UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT

Expert Meeting on Value Addition

Geneva, 12 December 2019

Escaping the commodity dependence trap through value addition

Janvier D. Nkurunziza

Commodities Branch, UNCTAD

Outline

- Main message
- Commodity dependence trap
- Associated vulnerabilities
- Value addition as a diversification strategy
- Conclusion

Main message

- Commodity-dependent developing countries (CDDCs) are highly vulnerable to a wide range of shocks
- Value addition is way of escaping the commodity trap
- Most CDDCs continue to be highly dependent, but some have made progress in diversifying exports

Commodity dependence trap

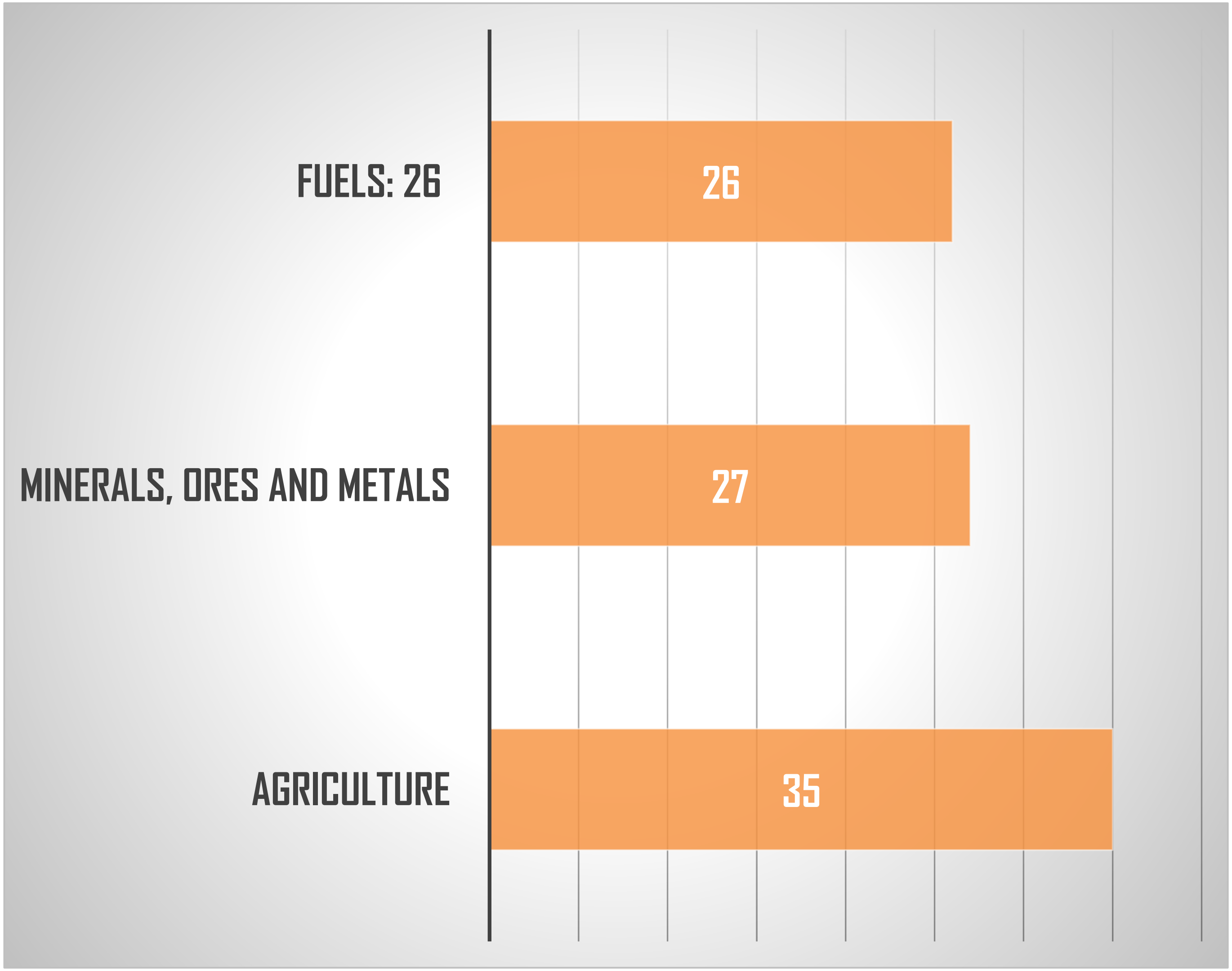
What is commodity dependence?

- Commodities >= 60% of merchandise exports

- Three major groups:
  - Agriculture
  - Minerals, Ores and Metals
  - Fossil fuel energy

- Country depends on a commodity group when:
  - it is commodity dependent (60% merchandise exports) and
  - sector generates at least 1/3 of commodity exports

88 CDDCs (period 2013-2017)



Why is commodity dependence a trap?

- Most CDDCs seem to be "locked" into this state for decades

- CDDCs generally dependent on a limited range of products & export partners, exposing them to shocks

- A range of other vulnerabilities associated with commodity dependence

Africa's export dependence: examples

Country	Top 2 exports	% Share
Burundi	Gold, coffee	72
Comoros	Spices, ferrous waste	93
Djibouti	Petr. Prod. & live animals	45
Eritrea	Copper, fisheries	64
Ethiopia	Coffee, vegetables	39
Kenya	Tea, vegetables	47
Madagascar	Nickel, spices	59
Malawi	Tobacco, sugar	68
Mauritius	Fish, sugar	69
Mozambique	Aluminium, pearls, etc.	35
Rwanda	Base metals, coffee	59
Seychelles	Fish, petroleum oils	96
Somalia	Live animals, gold	80

Country	Top 2 exports	% share
Benin	Cotton, gold	50
Burkina Faso	Gold, cotton	82
Cabo Verde	Fish, petroleum oils	90
Côte Ivoire	Cocoa, petroleum oils	59
Gambia	Forestry, fruits & nuts	64
Ghana	Gold, petroleum oils	58
Guinea	Al ores, petroleum oils	62
Liberia	Iron ore, rubber	61
Mali	Gold, cotton	91
Mauritania	Iron ore, fish	66
Nigeria	Petroleum, natural gas	90
Senegal	Petroleum oils, fish	46
Sierra Leone	Precious stones, base metals	69

Share of fossil fuels in total merchandise exports in 2017 (%)

Africa's limited export partners: examples

Country	Top 2 partners	% Share	Country	Top 2 partners	% share
Burundi	UAE, EU	62	Benin	China, India	41
Comoros	EU, Singapore	63	Burkina Faso	Switzerland, India	66
Djibouti	UAE, Yemen	43	Cabo Verde	EU, India	89
Eritrea	China, India	90	Côte Ivoire	EU, Africa	58 (42+16)
Ethiopia	EU, Africa	40 (23+17)	Gambia	China, India	71
Kenya	EU, Africa	51 (33+18)	Ghana	EU, India	46
Madagascar	EU, USA	52	Guinea	EU, India	52
Malawi	EU, Africa	51 (42+9)	Liberia	EU, China	53
Mauritius	EU, Viet Nam	73	Mali	UAE, South Africa	53 (32+21)
Mozambique	EU, S. Africa	56 (37+19)	Mauritania	China, EU	62
Rwanda	DRC, China	38 (22+16)	Nigeria	EU, India	52
Seychelles	EU, Japan	78	Senegal	Africa, EU	56 (32+24)
Somalia	S. Arabia, UAE	73	Sierra Leone	China, EU	93

