



THE INAUGURAL AFRICA AIRFINANCE CONFERENCE

Michael B. Cox, Vice Chairman Seabury Group

Africa: Aviation's Next Frontier



SEABURY

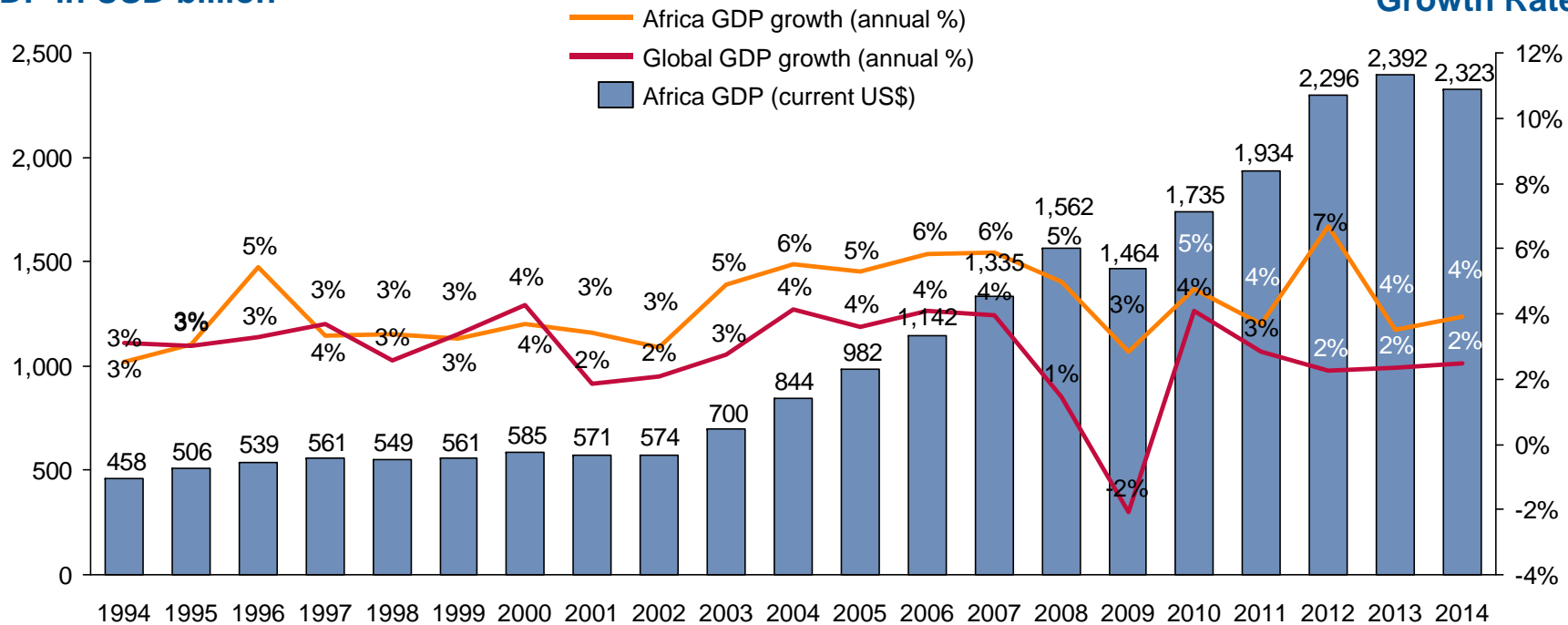
- African Economic Outlook
- Airlines in Africa
- Aviation financing in Africa
- Opportunities and challenges

Economic trends

Africa's gross domestic product (GDP) has been growing consistently for the last twenty years, outperforming the global economy

GDP in USD billion

Growth Rate %



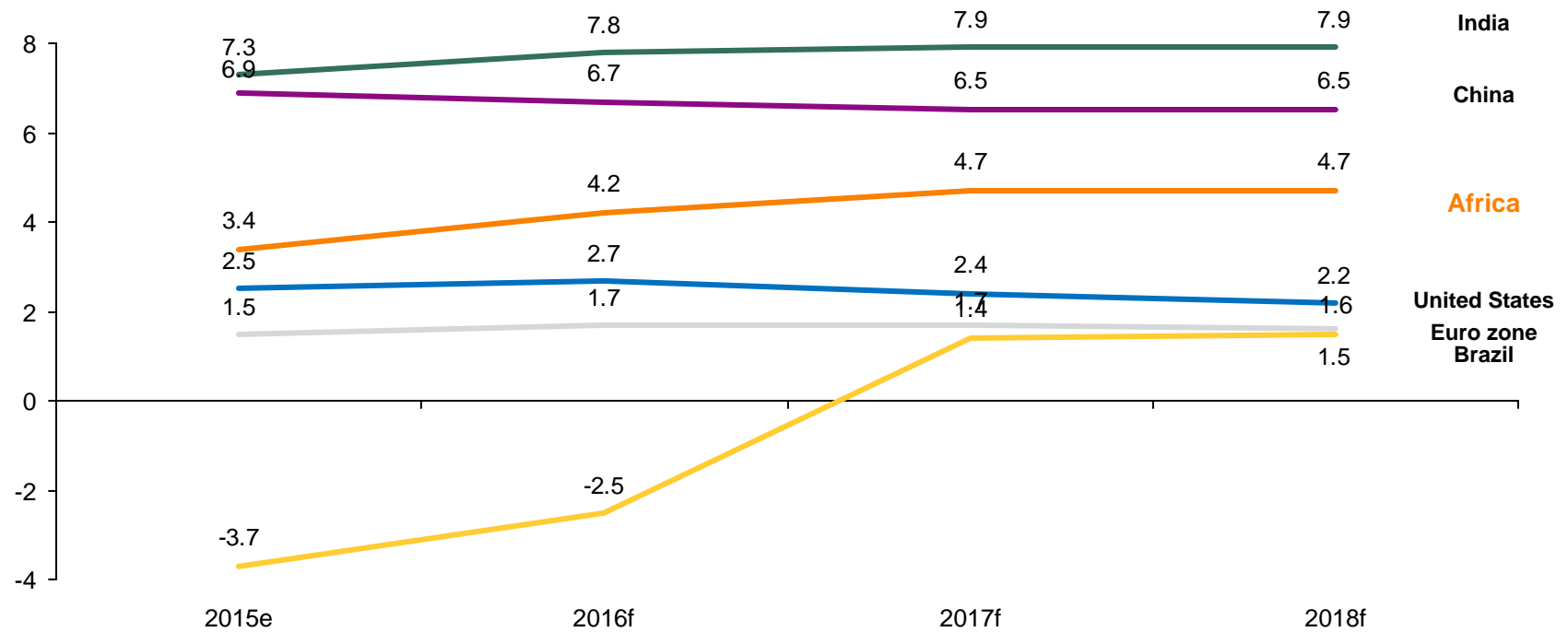
Source: World Bank and Seabury Analysis

Economic trends



Africa is one of the world's top economic growth performers and is expected to remain strong in the coming years

GDP growth rate (%)



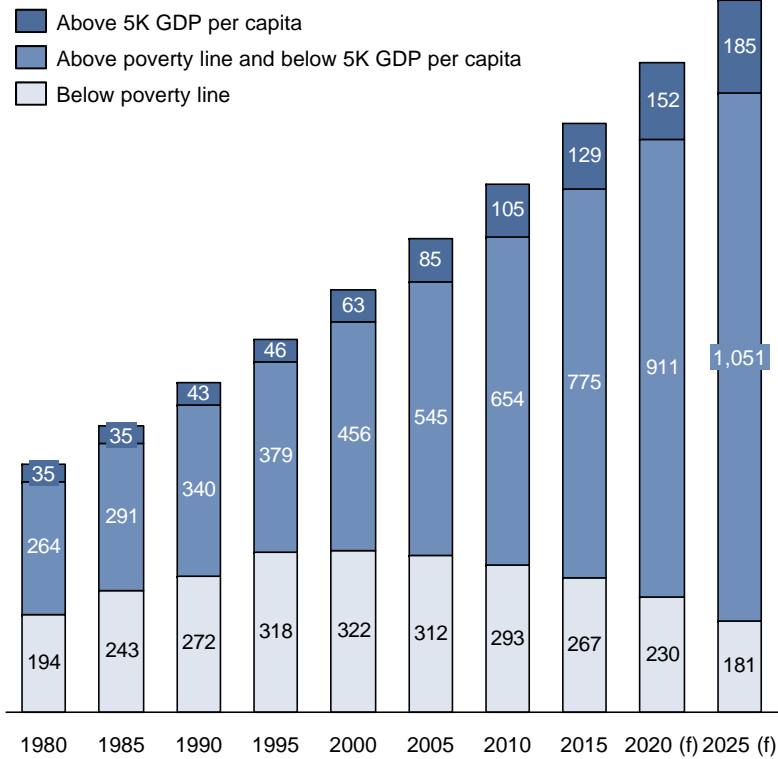
Source: World Bank Global Economic Prospects- January 2016

