June 30th 2010

# Kenya Airways Research Note: Prepared by: Samuel K. Gichohi

| | |
|---|---|
| **Base:** | Nairobi - Kenya |
| **Corporate Address :** | Airport North Road, Embakasi |
| | P.O. Box: 19002 – 00501 Nairobi, Kenya |
| **Website:** | www.kenya-airways.com |
| **Launch:** | 1977 |
| **Key People:** | Titus Naikuni |
| **CFO:** | Alex Wainaina Mbugua |
| **Pax 2008:** | 2.7 m |
| **Global Alliance:** | SkyTeam associate |
| **Ownership:** | KLM 26%, Permanent Secretary Treasury (23%), Paul Wanderi Ndungu (2.5%) - Mar09 |
| **Code Share:** | Air Botswana |
| | Air France |
| | Air Mauritius |
| | China Southern Airlines |
| | KLM-Royal Dutch Airlines |
| | Korean Air |
| | LAM-Linhas Aereas De Mocambique |
| | Martinair Holland |
| | Precisionair |
| | Virgin Nigeria |
| **Average Fleet Age:** | 7.6 years |

**Contents:**



## Company Profile

Kenya Airways which is based in Nairobi is the flag carrier of Kenya. Kenya Airways operates a fleet of Boeing narrow- and wide-body aircraft on its international carrier routes and Embraer E170 Jets on its regional routes, Kenya Airways operates an extensive network of regional services within Kenya and Africa as well as flights to Asia, the Middle East and Europe. Kenya Airways was recently elevated from an associate member of SkyTeam to full membership, sponsored by KLM after successfully attaining the requirements over a three year probation period.

Kenya Airways is listed on the Nairobi Stock Exchange and cross listed on both the Uganda Securities Exchange the Dar es Salaam Stock exchanges under the ticker code KQ.

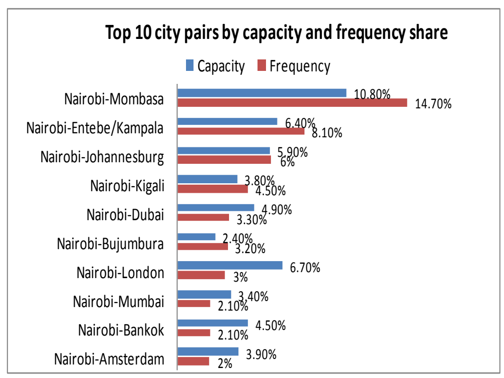
Kenya Airways Groups principal activities include the international, regional and domestic carriage of passengers and cargo by air, the provision of ground handling services to other airlines and the handling of import and export cargo.

**Below is a summary table of the Kenya Airways Fleet:**

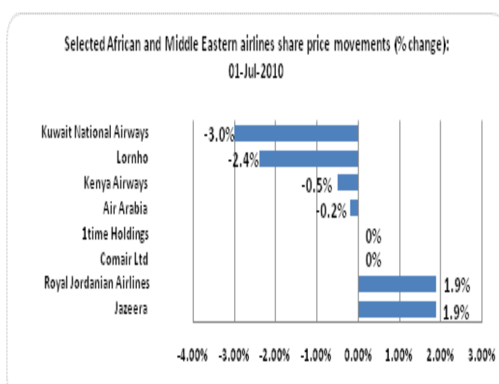
| Manufacturer | Type | In Service | On Order | Storage | Total |
|---|---|---|---|---|---|
| Boeing | 737 (CFMI) | 4 | | | 4 |
| | 737 (JT8D) | | | 2 | 2 |
| | 737 (NG) | 9 | | | 9 |
| | 767 | 6 | | 1 | 7 |
| | 777 | 4 | | | 4 |
| | 787 | | 9 | | 9 |
| Embraer | 170 | 3 | | | 3 |
| Total | | 26 | 9 | 3 | 38 |

Chronological Analysis of Market reactions to Recent Developments

- **1st Jul 2010: Kenya Airways** (-0.5%) announces plans to acquire an additional two E190 aircraft for regional operations, the first of which is expected to be delivered later in 2010. The aircraft will be leased from **US**-based Jetscape for eight years. The carrier also plans to increase frequencies on all regional and transcontinental routes for operational efficiency.
- 15th June 2010: Kenya Airways slipped (-1.0%) for the day, despite the Nairobi All Share Index gaining 0.3%. CEO, Titus Naikuni, stated over the weekend that the carrier plans to resume service to Rome, as economic recovery occurs in the region.