Commodity dependence is development problem

- 2/3 of developing countries are commodity dependent

- Most prevalent in economically vulnerable countries:
  - 85% of Least Developed Countries (LDCs)
  - 81% of Landlocked Developing Countries (LLDCs)
  - 57% of Small Island Developing States (SIDs)
  - 89% of countries in Sub-Saharan Africa

- Also, strong correlation with income per capita
  - 91% of low-income countries against…
  - Less than 1/3 of high-income countries

Vulnerabilities associated with dependence

- Socio-economic vulnerabilities
- Vulnerability to climate change

Negative association between dependence and development

- Declining terms of trade and short-term price volatility
- Dutch Disease through real exchange rate appreciation
- Microeconomic effects on households and firms

Vulnerability to declining terms of trade

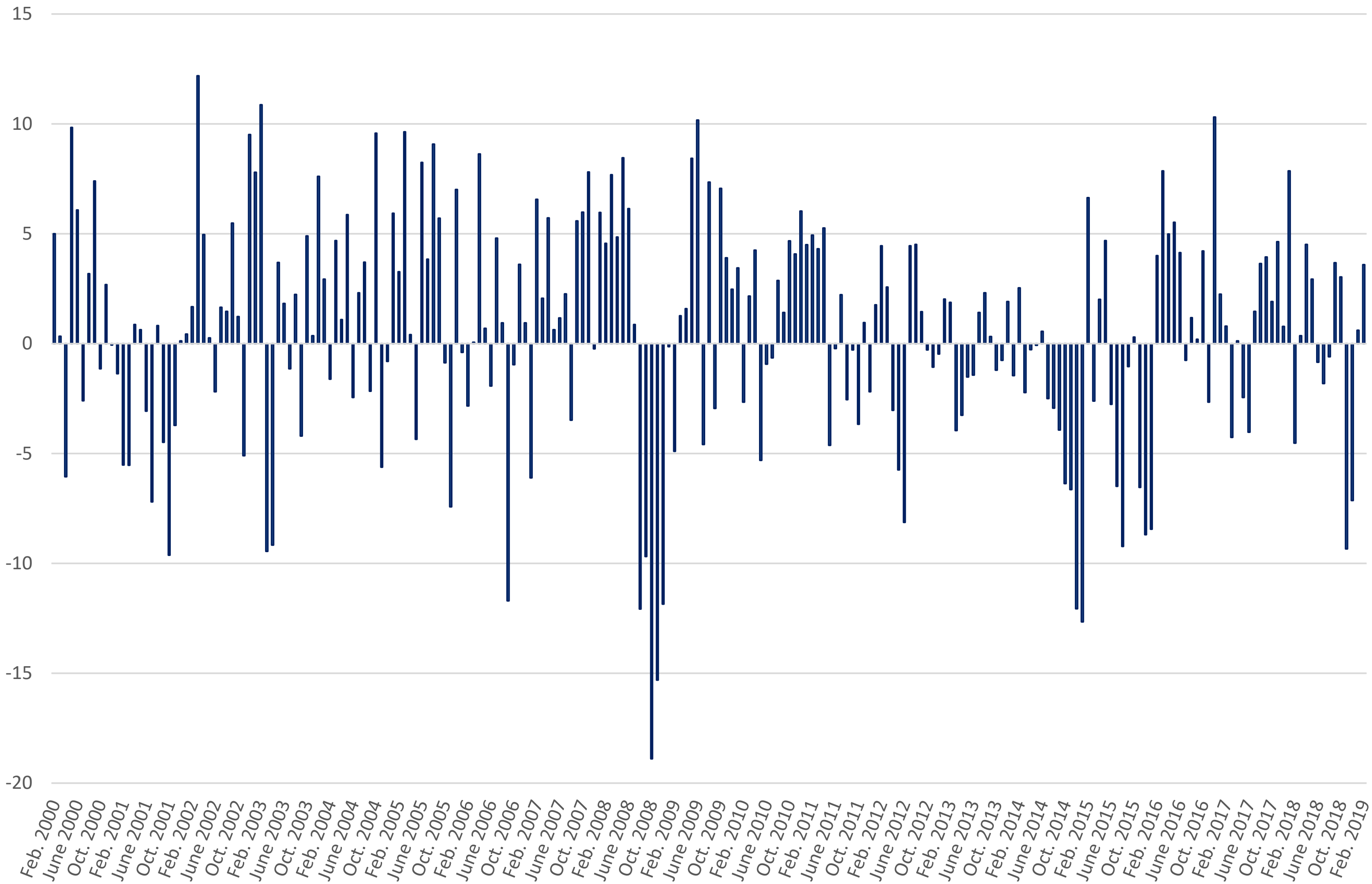
- Negative trend of commodity prices: commodity prices drop by 1% per year over long-term
- Prices go through booms & busts, hence changes in incomes
- From a low of 47.6 before boom, prices trebled 10 years later & dropped 20% after boom
- Steady increase of manufacturing prices, eroding purchasing power of CDDCs

Changes in commodity prices

Five-year average commodity prices (index base 2015 = 100)					Price changes in %	
Group	**1998-2002**	**2003-2007**	**2008-2012**	**2013-2017**	**Boom change**	**Bust change**
All	47.6	94.0	156.5	124.8	228.8	-20.3
Energy	48.0	108.2	172.6	132.1	259.6	-23.5
Minerals	34.9	66.8	134.5	116.0	285.4	-13.8
Agriculture	61.9	75.9	125.3	109.4	102.4	-12.7
Manuf. Unit value	76.5	89.8	104.7	105.2	36.9	0.5

Vulnerability to short-term price volatility

Monthly percentage changes of UNCTAD Commodity Price Index (all groups)



Dutch Disease & real exchange rate appreciation

- Large capital inflows during periods of high prices lead to domestic currency appreciation …
- Inefficient allocation of resources: high imports & low domestic production
- Loss of competitiveness of domestic production
- Collapse of entire sectors (e.g. manufacturing) & more economic and export concentration

Other macroeconomic vulnerabilities

- Periods of low prices much longer than those of high prices

- During low-price periods
  - budget deficits increase
  - debt stock increases
  - currencies are devalued
  - inflation increases

- These factors lead to slow growth & even recessions in some cases

Effects on firms and households

- Macro vulnerabilities create negative environment for firm investment & production
- Particularly, uncertainty w.r.t. export earnings discourages investment & long-term growth
- At household level, low prices reduce household income and capacity to meet socio-economic needs
- Low prices may push or maintain households in poverty

Vulnerability to climate change

- Climate change adds another layer of vulnerability to CDDCs & compounds economic vulnerability
- Commodity dependence & climate vulnerability go hand in hand
- 37/40 (that is 92%) countries most vulnerable to climate change are CDDCs
- SIDS are particularly vulnerable, especially CDDCs among them
- These countries contributed very little to the problem but bear brunt of its effects

Climate change affects CD in many ways

- Agriculture: yields and water availability increasing food instability & poverty
- Crop, livestock & fisheries losses due to extreme weather events
- Energy & mining sector: effect on infrastructure & installations
- Possible stranding of natural resources (palm oil, fossil fuels, etc.)

