

ROLE OF MINING IN BOTSWANA'S FUTURE ECONOMIC DEVELOPMENTS

Keith Jefferis

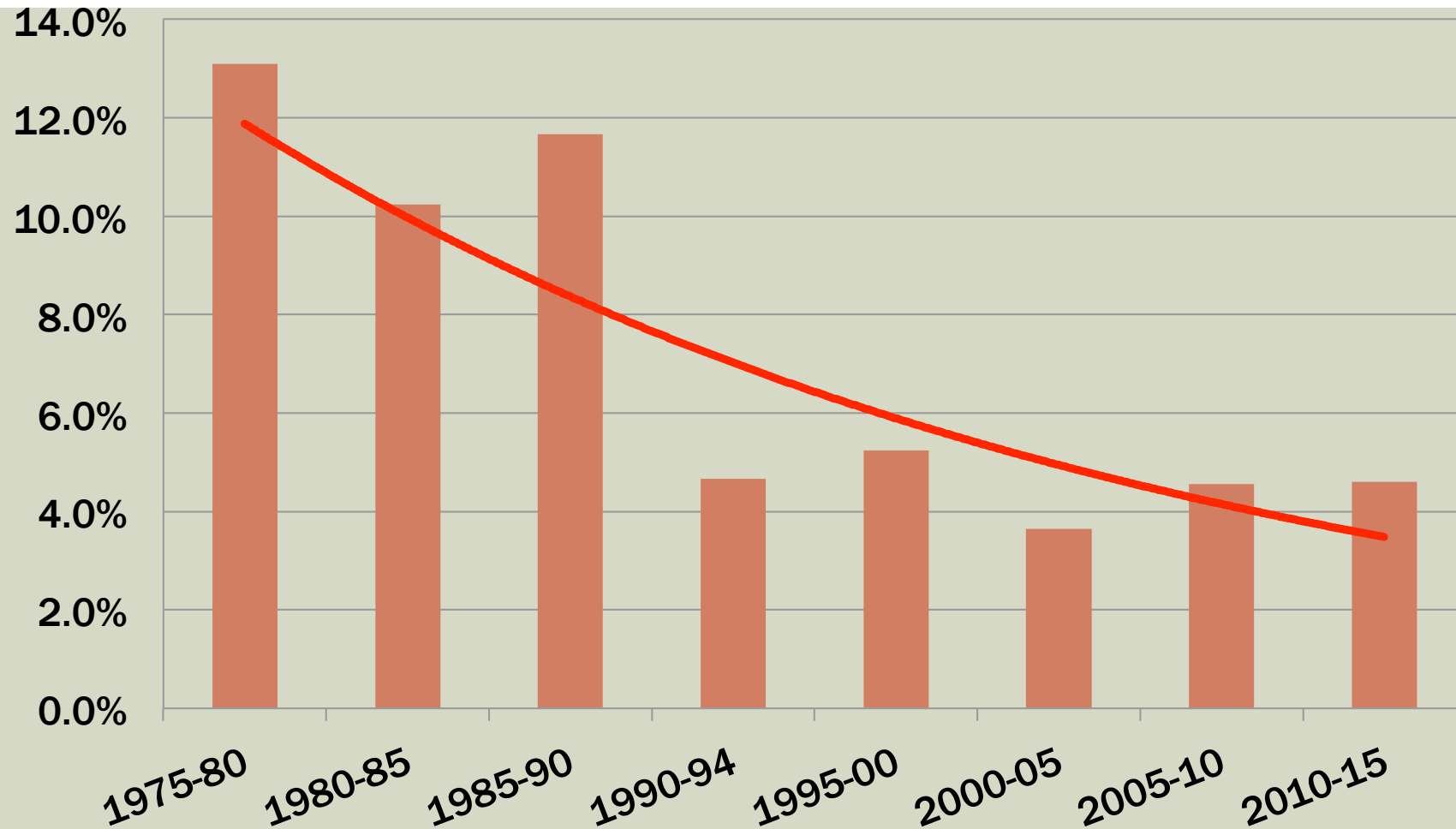
Econsult Botswana

June, 2016

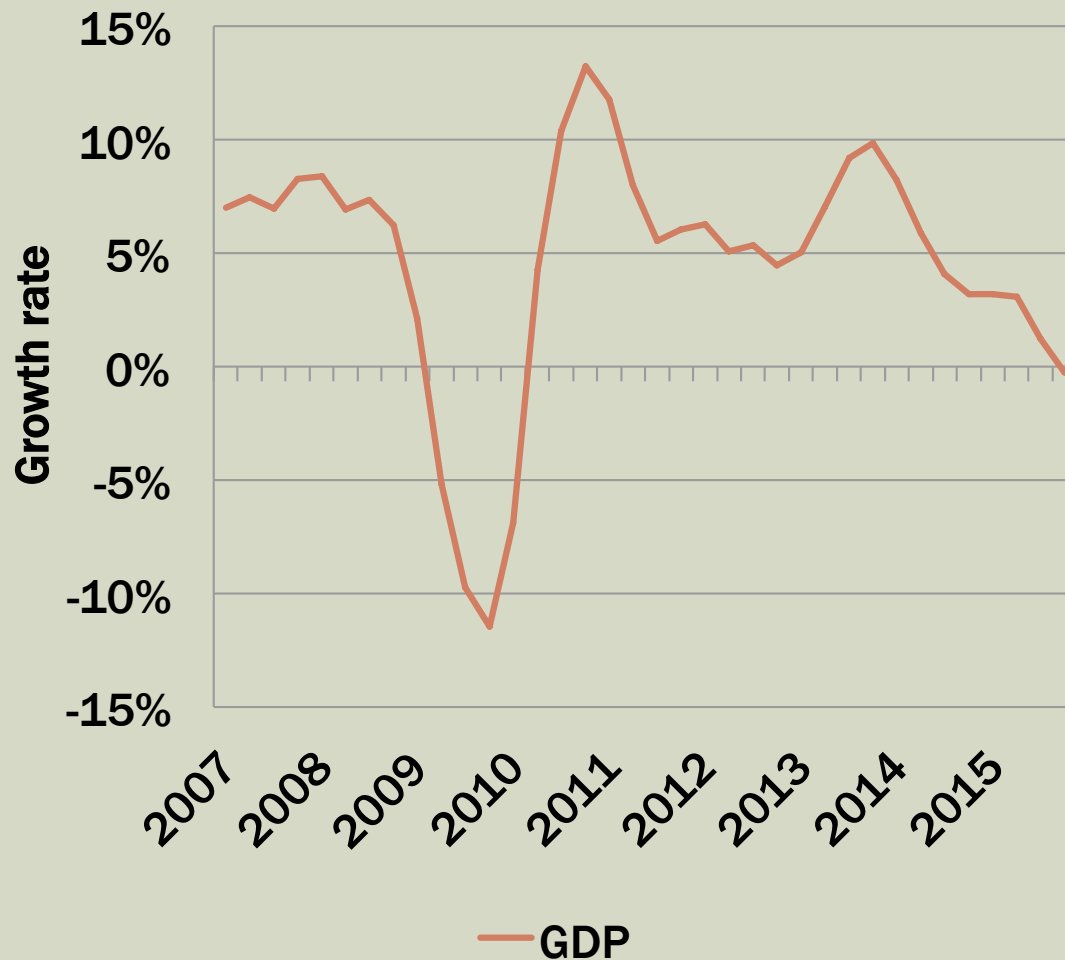
ECONOMIC BACKGROUND

- Upper-middle income economy, GDP/cap around \$6,000
– among the highest in SSA
- Long period of rapid growth since independence in 1966
- Diamond mining historically the largest economic sector
– around 30% of GDP
- A dominant role for government in the economy – largely financed by mineral revenues
- Exports largely based on minerals (diamonds, copper-nickel, gold, soda ash)