  Mr. Naikuni also confirmed the recent ash cloud stoppage of services to Europe will have an impact on the carrier's annual financial performance, although no further details were disclosed. The carrier is also in talks with Airbus regarding the purchase of A330 equipment, to support the carrier's expansion until it receives B787 equipment. A final decision is expected in 2H2010.
- 11th June 2010: Kenya Airways' (+1%) shares increased after the carrier took delivery of two new E170LR aircraft, leased from Finnair, increasing the carrier's Embraer fleet to five, as part Kenya Airways' fleet expansion and modernization strategy.
- 7th June 2010: Kenya Airways (-4.4%) fell on Friday (04-Jun-2010) following the announcement of its financial results for the 12 months ended Mar-2010 period. The carrier's total revenue fell 1.5% to USD864 million, while operating profit slumped 54.5% to USD22.5 million. But the carrier returned to net profitability, earning USD24.9 million compared to a loss of USD49.9 million in the previous corresponding period. Kenya's Group Finance Director, Alex Mbugua, attributed the carrier's return to profitability to stable foreign exchange and the steady recovery in the aviation industry. CEO, Titus Naikuni, added that the carrier plans to employ a number of cost-control measures, particularly in the area of labor costs.

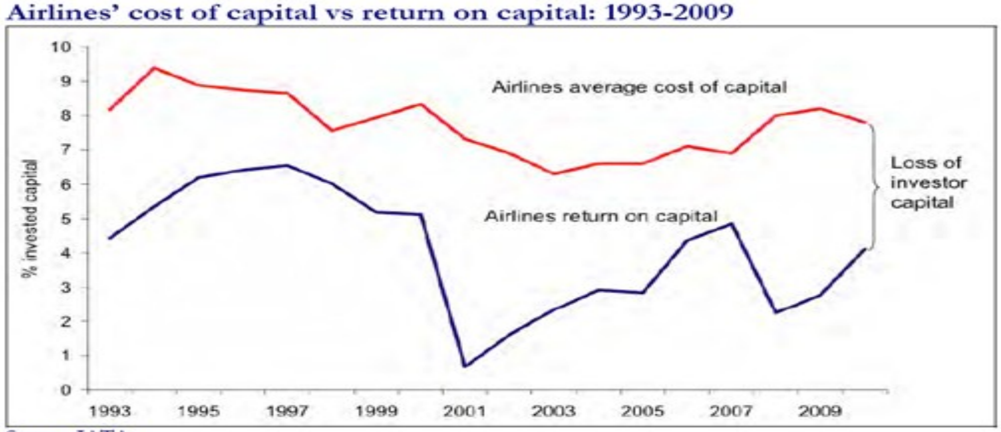
  
  

# Global Airline Industry profile

The airline industry's inherent profile is beset in crisis. In the post credit crunch crisis era , the industry is at a cruci al turning point in its history. According to IATA analysts never before has it been confronted by the current confluence of events. Unable historically to deliver returns sufficient even to cover its cost of capital, the protective – and highly distorting – layer of government protectionism has rapidly been peeled away this century. The result of removing protection and subsidies is that airlines will in future need to generate returns consistent with a free market competitive environment. In 2009, this long term institutional change coincided with the most severe economic downturn in recent history, in Kenya the effect of this downturn were further compounded by the 2007 post election turmoil and severe drought conditions in 2009 which depleted a huge chunk of our natural resources the impact has therefore sudden and extraordinarily deep

The result of these economic and deregulatory undercurrents is manifest in unprecedented financial pressure for the airlines industry which is econo-sensitive in nature. The result is an inevitable re-appraisal of the way the industry works.