Value addition for export diversification

Economic and export diversification

- 2 strategies: vertical and horizontal diversification

- Vertical diversification: producing new product by adding value to primary commodity

- Even though CDDCs have generally failed to diversify, there are examples of vertical diversification:
  - Adding value to crude oil or gas: petrochemicals (alcohol, fertilizers, plastics) or alumina processing: Egypt, Iran, Oman, Saudi Arabia, etc.
  - Increase in oil refining: Algeria, Iran, Qatar, UAE, etc.
  - Diversifying into energy intensive products such as aluminium: Bahrain, Oman, Qatar, Saudi Arabia, UAE

Value addition or vertical diversification

- Adding value to a primary commodity results in creation of new product

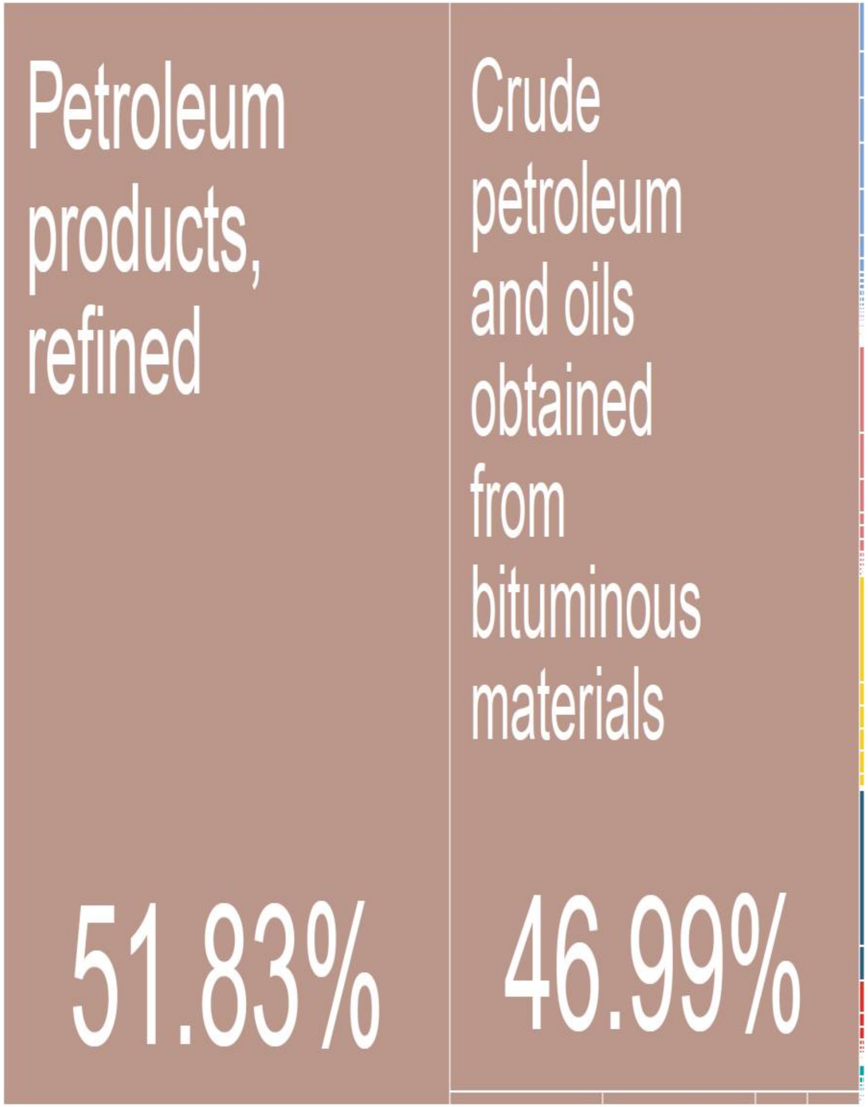
- This allows country's export of higher value products:
  - Less exposed to commodity vulnerabilities highlighted
  - Command higher prices on market

- Value addition must be deep enough to create products substantially different from underlying primary commodity

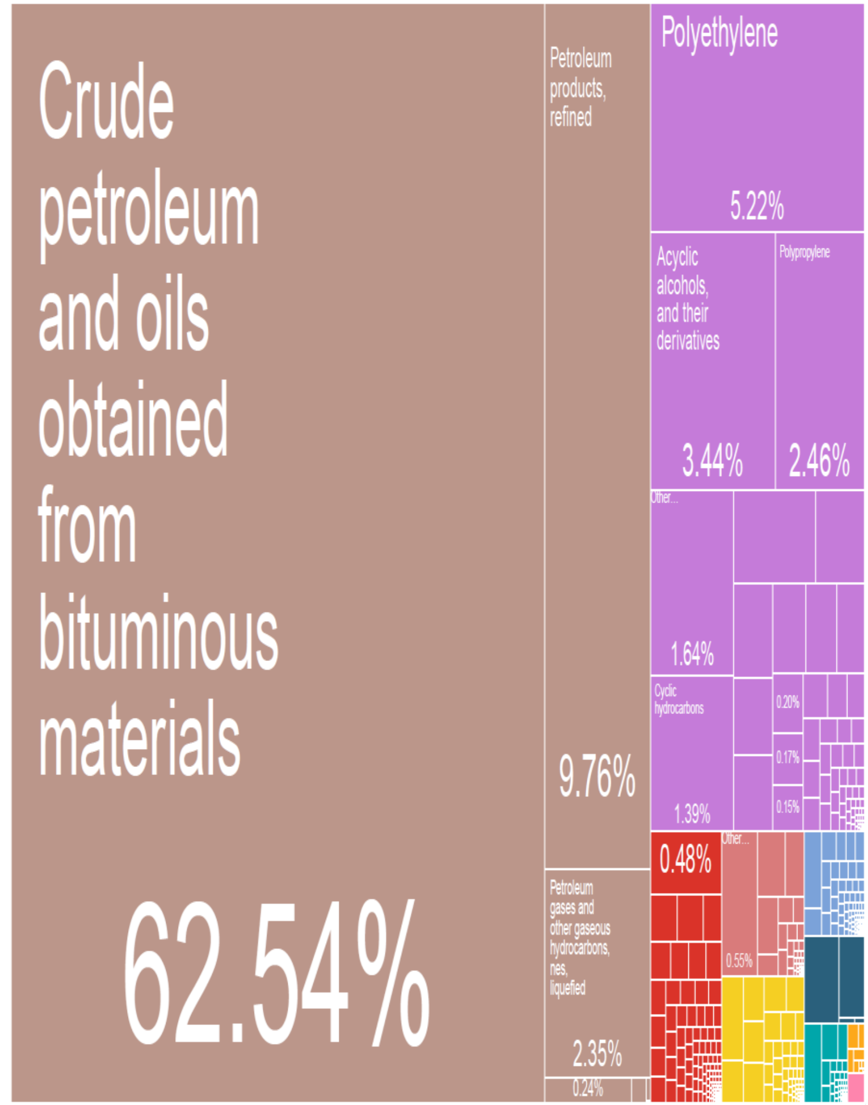
- Most CDDCs failed to add value, but successful cases exist