Economic trends

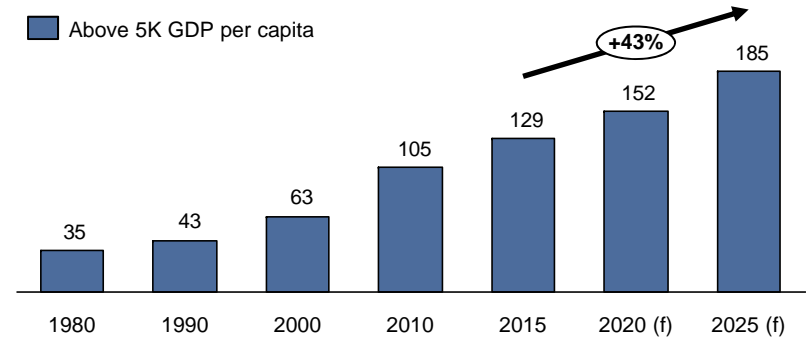
With a young population and a growing urban middle class, a potential 2 trillion (USD) market opportunity is expected

Africa population by income group

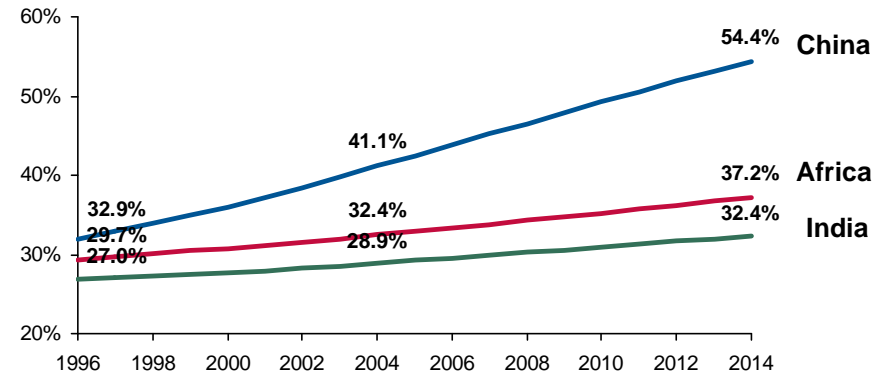
US\$ millions



Population above 5k GBP per capita



Urban population (% of total)



Approx. 65% of the population is less than 35 years old

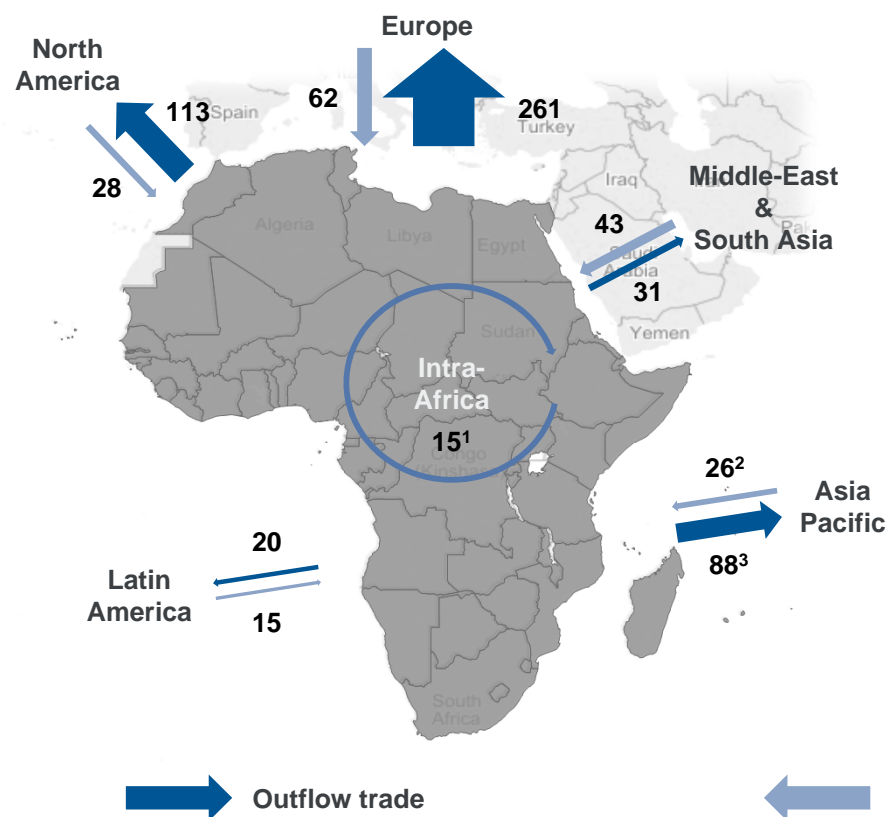
Source: United States Census, African Union Commission; the World Bank; the IMF and the AFDB

African total trade (by weight) trends

Between 2000 and 2014, African trade flows have increased significantly with Asia Pacific to nearly the European levels; with significant North American reductions

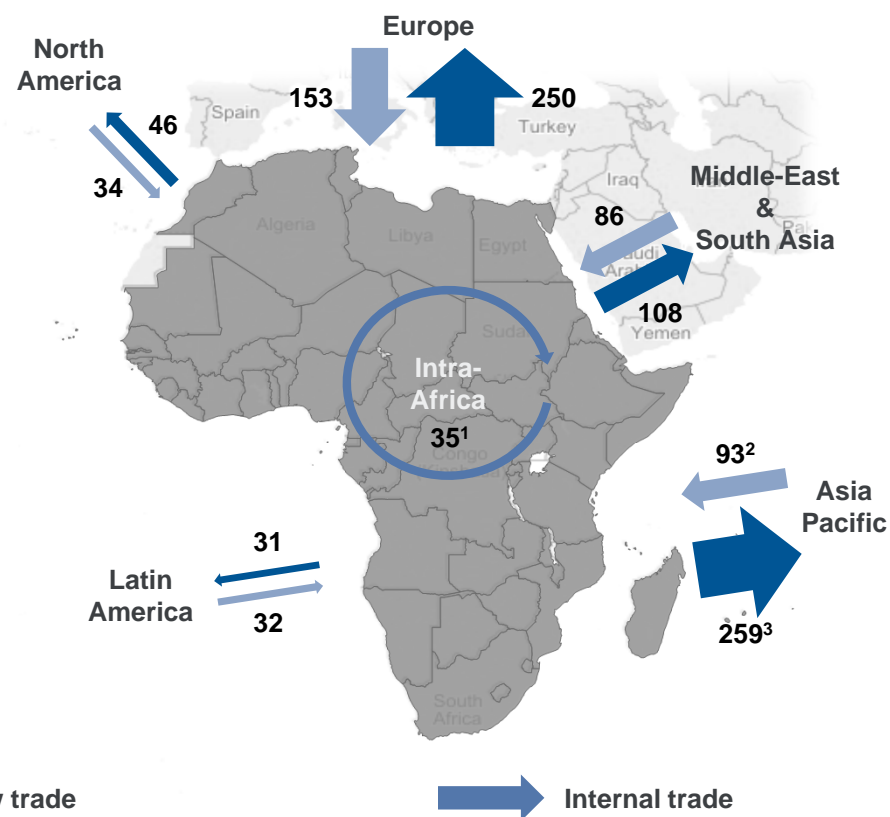
African total trade weight in 2000

Metric tons (M)



African total trade weight in 2014

Metric tons (M)



Notes: Trade commodities include amongst others raw materials, industrial consumables, foods, chemicals and products and temperature or climate control; (1) Intra- African flows are partial, the missing flows are inside and between North Africa and West Africa; (2) Inflow trade weight from China jumped from accounting for 20% of the Asian Pacific inflow in 2000 to 50% in 2014; (3) Outflow trade weight to China jumped from accounting for 33% of the Asian Pacific outflow in 2000 to 70% in 2014;