**Airlines' cost of capital vs return on capital: 1993-2009**

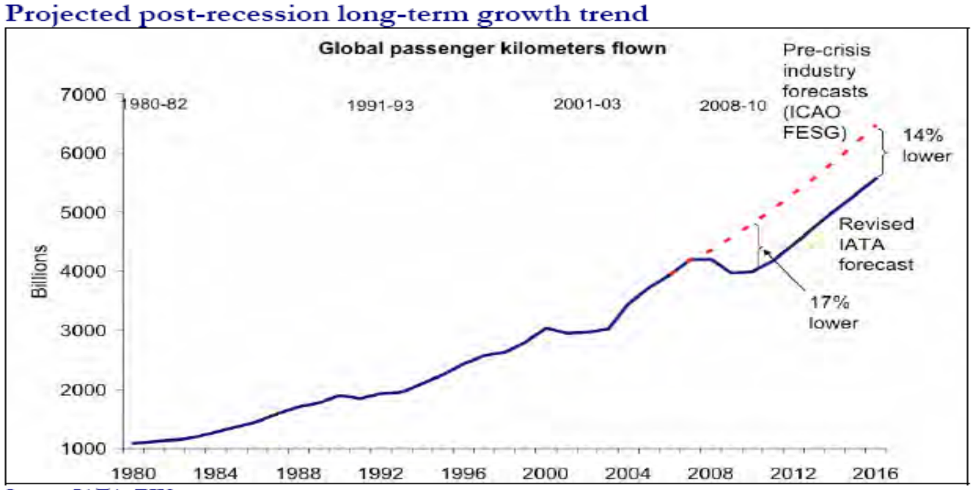



Source: IATA

The prevailing circumstances Raise questions regarding the sustainability and relevance of the network airline model. The significance of the emerging low cost airline mode, whether a hybrid model is a viable alternative and also what future levels of government intervention and protectionalism the industry may face as revenues head downwards and unprecedented yield reductions confront the airline industry.

The entire airline industry is essentially cyclical in nature and is therefore easily affected by any form of economic uncertainty which has caused a deep crisis of confidence in Airline stocks worldwide. Further questions arise in whether governments will take the forefront in opening markets to free competition by removing ownership controls thus allowing a market oriented industry to emerge at the cost of exposing their national airlines to increased market risks.

**Projected post-recession long-term growth trend**




Source: IATA; EIU

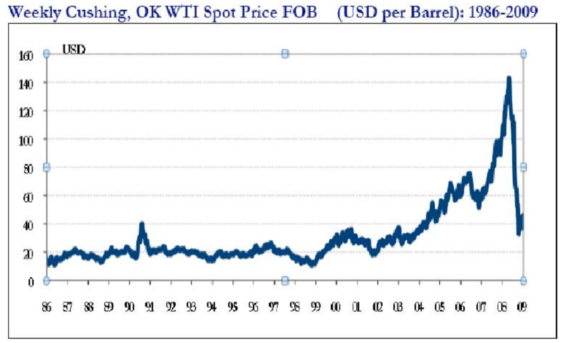
With airlines having exhausted the usual downturn responses, like staff cutbacks and reduced flying the emergence from the economic downturn will inform the need for airline boards to put in place various structures to cushion them from further erosion of credibility and hedge against future upheavals by forging sustainable models.

The future airline model must be hinged on adaptability and ability to morph into any future challenges that arise through efficiency and efficacy especially in a future environment that may never relive the long term growth trends of the past.

## The key Airline industry risks identified to KQ include:

**Fuel Prices:** The volatility of fuel prices has been a perennial cause for worry across the entire aviation industry. After the surge in fuel prices between 2007 and 2008 Fuel prices rapidly declined from around 40% of airline costs to below 20%, a strengthened USD has slightly softened this improvement for some. Kenya Airways will have to hedge against future fuel price shocks? Industry pundits however predict that in view of the sudden decline and the subsequent stabilization of fuel prices the likelihood going forward is a rise towards 70$ to 80$ per barrel Factors that will push the price up include political uncertainty, for example in the Middle East; OPEC volume reductions, as many national producers prefer a level around USD70-80; fluctuations in the US dollar; and, as we saw last year, speculation. Also, users previously deterred from consumption at higher prices will probably amend earlier plans and increase usage. Downward pressures will come from slackening demand largely influenced by negative consumer sentiment.

Weekly Cushing, OK WTI Spot Price FOB (USD per Barrel): 1986-2009




**The US dollar:** A significant percentage of Kenya Airways airline costs is denominated in US dollars, be it for aircraft leases [or purchases], purchasing fuel, or a host of other international contracts. Consequently, a strong dollar is generally a negative for Kenya Airways. And

**Capacity:** "Excess capacity" due to reduced economic activity and a post crisis decline in passenger volumes has adverse effects on Kenya Airways . The concept of excess capacity is a fluid one, but becomes more visible when demand suddenly drops. In these circumstances, Kenya Airways and the industry's ability to adapt capacity to the new level of demand is limited. Fares and r ates can be cut, but the negative impact on profitability is immediate. Aircraft can be flown less or grounded, routes can be changed. But new deliveries, following years of aggressive buying, are hurting Kenya Airways which had projected rapid expansion.

