54.8	55.8	51.3	55.4	55.2	59.1	59.7	57.8	56.8	56.9
Annual Change	8.7%	7.5%	(1.2)%	1.9%	(8.1)%	8.0%	(0.5)%	7.2%	1.0%	(3.2)%	(1.8)%	0.3%
Break-Even Overall Load Factor	67.4%	67.4%	67.0%	67.7%	69.9%	71.3%	71.5%	71.2%	74.0%	72.2%	71.1%	70.7%
Average Number of Staff	90,811	93,541	100,779	108,123	112,320	117,066	115,335	117,357	118,214	117,477	117,392	117,350

Source: Company Reports and Citi Research Estimates

Figure 8. Lufthansa – Divisional Breakdown of Profit and Loss Account, 2011-2016E (€ millions)

2016E	Passenger	Logistics	MRO	Catering	Leisure	Systems	Other	Consolidation Adjustments	Total
Total Revenue	26,452	2,607	4,592	2,677	0	709	0	(3,632)	33,405
Revenue Growth	4.2%	3.2%	2.0%	2.4%	0.0%	2.0%	0.0%		3.7%
EBITDA	3,219	196	528	214	0	82	(91)	0	4,147
EBITDA Margin	12.2%	7.5%	11.5%	8.0%	0.0%	11.5%	0.0%		12.4%
Operating Result	2,044	152	423	148	0	44	(136)	21	2,698
Operating Margin	7.7%	5.8%	9.2%	5.5%	0.0%	6.3%	0.0%		8.1%
Other Items	92	(6)	34	(1)	0	(2)	92	(22)	187
Result of Associates	78	34	38	38	0	0	1		188
Segment Result	2,214	180	495	185	0	42	(44)		3,072
2015E	Passenger	Logistics	MRO	Catering	Leisure	Systems	Other	Consolidation Adjustments	Total
Total Revenue	25,397	2,525	4,502	2,613	0	695	0	(3,534)	32,199
Revenue Growth	4.0%	2.4%	3.0%	3.4%	0.0%	3.0%	0.0%		3.7%
EBITDA	2,998	177	495	196	0	76	(201)	0	3,742
EBITDA Margin	11.8%	7.0%	11.0%	7.5%	0.0%	11.0%	0.0%		11.6%
Operating Result	1,849	135	392	131	0	40	(245)	11	2,314
Operating Margin	7.3%	5.4%	8.7%	5.0%	0.0%	5.8%	0.0%		7.2%
Other Items	92	(6)	34	(1)	0	(2)	92	(15)	194
Result of Associates	65	31	34	34	0	0	5		169
Segment Result	2,006	160	460	165	0	38	(153)		2,676
2014E	Passenger	Logistics	MRO	Catering	Leisure	Systems	Other	Consolidation Adjustments	Total
Total Revenue	24,418	2,466	4,371	2,527	0	675	0	(3,414)	31,044
Revenue Growth	3.9%	1.0%	4.6%	1.8%	0.0%	5.5%	0.0%		3.4%
EBITDA	2,668	160	437	177	0	74	(471)	0	3,045
EBITDA Margin	10.9%	6.5%	10.0%	7.0%	0.0%	11.0%	0.0%		9.8%
Operating Result	1,553	123	336	114	0	39	(514)	0	1,650
Operating Margin	6.4%	5.0%	7.7%	4.5%	0.0%	5.7%	0.0%		5.3%
Other Items	92	(6)	34	(1)	0	(2)	92	(3)	206
Result of Associates	54	26	29	29	0	0	3		140
Segment Result	1,699	142	399	141	0	37	(422)		1,996
2013	Passenger	Logistics	MRO	Catering	Leisure	Systems	Other	Adjustments	Total
Total Revenue	23,513	2,442	4,180	2,481	0	640	0	(3,228)	30,028
Revenue Growth	(0.2%)	(9.2%)	4.2%	1.1%	0.0%	5.1%	0.0%		(0.4%)
EBITDA	2,026	104	503	167	0	71	(436)	28	2,463
EBITDA Margin	8.6%	4.3%	12.0%	6.7%	0.0%	11.1%	0.0%		8.2%
Operating Result	595	77	404	105	0	36	(478)	(41)	698
Operating Margin	2.5%	3.2%	9.7%	4.2%	0.0%	5.6%	0.0%		2.3%
Other Items	92	(6)	34	(1)	0	(2)	92	8	217
Result of Associates	36	17	19	19	0	0	34		125
Segment Result	723	88	457	123	0	34	(385)		1,040
2012	Passenger	Logistics	MRO	Catering	Leisure	Systems	Other	Consolidation Adjustments	Total
Total Revenue	23,559	2,688	4,013	2,453	0	609	0	(3,187)	30,135
Revenue Growth	5.7%	(8.7%)	(2.0%)	8.6%	0.0%	1.7%	0.0%		4.9%
EBITDA	1,673	162	419	162	0	58	(219)	108	2,363
EBITDA Margin	7.1%	6.0%	10.4%	6.6%	0.0%	9.5%	0.0%		7.8%
Operating Result	258	104	318	97	0	21	(263)	(11)	524
Operating Margin	1.1%	3.9%	7.9%	4.0%	0.0%	3.4%	0.0%		1.7%
Other Items	19	7	34	16	0	(1)	14	(52)	37
Result of Associates	(15)	16	15	14	0	0	64		94
Segment Result	262	127	367	127	0	20	(248)		655
2011	Passenger	Logistics	MRO	Catering	Leisure	Systems	Other	Consolidation Adjustments	Total
Total Revenue	22,290	2,943	4,093	2,258	0	599	0	(3,449)	28,734
Revenue Growth	6.6%	5.3%	1.9%	1.8%	0.0%	0.7%	0.0%		5.2%
EBITDA	1,699	332	347	143	0	53	(49)	17	2,542
EBITDA Margin	7.6%	11.3%	8.5%	6.3%	0.0%	8.8%	0.0%		8.8%
Operating Result	349	249	257	85	0	19	(92)	(47)	820
Operating Margin	1.6%	8.5%	6.3%	3.8%	0.0%	3.2%	0.0%		2.9%
Other Items	40	16	28	(2)	0	2	(32)	(44)	8
Result of Associates	(34)	(22)	21	14	0	0	92		71
Segment Result	355	243	306	97	0	21	(123)		899