ECONOMIC GROWTH - 5 YEAR AVERAGES

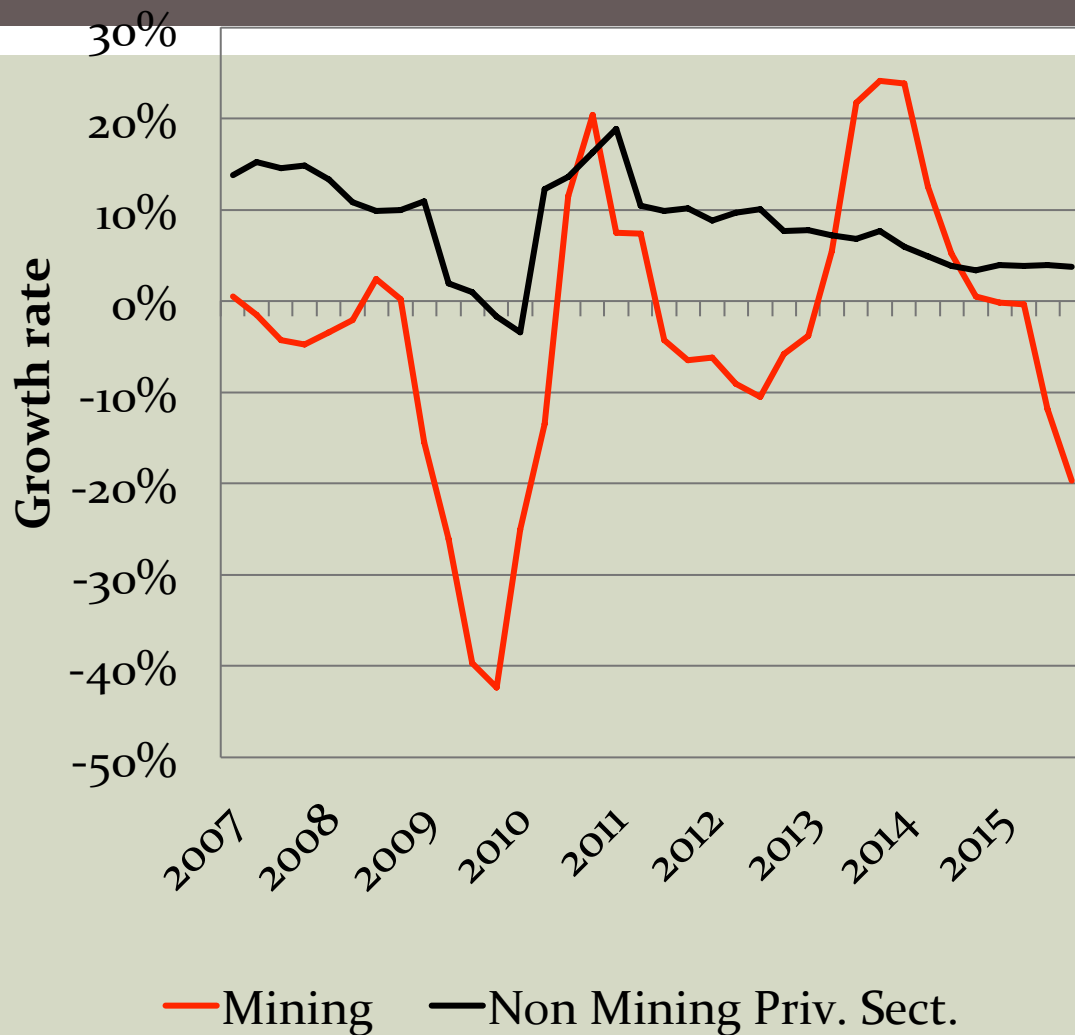


GDP GROWTH



- GDP growth has slowed down in 2015, recording negative growth (-0.3%) for the first time since the Global Financial Crisis in 2008/09
- Swings in overall GDP growth tend to be driven by mining growth, which is the largest sector of GDP and highly volatile

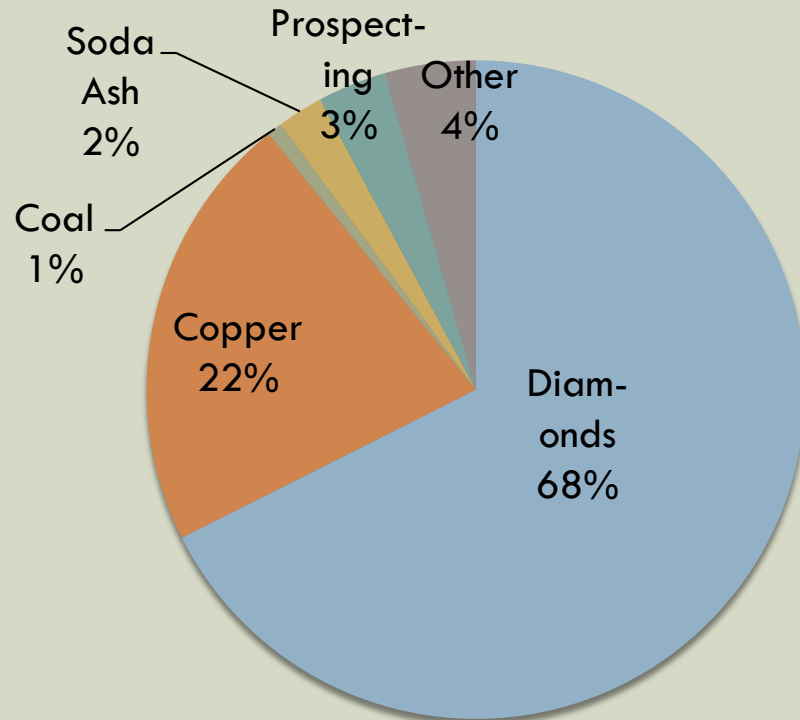
GDP GROWTH – MINING & NON-MINING



- Mining declined from a high growth of 24.2% in 2013 to -19.7% in 2015
- Mining growth mainly driven by diamonds, followed by copper-nickel
- NMPS growth resilient at 3.8%, although gradually slowing