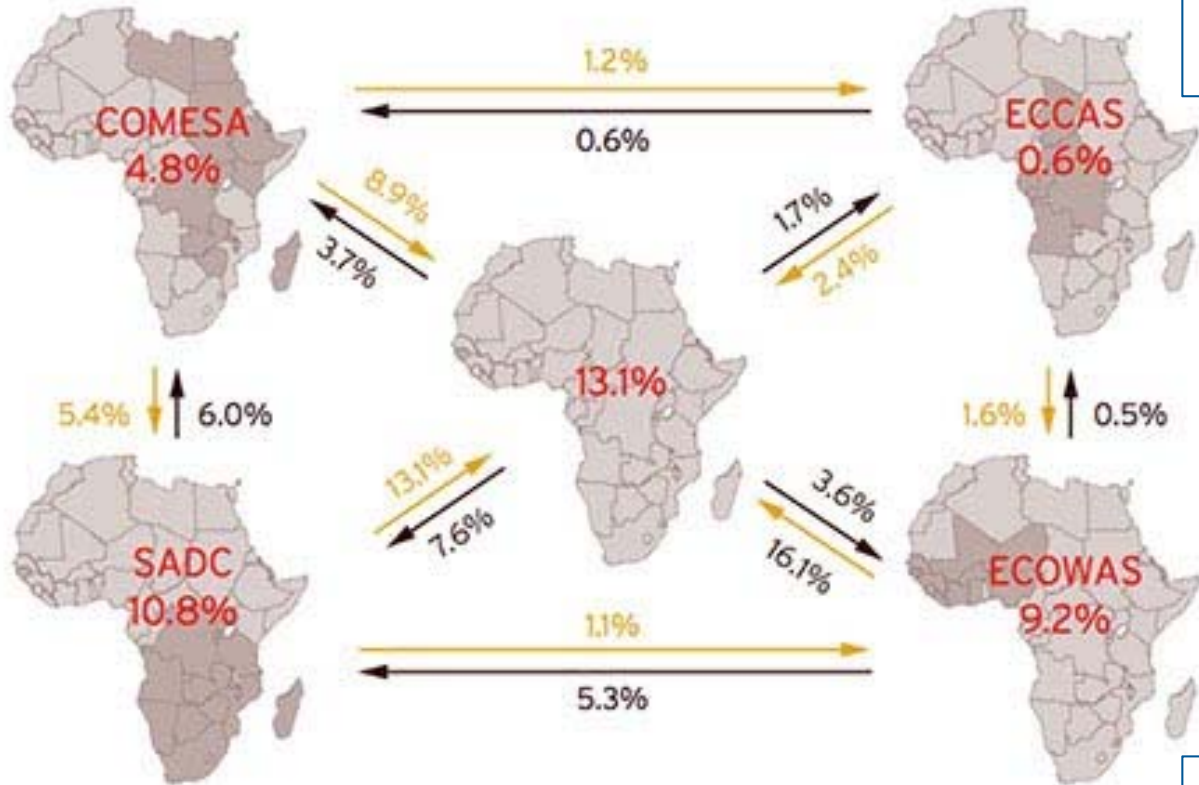
Source: Seabury Global Trade Database

Intra Africa trade trends and regional integration (by weight)

Approx. 13% of African trade is intra-Africa with limited regional integration

Intra Africa trade by regional blocs & within Africa in 2015

Member States: 20
Pop.: 406 million
GDP: \$735 Billion



Member States: 11
Pop.: 124 million
GDP: \$175 Billion

Member States: 15
Pop.: 277 million
GDP: \$1,193 Billion

Member States: 15
Pop.: 340 million
GDP: \$1,322 Billion

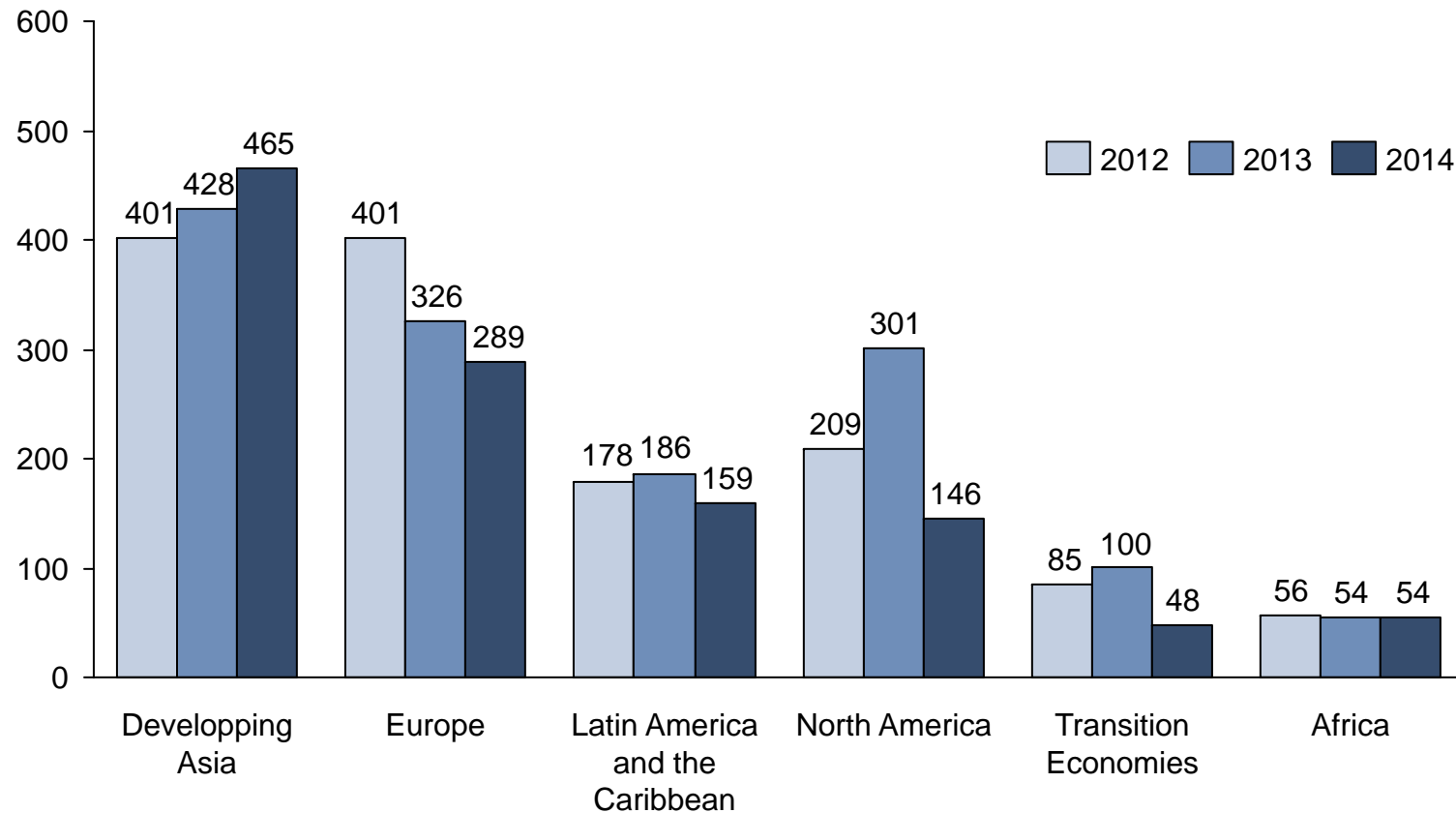
Source: Intra-African Trade' – A Renewed Urgency for Further Regional Integration by the AU

Trade trends- Foreign direct investment

Foreign direct investment (FDI) inflows to Africa as a whole remained stable at \$54 billion in 2014

FDI inflows, by regions, 2012-2014

USD Billions



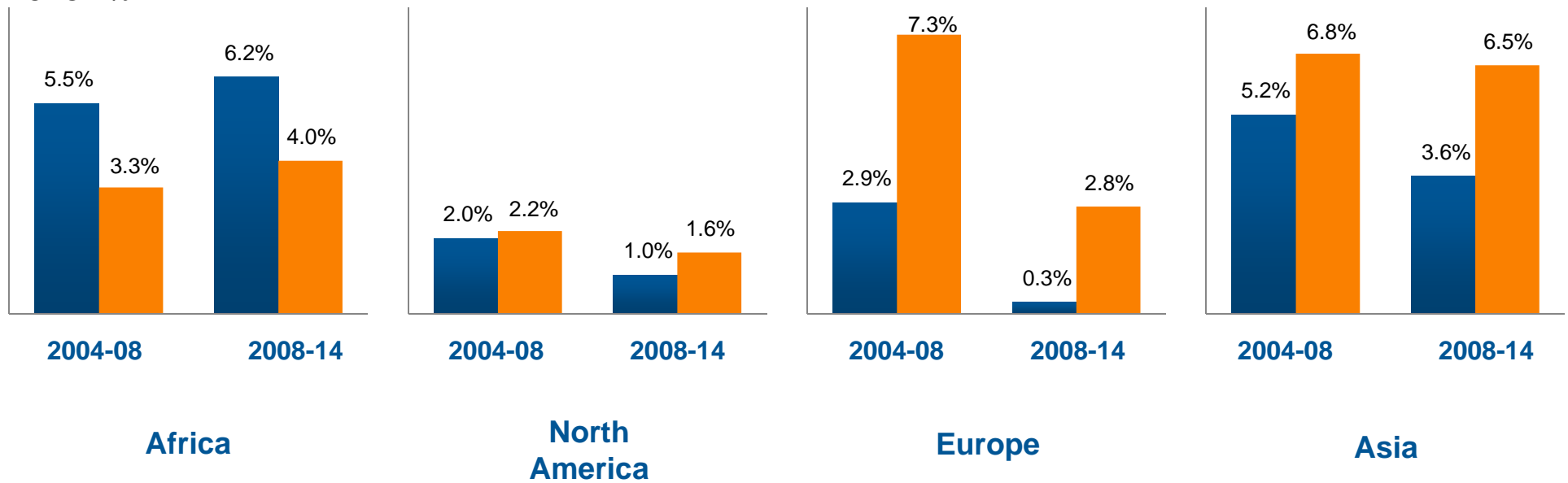
Source: unctad.org/en/PublicationsLibrary/wir2015_en.pdf, UNCTAD World Investment Report 20151

