

Steel demand in sub-Saharan Africa

African Union and the United Nations Statistics Division
Regional Seminar on International Trade Statistics, 13 May 2014



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- Overview of sub-Saharan Africa
- Steel demand of sub-Saharan Africa's countries
- Summary

Role of steel industry in a modern economy



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ASSOCIATION

Steel is everywhere in your life



Steel: A key driver of the world's economy



Sustainable steel: steel at the heart of the green economy



Role of World Steel Association

- worldsteel members produce around 85% of the world's steel
- More than 160 Members, with HQs are located in over 50 countries
- 17 of the world's 20 largest companies are members
- The World Steel Association acts as the focal point for the steel industry.
- worldsteel provides global leadership on all major strategic issues affecting the industry, particularly focusing on economic, environmental and social sustainability.
- worldsteel promotes steel and the steel industry to customers, the industry, media, financial markets and the general public.
- worldsteel assists its members to develop the market for steel, managing major projects in a range of industry sectors.

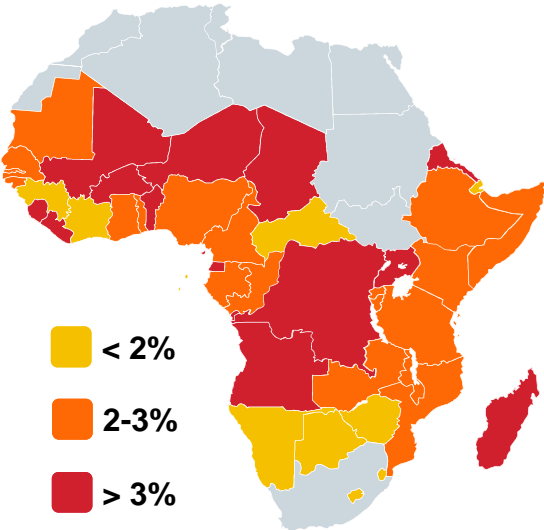
Overview of sub-Saharan Africa



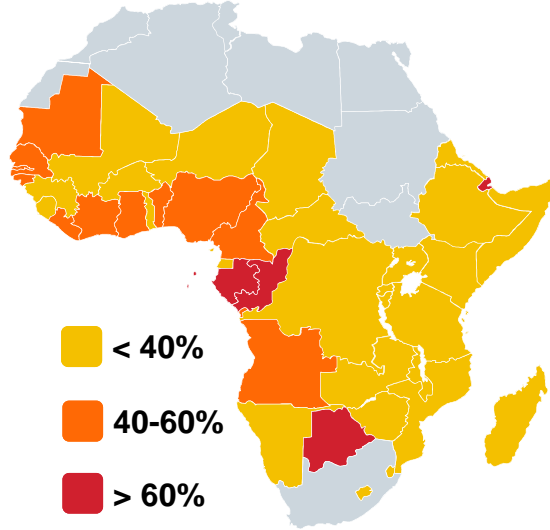
Strong growth of population

- Sub-Saharan Africa¹ was inhabited by 810 million people in 2012, which represents 11.5% of World total
- Strong population growth in recent years
- Low urbanisation rate and slower urbanisation growth in recent years than world average

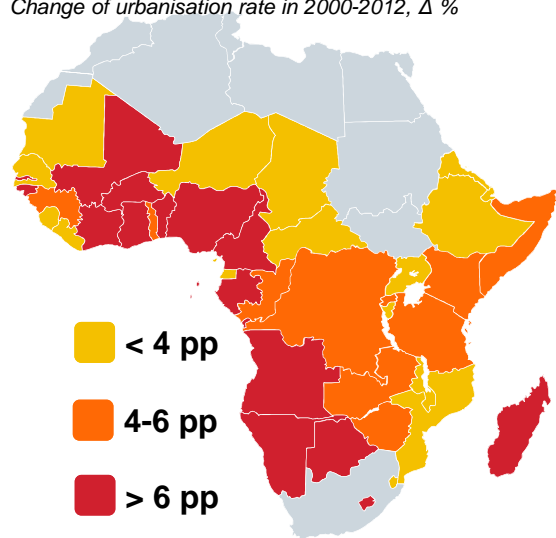
Population growth in 2000's
CAGR 2000-2012, %



Urbanisation rate in 2012
Urban population as % of total population



Change of urbanisation rate in 2000's
Change of urbanisation rate in 2000-2012, Δ %