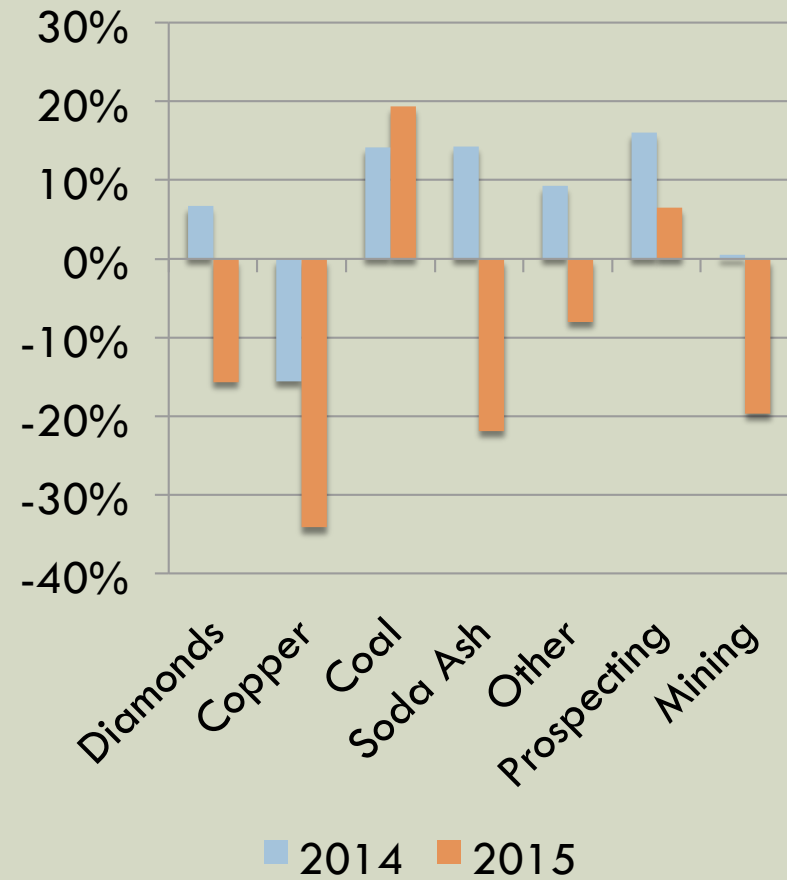
MINING

Share of Output - 2015

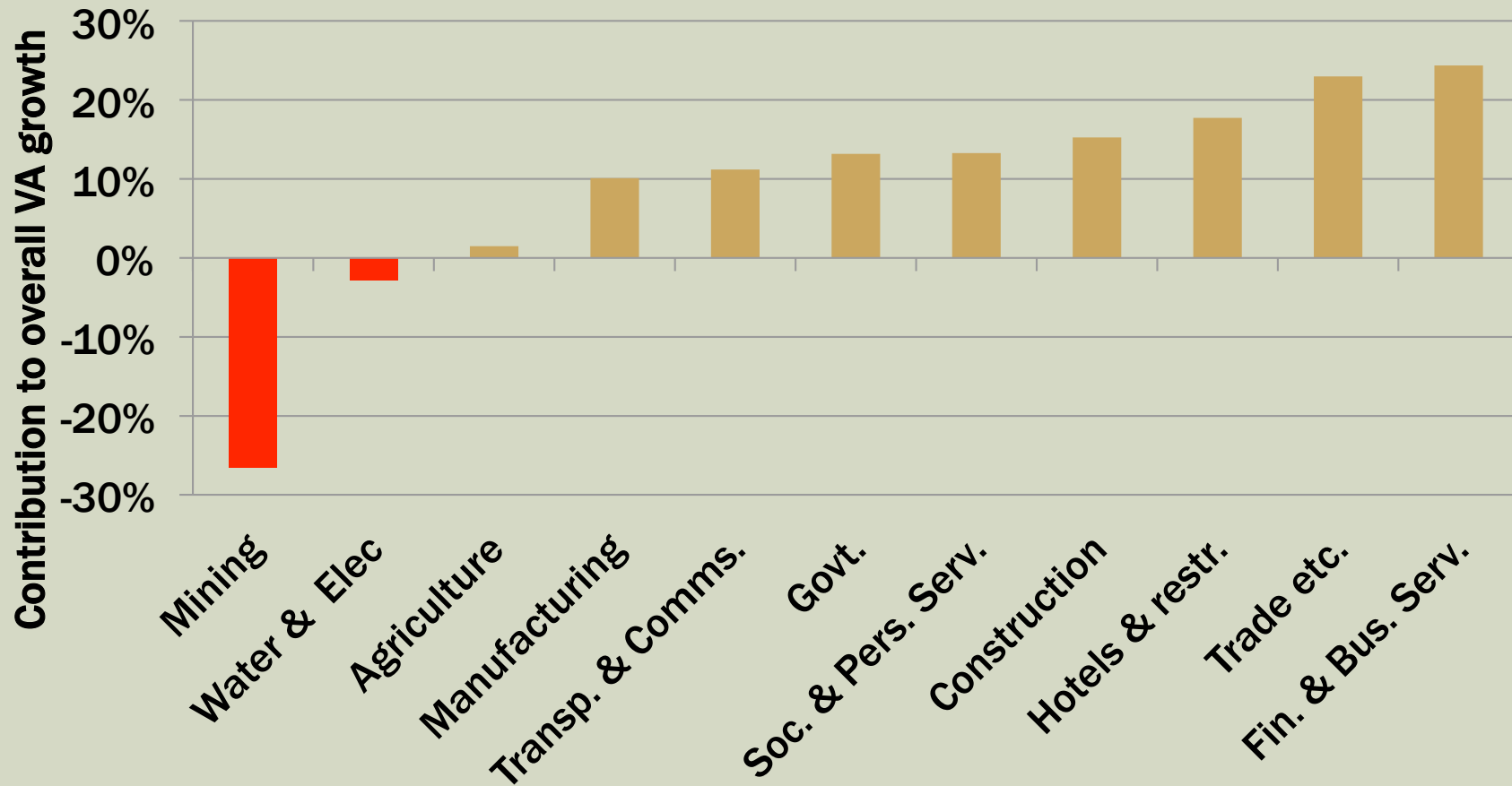


Overall performance still driven by diamonds

Annual Growth Rates