- African Economic Outlook
- **Airlines in Africa**
- Aviation financing in Africa
- Opportunities and challenges

Growth in Real GDP and ASKs by Region

Commercial traffic in Africa is expected to grow at 5.2% annually between 2011 and 2030

GDP & ASK growth per year
CAGR %



■ GDP growth
■ ASK growth

Source: Diio and Seabury Analysis

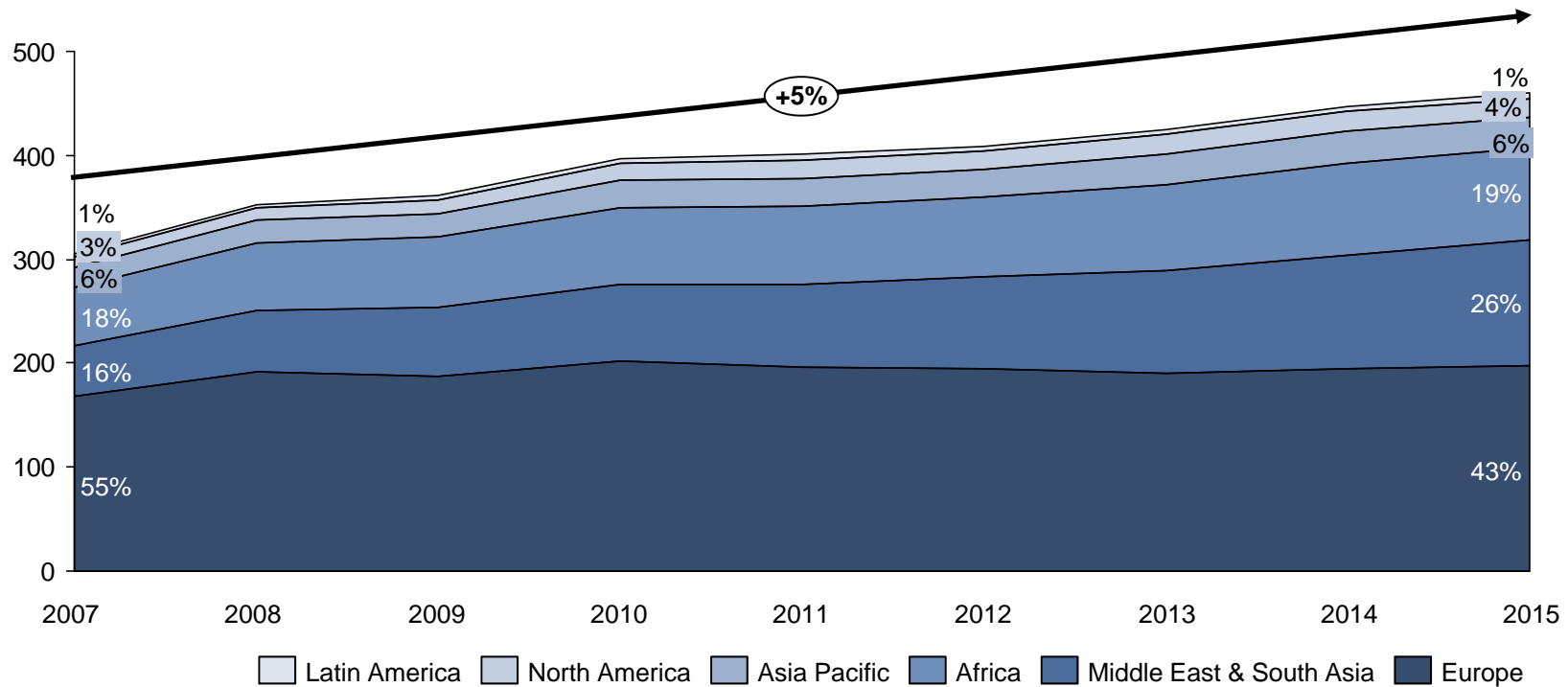
ASK distribution



Since 2007, the distribution of ASKs to / from Africa has shifted from being European oriented to a more global orientation

ASKs to / from Africa and other continents

ASKs both ways (Billions)



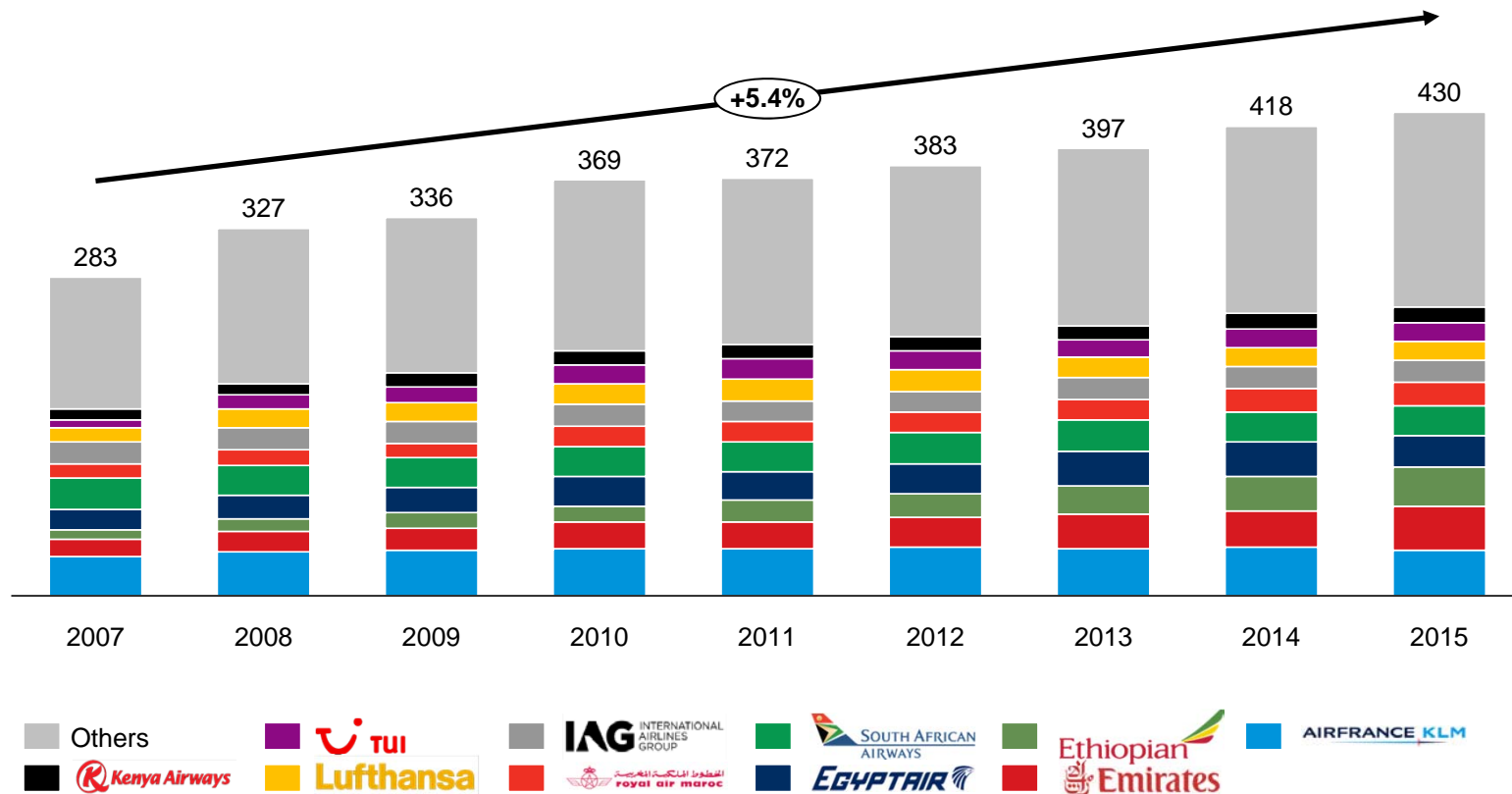
Source: Innovata schedule data, Seabury analysis

International ASKs

Since 2007, the 5.4% YoY growth of international ASKs to / from Africa has been primarily driven by Emirates, Ethiopian and other African carriers

ASKs top 10 carriers

ASKs both ways (Billions)



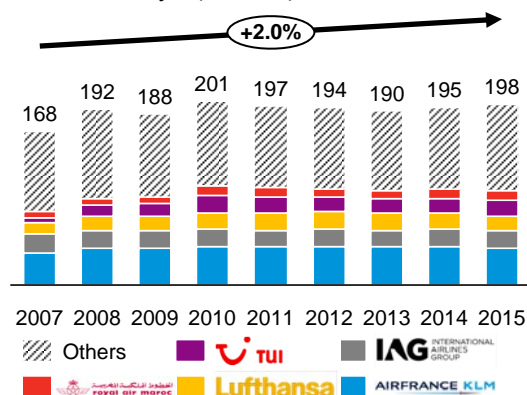
Source: Innovata schedule data, Seabury analysis

African air traffic growth

Low-growth European market represents a large part of the African air traffic but it has been quickly equalled in capacity since 2007 with the Middle-Eastern markets

