

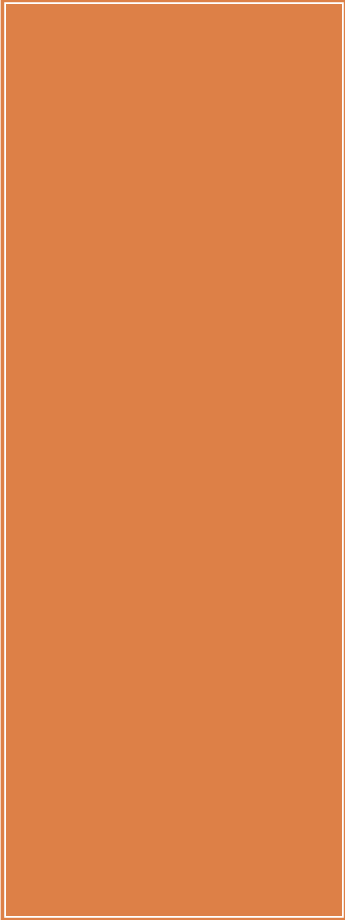


RWANDA

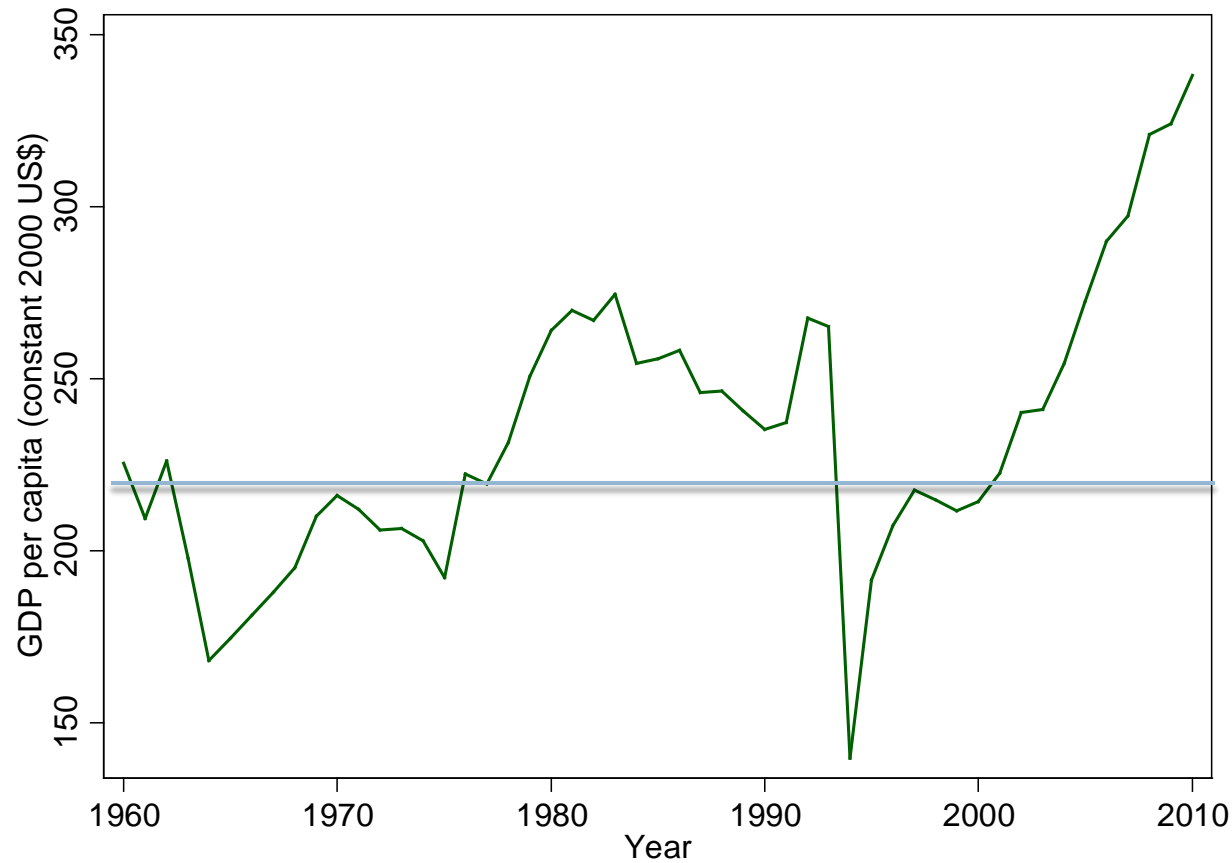
February 2012

Ricardo Hausmann