Source: Company Reports and Citi Research Estimates

Figure 9. Lufthansa Passenger Airline Division – Profit Breakdown by Airlines, 2011-2016E (€ millions)

2016E	Austrian	BMI	Brussels	Germanwings	Lufthansa	Swiss	Other	Total Passenger
Total Revenue	2,326	0	0	0	19,485	4,641	0	26,452
Revenue Growth	4.0%	0	0	0	4.0%	5.0%	nm	4.2%
EBITDA	319	0	0	0	2,209	691	0	3,219
EBITDA Margin	13.7%	0.0%	0.0%	0.0%	11.3%	14.9%	nm	9200.0%
Operating Result	170	0	0	0	1,434	440	0	2,044
Operating Margin	7.3%	0.0%	0.0%	0.0%	7.4%	9.5%	nm	7.7%
2015E	Austrian	BMI	Brussels	Germanwings	Lufthansa	Swiss	Other	Total Passenger
Total Revenue	2,237	0	0	0	18,741	4,420	0	25,397
Revenue Growth	3.0%	0.0%	0.0%	0.0%	4.4%	3.0%	nm	4.0%
EBITDA	296	0	0	0	2,047	655	0	2,998
EBITDA Margin	13.3%	0.0%	0.0%	0.0%	10.9%	14.8%	nm	11.8%
Operating Result	150	0	0	0	1,289	410	0	1,849
Operating Margin	6.7%	0.0%	0.0%	0.0%	6.9%	9.3%	nm	7.3%
2014E	Austrian	BMI	Brussels	Germanwings	Lufthansa	Swiss	Other	Total Passenger
Total Revenue	2,171	0	0	0	17,956	4,291	0	24,418
Revenue Growth	5.0%	0.0%	0.0%	0.0%	3.8%	1.6%	nm	3.9%
EBITDA	254	0	0	0	1,812	601	0	2,668
EBITDA Margin	11.7%	0.0%	0.0%	0.0%	10.1%	14.0%	nm	10.9%
Operating Result	110	0	0	0	1,083	360	0	1,553
Operating Margin	5.1%	0.0%	0.0%	0.0%	6.0%	8.4%	nm	6.4%
2013	Austrian	BMI	Brussels	Germanwings	Lufthansa	Swiss	Other	Total Passenger
Total Revenue	2,069	0	0	0	17,302	4,223	(81)	23,513
Revenue Growth	(4.1%)	0.0%	0.0%	0.0%	0.2%	0.1%	nm	(0.2%)
EBITDA	201	0	0	0	1,200	525	100	2,026
EBITDA Margin	9.7%	0.0%	0.0%	0.0%	6.9%	12.4%	nm	8.6%
Operating Result	25	0	0	0	365	226	(21)	595
Operating Margin	1.2%	0.0%	0.0%	0.0%	2.1%	5.4%	nm	2.5%
2012	Austrian	BMI	Brussels	Germanwings	Lufthansa	Swiss	Other	Total Passenger
Total Revenue	2,158	0	0	0	17,261	4,220	(80)	23,559
Revenue Growth	5.4%	0.0%	0.0%	0.0%	10.0%	7.1%	nm	5.7%
EBITDA	228	0	0	0	1,113	507	(175)	1,673
EBITDA Margin	10.6%	0.0%	0.0%	0.0%	6.4%	12.0%	nm	7.1%
Operating Result	65	0	0	0	(45)	191	47	258
Operating Margin	3.0%	0.0%	0.0%	0.0%	(0.3%)	4.5%	nm	1.1%
2011	Austrian	BMI	Brussels	Germanwings	Lufthansa	Swiss	Other	Total Passenger
Total Revenue	2,047	865	0	687	15,689	3,942	(940)	22,290
Revenue Growth	0.7%	(3.5%)	nm	9.0%	12.2%	14.0%	nm	6.6%
EBITDA	107	(135)	0	(15)	1,136	503	103	1,699
EBITDA Margin	5.2%	(15.6%)	nm	(2.2%)	7.2%	12.8%	nm	7.6%
Operating Result	(62)	(199)	0	(52)	168	259	235	349
Operating Margin	(3.0%)	(23.0%)	nm	(7.6%)	1.1%	6.6%	nm	1.6%