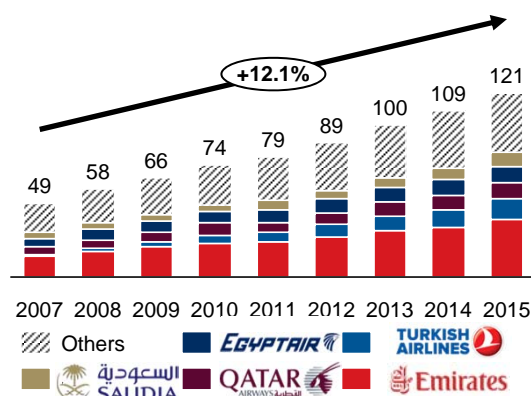
Africa - Europe

ASKs both ways (Billions)



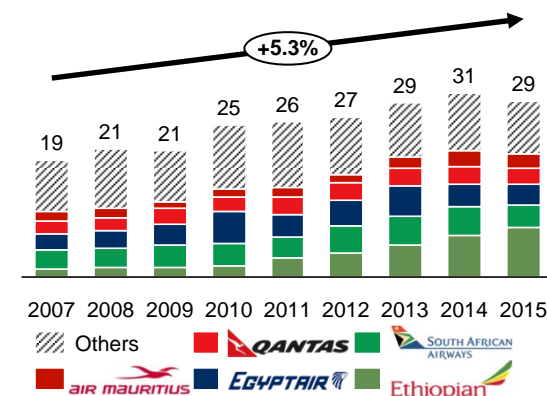
Africa - Middle-East

ASKs both ways (Billions)



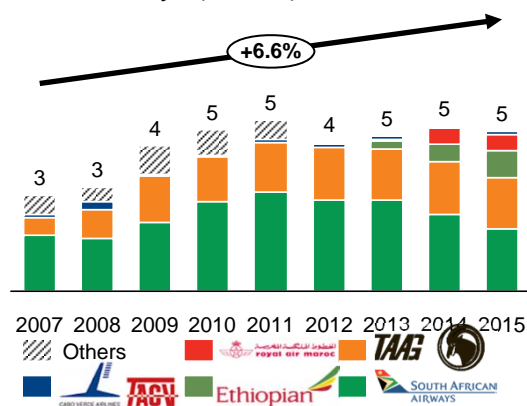
Africa - Asia

ASKs both ways (Billions)



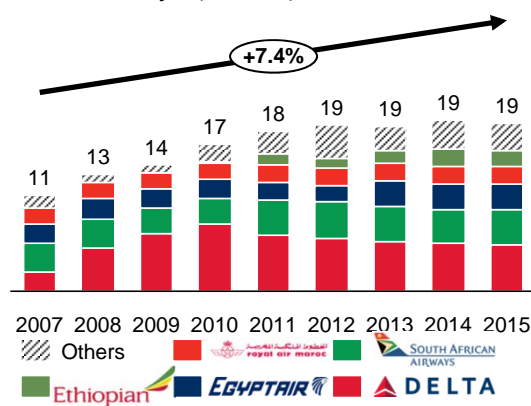
Africa - Latin America

ASKs both ways (Billions)



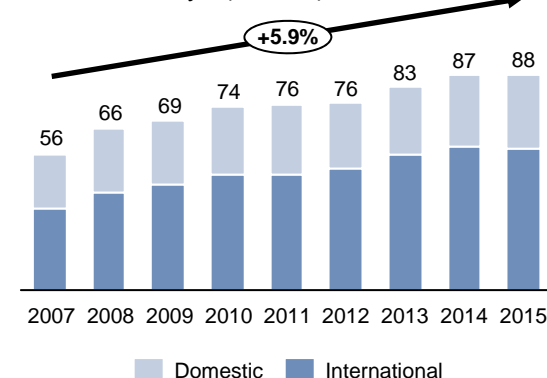
Africa - North America

ASKs both ways (Billions)



Africa: Dom. vs. Int.

ASKs both ways (Billions)

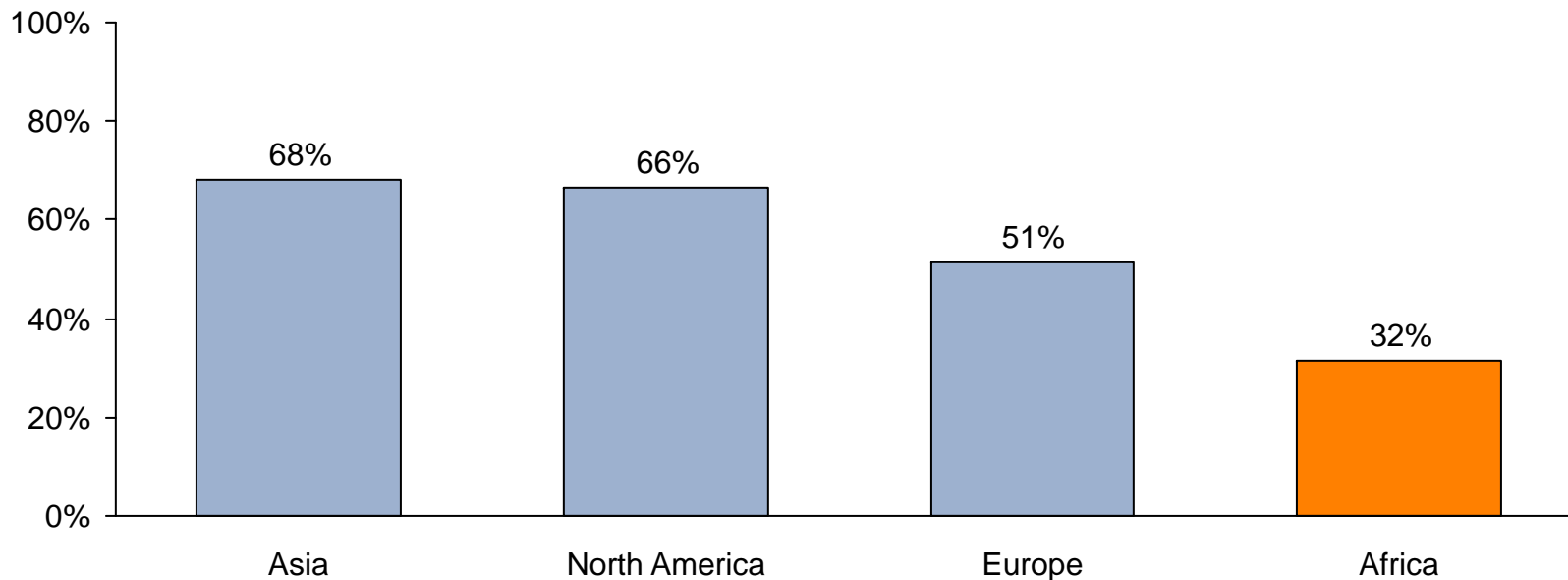


Notes: S.A.A = South African Airways, R.A.M = Royal Air Maroc
Source: Innovata schedule data, Seabury analysis

Intra-Africa capacity

The intra-African markets are underserved and represents a huge opportunity for airlines

2014 Inter-regions capacity as a % of total capacity (ASMs)



Too often, the best option for intra-African routes is to connect through Europe of the Middle East

Source: Diio and Seabury Analysis

African carriers

5 African carriers offer more than 65% of the total capacity; largely from Ethiopia, South Africa, Egypt, Morocco and Kenya in a continent of 54 countries

	ASMs (millions, LTM Dec 2015)	Existing Fleet				Fleet Orders				Total Fleet	
		Prop	RJ	Narrow	Wide	Prop	RJ	Narrow	Wide	Exist.	Order
Ethiopian	21,750	12	-	20	30	2	-	20	18	62	40
SOUTH AFRICAN AIRWAYS	19,784	-	-	26	23	-	-	-	5	49	5
EGYPTAIR	17,002	-	-	34	18	-	-	8	1	52	9
الخطوط الملكية المغربية royal air maroc	11,955	-	4	36	7	-	-	-	3	47	3
Kenya Airways	9,067	-	15	11	9	-	-	-	-	35	-
AIR ALGERIE	5,804	15	-	26	11	-	-	6	-	52	6
Comair Limited	4,040	-	-	13	-	-	-	10	-	13	10
الخطوط التونسية TUNISAIR	3,832	-	-	28	2	-	-	4	1	30	5
TAA LINHAS AEREAS DE ANGOLA ANGOLA AIRLINES	3,457	-	-	5	6	-	-	-	2	11	2
nouvelair	3,413	-	-	6	-	-	-	-	-	6	-
mango	2,194	-	-	11	-	-	-	-	-	11	-
العربية للطيران airarabia.com	1,392	-	-	4	-	-	-	-	-	4	-
الخطوط الجوية السودانية SUDAN AIRWAYS	1,264	3	1	3	-	-	-	-	-	7	-
OECAir	1,136	-	-	3	1	-	-	-	-	4	-
Air Madagascar	1,087	4	-	1	2	3	-	-	-	7	3
RwandAir	869	2	2	4	-	-	-	-	2	8	2
LAM Lufthansa Aviation Services	833	-	2	2	-	-	-	-	3	4	3
TACV Togo Airlines	781	3	-	2	-	-	-	-	-	5	-
Nesma Airlines شركة الخطوط الجوية Nesma Airlines	746	-	-	3	-	-	-	-	-	3	-
aero	727	3	-	13	-	-	-	-	-	16	-
All Others (42 carriers)	8,043										