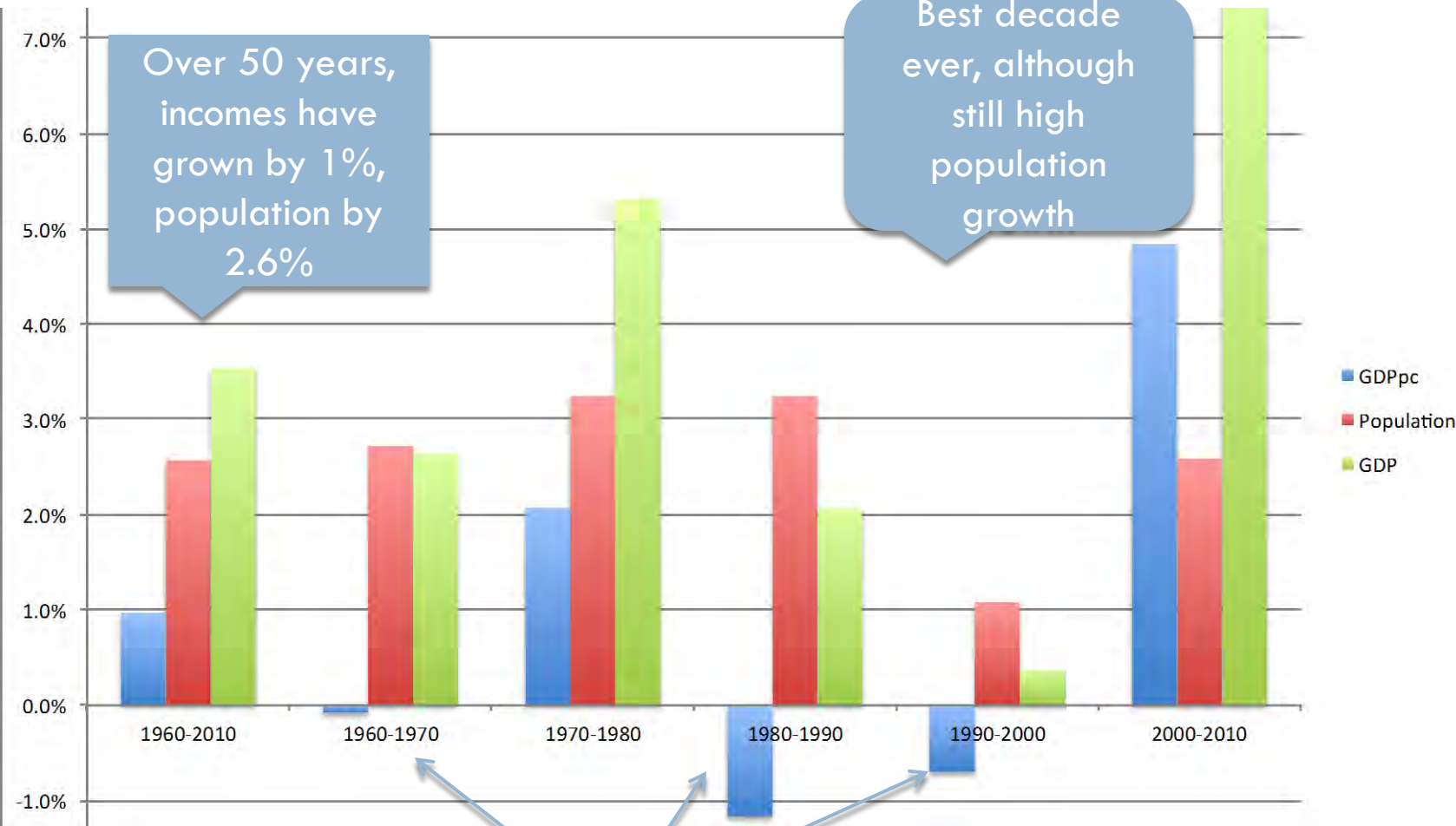
Outline

- 
- Reviewing the macro picture
 - The secret of growth
 - Implications for Rwanda