Source: Company Reports and Citi Research Estimates

Lufthansa

Company description

Lufthansa is an aviation group with a network of more than 400 subsidiaries and affiliates around the globe. It concentrates its activities on six strategic business segments: passenger business, logistics, MRO, catering, leisure travel and IT services. The basis of the company's activities is the management of international passenger and cargo flights; independently and with partner airlines, the company offers flight and connection programs in co-operation with Star Alliance partners from North America, Scandinavia and Asia. Europe is the company's home market.

Investment strategy

We rate Lufthansa Buy (1). We believe the main reason to invest in Lufthansa shares is the expectation of the delivery of a series of fundamental restructuring initiatives, in addition to the prospect of economic recovery in Europe as well as globally. Its maintenance and overhaul business, Lufthansa Technik, is relatively defensive compared to the main airline business. A Sum-of-the-Parts (SOTP) analysis reveals substantial value upside to as high as €35/share.

Valuation

Our one-year target price of €26.50 is based on a 25% discount to our bottom-up Sum-of-the-Parts (SOTP) value of c. €35, using our 2015E EBITDA/EBITDAR forecasts and comparable companies as benchmarks for each business, as well as a combination of book and market values for its equity investments. We use a 25% discount to SOTP because disposal activity is likely to be low, especially in current volatile equity markets.

Risks

The following factors may prevent the share from achieving our target price:

1. Typical airline operating risks: cyclicalities, overcapacity, fuel prices, labour strength, safety, war/terrorism and sensitivity of travel demand to external shocks (e.g. a resurgence of SARS), which are reflected in Lufthansa's beta value of 1.05 (source: Reuters).
2. Overly-aggressive capacity expansion could undermine pricing power, including the risk that its dual hubs of Frankfurt and Munich could partially cannibalise each other.
3. An increase in competition from low-fare carriers in the German market.
4. Lufthansa shareholders could be called upon to fund acquisitions and restructuring costs as Lufthansa is aggressive in leading the consolidation of the European airline sector.
5. Potential forced sale of non-EU shareholdings should foreign ownership limits be exceeded.

Conversely, should our assumptions relating to these risk factors prove too pessimistic, the shares could rise above our target price.

Air France-KLM

(AIRF.PA; €10.64; 1)

Valuation

Our €11.10 target price is based on a P/E of 8x applied to our 2015E pre-exceptional EPS estimate of €1.05 (excluding contribution of Kenya Airways) plus €2.58/share for its 7.73% stake in Amadeus (adjusted for its hedging of a portion of the stake) and its 26.7% stake in Kenya Airways at Citi target prices (€35 and KES15.50, respectively) and its 1.7% stake in Club Med at the current market share price and then rounded.

Risks

The following risks could impede the share price from reaching our target price: Typical airline operating risks: cyclicalities, overcapacity, fuel prices, labour strength, safety, war/terrorism and sensitivity of travel demand to external shocks (e.g. SARS/Swineflu). Air France's quest for European market share could lead to price and margin pressure. Less flexibility compared with peers to downsize capacity and restructure its cost base should there be a downturn in demand. Potential overhang from a further disposal of shares by the French government. Potential increase in competition from low-cost carriers (especially at Paris Orly). Its fuel hedges could hinder its competitiveness with unhedged competitors. Potential forced sale of non-EU shareholdings should foreign ownership limits be exceeded. Balance sheet weakening due to ongoing losses, which could lead to capital raising, which could be dilutive to existing shareholders.

International Consolidated Airlines Group, S.A.