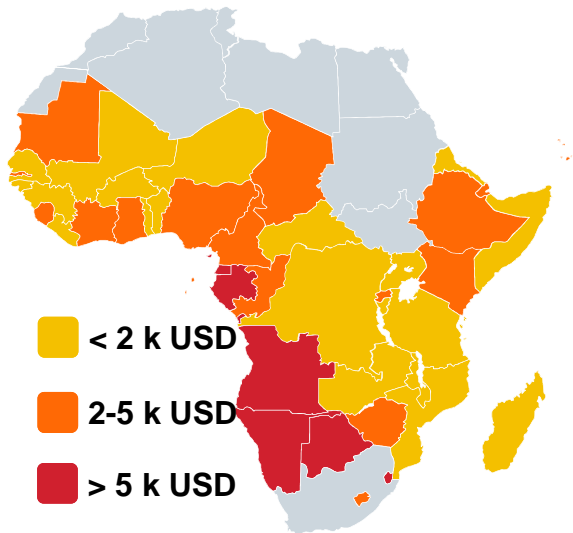
1) World Bank sub-Saharan Africa All Income Levels definition excluding South Africa, Sudan and South Sudan, 2012
Source: World Bank

Low income levels but with strong growths

- Low income level in sub-Saharan Africa
- Countries with lowest urbanisation rate have lowest GDP per capita
- Strong GDP growth
- Strong investments growth