Level of income is rising after 40 years of stagnation



2000-2010 Fastest decade of growth ever

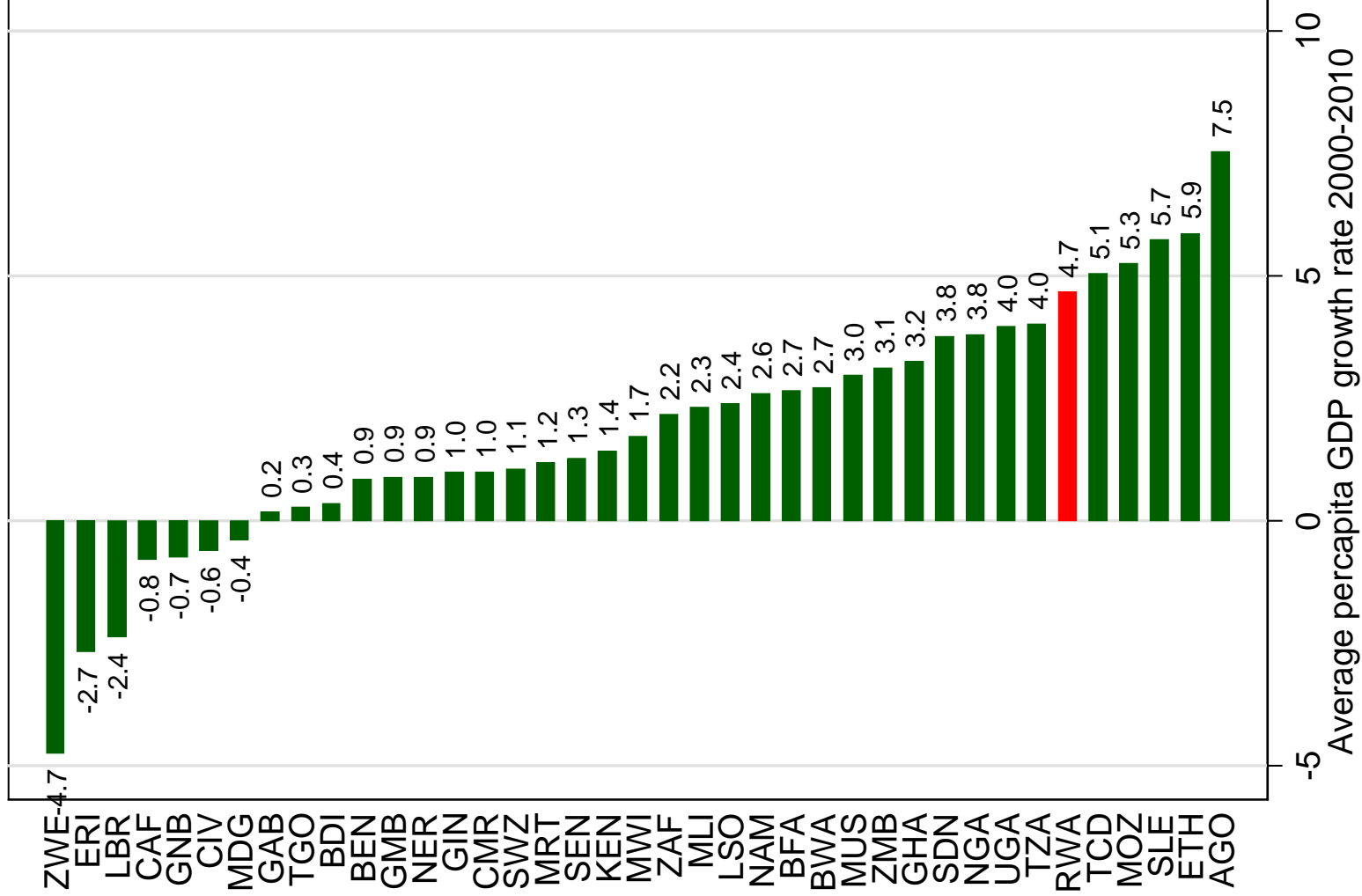


Over 50 years, incomes have grown by 1%, population by 2.6%

Best decade ever, although still high population growth