Saudi Arabia: commodity-based manufacturing

1965



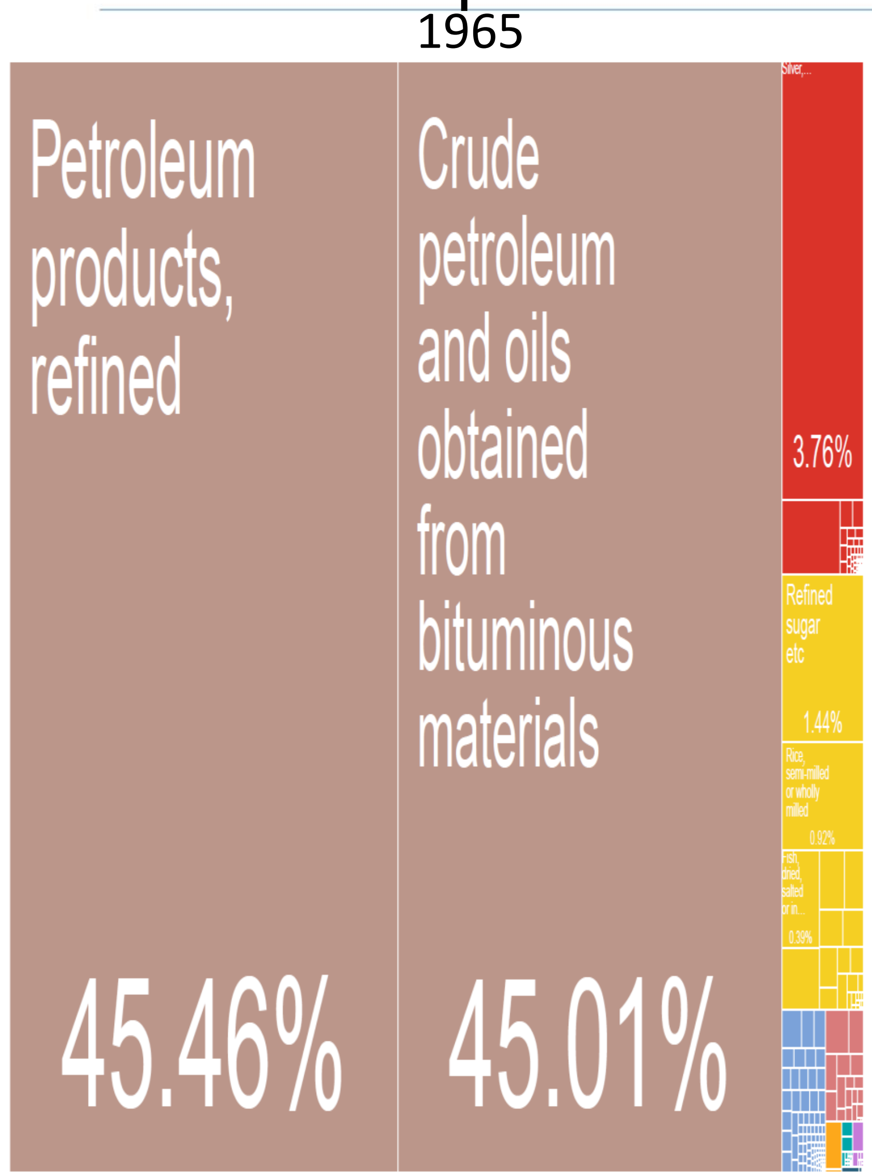
2017

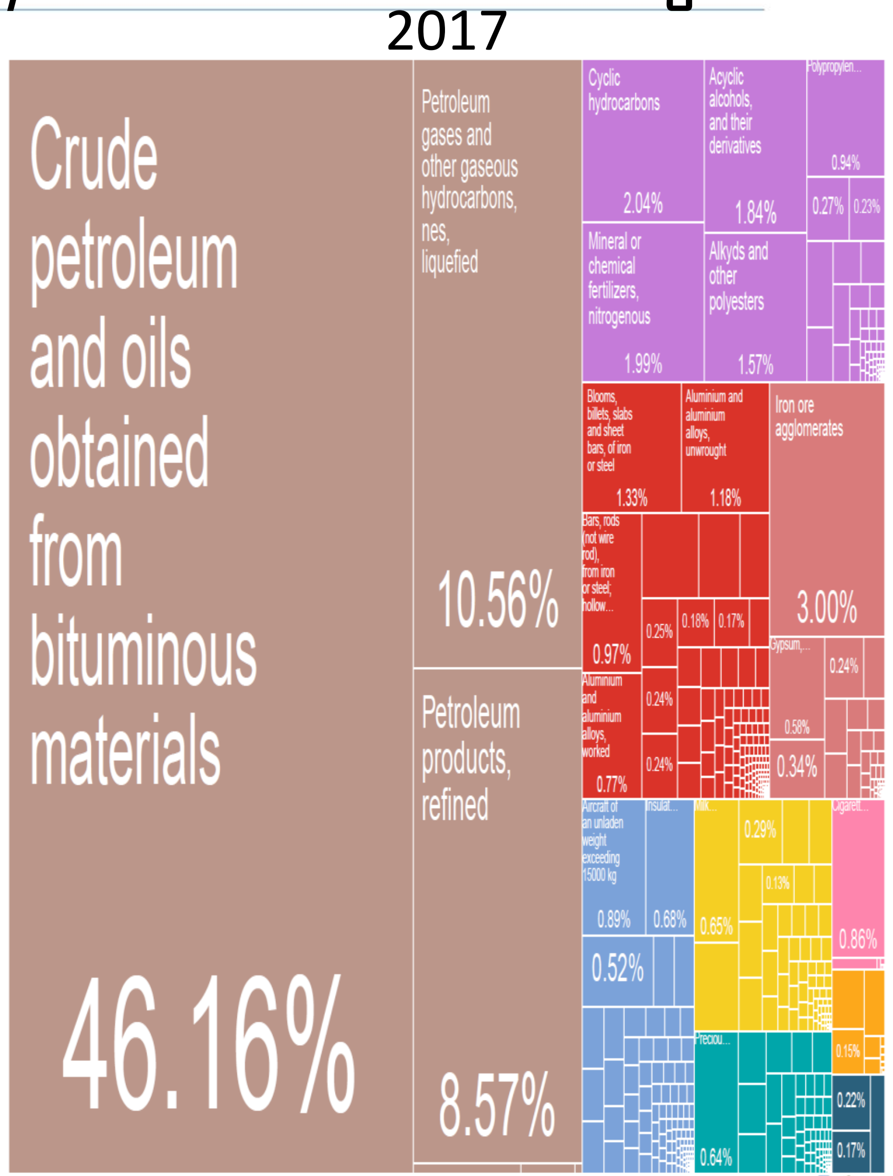


UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT

UNCTAD

Oman's exports: commodity-based manufacturing





Horizontal diversification

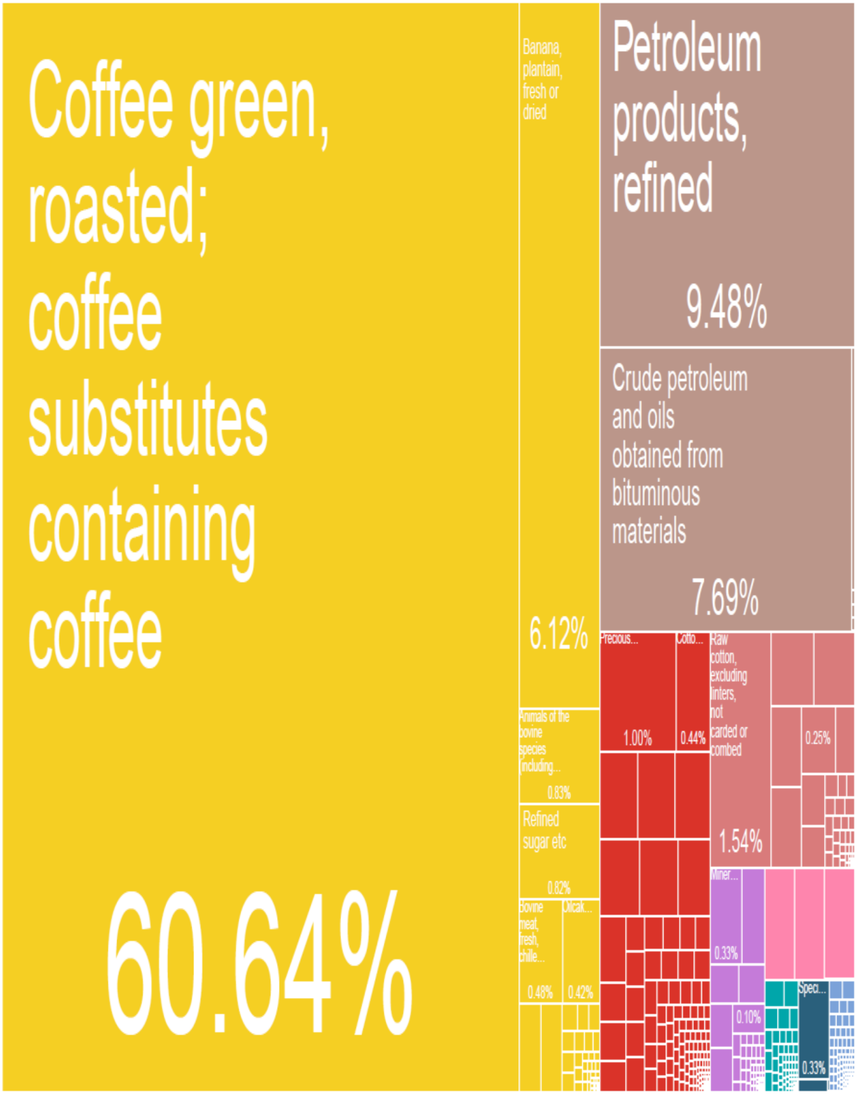
- Investing in production of new products unrelated to existing primary sector