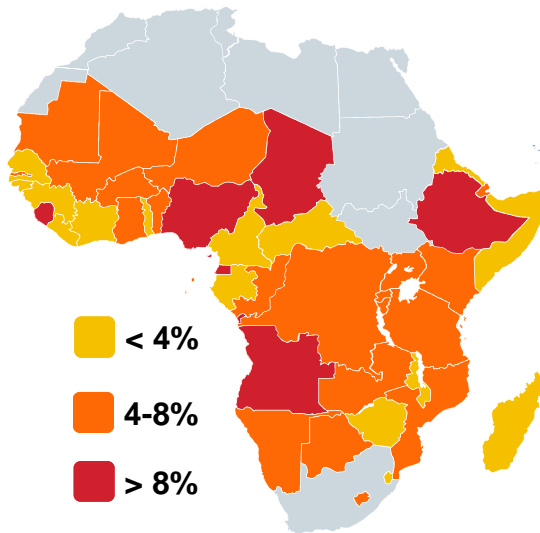
GDP per capita in 2013

Real 2010 PPP USD, thousand USD per capita



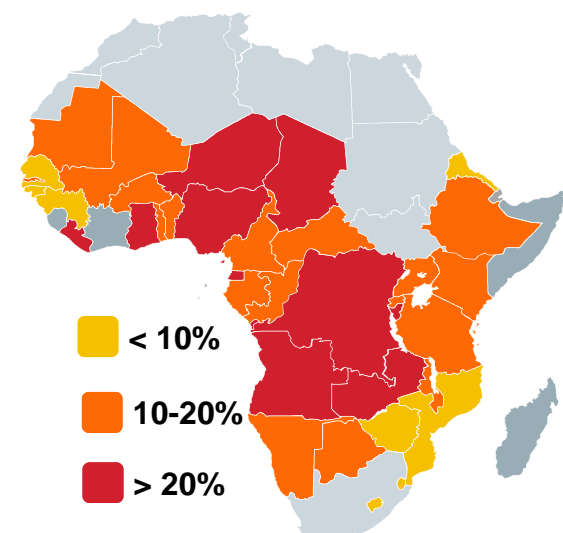
GDP growth in 2000's

Real 2010 USD, CAGR 2000-2013, %



GFCF growth in 2000's

Current USD, CAGR 2000-2012, %



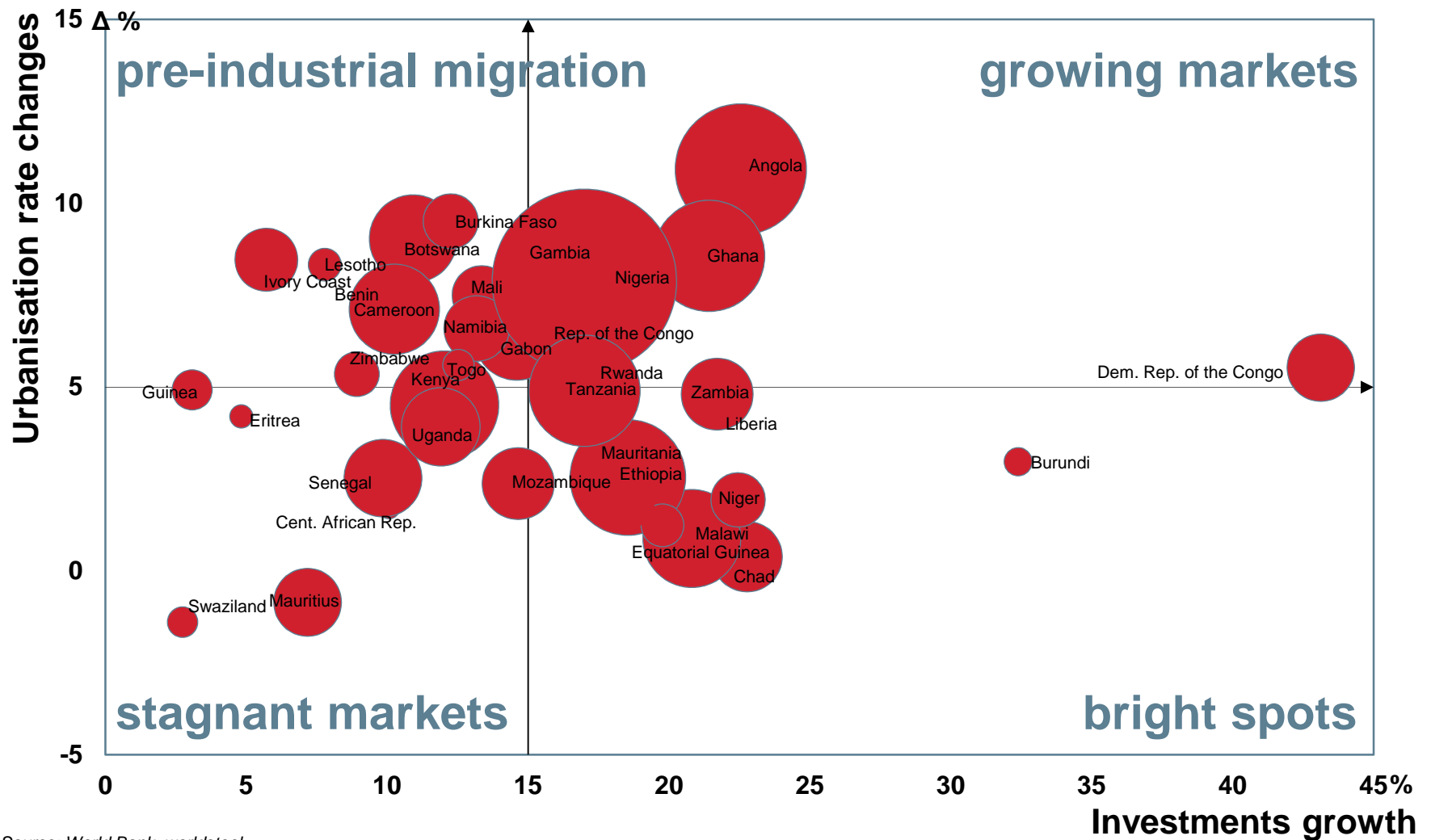
Source: World Bank, Global Insight

Investments and urbanisation relations

Investments growth: current USD, World Bank, CAGR 2000-2012, %

Urbanisation rate change: World Bank, change of urbanisation rate in 2000-2012, Δ %

Size of bubbles: investments current USD, World Bank, yearly average 2000-2012, bn USD