Three decades of declining incomes

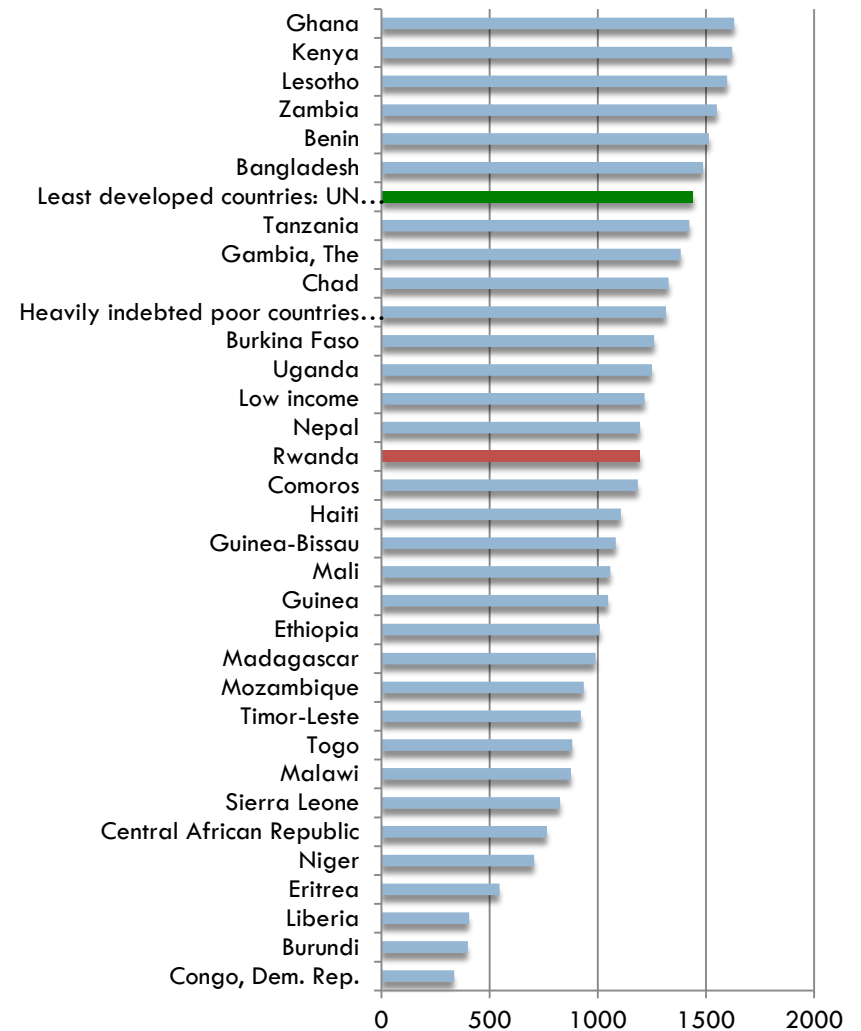
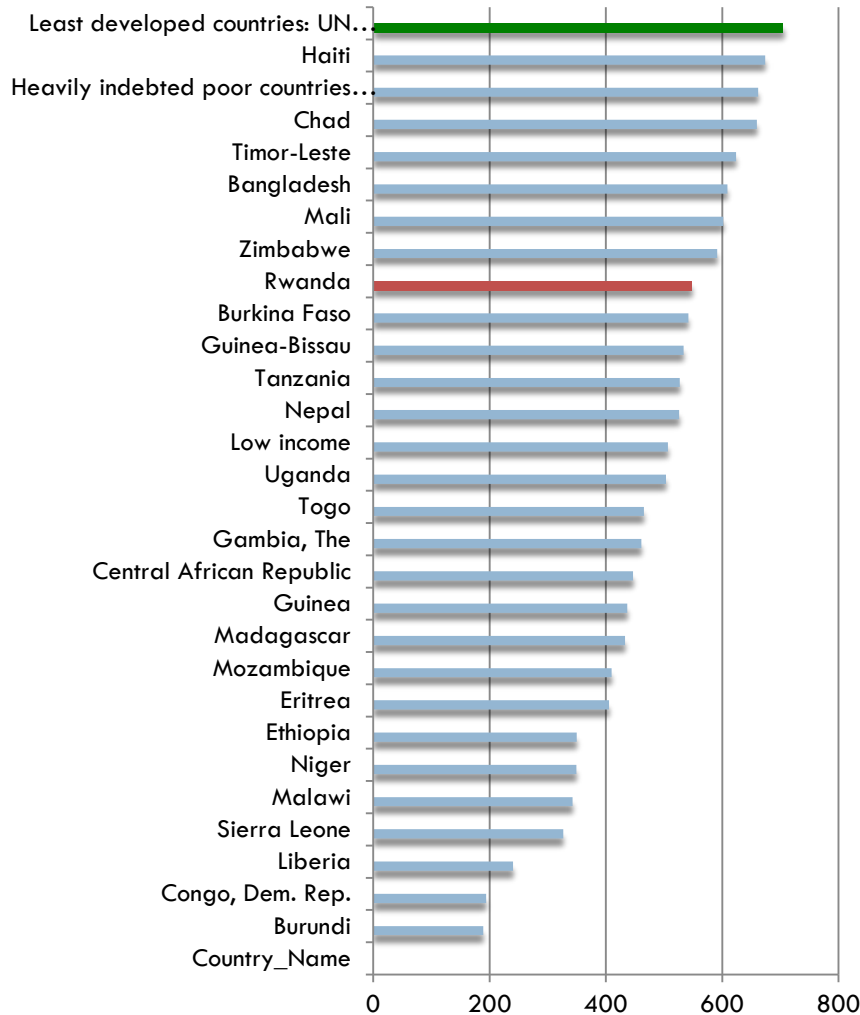
GDP pc growth was high compared to others



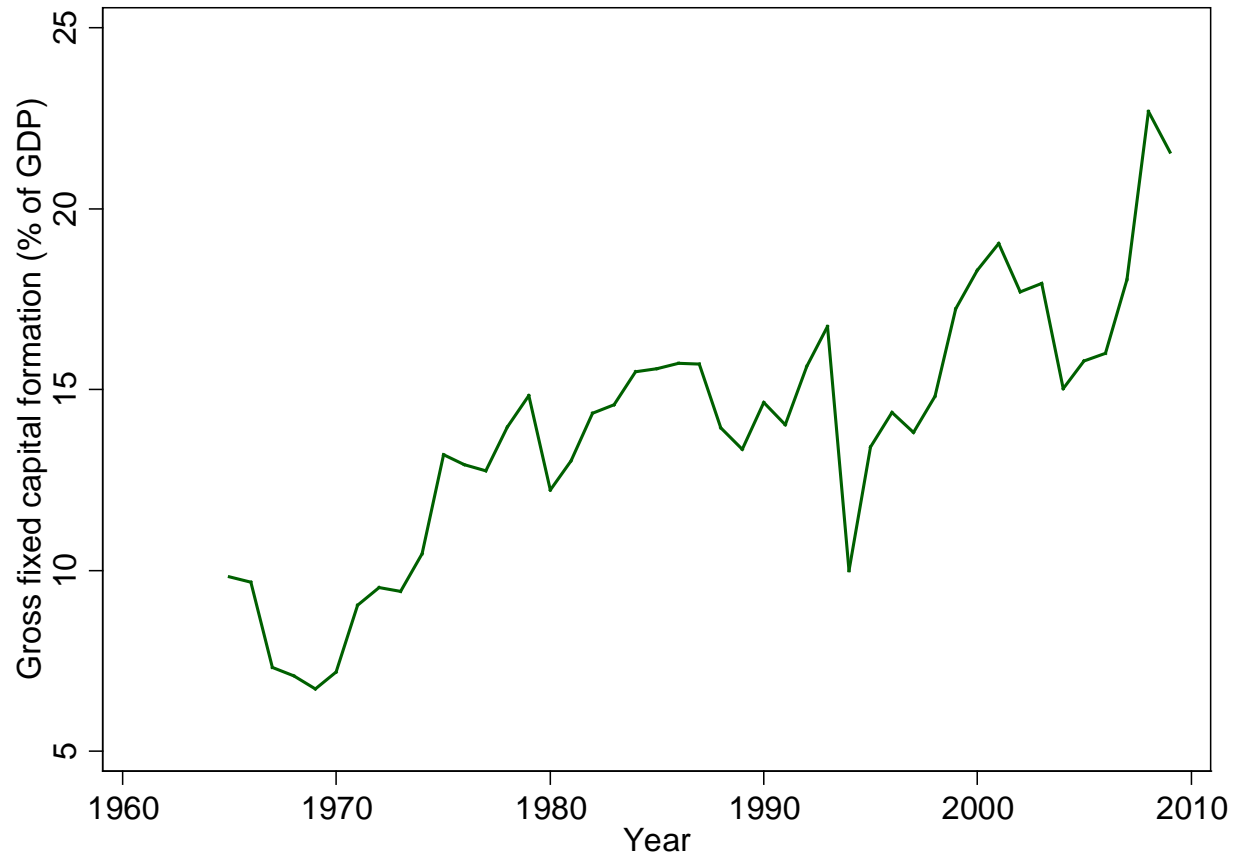
Income still below the average of the least developed countries