Fuel cost as a proportion of total operating cost: 2001 to 2009F


**Airline consolidation:** Kenya airways was formed and still espouses a quasi-government role. However despite the erstwhile restrictive underpinning of national[istic] ownership rules, which prevented foreign ownership of national airlines the Kenyan Government has in its divestment policy been gradually relinquishing this regulation over time to allow for eventual consolidation. However that unevenness remains a serious threat to the forefront of progress towards consolidation.

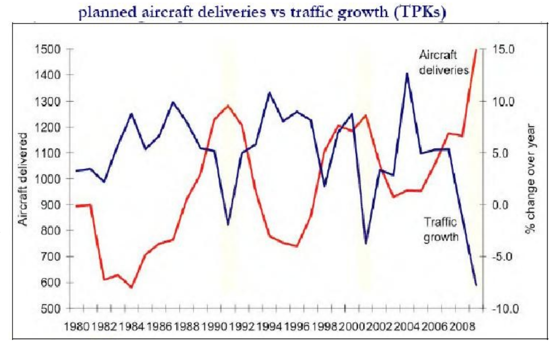
**Profitability: the financial outlook:** Kenya Airways has in the recent past been a rare exception compared to most airlines which have always been underachievers financially. In 2009, KQ like most airlines performance was worse than ever; going forward it will depend as always on the cost and supply-demand fundamentals – each of which are unpredictable despite the current economic recovery. This makes extrapolation into the future a futile endeavor.

**Airports and airways:** The Kenya Airports Authority as well as most airports and air traffic control organizations occupy near-monopoly positions and uphold relatively liberal aeronautical pricing regimes. However, when traffic slows, they have little power to influence events or to make major adaptations to their operating regime.

They eventually resort to increasing charges to jeopardizing long term capital projects. This situation gives rise to projections of disputes arising unless pacts are made to mitigate the probability.

**Aircraft values:** Airlines are capital intensive businesses, amid short term cash flow pressures. The resultant effect of the recent crisis makes the borrow-long-earn-short conflict more of a challenge than it was then. With most capital costs incurred relating directly to aircraft prices and values. in 2009 after peaking in 2008, they declined sharply, but have recently, like fuel costs, stabilized relatively as the demand/supply balance shifts. Further fluctuations could forecast serious systemic effects across the airline industry.

planned aircraft deliveries vs traffic growth (TPKs)




**Industrial issues:** 2009 was a challenging year for industrial action across the airline industry, for Kenya Airways this was characterized by airline personnel strikes and traffic control industry actions. These have now subsided and a semblance of normality has returned. However further economic shocks may trigger further upheaval across the industry.

**The environment:** In recent years the airline industry has had growing concerns at the threat of uncoordinated and inappropriate government action in response to the threat of climate change. There was good cause for the concern. Apart from uncoordinated government actions, popular opinion was also growing noisy and irrational, carbon emission tariffs' target ing agro imports from Africa to Europe continue to be a major area of concern for investors in Kenya airways due to uncertainty regarding what effect they will have on the Airlines bottom line. Although the post financial crisis, 'economic decline' pushe d the environment debate onto the sidelines, at least temporarily. It remains an issue that in our perception poses substantial threats to the Airlines business planning. Furthermore the effect of the recent grounding of airlines due to the Icelandic ash cloud is yet to reflect in the company's bottom line

**Finding the "right" airline model:** higher-yielding network airlines may have felt less impact from ballooning fuel prices but now they face new challenges as yields slump. Although greatly reduced fuel prices in 2009 provided some respite.

Ways of egotiating the short term environment, while preparing for an uncertain treacherous future – where fuel prices eventually will almost certainly rise – is a fundamental issue for management this year.