Source: World Bank, worldsteel

Steel demand of sub-Saharan Africa's countries

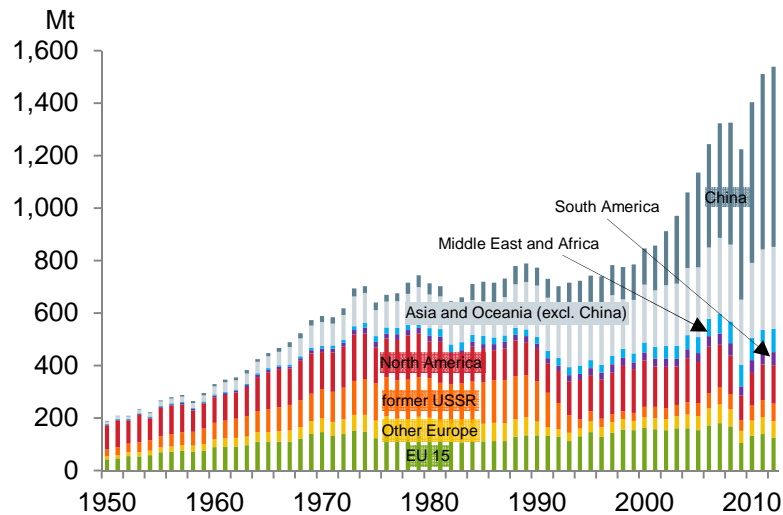


Regional breakdown of steel demand

- Regional structure of steel demand has changed dramatically since 2000
 - Expansion of steel demand in developing world leading by growth of China
 - Development of MENA and ASEAN countries

Steel demand development in 1950-2012

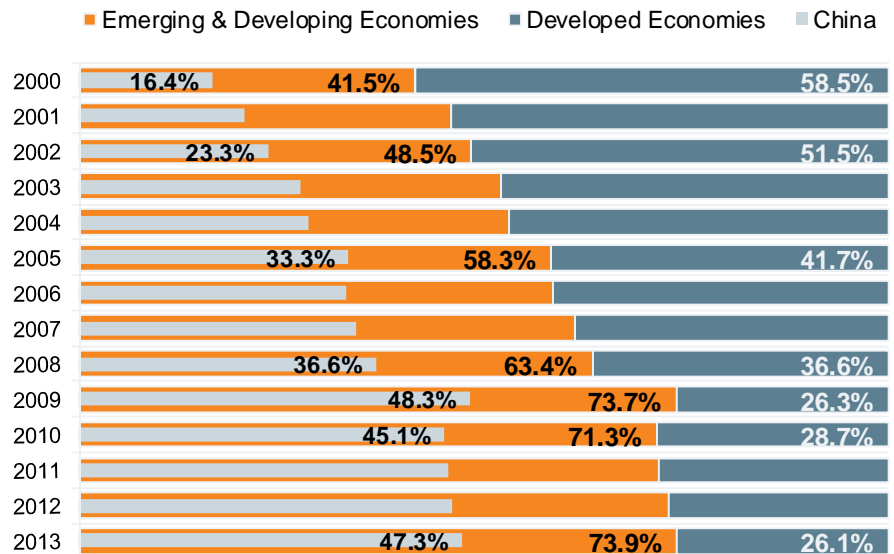
Apparent steel use, crude steel equivalent, million tonnes (Mt)



Source: worldsteel

Regional share in World steel demand

Apparent steel use, finished steel, %



Estimation of steel demand, data requirements

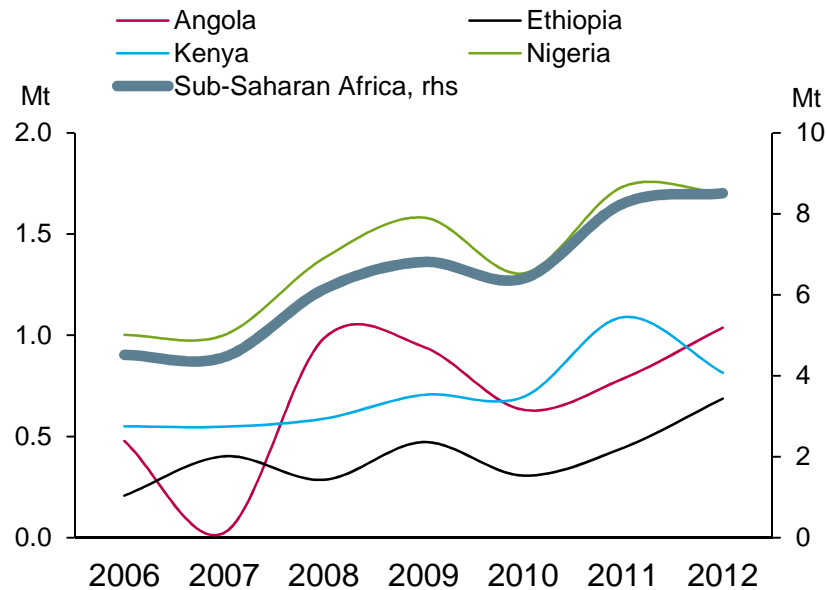
- Volume data required expressed in tonnes
- Production
 - It is assumed that sub-Saharan Africa's countries production is very small compared to steel demand
 - Accessibility issue; estimated for many countries
 - Steel demand depends largely on net imports of steel products
- Steel trade data
 - Steel imports and exports data are very often not available in UN Comtrade
 - Mirror statistics
- Steel containing goods trade data
 - As in case of steel trade data