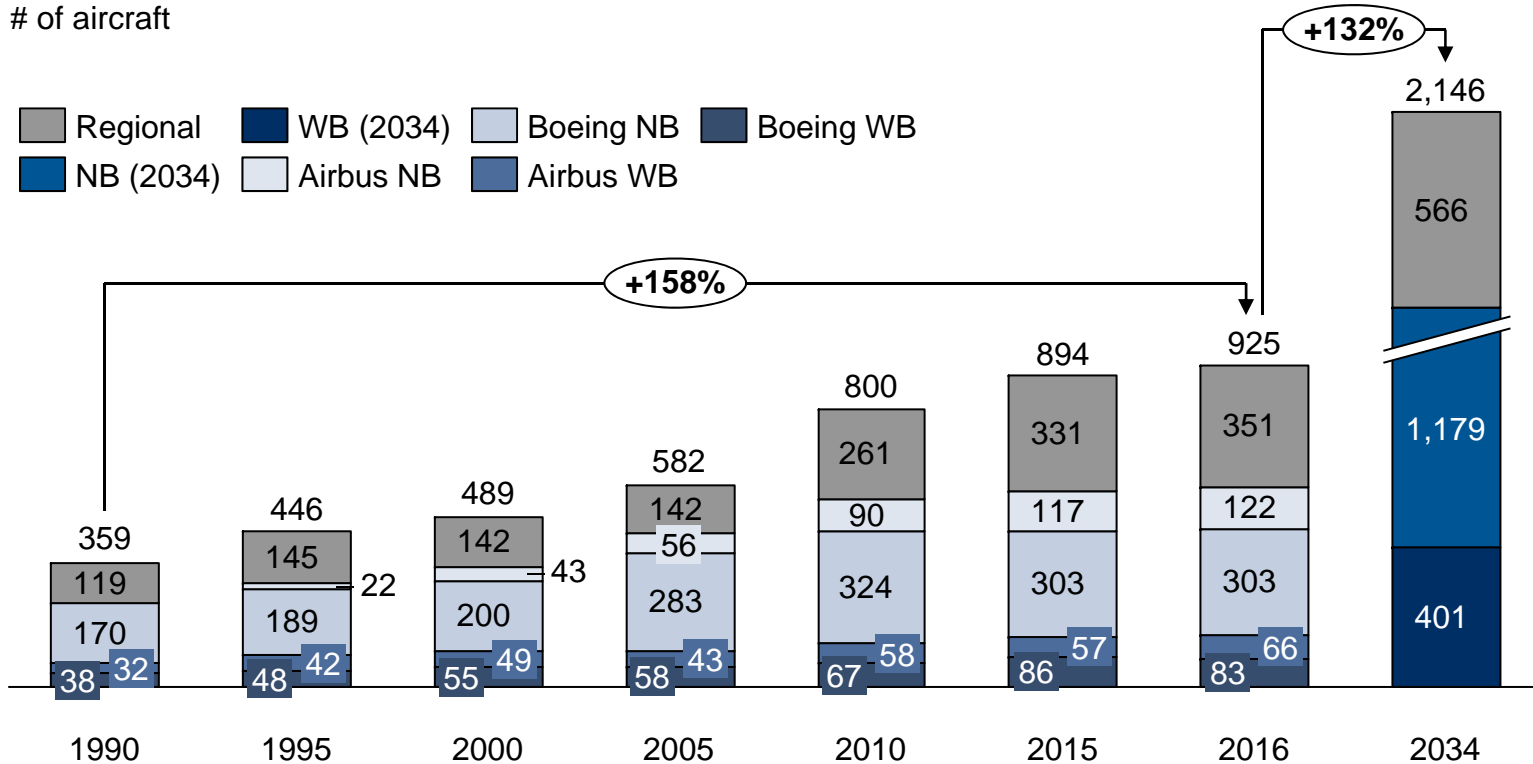
Source: ASM are LTM December 2015 from Diio.net; fleet data from Ascend (March 2016) and CAPA (March 2016)

Actual and forecasted fleet in Africa

All major manufacturers share the view that Africa's fleet will more than double until 2035

Passenger aircraft in service (actual and forecasted)

of aircraft



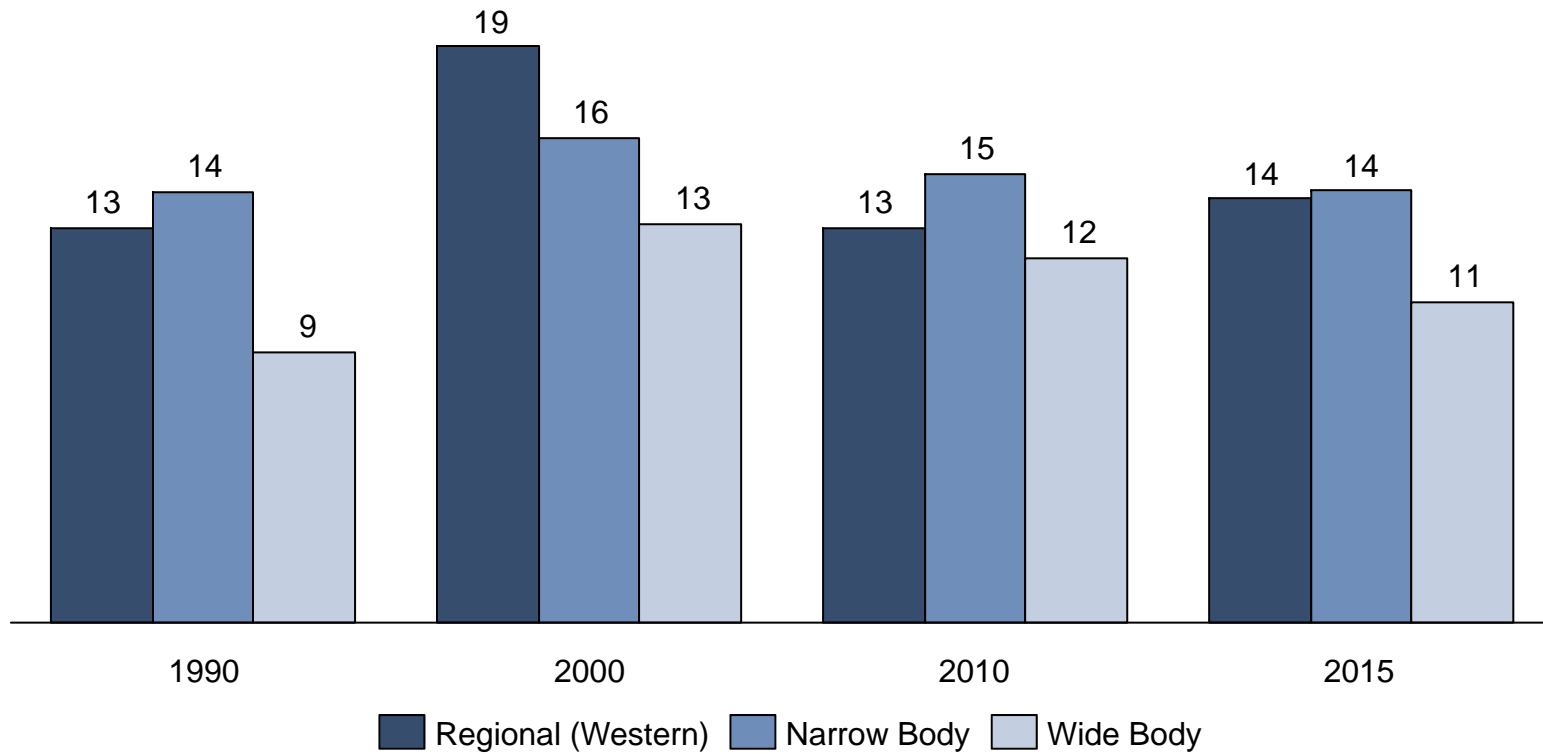
Notes: Airbus forecasts 1,117 deliveries and 100 retirements of NB and WB aircraft for the 2015-2034 period; Boeing predicts 1,170 deliveries for the same period. Embraer forecasts deliveries of 240 70-130 seat regional aircraft and 140 turboprop regional aircraft for the 2015-2034 period. Regional fleet includes the following manufacturers: ATR, BAE Systems, Bombardier, Embraer and Fokker