(ICAG.MC; €5.00; 1)

Valuation

We have a target price of €7, after rounding, for the Madrid-based share, which is equivalent to £5.85 (after rounding) for the London-listed share (ICAG.L). Our target price comprises: (i) BA valuation of €4.80/share (little changed) on P/E of 10x 2015E F-D EPS of €0.48; (ii) Iberia valuation of €0.57/share (up from €0.40) on P/E of 10x 2015E F-D EPS of €0.057; (iii) Vueling valuation of €1.18/share (up from €0.94) on P/E of 14x 2015E F-D EPS of €0.084; (iv) 7.5% Amadeus stake €0.405/share after hedging.

Risks

With regard to IAG, we would highlight in particular the following risks, which could impede the share price from achieving our target price:

1. Typical airline operating risks: cyclicalities, overcapacity, fuel prices, labour strength, safety, war/terrorism and sensitivity of travel demand to external shocks (e.g., a resurgence of Sars or volcanic ash disruption).
2. Potential loss of market share as a result of Open Skies opening up Heathrow Airport to more competition since 2008.
3. Potential forced sale of non-EU shareholdings should foreign ownership limits be exceeded.
4. Valuation and cash flow risk because of British Airways' pension deficit.
5. Potential failure to turnaround heavy losses at Iberia.

Appendix A-1

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Air France-KLM (AIRF.PA)

Ratings and Target Price History Fundamental Research

Analyst: Andrew Light



	Date	Rating	Target Price	Closing Price
1	1-Apr-11	*2H	*13.70	11.65
2	24-Jun-11	*1H	*12.80	10.17
3	30-Jul-11	*2S	*10.50	8.43
4	30-Sep-11	2S	*6.00	5.54
5	7-Oct-11	Stock rating system changed		

* Indicates change

	Date	Rating	Target Price	Closing Price
6	8-Oct-11	*2H	6.00	5.15
7	27-Apr-12	2H	*4.00	3.68
8	2-Aug-12	2H	*4.50	4.21
9	21-Jan-13	*2	*9.00	8.42
10	10-May-13	2	*8.00	7.60

	Date	Rating	Target Price	Closing Price
11	2-Aug-13	*1	*7.30	6.42
12	15-Jan-14	1	*10.80	9.32
13	26-Feb-14	1	*11.10	9.99

Rating/target price changes above reflect Eastern Standard Time

Air France-KLM (AIRF.PA)

Ratings and Target Price History Best Ideas Research Relative Call (3 Month)

Analyst: Andrew Light



	Date	Rating	Target Price	Closing Price
1	3-Oct-11	*ADD LP	-	5.31

* Indicates change

	Date	Rating	Target Price	Closing Price
2	11-Jul-12	*REM LP	-	4.17

Rating/target price changes above reflect Eastern Standard Time

Lufthansa (LHAG.DE)

Ratings and Target Price History

Fundamental Research

Analyst: Andrew Light



	Date	Rating	Target Price	Closing Price
1	7-Oct-11	Stock rating system changed		
2	8-Oct-11	*1	20.00	9.61

* Indicates change

	Date	Rating	Target Price	Closing Price
3	10-Oct-11	1	*16.00	10.00
4	8-Jun-12	1	*15.00	8.24

	Date	Rating	Target Price	Closing Price
5	21-Jan-13	1	*18.00	15.02
6	15-Jan-14	1	*26.50	18.54

Rating/target price changes above reflect Eastern Standard Time

Lufthansa (LHAG.DE)

Ratings and Target Price History

Best Ideas Research

Relative Call (3 Month)

Analyst: Andrew Light



	Date	Rating	Target Price	Closing Price
1	3-Oct-11	*REM MP	-	9.38

* Indicates change

Rating/target price changes above reflect Eastern Standard Time

International Consolidated Airlines Group, S.A. (ICAG.MC)

Ratings and Target Price History

Fundamental Research

Analyst: Andrew Light



	Date	Rating	Target Price	Closing Price
1	1-Apr-11	1H	*3.40	2.58
2	7-Oct-11	Stock rating system changed		
3	8-Oct-11	*1	3.40	1.83
4	10-Oct-11	1	*2.50	1.86

* Indicates change

	Date	Rating	Target Price	Closing Price
5	4-Apr-12	1	*2.60	2.17
6	21-Jan-13	*2	*2.70	2.58
7	5-Mar-13	2	*2.80	2.86
8	13-May-13	2	*3.50	3.20

	Date	Rating	Target Price	Closing Price
9	6-Aug-13	*1	*4.40	3.72
10	11-Nov-13	1	*6.40	4.57
11	15-Jan-14	1	*6.70	5.28
12	3-Mar-14	1	*7.00	5.15

Rating/target price changes above reflect Eastern Standard Time

International Consolidated Airlines Group, S.A. (ICAG.MC)

Ratings and Target Price History

Best Ideas Research

Relative Call (3 Month)

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