Increasing imports to sub-Saharan Africa's

- All sub-Saharan Africa's countries are net importers of steel products
- Net import of steel products doubled in period from 2006 to 2012
- Top 5 net importers had 58% share in the total net imports

Net imports of sub-Saharan Africa

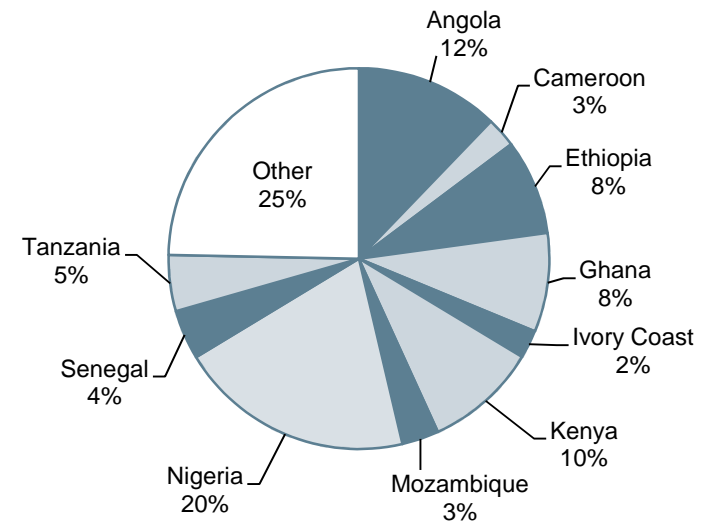
Mirror statistics, finished steel products, 2006-2012, million tonnes (Mt)



Source: ISSB, worldsteel

Share in sub-Saharan Africa's net imports

Mirror statistics, finished steel products, 2012, %

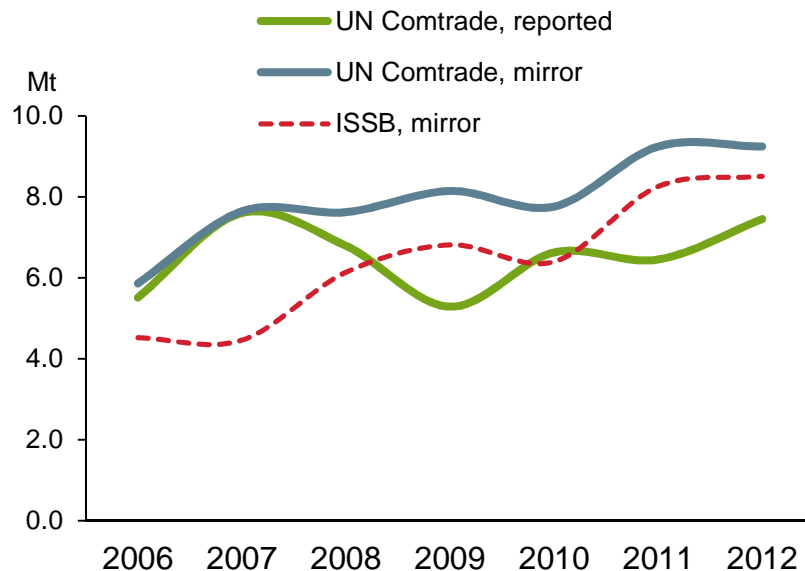


Different sources, different results, alike trend

- Comparison of ISSB mirror statistics with UN Comtrade and UN Comtrade mirror statistics gives different data, but similar trend
- UN Comtrade mirror statistics seems to cover bigger share of the market
- Samples shows good fit to price trend