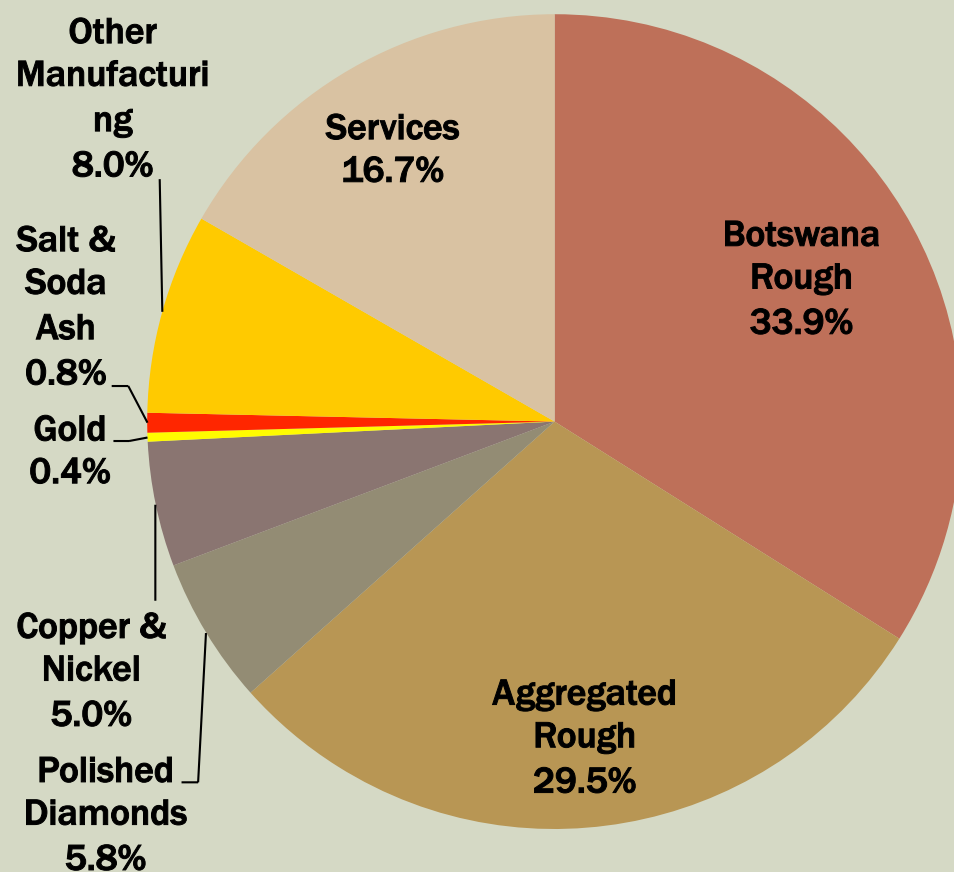
SOURCES OF GROWTH 2005-2015 (ECONOMY DIVERSIFIED?)



INTERNATIONAL TRADE

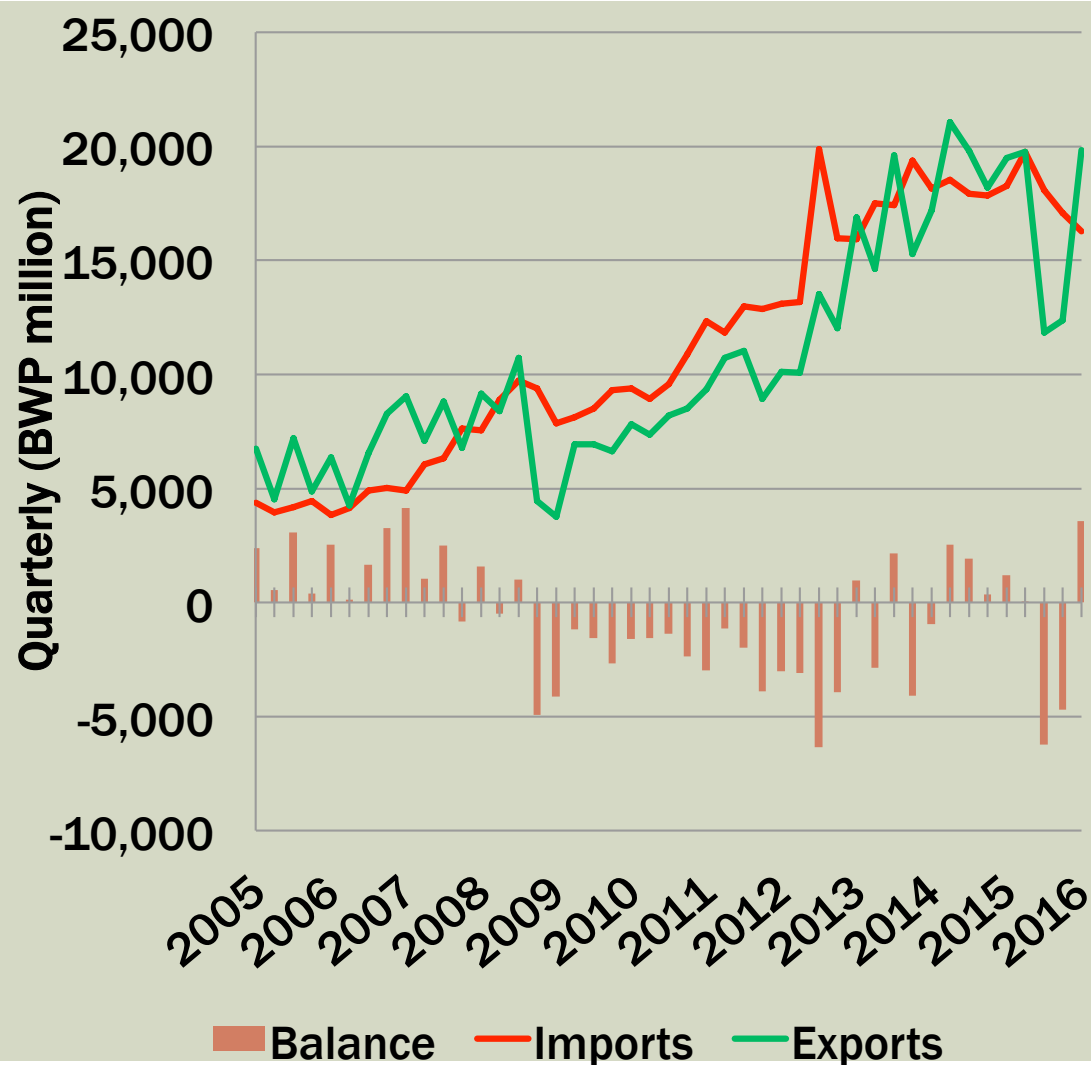
SHARE OF EXPORTS IN 2015

(NEED FOR EXPORT DIVERSIFICATION?)