# Financial Performance

**Kenya Airways: 5 year, balance sheet trends.**

Despite the adverse effect of the global financial meltdown in 2008/2009, common size analysis of Kenya Airways balance sheet reveals that the company's non-current assets attained a Compounded annual growth rate (CAGR) of 1.87% over 5 years, while current assets recorded CAGR of 0.01% resulting in a total assets growth trend of 1.40%. horizontal common size analysis indicates that prepaid lease rentals made up the bulk of the growth especially in the 2008/2009 financial period when they grew by 1368% from KShs 116mn to KShs 1.7bn in 2008/2009 resulting in a CAGR of 92.3% as Kenya Airways management increased land rentals significantly during that financial period. Investments in associate companies also grew at a gradual pace of 40% as a result of Kenya Airways regional expansion strategy through acquisitions of African Cargo Handling Ltd and 48% stake in Precision Air of Tanzania. Intangible assets also grew by CAGR of 27% over the 5 year period to stand at 262% of the initial 100% in 2006 while deposits recorded a decline to 56% over the same period which indicates that the company increasingly had to dip into reserves to fund growth. On the current assets front inventories and receivables grew gradually over the 5 year period but amounts from related companies seem to have been in constant decline only constituting 4% of their initial contribution to KQ's current assets in 2006. Bank and cash levels also declined in tandem with deposits to stand at 56% in 2010. On the Equity and liabilities front KQ's Hedge reserve has been the main sufferer as fuel price uncertainty which saw the reserve grow to a peak of 316% in 2008 and then take a major decline to -114% due to a major shock in 2009 there are signs of recovery in 2010 almost regaining 2006 levels.

**Balance Sheet Ratios.**

| LIQUIDITY | 2006 | 2007 | 2008 | 2009 | 2010 | 0.0% |
|---|---|---|---|---|---|---|
| CURRENT RATIO | 1.13 | 1.36 | 1.57 | 0.91 | 0.85 | -6.7% |
| QUICK RATIO | 1.08 | 1.30 | 1.48 | 0.84 | 0.78 | -7.8% |
| L. TERM DEBT TO EQUITY | 1.65 | 1.45 | 0.95 | 1.65 | 1.17 | -8.3% |
| INTEREST COVERAGE RATIO | 4.95 | 4.60 | 2.64 | 2.54 | 11.80 | 24.3% |

Kenya Airways Liquidity position indicates that the company has had mixed fortunes over the last 5 years. During the period between 2006 and 2008 in the background of steady economic growth both locally and globally the company recorded constant growth and that is reflected in the company's ability to meet its obligations getting steadily stronger from a current ratio of 1.13:1 in 2006 peaking at 1.57:1 in 2008, however these gains seem to have been abruptly reversed in 2009 in the aftermath of the global financial crisis and have declined to 0.85:1. This situation is reflected across all of Kenya Airways Balance Sheet Ratios above which also indicate that as a result of the shift in fortunes the company was compelled to apply more long term debt to weather the storm which returned to 2006 levels while the company's interest coverage continued to decline becoming more risky as its ability to meet interest expenses approached the critical 1.5 level but seems to have recovered adequately to stand at 11.80 in 2010 the ratio had declined sharply after being fairly consistent at 4 over time. It has been restored to a healthy level given the cyclical nature of the industry although 4 is acceptable and should cover for temporary shortfalls in earnings 11% offers more sufficient cover for an industry that is prone to sudden shocks . However a look at Kenya Airways Risk factors listed on page 3 indicates that the company is exposed to various external risks that make it vulnerable to economic uncertainty. It is evident therefore that any increase in application of debt on Kenya Airways balance sheet would need to be made on the basis of careful analysis of these external risks and how they are expected to affect Kenya Airways performance going forward. A reversal of the current economic recovery and stabilization of fuel prices could spell doom if measures are not taken to protect against such an eventuality and as a result we see that Kenya Airways has indeed attempted to use fuel derivative instruments to hedge against fuel price fluctuations in future. This has in effect depleted the company's hedge reserves since 2009 although once again 2010 figures indicate recovery.

## Profitability

Kenya Airways recorded a negative income per passenger in 2009 with Loss of 4 Billion Shillings in the financial period. Gross profit margin had declined to 0.22 putting extreme pressure on the company which has high overheads especially in a period in which the airline industry has been hit by union staff strikes for higher pay and increasing airport management associated costs, however the margin has climbed substantially in 2010 to 0.37 as KQ's performance rebounds. The company's return on turnover which is measured by the net profit margin has improved to 0.30 while

| PROFITABILITY INDICATORS | 2006 | 2007 | 2008 | 2009 | 2010 | 0.0% |
|---|---|---|---|---|---|---|
| Gross Profit Margin | 0.33 | 0.30 | 0.24 | 0.22 | 0.37 | 3.4% |
| Operating Profit Margin | 0.15 | 0.13 | 0.07 | 0.06 | 0.15 | 1.5% |
| Net Profit Margin | 0.09 | 0.07 | 0.24 | 0.09 | 0.30 | 34.7% |
| Total Asset Turnover | 0.76 | 0.76 | 0.78 | 0.95 | 0.97 | 6.1% |
| LEVERAGE | 4.02 | 3.57 | 2.93 | 4.42 | 3.67 | -2.2% |
| INCOME PER PASSENGER | | 1717 | 1760 | -1478 | 722 | |