- Examples:
  - Tajikistan, Armenia, Brazil, Liberia, diversified into agriculture
  - Mineral dependent countries also diversified into agriculture: Cameroon, Chile, Ghana, Peru
  - Diversification into manufacturing: Brazil, Indonesia
  - Diversification into different commodity segments: Colombia

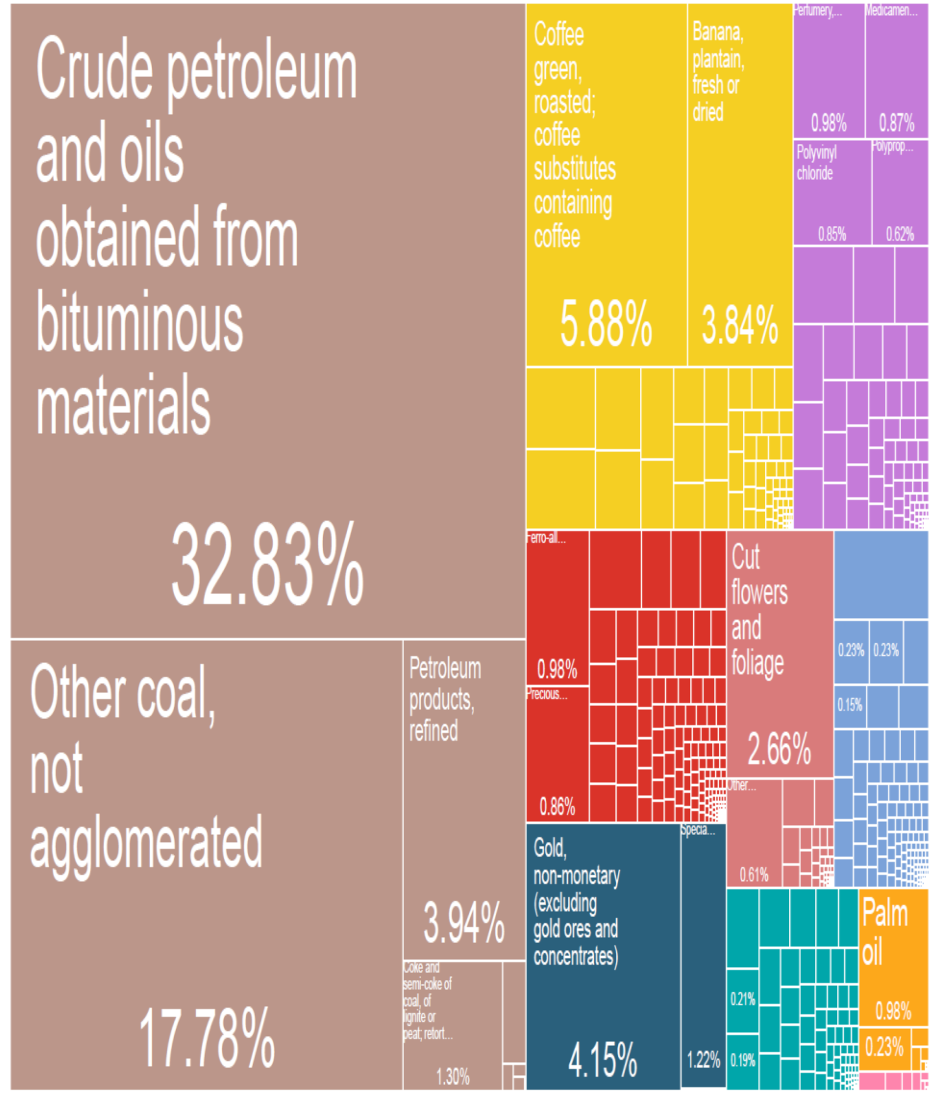
- Combination of vertical & horizontal diversification: Costa Rica

