Commodity dependence, distribution of value & Export diversification

Janvier D. Nkurunziza
Commodities Branch, UNCTAD
Outline

- Commodity dependence
- Why does commodity dependence matter?
- Complex value chains and unequal distribution of value
- Diversification: vertical or horizontal?
- Conclusion
Commodity dependence

- Definition
- Distribution & geography
Defining commodity dependence

- Commodities >= 60% of merchandise exports
- Three major groups:
  - Agriculture
  - Minerals, Ores and Metals
  - Energy
- Country depends on a commodity group when:
  - it is commodity dependent (60% merchandise exports) and
  - more than 1/3 of exports are from the commodity group
Countries by Commodity Group 2013-17

- FUELS: 26
- MINERALS, ORES AND METALS: 27
- AGRICULTURE: 35
World Commodity Export Dependence by commodity groups, 2013–2017 average (per cent)
Why does commodity dependence matter?

- Declining prices
- High producer price volatility
- CDDCs stuck at bottom of value chain
Negative terms of trade
High commodity price volatility

Monthly price: 2017 vs. 2018 (% change)

Phosphate rock
Cocoa
Wheat
Maize
Groundnut oil
Soybeans
Beef
Rice
Sugar
Sunflower oil
Soybean oil
Rubber
Crude oil, Brent
Coffee
Zinc
Tea
Palm oil
Coconut oil
Commodity price volatility

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

- 59% of the monthly changes from February 2000 to February 2019 were positive; 41% were negative

- 56% of the shocks with an absolute value above 5% were positive; 44% were negative

- The average size of negative shocks was -4.3%; the average size of positive shocks was 3.9%

- Producer prices twice as more volatile than retail prices
Volatility of producer prices almost double retail (1990-2017)
Commodity price volatility

Coefficient of variation of UNCTAD commodity price indices (Jan 2000 - Feb 2019)

- All Groups
- All Food
- Agricultural Raw Materials
- Minerals, Ores and Metals
- Fuels
Value chains & distribution of value

- Complex value chains
- CDDCs stuck at the bottom of value chain
- Unequal distribution of value
Figure 10 – The Coffee Global Value Chain – From Tree to Cup

GROWING & PROCESSING

1. Growing
2. Handpicking (most countries) or Mechanical Harvesting (Brazil, Hawaii)
3. Dry or Wet Processing

PRODUCERS
Smallholders
Mid-size farms
Cooperatives
Estates/Large plantations

4. "Domestic Roasting Manufacturing Consumption"

INPUTS
(Seed, Land, Fertilizers, Machinery)

INTERNATIONAL TRADING

1. Local Traders/Collectors

INTERNATIONAL TRADERS

1. Exporters; Marketing Boards; Auctions; Brokers; Facilitators
2. Importers; Brokers; Warehousing

ROASTING

1. Roasting
2. Grinding
3. Blending
4. Brewing
5. Packaging

INTERNATIONAL ROASTERS

RETAILING

1. Retail

RETAILERS
Wholesalers
Supermarkets
Food Service
Coffee chains
Specialty Coffee shops
Internet-shopping

CONSUMPTION

500 millions coffee drinkers daily

CONSUMING COUNTRIES/DEVELOPED COUNTRIES

PRODUCT CETERA/DISTRIBUTION/DEVELOPED COUNTRIES

PRODUCING COUNTRIES/DEVELOPING COUNTRIES

25 million producers & workers

2. Dry Milling

GROWING & PROCESSING

IN- & OUT-OF-HOME

Storage

Shipping

Roast Ground Coffee

Roast Instant/Soluble Coffee

Alternative unusual uses for coffee:
Bioenergy, Beauty, Cleaning
Recent developments in global commodity markets

Market concentration along the Global Coffee Value Chain

- 25 million coffee producers & workers
- 500 million coffee consumers daily
- BIG 5 TRADERS (40% market)
- 2 MAJOR ROASTERS (¼ market)
- 30 RETAILERS

Source: UNCTAD secretariat
Unfair distribution of value: Ethiopian coffee
Cost structure of a £2.5 cup of coffee (percentage)

Source: Based on data from Allegra Strategies (FT, 21 May 2019)
Why is the producer price so low?

- Oversupply—despite increasing consumption
  - Coffee reference price: $.90/lb, a 14-year low; Arabica price on ICE or New York C (Intercontinental Exchange) at $1.20/lb in last 3 years
  - Production cost, processing & transport amounts to $1.50/lb.
  - New York exchange, part of ICE, sets reference price

- Dominant actor, Brazil (28% of market in 2018) has low break-even: $0.90/lb. due to mass production & mechanization

- Low producer price raises real issue of sustainability of supply
  - Multinationals, including Starbucks, taking action to secure supply
  - Nestlé, largest coffee buyer: addressing issue requires cooperation
Why is producer price so low?