Source: Ascend, Airbus forecast, Embraer forecast, Seabury analysis

Africa's fleet average age

The average age has been steadily dropping since 2000

Aircraft average age
of years



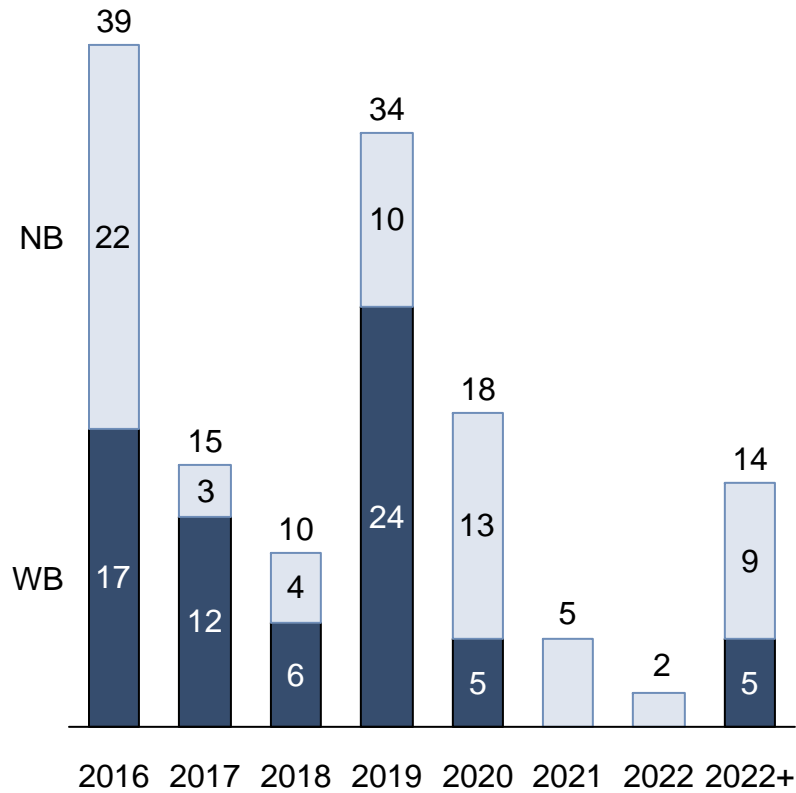
Notes: Core regional fleet includes the following manufacturers: ATR, BAE Systems, Bombardier, Embraer and Fokker
Source: Ascend, Seabury analysis

Expected NB and WB deliveries to airlines

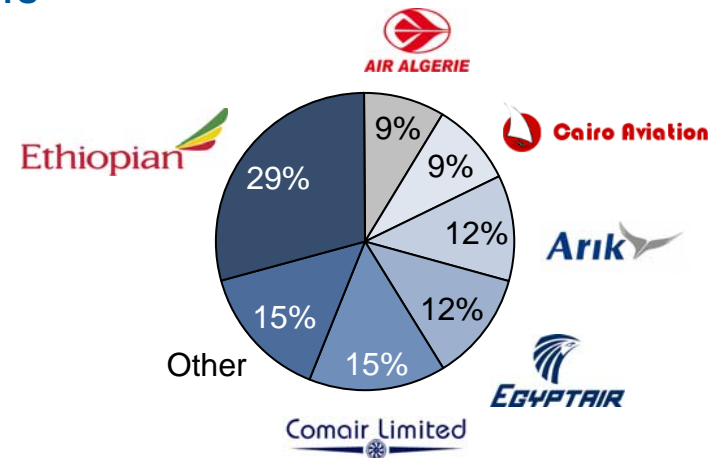
Airbus and Boeing expect over 1,100 WB and NB deliveries until 2035 with only 137 firm orders today

Current orders in Africa

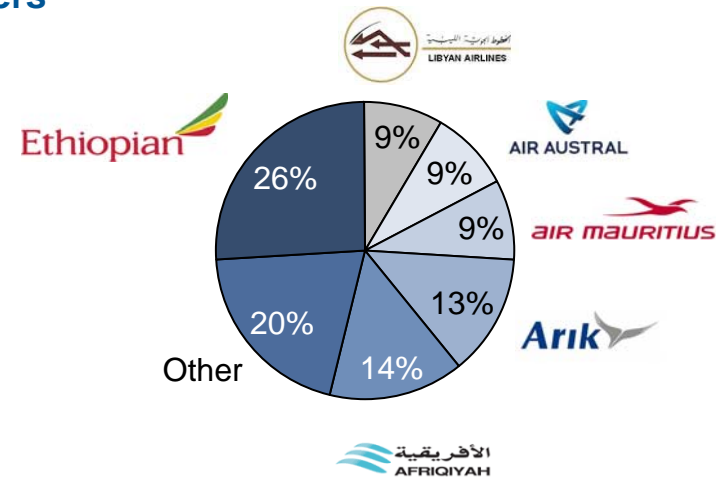
of aircraft



NB orders



WB orders



Source: Ascend, Seabury analysis

African airlines; joint ventures and international alliance

With only 4 airlines participating in global alliances; joint ventures have become more prominent



- Investment (and commercial agreement)
- Commercial agreement
- - - - - Global alliance

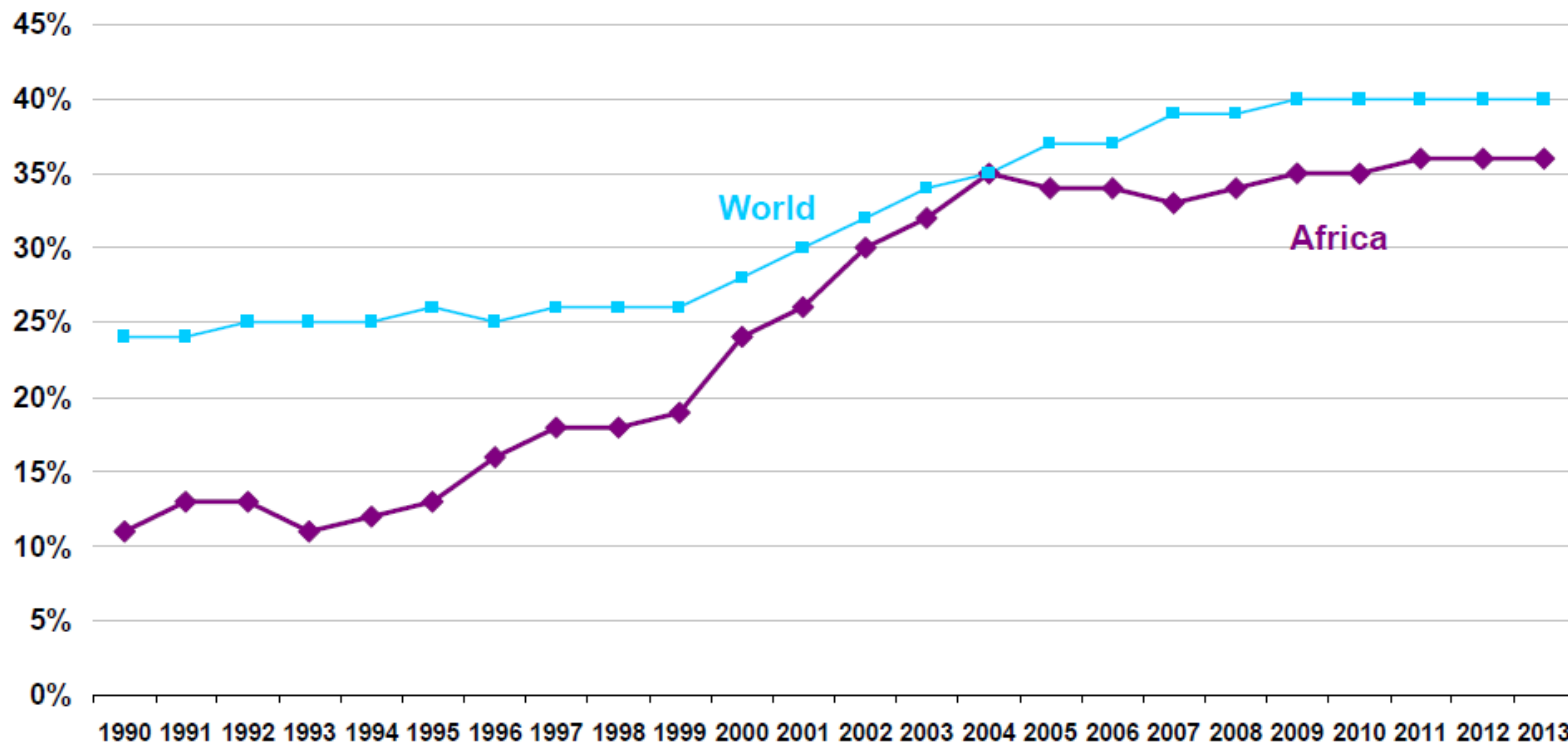
- African Economic Outlook
- Airlines in Africa
- **Aviation financing in Africa**
- Opportunities and challenges

Aircraft lessors increasing Africa exposure

In Africa, Lessors are increasing their market shares; in a region with relative limited access to capital their role is essential to the industry's growth

Lessor fleet share

% of total fleet



Source: Boeing Capital, Ascend 2014 data, Seabury analysis

Aircraft financing environment

African carriers should be well positioned to access traditional and new sources of funding