Colombia: diversification within commodity sector

1965

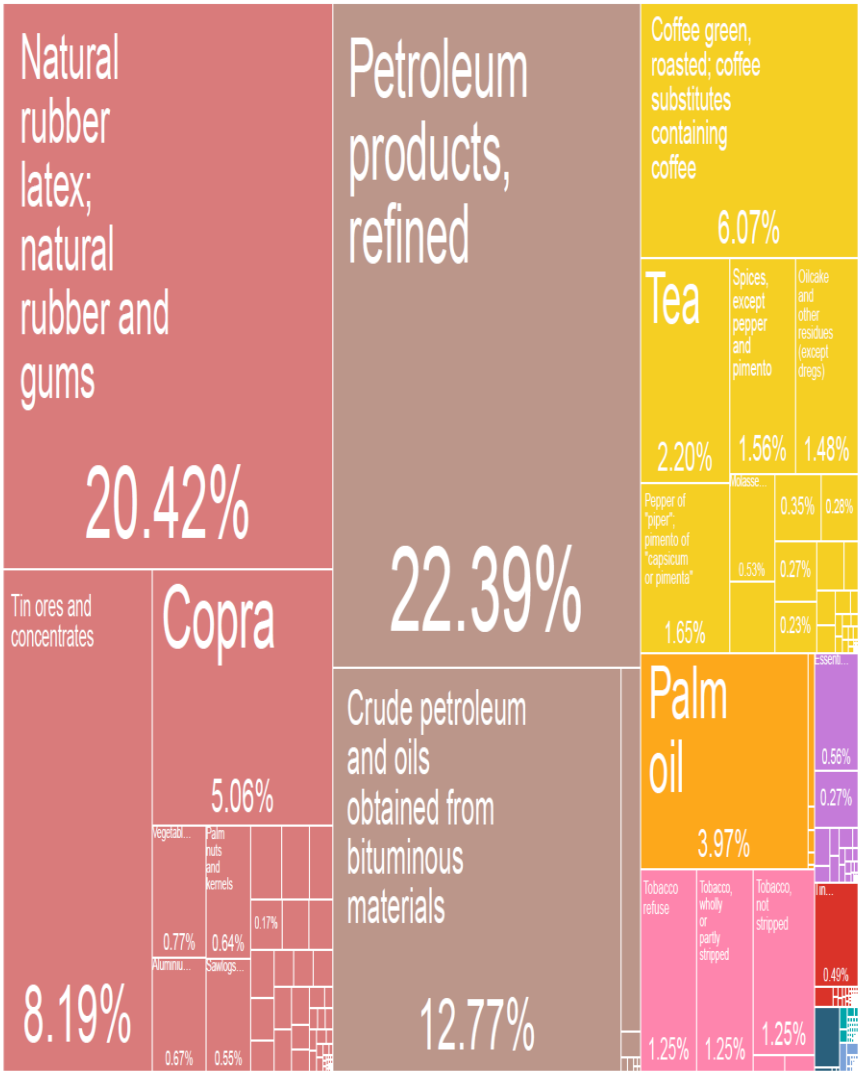


2017

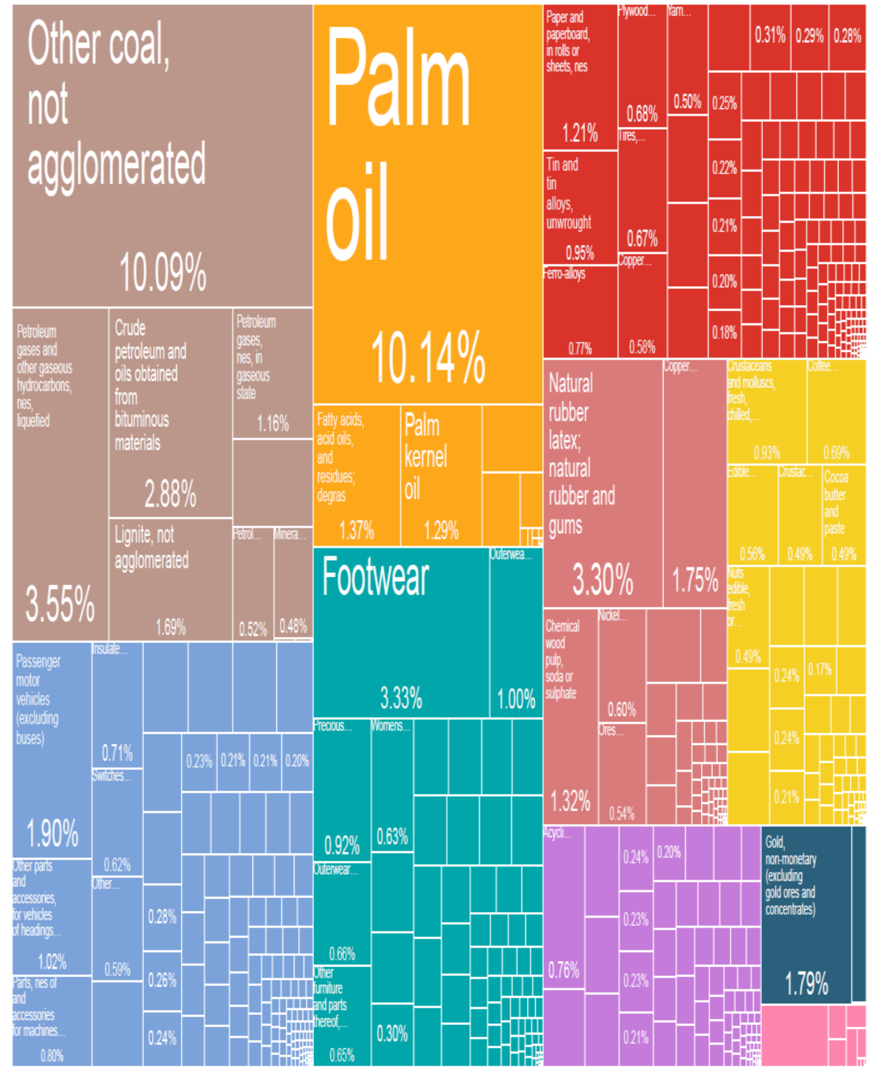


Indonesia: diversifying into other commodities & manufacturing

1965

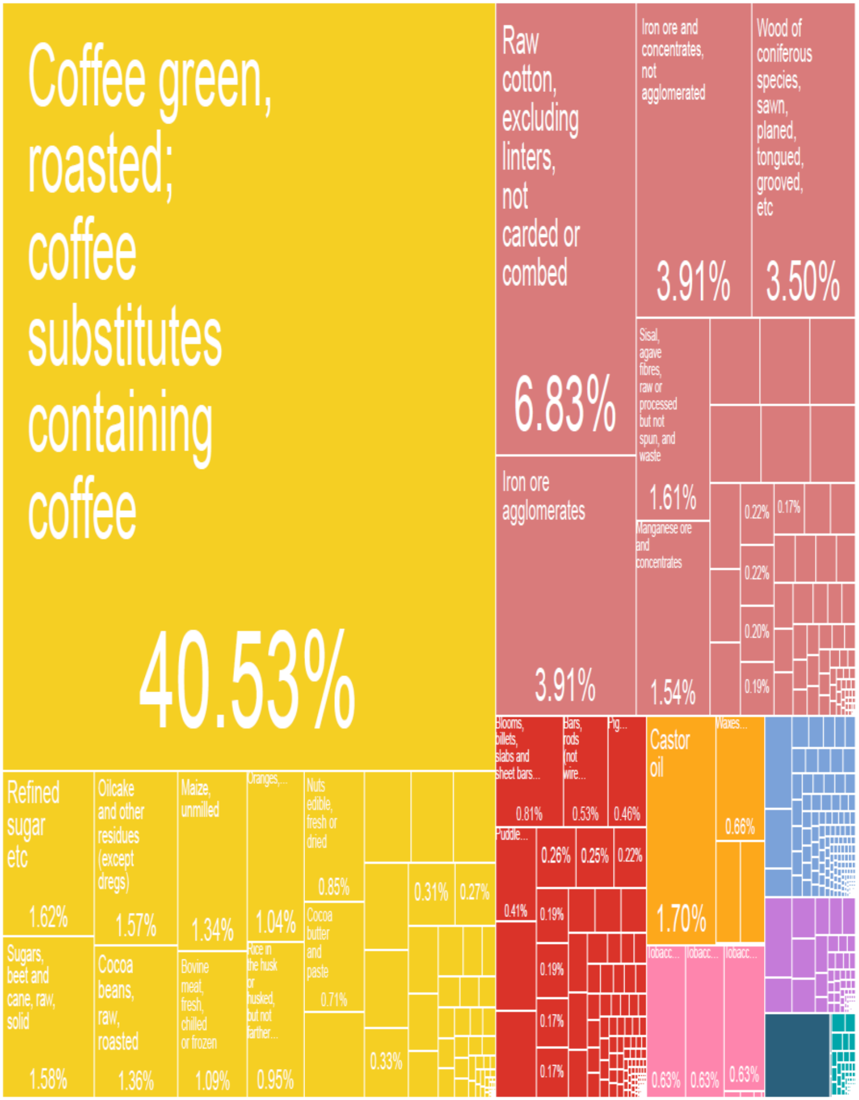


2017

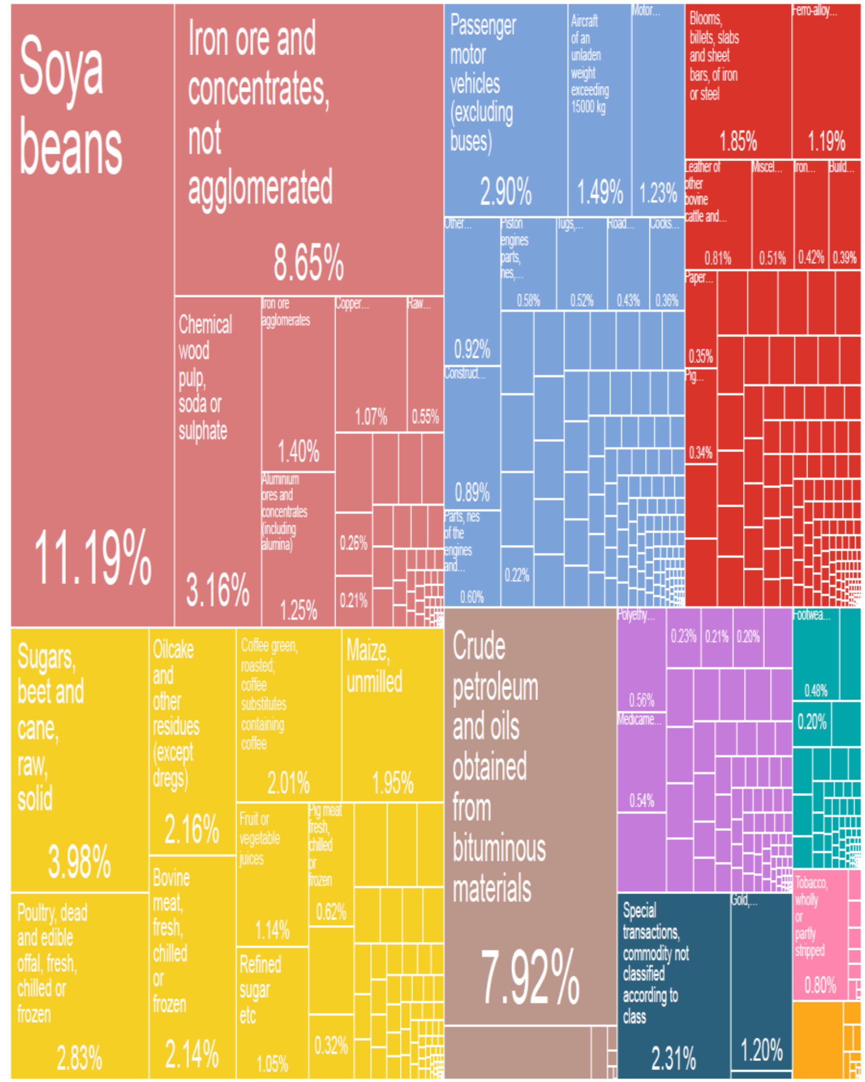


Brazil: diversifying into other comm. & manufacturing

1965



2017

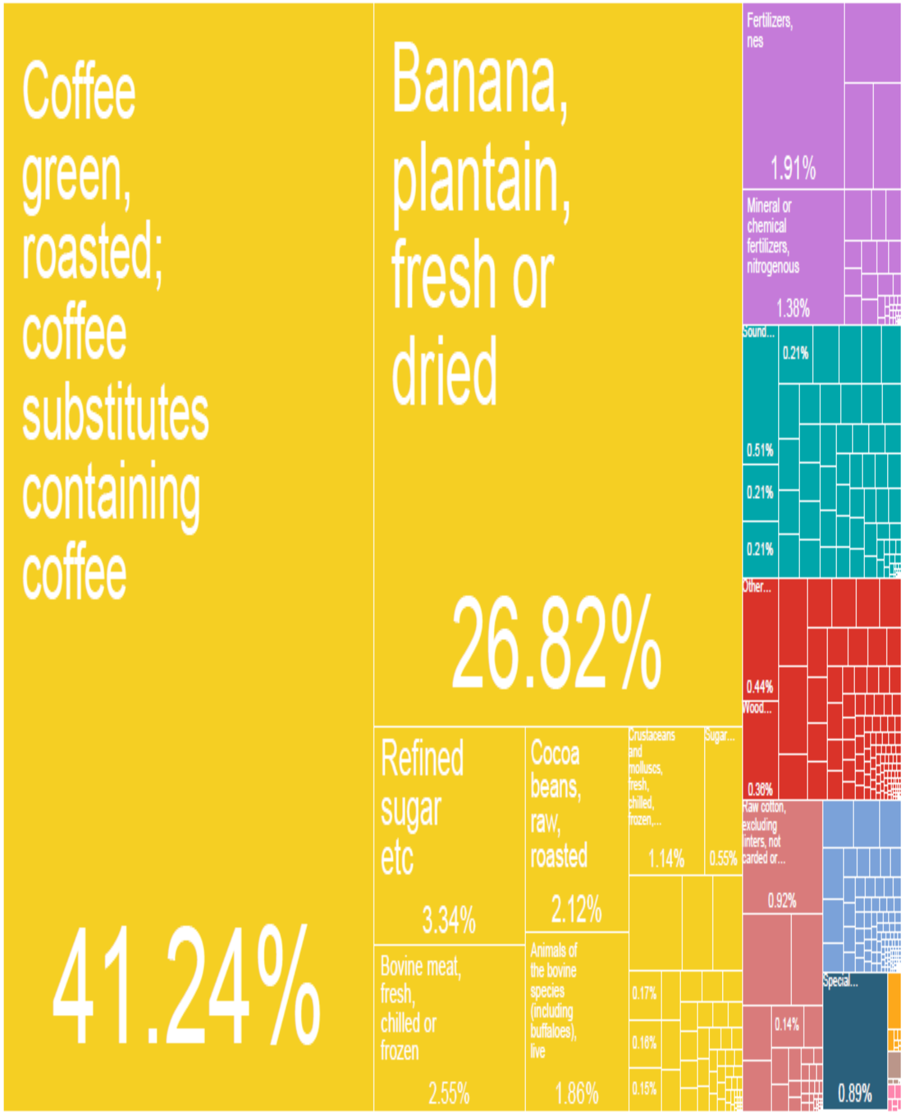


Determining relevant diversification strategy

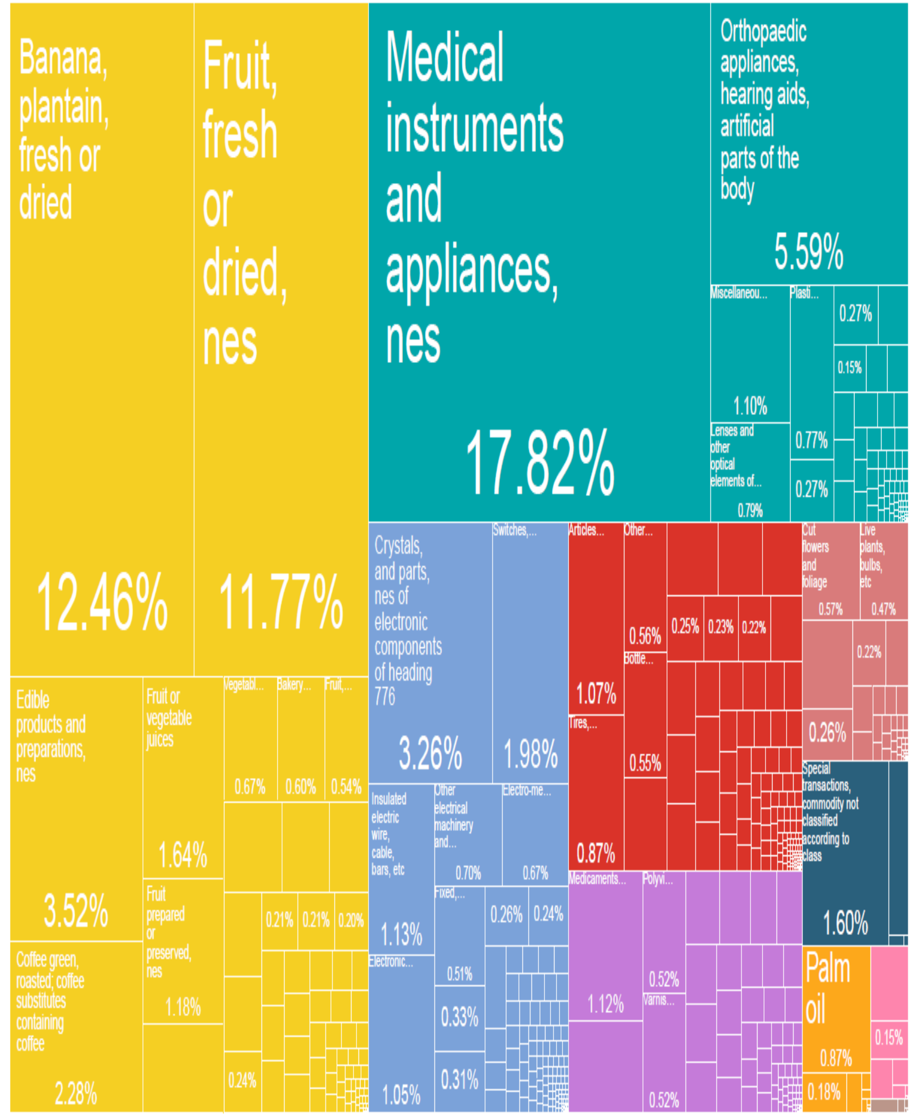
- Analysis of risk: idiosyncratic or systemic?