Kenya Airways Operating Profit Margin is back to 2006 levels confirming that the company which was losing money per passenger has managed a turnaround and if sustainable this will help replenish the company's reserves. Kenya Airways Total asset turnover has been relatively stable but it is imperative that further analysis of the company's credit days position and turnover ratios. The company's receivables turnover at 0.30 and average collection period at 1225.54 days has reduced significantly from 7772 days in 2007 but still remains on the high side, indicating that the company needs to attempt at reducing their receivables turnover.

KQ's return on invested capital was ridiculously low at a level less than wacc. calculated wacc was at least 11% but has recovered to a more palatable level at 15.7 in 2010. KQ's ROE and ROE for 2010 is encouraging and sends strong recovery signals especially on KQ's expansion model which has seen the airline outperform most of its peers in the post financial crisis recovery period.

| | 2006 | 2007 | 2008 | 2009 | 2010 | |
|---|---|---|---|---|---|---|
| Net Operating PAT | 4,315 | 3,842 | 680 | 4,029 | 8,820 | 19.6% |
| INVESTED CAPITAL | 50,184 | 56,273 | 56,274 | 56,274 | 56,274 | 2.9% |
| ROIC | 9% | 6.8% | 1.2% | 7.2% | 15.7% | 16.2% |
| ROA | 7% | 5.3% | 18.7% | 8.8% | 29.0% | 42.9% |
| ROE | 28% | 18.9% | 54.7% | 38.6% | 106.5% | 39.7% |
| INCOME PER PASSENGER | 2,365.43 | 1,717.34 | 1,759.86 | (1,478.25) | 721.68 | -25.7% |
| EPS | 10.45 | 8.87 | 10 | (8.8) | 4.4 | -19.4% |
| DPS | 1.75 | 1.75 | 1.75 | 1 | 1 | -13.1% |
| Dividend Yield | 1.67% | 1.84% | 3.37% | 5.06% | 1.67% | 0.0% |
| WACC | | 10% | 12% | 14% | 11% | |

For an investor or an investment fund to buy into Kenya Airways shares they would need to have a high appetite for risk considering the airline industries exposure to external economic pressures. It is therefore important for any recommendation to invest in the stock to be accompanied by an in depth look at the economic environment at the time of investment to ensure that the investors risk appetite is compatible to the level of risk that investing in the airline industry involves. It would also help to inform the investor of the risk return implications before they commit to the investment. Below is a summary of the airline industry as it relates to Kenya Airways and the risk factors.

## Stock Markets Overview

The Kenyan equities market has undergone some major transformation since late 2008 leading to the notion of a (1) Pre-Safaricom IPO era and a Post-Safaricom IPO era, (2) a post-2007 Political era and (3) a post-Safaricom IPO stockbroker problematic era (*a number have either changed ownership or folded*).

**Pre-Safaricom IPO era** – 2006, 2007 and 2008 were a 'bull' period for equities during which a number of IPOs and Rights Issues were successfully over-subscribed. The largest IPO being Safaricom (Kshs 50 Billion) and the largest Rights Issue (Kshs 5.5 Billion subscription) being KCB. Safaricom was heavily oversubscribed with the following conclusions - 800,000+ Kenyan Institutional Investors (**KIIs**), Kenyan Wealthy Investors (**KWIs**) and Kenyan Retail Investors (**KRIs**) can invest Kshs 50 Billion+ while less than 100 foreign institutional investors (**FIIs**) can also invest Kshs 50 Billion+. KCB Rights Issue 2008 proved that 100,000 Kenyan investors and some FIIs can participate in a rights issue for Kshs 8 Billion worth of shares. Note that both Safaricom and KCB were **after** the December 2007 election fiasco and **before** the global financial crisis. The equities turnover in 2008 closed at Kshs 97.5 Billion; up 9% from Kshs 88.62 Billion in 2007, a 6% drop from Kshs 95 Billion in 2006. The no of equities transactions in 2008 closed at 890,542 deals, down 9% from 973,548 deals in 2007, a 63% jump from 598,301 deals in 2006. Kenyan investors were the dominant investors in 2006 and 2007 but began to drop noticeably in 2008.