Market prices

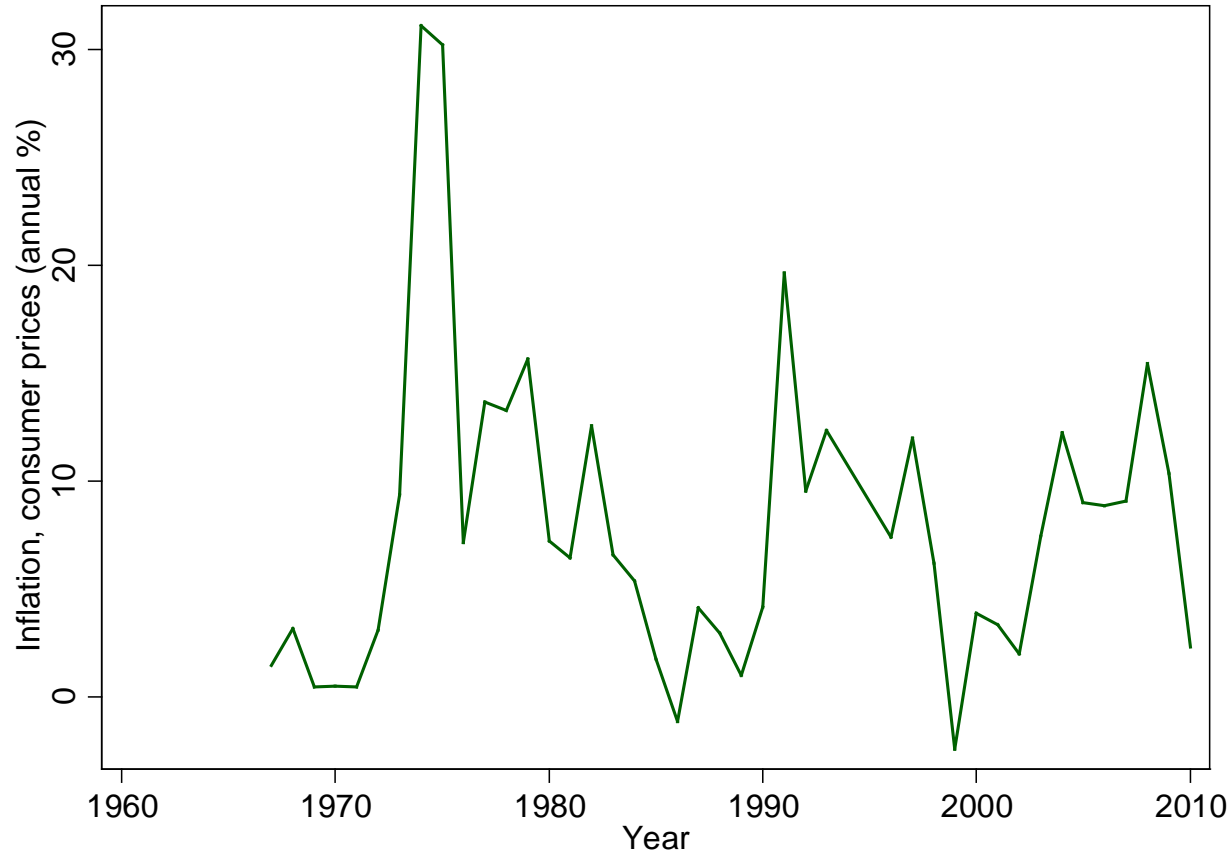
Purchasing-parity prices



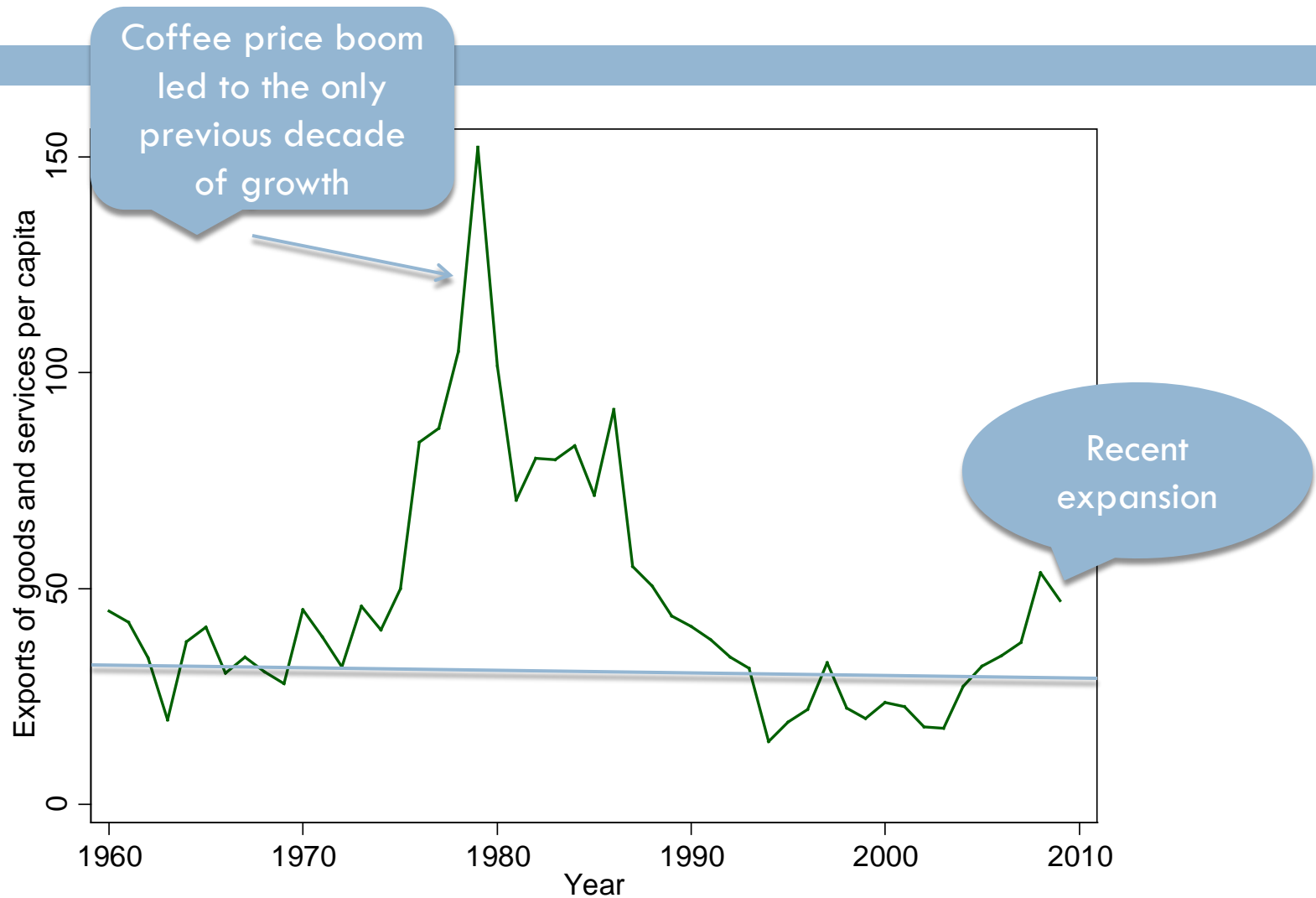