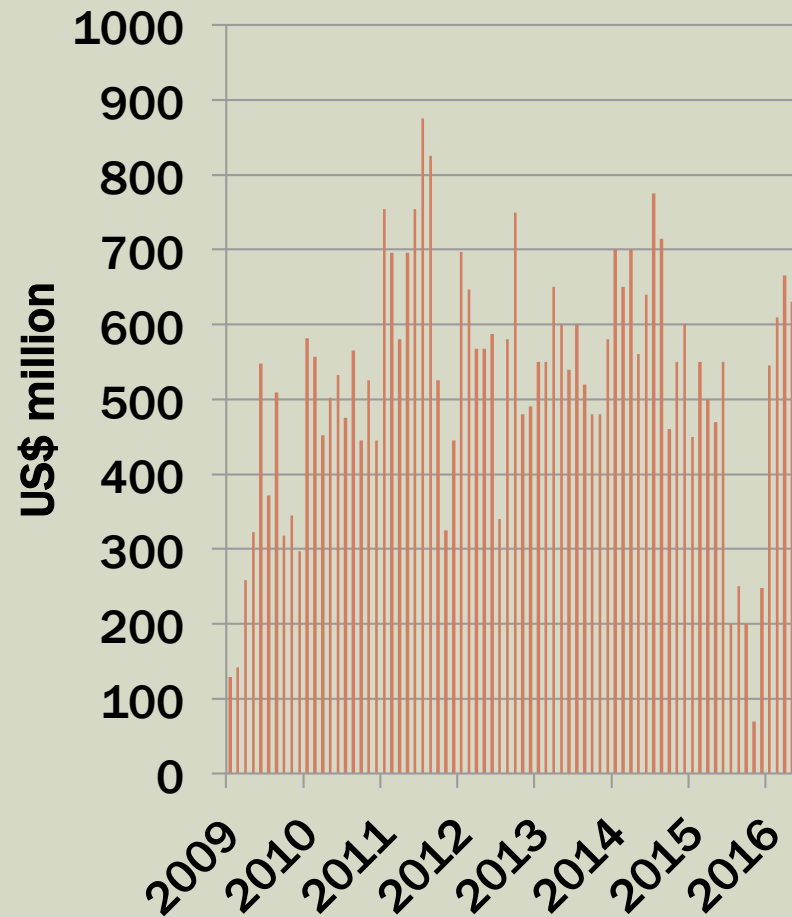
- Minerals dominate exports (75%)
- Rough diamonds are the largest exports commodity (63%)
 - BW rough and Aggregated rough
- Diamonds accounted for 69% of exports
- Services exports – mostly tourism – double exports of manufactures

EXPORTS, IMPORTS & TRADE BALANCE



- Trade deteriorated from P3.8 bn surplus in 2014 to P9.7 bn deficit in 2015
- Deficit was driven by a 17% decline in exports compared to imports (up 1.0%)
- Signs of recovery in 2016Q1

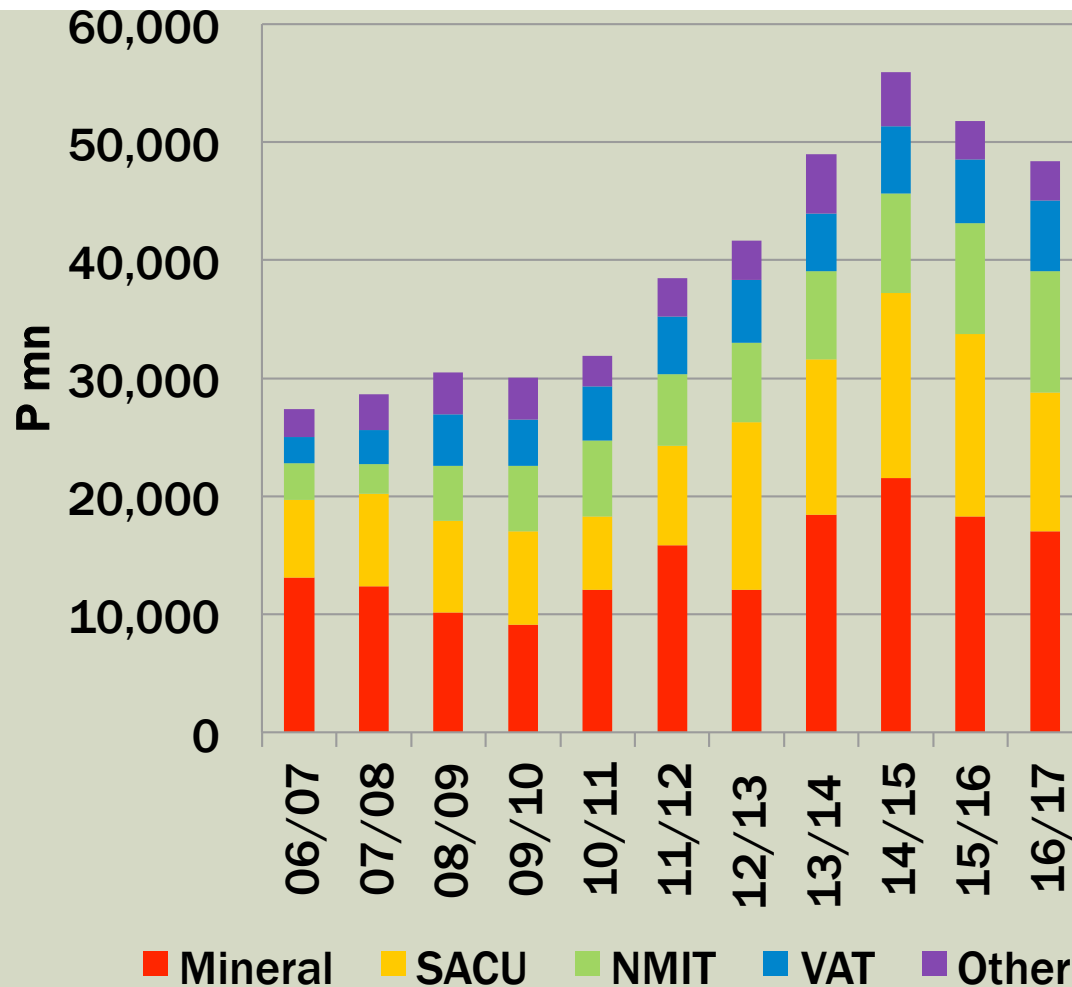
GLOBAL DIAMOND MARKET - DBGSS SIGHTS



- Dismal H2 2015 apparent in De Beers total sales figures
 - Price margins between polished and rough diamonds very narrow
 - Limited purchasing by cutters & polishers
 - Weak final demand (mainly jewellery)
 - Diamond pipeline not flowing
 - Debswana forced to cut production in response
- Strong recovery in 1st 4 sights of 2015 (to May)
 - Averaging over \$600m
 - Enabling stocks accumulated in 2015 to be sold
 - Cautious optimism about recovery
 - Production not yet increased to higher levels – guidance of 20mcts for 2016 remains, unchanged from 2015