**Post-Safaricom IPO era -** 2009 saw poor equity traded volumes at Kshs 38.16 Billion, a 61% drop from Kshs 97.5 Billion reported in 2008 and no IPO on the Nairobi Stock Exchange. The no of equities transactions in 2009 closed at 402,169 deals, down 40% from 890,542 deals reported in 2008. All Kenyan investors noticeably exited the equities market as FIIs ended up dominating secondary trading. 2009 was the year of bonds for KIIs and KWIs. The ground-breaking KenGen Bond of Kshs 25 Billion was a major success and so were the various GOK infrastructure bonds and other regular bonds. Currently KCB, KPLC and TPS have all announced rights issues. GOK continue with bond issues every month but with interest rates declining substantially especially in short term securities with 91 day T-Bill at 1.782% as at 30th June 2010, 182 Day T-Bill at 1.8% a situation we expect will prompt fund managers to shift to fixed income secondary markets and equity in search of better yields and returns. The secondary market turnover in June witnessed a surge in Turnover to record KShs 6.4 Billion in Turnover compared to KShs 4.1 Billion Y.o.Y resulting in average transaction value at KShs 144,210 compared to an average transaction value of KShs 99,015 in Y.o.Y.

Market Performance

| June | 2009 | 2010 | %Chg |
|---|---|---|---|
| Volume | 377,559,589 | 351,513,200 | -6.90% |
| No. of Deals | 41,679 | 44,778 | 7.44% |
| Turnover | 4,126,871,673 | 6,457,441,652 | 56.47% |

**FIIs dominated trading** in January and February but KIIs appear to be coming in strong between March and May 2010. The numbers of transactions declined from 49101 in May to 44,778 in June but are expected to remain steady in July as KRIs trickle back to the market. Kenya is experiencing sub-2% 91 day interest rates while GDP growth of more than 5% is projected for 2010

## Valuation Rationale:

Kenya Airways share has been trading on the NSE at a six month average price of KShs. 52.80 which is slightly higher than the Net asset value per share of 43.33. the dividend discount model returns a paltry value of KShs. 7.14 which cannot be viewed as a realistic value leading us to seek a more relevant valuation model, finally settling on the NPVGO model under the rationale that KQ has been in regional expansion mode having attained respectable growth in the following areas over the past year.

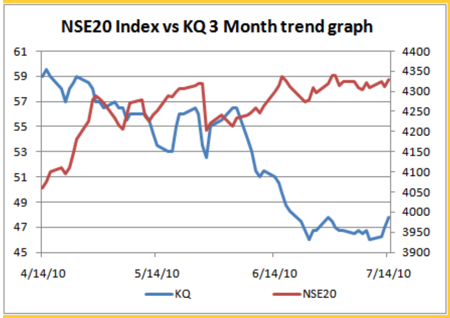
- Available Seats per Kilometer increased by 6.7% as KQ ventured to new destinations
- Southern Africa Passenger traffic grew 7% after the launch of 3 new routes
- Eastern Africa traffic grew by 5.7% due to increased frequency to Rwanda, Burundi and Tanzania
  - Note that Tanzania improvement was boosted by partnership with Precision Air
- Northern Africa operations increased by 4.4% boosted mainly by Addis-Djibouti route.
- Europe improved by 4.3% boosted by Amsterdam and Paris operations
- West and Central Africa operations grew by 3.6% driven by new destinations including Malabo Bangui and Kinshasa Brazzaville routes
- Cargo tonnage in West and Central Africa by 41.6% due to increased frequencies.
- North Africa cargo tonnage grew 14.2%
- Middle East and Asia grew 9.3%
- Europe grew 1.9%

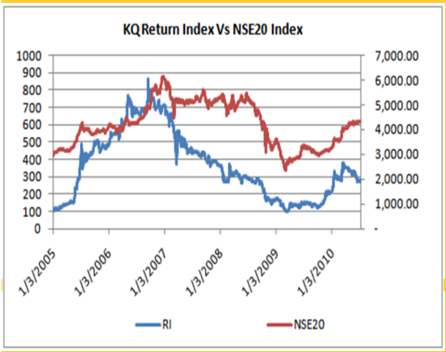
| | | | | | |
|---|---|---|---|---|---|
| EPS/20% | 52.25 | 44.35 | 49.55 | -44.2 | 22 |
| Growth Factor | 1.06 | 0.12 | 0.12 | 1.00 | 8.33 |
| | | | 55.06 | -49.11 | 24.44 |
| NPVGO | | | 55.18 | -48.11 | 32.78 |

Continued economic recovery in our view will see further growth even in areas where declines were recorded and therefore a valuation based on growth opportunities is justifiable.