Net imports of sub-Saharan Africa, different sources

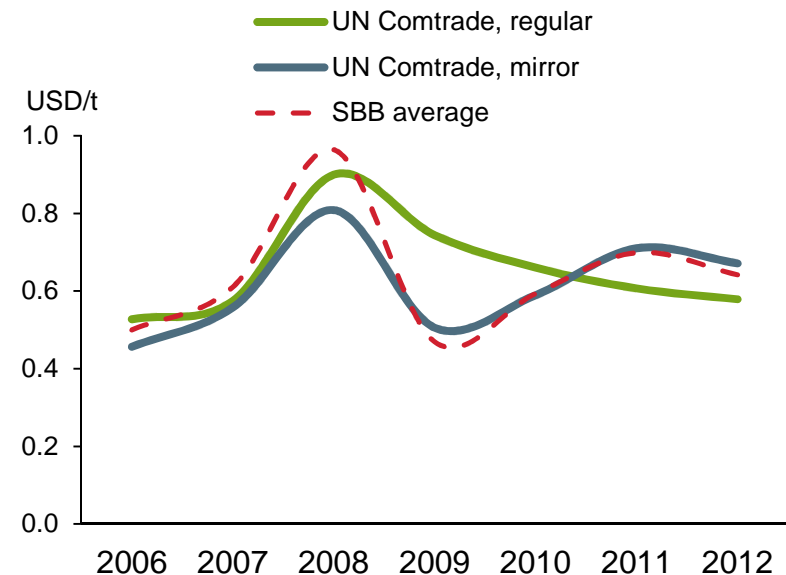
Finished steel products, 2006-2012, million tonnes (Mt)



Source: ISSB, UN Comtrade, SBB, worldsteel

Prices of steel products

Rebars (SBB, imports, cfr Gulf States) and HS-6 721200 (UN Comtrade, imports), 2006-2012, USD/tonne



Estimation of steel demand, limitations

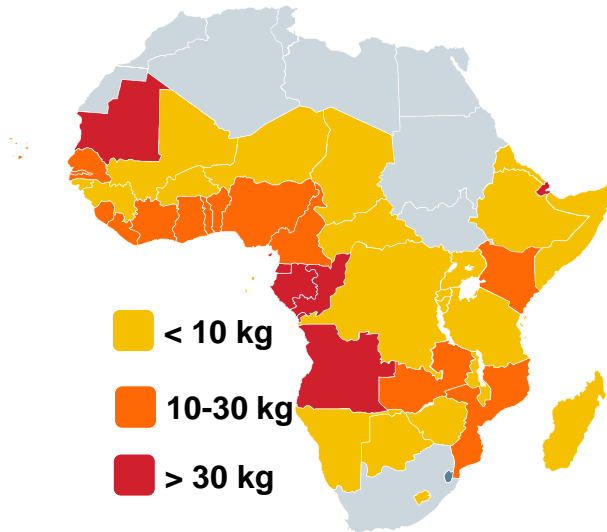
- Mirror statistics used for many of sub-Saharan Africa's countries
 - trade statistics is not always precisely declared by countries for which steel demand is estimated
 - trade between sub-Saharan Africa's countries is not available
- Steel demand figure for the whole region is more precise than for individual countries
- Missing production estimation, rather small facilities
- Desirable to improve quality of reporting countries trade data to avoid necessity of using mirror statistics

Very low level of steel demand per capita

- Only 11 kg of steel products were used per person in 2012
 - World average: 220 kg, Developing Economies excl. China: 92 kg
- Urbanisation is not contributing to steel demand yet