Capital Providers	2009	2010	2011	2012	2013	2014	2015	2016F	2016 Africa	Seabury Outlook
Leasing Companies	Major Concern	Cautionary	Cautionary / Satisfactory	Cautionary / Satisfactory	Cautionary / Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	With appetite for higher risk, major source of capital
Capital Markets	Concern	Cautionary	Cautionary / Satisfactory	Cautionary / Satisfactory	Cautionary / Satisfactory	Satisfactory	Satisfactory	Satisfactory	Concern	Very limited opportunities, potentially through Exim-Bond
Commercial Banks	Concern	Cautionary	Cautionary	Concern	Cautionary	Satisfactory	Satisfactory	Satisfactory	Cautionary	Some appetite, increased "regional" risk make the banks cautious
Export Credit Agencies	Cautionary / Satisfactory	Cautionary	Cautionary / Satisfactory	Cautionary	Concern	Concern	Concern	Cautionary	Satisfactory	Available to support, some creative solutions, but expensive
Private Equity and Hedge Funds	Major Concern	Cautionary	Cautionary / Satisfactory	Cautionary / Satisfactory	Cautionary / Satisfactory	Satisfactory	Satisfactory	Satisfactory	Cautionary	Some availability, looking for yield
Tax efficient leasing**	Cautionary / Satisfactory	Cautionary	Cautionary / Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Major Concern	Unlikely
New Sources of Funding*	Cautionary / Satisfactory	Cautionary	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Public banks and insurance companies
Airframe and Engine Manufacturers	Concern	Cautionary	Cautionary	Cautionary	Concern	Cautionary	Cautionary	Cautionary	Cautionary	Limited support available

■ Satisfactory
 ■ Cautionary / Satisfactory
 ■ Cautionary
 ■ Concern
 ■ Major Concern

Note: *Includes regional banks, pension funds, Islamic finance and other new exotic solutions; **Includes JOLCOs, French Operating Leases, US & Spanish Operating Leases
 Source: Boeing Capital, Seabury analysis

Potential sources of funds for other Aviation projects

Although Africa presents a challenging environment, alternative sources of financing are available

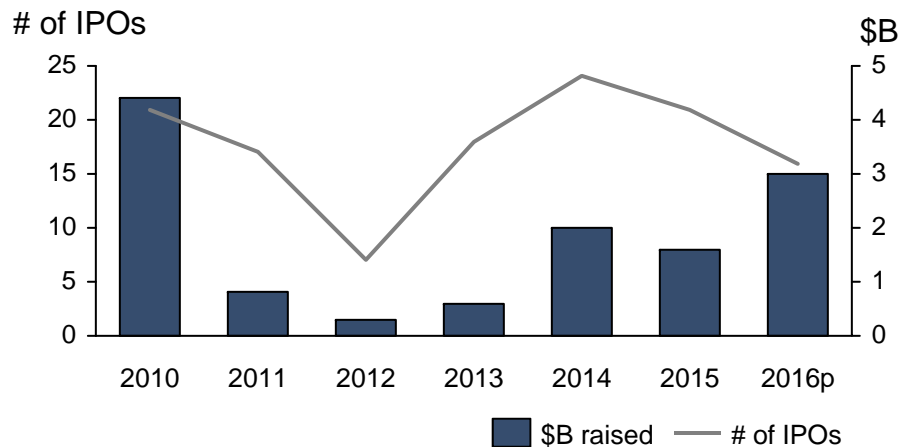
Sources

Banks	International Institutions	Sovereign Funds	Private Equity	Partnerships

Opportunities

- Increased interest of private equity for Africa (c\$12b/y)
- A steady increase of companies launching IPOs
- Sovereign funds exposure:
 - Norway's sovereign fund held African securities >\$5.6bn
 - Chinese African FDIs rose to \$3.5bn in 2013
 - Africa's sovereign funds could invest an additional \$29bn

IPOs in Africa



Challenges

- Complicated legal & political framework
- Limited market liquidity (growing market but lacking depth)
- “Overhang” of unused capital due to limited suitable investment opportunities
- High economic volatility linked to high dependency on commodity prices

Source: Baker & McKenzie, Thomson One, Overseas Development Institute, The Commonwealth, World Bank, Reuters

- African Economic Outlook
- Airlines in Africa
- Aviation financing in Africa
- Opportunities and challenges

Airline success factors: Key elements

Airline success revolves around 6 key interrelated elements supported by a comprehensive strategy and business plan



Strategic Direction	Commercial Strategy	Fleet
	<ul style="list-style-type: none"> ▪ Sound long-term strategy ▪ Rationalized and optimized network and schedule ▪ Effective revenue management ▪ Match aircraft to network plan and growth strategy 	<ul style="list-style-type: none"> ▪ No uneconomic aircraft ▪ Market aircraft financings ▪ Future fleet secured to deliver commercial strategy
Cost Structure	Best practice operations and lean cost structure	Labor
	<ul style="list-style-type: none"> ▪ Well negotiated customer & vendor contracts ▪ Optimized supply chain ▪ Monitored lean cost structure ▪ Constantly implement best operational practices 	<ul style="list-style-type: none"> ▪ High labor productivity ▪ Streamlined organization ▪ Sustainable labor costs
Catalysts	Liquidity	Capital Structure
	<ul style="list-style-type: none"> ▪ Appropriate liquidity level to deal with seasonality & chocks ▪ Monitoring procedure 	<ul style="list-style-type: none"> ▪ Appropriate capital to finance business plan ▪ Secured aircraft financing ▪ Strong balance sheet

Airline success factors and challenges in Africa

Success factors



Low cost base



Strong local market



Strong network



Access to capital



Management stability



Modern fleet



Cape Town convention

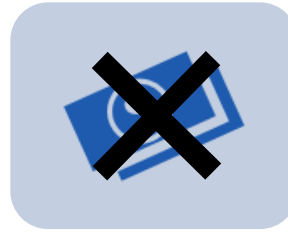


Government support

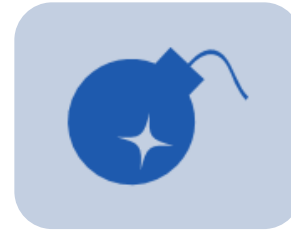


Alliances/
partnerships

Challenges



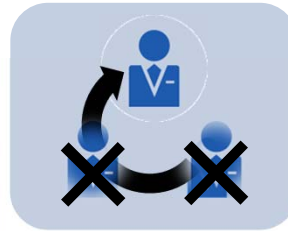
Limited access to capital



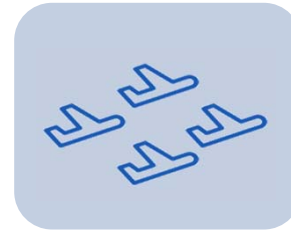
Political instability & terrorism



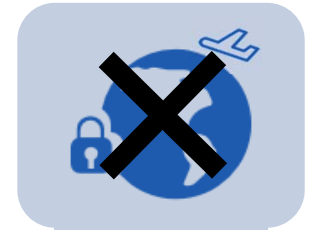
Weak infrastructure



Management instability



LCC/Middle East competition



Lack of open skies intra-Africa

Airline failures

The continent has had a number of failures in recent years



(2015)



(2014)



(2012)



(2012)



(2012)



(2012)



(2011)



(2010)



(2009)



(2009)



(2008)



(2007)



(2006)



(2004)



(2003)



(2002)



(1995)

Some African Airlines success stories

Success factors

Challenges

	Low cost base	Strong local market	Strong network	Access to capital	Management stability	Modern fleet	Cape Town convention	Government support	Alliances/partnership	Limited access to capital	Political instability & terrorism	Weak infrastructure	Management instability	LCC / Middle East competition	Lack of open skies intra-Africa*
Royal Air Maroc	✓		✓	✓	✓	✓		✓	✓			✓		✓	
TAAG Angola		✓					✓	✓	✓	✓		✓	✓		
Ethiopian Airlines	✓	✓	✓	✓	✓	✓	✓	✓	✓					✓	
Air Côte d'Ivoire			✓		✓	✓		✓	✓	✓	✓	✓			✓
Kenya Airways		✓	✓			✓	✓	✓	✓	✓	✓		✓	✓	
Air Mauritius					✓			✓	✓					✓	
South African Airways		✓	✓	✓				✓	✓				✓	✓	
Fast Jet	✓	✓	✓			✓				✓		✓	✓		✓

Note: *There are no real open skies in Africa but airlines focusing on intra-Africa traffic are significantly affected

NEW YORK | WASHINGTON, DC | MINNEAPOLIS | HOUSTON | SUMMIT, NJ | LOS ANGELES | LONDON | AMSTERDAM | HONG KONG | SINGAPORE | JOHANNESBURG | CINCINNATI | SAN FRANCISCO



SEABURY

DELIVERING COMPREHENSIVE SOLUTIONS FOR AVIATION CLIENTS WORLDWIDE

Michael B. Cox
Vice Chairman, Seabury Group
mcox@seaburygroup.com
Tel: +1 212 284 1136

Alexis Fekete
Executive Director
afekete@seaburygroup.com
Tel: +44 786 742 6030

Albert Konan-N'da
Sr. Associate
akonannda@seaburygroup.com
Tel: +1 571 730 9667



SEABURYGROUP.COM