The NPVGO value of 32.78 is considered on the lower side given the fact that KQ is coming out of a slump and therefore it is suffice to state that the expectations of further recovery should push the valuation back towards 55.18 levels in the pre financial

## Kenya Airways Stock performance:




| Kenya Airways Ltd MKT Stats | |
|---|---|
| Par Value | 5/- |
| Status | cd |
| VWAP 15/07/2010 | 47.50 |
| Total Shares Issued | 461,615,483 |
| Mkt Cap. Kshs Mn. | 21,926.74 |
| EPS | 4.40 |
| DPS | 1.00 |
| P/E | 10.80 |
| Dividend Yield | 2.11% |
| Sector P/E | 14.99 |
| MIMS P/E | 13.90 |

| KQ Stock Statistical Summary | | | |
|---|---|---|---|
| Variable | KQ 5Yr | KQ 6Mth | KQ 3Mth |
| Mean | 61.601 | 52.096 | 52.801 |
| StDev | 32.543 | 5.984 | 4.48 |
| Variance | 1059.073 | 35.804 | 20.072 |
| Minimum | 16.55 | 36 | 46 |
| Maximum | 146 | 64.5 | 59.5 |
| Skewness | 0.45 | -0.29 | -0.26 |
| Kurtosis | -0.89 | -0.03 | -1.48 |
| Covariance (KQ/NSE20) | 113,878.86 | 2,461.25 | (352.28) |
| Var NSE20 | 791,262.65 | 111,805.24 | 4,758.87 |
| KQ Beta | 0.14 | 0.02 | (0.07) |

**Technical analysis:**
Since 2005 KQ shares trading on the NSE have traded at a mean of KShs. 61.6, a 5 year low of KShs. 16.55 and a high of KShs. 146 our return index (base value=100) indicates that an investor who invested KShs. 16.90 in January 2005 and reinvested all their dividends since then would have made 182.62 in returns, the stocks Beta over the 5 year period is 0.14 which indicates that there is positive correlation with the NSE20 index in the long term.

However when shorter periods are analyzed i.e.6 months and 3 months the stock price movement returns a mean of KShs. 52.09 and KShs 52.8 respectively with lows of KShs. 36 and KShs 46 respectively and peaks of KShs. 64.5 and KShs. 59.5. This indicates that the stock has been experiencing higher lows with time and that we can expect support levels at around KShs. 45.

The stock price volatility returned a negative Beta of -0.07 over 3Months which indicates that the price has been moving in contrasting direction to the NSE20 index of which it is a constituent stock. As at 15th July 2010 Kenya Airways stock was trading at KShs 47.50 with a P/E Ratio of 10.80 which is below the average commercial and services sector P/E at 14.99 and the Main Investment Market Segment (MIMS) P/E of 13.90.

Based on the technical analysis we expect that the stock which is trading close to the KShs. 45 support level it is at an entry level for prospective investors in the medium term to long term with downward pressure expected to be at around KShs 60.00.

**Conclusions and recommendations:** Kenya Airways faces an array of external risks primarily Fuel and exchange rate risks which can have negative effects on the company's profitability and ultimately on its stock value. The company has in place derivative instruments to mitigate the fuel price risk while the fact that the company receives payment for services in various regions in local currencies which helps reduce exposure to currency risks especially in the face of a weakening shilling.

The Airline industry as a whole is exposed to economic pressures and therefore the KQ stock is essentially cyclical in nature which means that investors should consider all underlying economic indicators before investing in the stock. Current GDP estimates are at 5% while the 90 day T-Bill is approaching 2001 levels at 1.728% while the 182 T-Bill stands at 1.8 and inflation is under control at 3.88% as the CBK seeks to trigger investment as a means to spur economic growth. The banking sector has also seen lowering lending rates across the board while the global economy is on recovery mode. Further there is a semblance of stability in fuel prices which are expected to level out at around USD 60 per barrel all of which bode well for KQ. International travel has picked up with the economic recovery and therefore at 47.50 we feel that KQ is close to bottom levels and should trigger increased demand for the stock going forward, thus exerting upward pressure on the stocks price . As a result we recommend a medium term to long term **BUY and Hold position.**