Steel demand per capita

Apparent steel use, finished steel per capita, kilogrammes, 2012

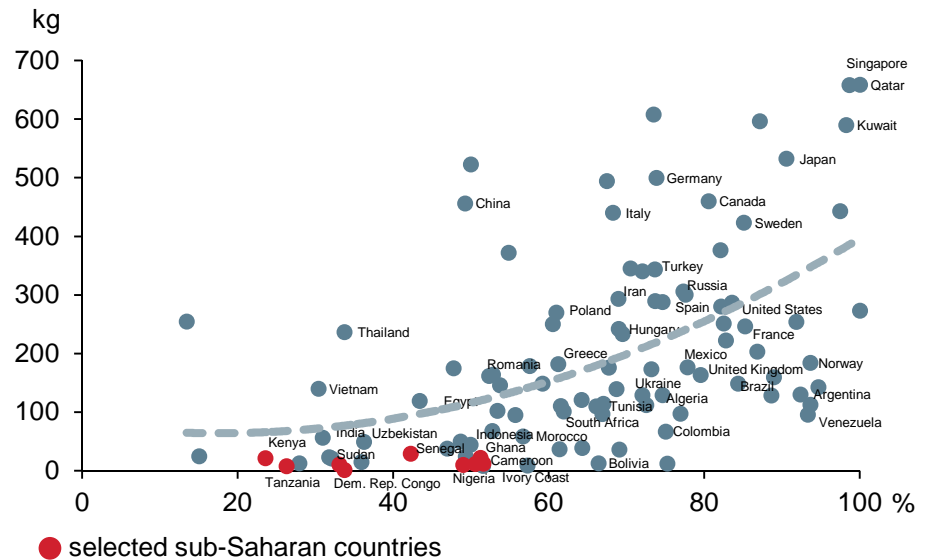


Source: World Bank, United Nations, worldsteel

Urbanisation vs steel demand

Urban population as % of total population, 2010

Apparent steel use, crude steel equivalent per capita, kilogrammes, 2010

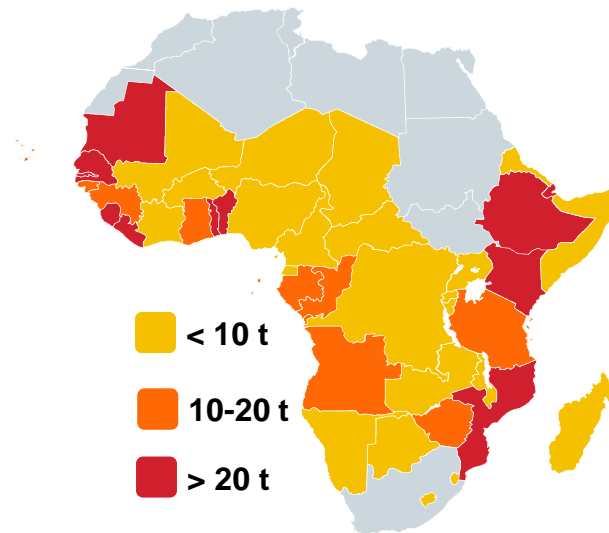


Low steel intensity of GDP, lagging logistics

- Steel intensity in sub-Saharan Africa is much lower than in World's average, especially taking into account high dynamics of GDP
- Steel intensity in sub-Saharan Africa is increasing fast only in a few countries
 - Possibility of steel demand being underestimated
 - Other factors, e.g. inefficient logistics not supportive for steel demand

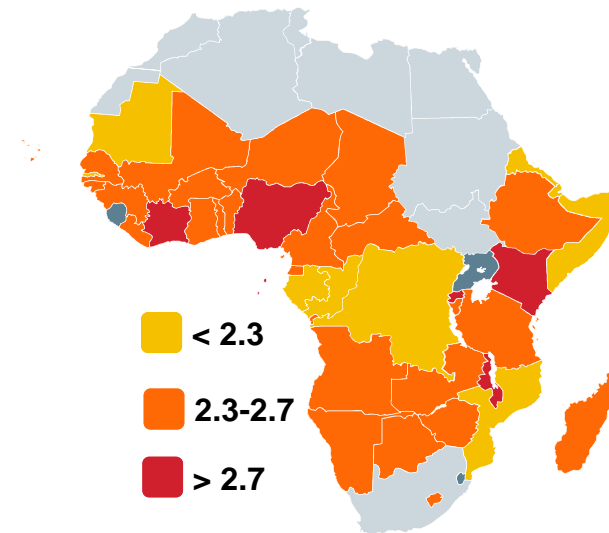
Steel intensity

Steel intensity of GDP, tonnes / million real 2010 USD, 2012



Logistics Performance Index

2014



Source: World Bank, worldsteel

Data range used for presented analysis

- Set of macroeconomic variables which set a background for steel industry analysis
 - different sources
- Volume data, steel demand calculation: steel production, steel trade, indirect steel trade
 - worldsteel sources
 - UN Comtrade, trade data
 - country coverage, frequency, data quality
 - other providers, e.g. trade data, raw materials production

Summary

- Volume data are fundamental for steel market analysis
 - production, trade, demand, raw materials, capacity
- Frequency of data
 - monthly preferable
 - provided on regular basis
 - as close to reported period
- Data quality is essential
- Tight cooperation between providers and end-users of trade data for better understanding of needs and limitations

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