Investment is on the rise



Inflation has been moderate



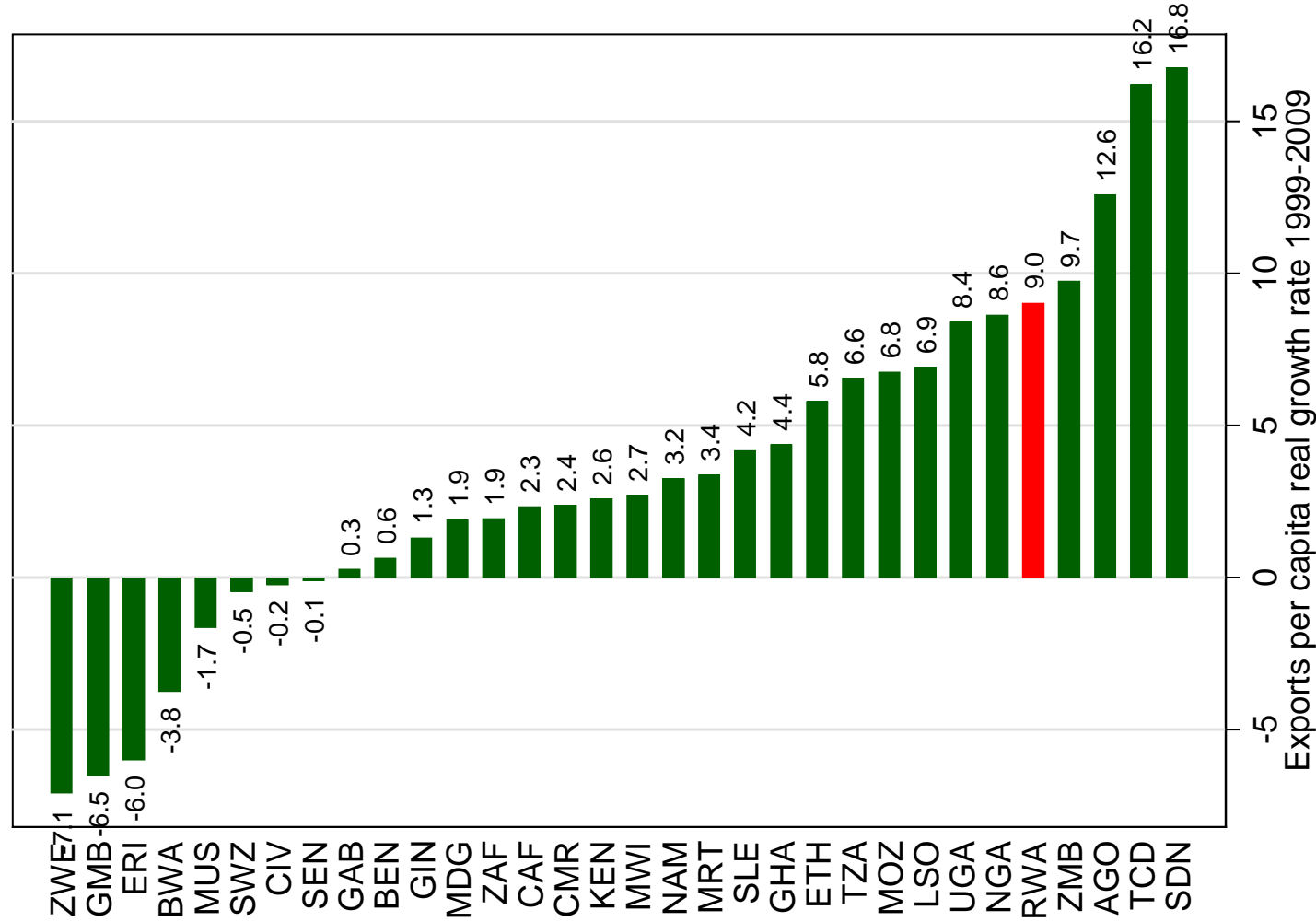