- Look at comparative & potential competitive advantage
  - How to access required inputs and at what cost?
  - Market access: tariff escalation, SPS, other NTMs
  - Market location & transport costs
  - Institutional environment that is required
- Generally combination of vertical and horizontal strategies

Combination of vertical & horizontal diversification: Costa Rica

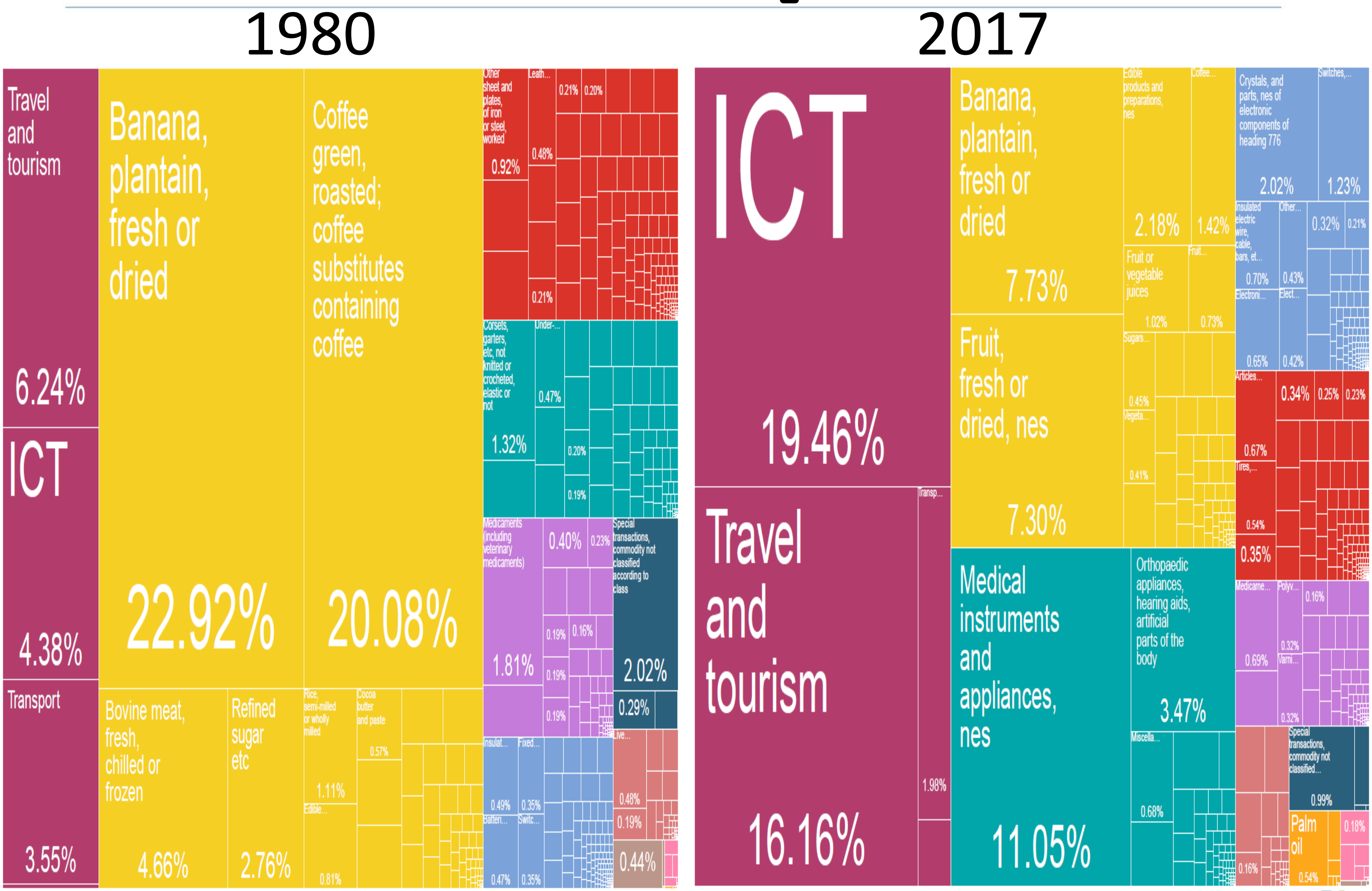
1965



2017



Costa Rica: including services



Conclusion

Conclusion

- CDDCs face multifaceted vulnerabilities: economic, social and climate
- Pursuing economic diversification would limit exposure to vulnerabilities
- Countries need to carefully study diversification strategy before adoption:
  - Adding value to an existing primary commodity
  - Diversifying horizontally within the commodity sector
  - Diversifying into manufacturing of products using existing primary commodity (e.g. oil)
  - Combining vertical and horizontal diversification
- Diversification strategy must consider access to complementary inputs & market access for the new product
- Successful diversification takes a long time & requires holistic approach

Thank you.