- Consumers far removed from consumer markets

- Specialty coffees more at risk of supply disruptions:
  - defined as coffee above 80 on Specialty Coffee Association’s testing scale of up to 100
  - more than half of coffee consumed in US
  - sales based on personal stories
Way forward....

- Many executives in the industry agree that New York C pricing benchmark does not reflect value of beans:
  - New York C does not take into account differences in quality
  - need different form of price discovery
  - some importers bypass New York C, deal with growers and negotiate price based on cost and profit

- Progressive roasters & traders initiative to pay farmers a fair price
  - Thrive Farmers, an importer, has revenue sharing model giving 50%-75% of beans retail value to growers
  - farmers in scheme make 3 times more profits than their next best offer in marketplace
Way forward....

- Transparent Trade Coffee website offers price information

- Peter Roberts & Chad Trewick launched specialty price guide
  - based on data from 21 importers, exporters & roasters in 10 countries
  - in 2017-2018 whereas market average was $1/lb, price ranged from $1.55/lb. to $9.05/lb. with median of $3/lb

- Something more structural needed across industry

- Need for international dialogue on fairness in allocation of value
Defeating dependence via diversification

- Moving up value chain and/or...
- Horizontal diversification?
- Contrasting Zambia with Costa Rica
Product & export diversification

- Moving up chain increases revenues & reduces their volatility

- Value addition must be:
  - “deep” for successful vertical diversification
  - part of comprehensive, long-term and realistic diversification strategy

- Value addition must create substantially new product

- Climate change has added urgency to need to diversify
  - mitigation efforts
  - adaptation to climate change & to 3rd country mitigation
To be relevant, value addition must overcome many challenges:

- acquiring, adapting, and mastering new technologies
- access to complementary inputs (cocoa and milk for chocolate)
- finding market for new product, generally not in domestic economy
- tariff escalation, non-tariff measures, difficult trade policy environment (see Ha-Joon Chang’s “Kicking Away the Ladder”)
- high competition with or market power of established actors

Diversification more than value addition: horizontal diversification

- new products in & outside commodity sector
- choice informed by country’s comparative & competitive advantages
- identify commodities for which value addition could be viable strategy
Costa Rica's and Zambia's exports in 1965...

<table>
<thead>
<tr>
<th>Product Description</th>
<th>Costa Rica Export Share</th>
<th>Zambia Export Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coffee green, roasted; coffee substitutes</td>
<td>41.69%</td>
<td></td>
</tr>
<tr>
<td>containing coffee</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Banana, plantain, fresh or dried</td>
<td>26.03%</td>
<td></td>
</tr>
<tr>
<td>Refined sugar etc</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Borine meat, fresh, chilled or frozen</td>
<td>2.47%</td>
<td></td>
</tr>
<tr>
<td>Cocoa beans, raw, roasted</td>
<td>2.07%</td>
<td></td>
</tr>
<tr>
<td>Fertilizers, nes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Copper ore and concentrates; copper matte</td>
<td>42.48%</td>
<td></td>
</tr>
<tr>
<td>cement copper</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Copper and copper alloys, refined or not,</td>
<td>42.46%</td>
<td></td>
</tr>
<tr>
<td>unwrought</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Costa Rica’s and Zambia’s exports in 2016

- Costa Rica’s exports:
  - Banana, plantain, fresh or dried
  - Fruit, fresh or dried
  - Medical instruments and appliances, nes
  - Medical instruments and appliances, nes
  - Copper and copper alloys, refined or not, unwrought

- Zambia’s exports:
  - Maize, unmilled
  - Tobacco, wholly or partly stripped

Total exports:
78.34%
Product & export diversification

- Human capital formation at the core of diversification process

- External factors help to drive successful diversification:
  - foreign direct investment
  - technology transfer
  - conducive & predictable international environment

- Success requires reforms and policies over a long period
  - conducive domestic macroeconomic policies (fiscal, monetary, ...)
  - relevant sectoral policies (industrial policies)
Conclusion

- Commodity dependence
- Sharing value fairly
- Horizontal diversification?
Conclusion

- Most developing countries are commodity-dependent, a status associated with slow growth & low human development

- Launch an international dialogue on how to foster fairness in value allocation along value chain
  - UNCTAD to initiate the dialogue?
  - identify ongoing positive initiatives and build on them

- Diversification, particularly horizontal:
  - solution to commodity-dependence
  - best response to effects of climate change
Thank you.