Exports of goods & services per capita



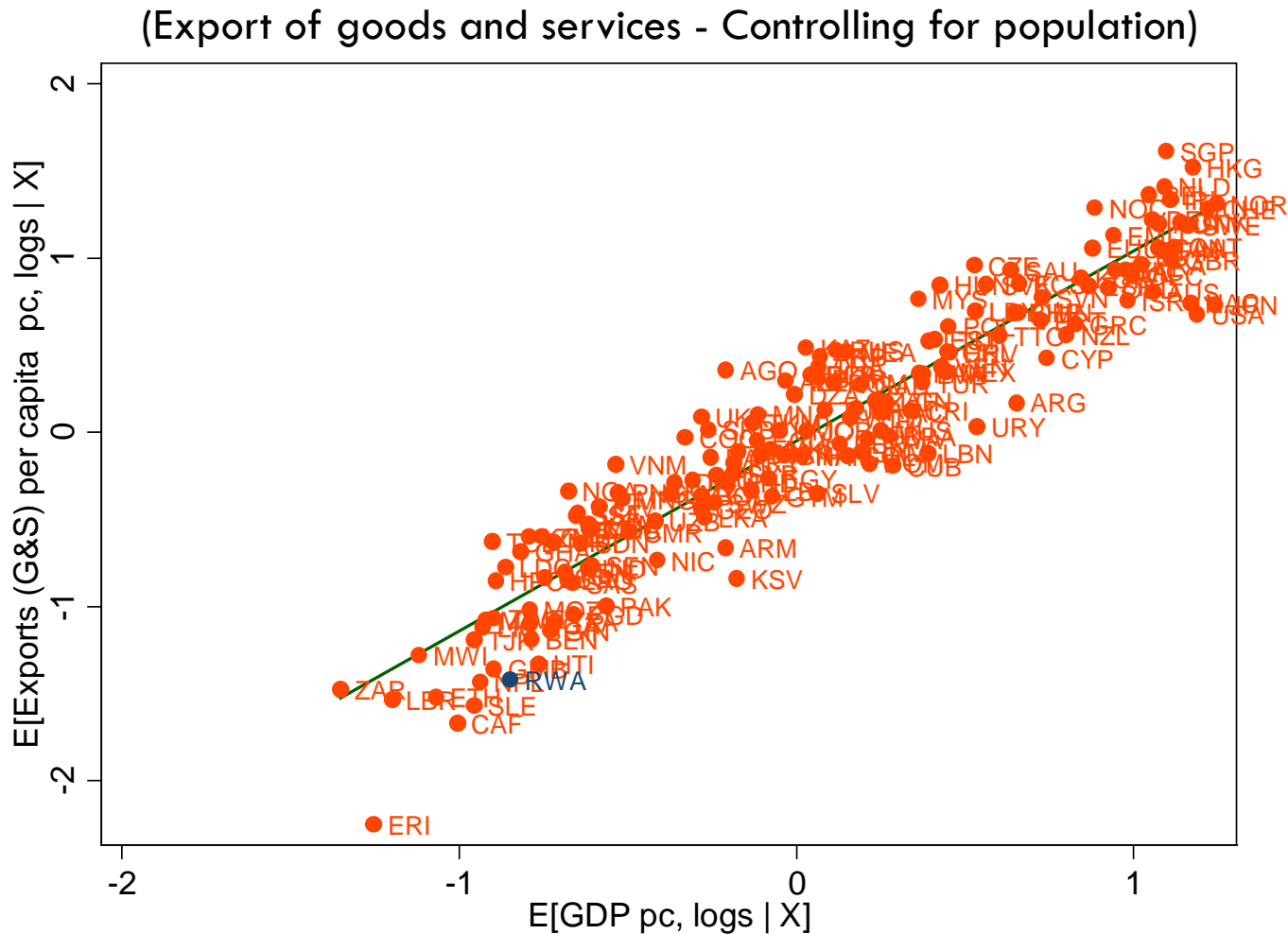
*Deflated using US wholesale price index