FISCAL POSITION

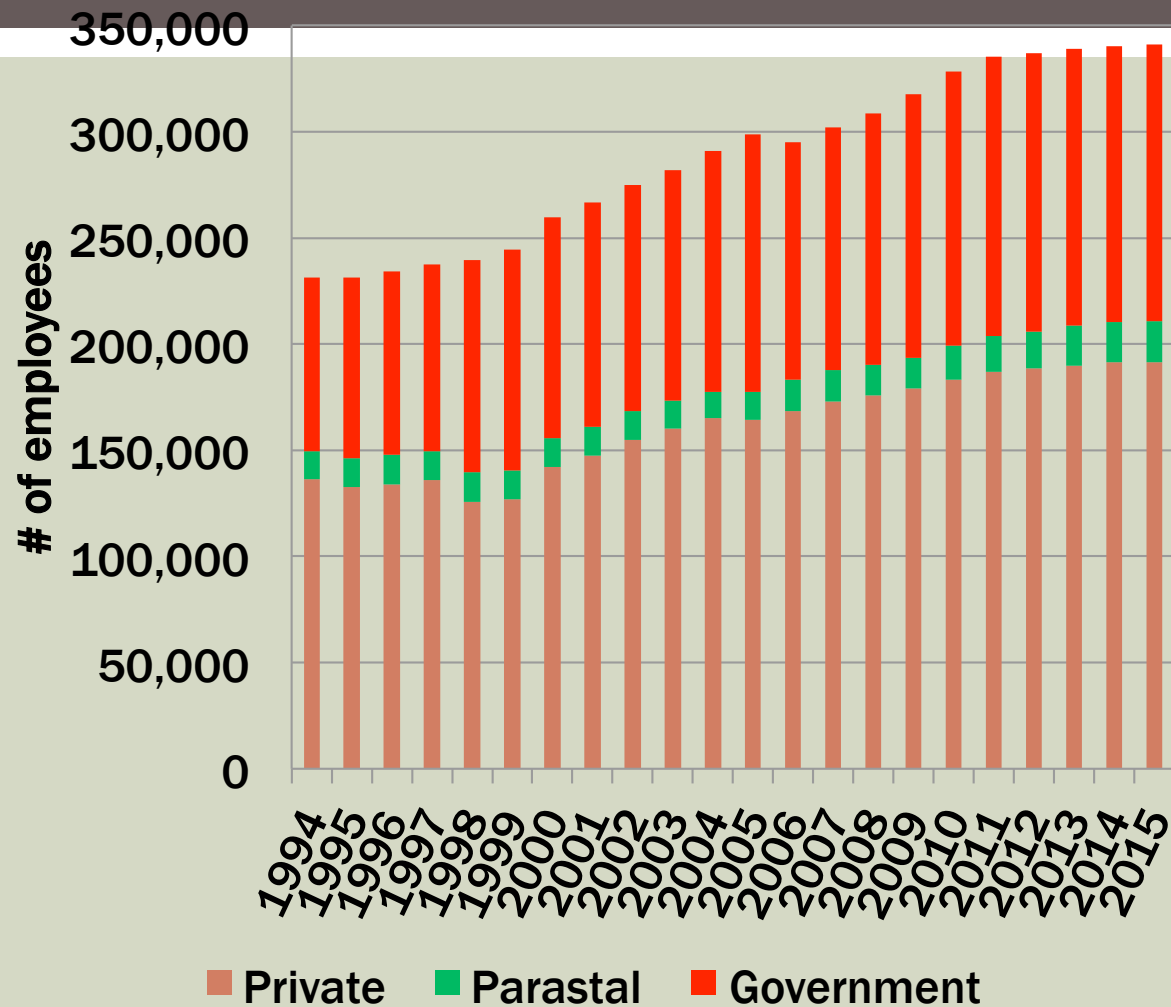
SOURCES OF GOVERNMENT REVENUE



- Minerals are the largest contributor to government revenues, but share declining
- Fell from 48% in 2006/07 to 35% in 2015/16
- Need to mobilise more revenues from domestic sources
 - SACU revenues expected to fall

EMPLOYMENT

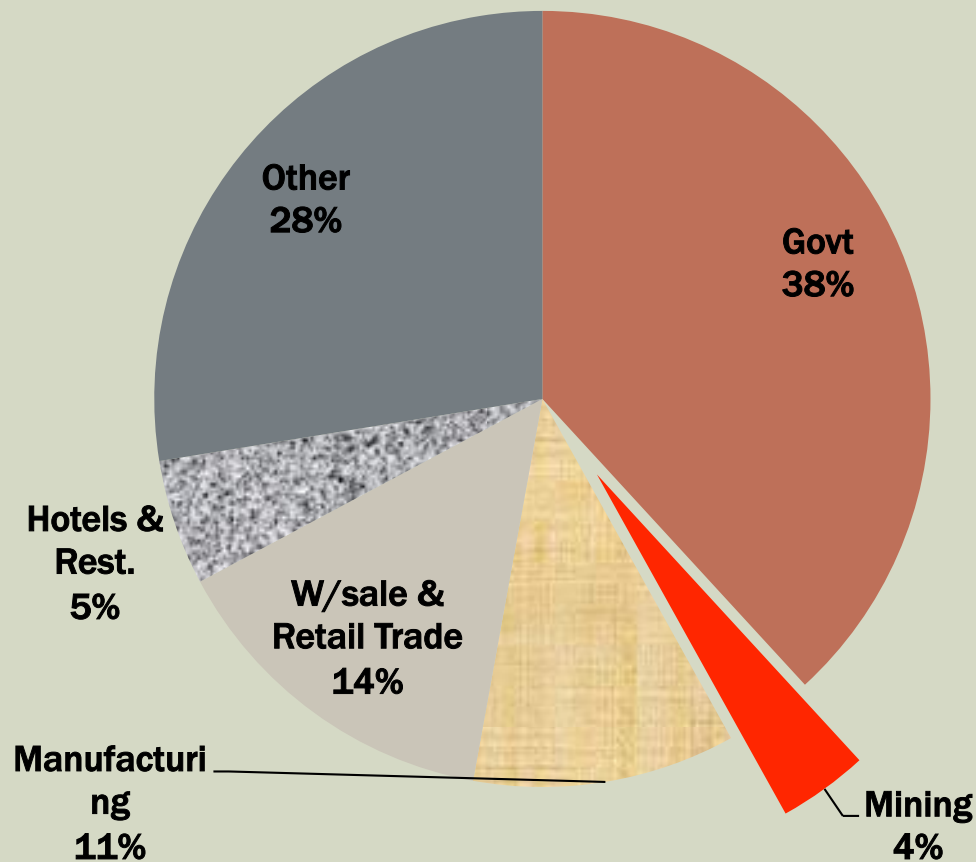
FORMAL EMPLOYMENT LEVELS



- Most recent data- September 2015
- Total of 341,115 jobs
- Formal employment growth slow - 0.3% in year to Sept. 2015
- Job creation insufficient:
 - 1,008 new jobs in 24 months
 - Approx 20,000 or more new jobs needed each year
- Official unemployment rate (2013) 20.0%

SHARE OF FORMAL EMPLOYMENT, SEPT' 2015

% of formal employment



- 341,115 jobs in to formal employment
- Relative to GDP shares, govt has high employment, while mining share is low
- Mining share 4 % (12,773)

CHALLENGES FACING THE ECONOMY

■ Undiversified exports

- Diamonds accounted for 69% of exports in 2015

■ Fiscal dependency on mineral revenues

- Historically, mineral revenues have been more than a third of Gov't revenues

■ High unemployment

- 20.0% in 2013 – probably under-recorded
- Insufficient new job creation

THE MINING SECTOR AND THE ECONOMY OF BOTSWANA



HOW WELL HAS BOTSWANA SPENT ITS MINERAL REVENUES?

- **Total revenues**
 - Approx. P420bn (2012 prices).
 - Almost all invested in infrastructure and human capital
- **Human capital**
 - Provision of largely free education to tertiary. Approx 20-25% of budget (7-10% of GDP) spent on public education
 - But still problems with quality, productivity, work ethic
- **Infrastructure**
 - Roads, dams, hospitals, airports, telecommunications etc.
 - Recent developments badly managed – late, over budget, poor quality – suggesting public sector project management weaknesses
- **Financial assets (savings)**
 - Govt. savings and Pula fund provide important financial buffers for fiscal and balance of payments accounts
 - But total financial savings small – only 5% of mineral revenues saved – compared to other mineral dependent economies

MINERAL ECONOMIC OPPORTUNITIES

Opportunities

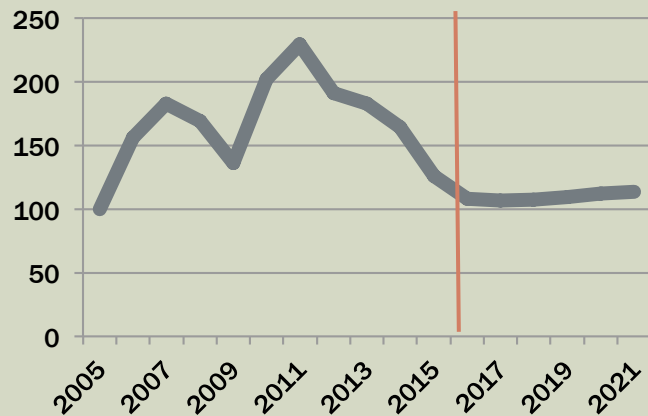
- Extensive prospecting taking place
- Botswana endowed with many minerals, including
 - Diamonds
 - Coal
 - Coal Bed Methane
 - Base Metals
 - Uranium
 - Iron ore
 - Other?
- Long-term potential

Requirements

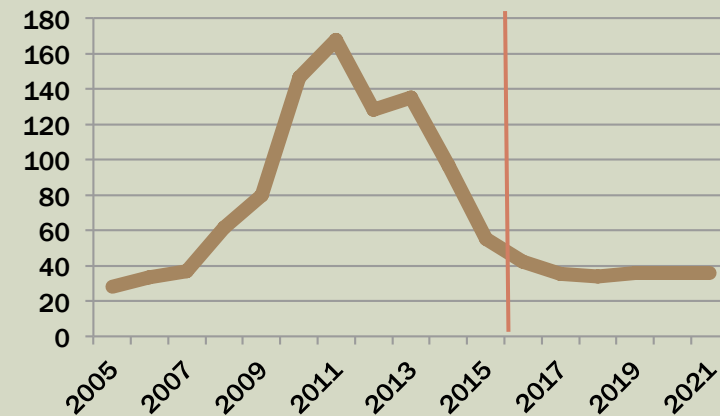
- Large infrastructure investments
 - Rail and port (coal)
 - Pipelines (CBM)
 - Power generation and distribution
 - Water infrastructure (Zambezi pipeline)
 - Base metals refinery
- Infrastructure financing
 - Private sector
 - Government
- Markets
 - International
 - Domestic offtake

IMF MINERAL COMMODITY PRICE FORECASTS TO 2021

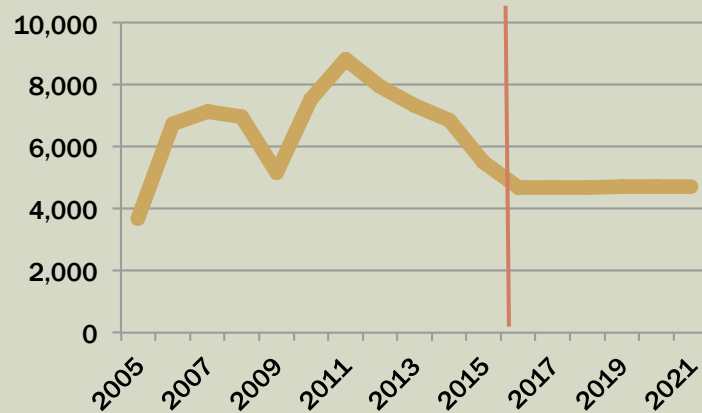
Metals (index)



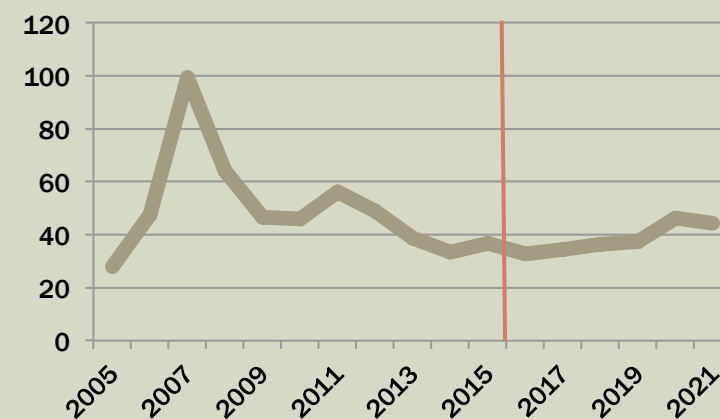
Iron Ore (\$/t)



Copper (\$/t)



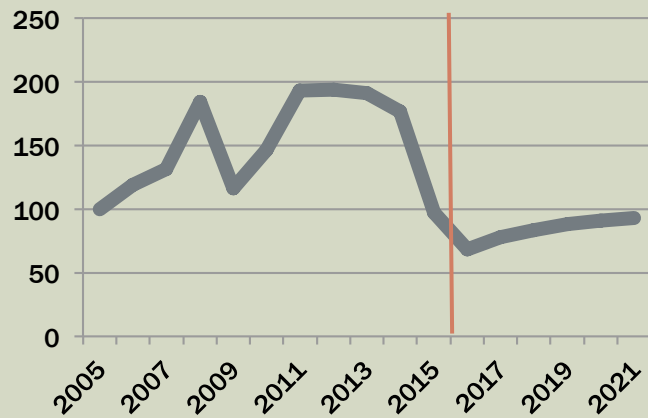
Uranium (\$/pound)



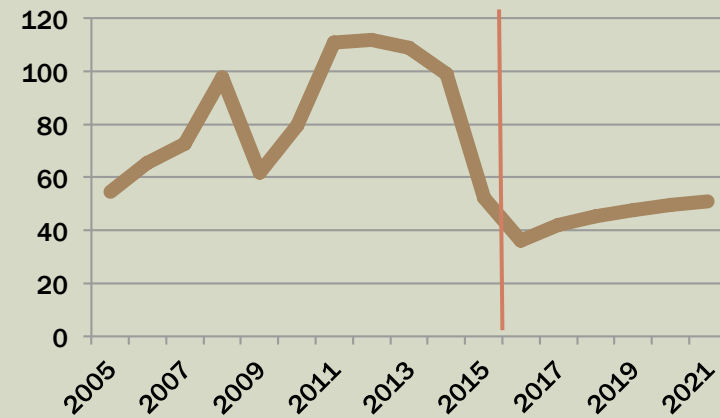
Source: IMF WEO database

IMF ENERGY COMMODITY PRICE FORECASTS TO 2021

Energy Fuels (index)

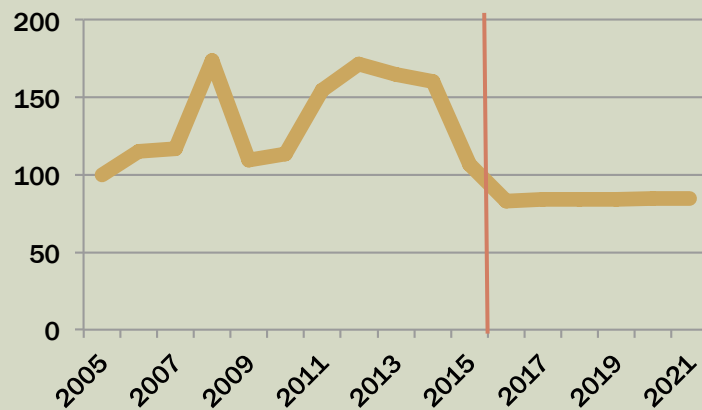


Crude oil (Brent) (\$/barrel)

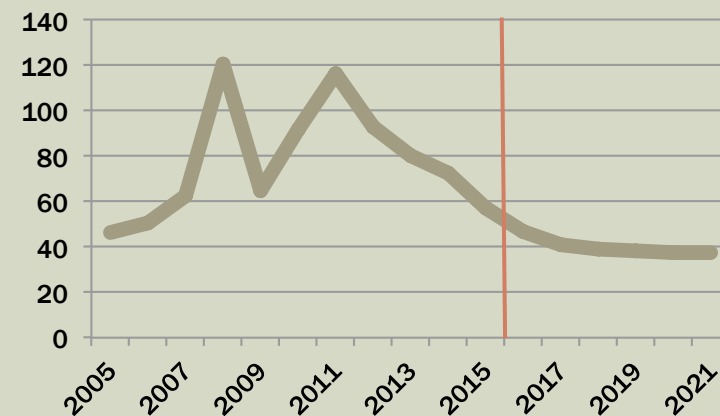


Source: IMF WEO database

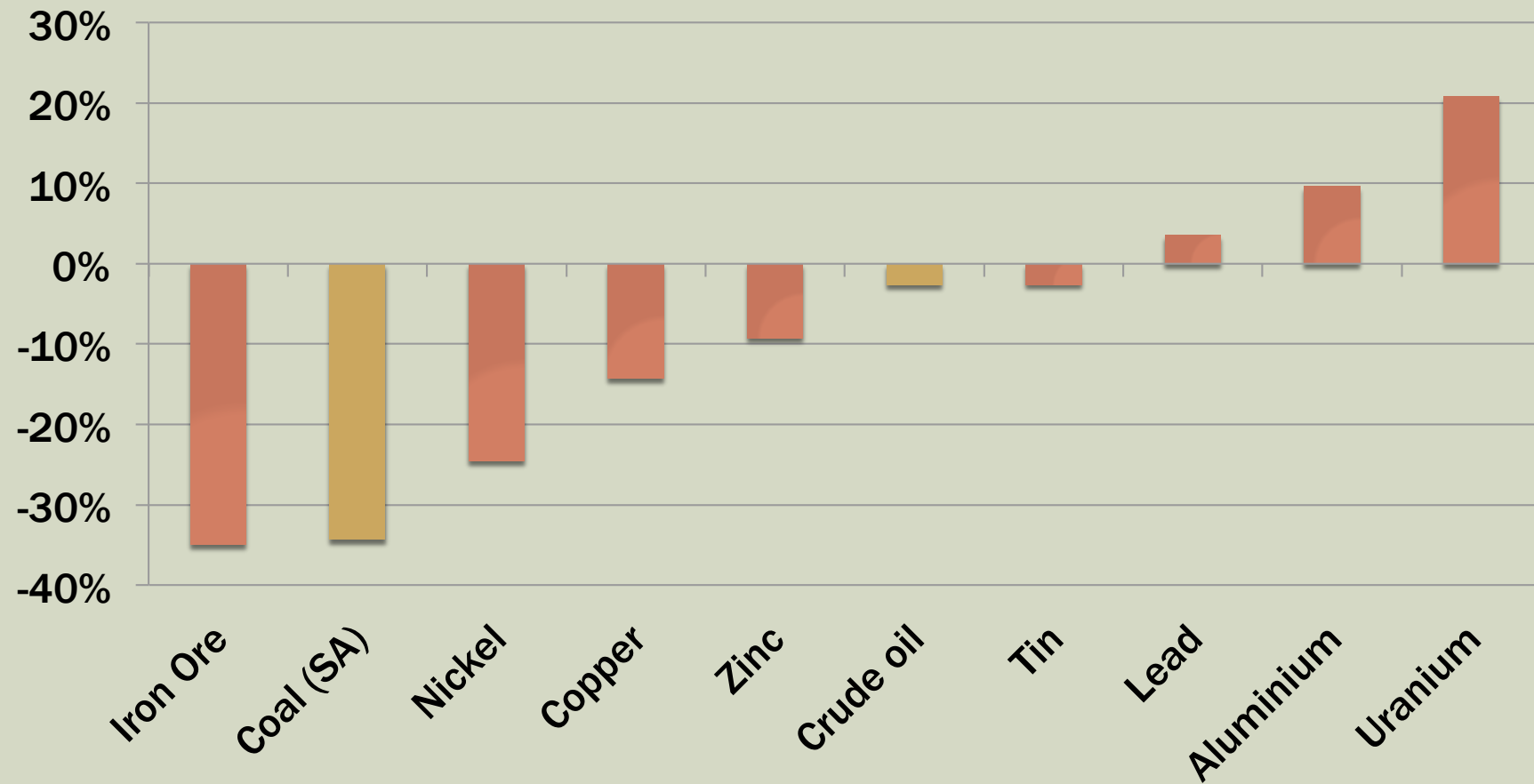
Natural Gas (index)



Coal (SA) (\$/t)



PROJECTED PRICE CHANGES 2015-21 (IMF)



BARRIERS / CHALLENGES

- Much attention focused on seaborne export coal (large scale mining, TKR)
 - Required investment large and lumpy
 - Current prices unattractive
 - Long-term market uncertainty (GHG, global warming, carbon taxes, falling prices of renewables)
 - Financing likely to be an issue
- Coal can't fully replace diamonds as source of Govt revenues
 - Relative margins/profitability (coal much less profitable than diamonds)
 - Tax rates (lower on coal compared to diamonds)
- Current “low price” environment for most minerals discouraging investment
- Water constraints
 - Groundwater abstraction rate greater than replenishment rate
 - High costs of new supplies (Zambezi, Lesotho)

CONCLUSION

- **Diamonds will continue to dominate mining sector**
 - but will not provide economic growth (production plateau)
 - will make a diminishing fiscal contribution
- **Coal alone cannot replace diamonds, especially with respect to exports and government**
- **Take a long term view:**
 - Other ways of monetising coal (besides bulk exports)
 - Govt to focus on economically viable, public good infrastructure, with cost recovery
- **Power: govt. needs to provide clear PPA terms, otherwise IPPs will not materialise**
- **From an employment perspective, need to nurture labour intensive economic sectors**
- **From a BoP perspective, need other sources of exports.**

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