The recent increase in exports is substantial

(goods and services - constant dollars)



...but the level of exports per capita is still unexpectedly low...

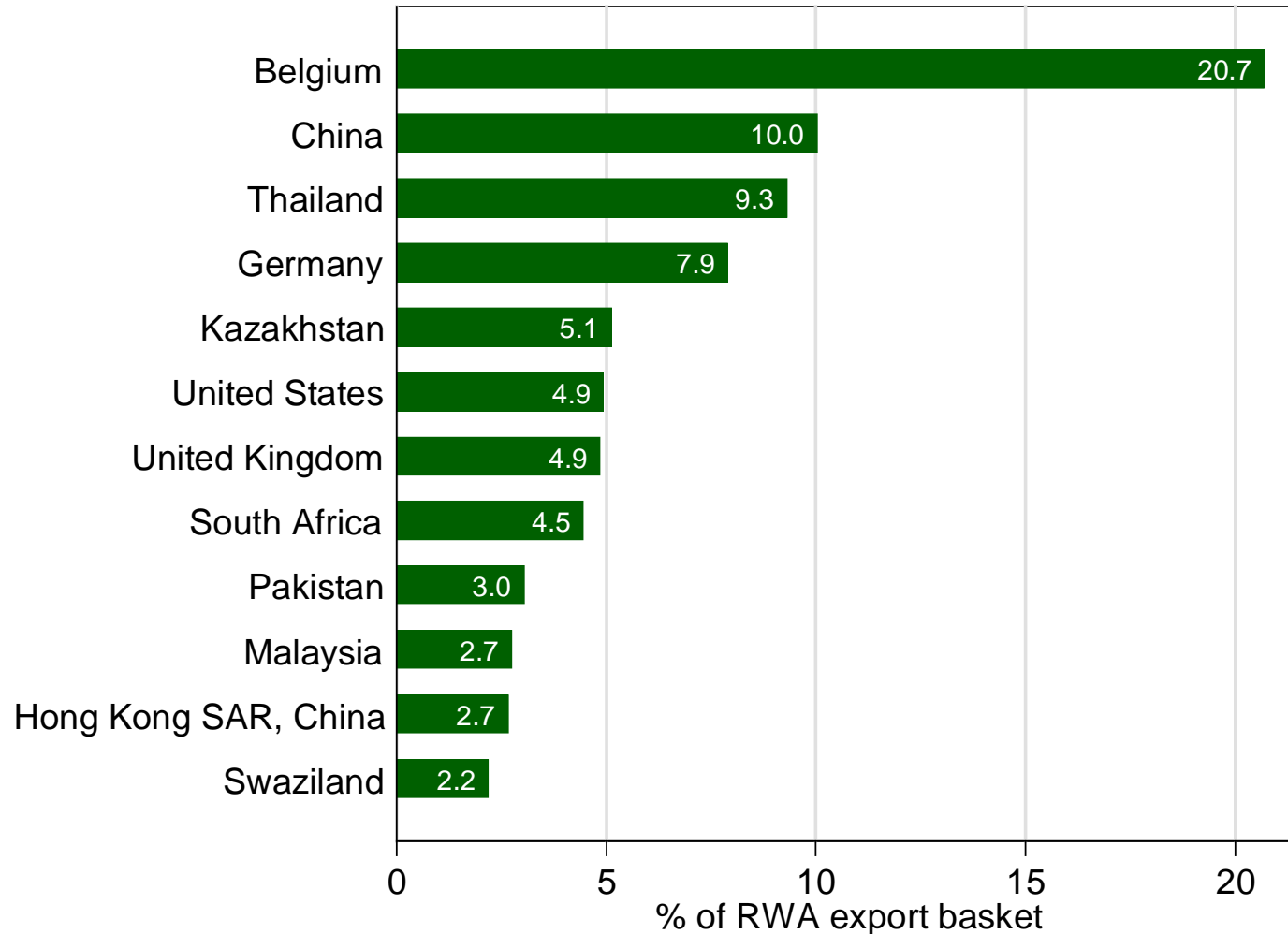


* Controlling for size of countries

...maybe because the country is severely landlocked...



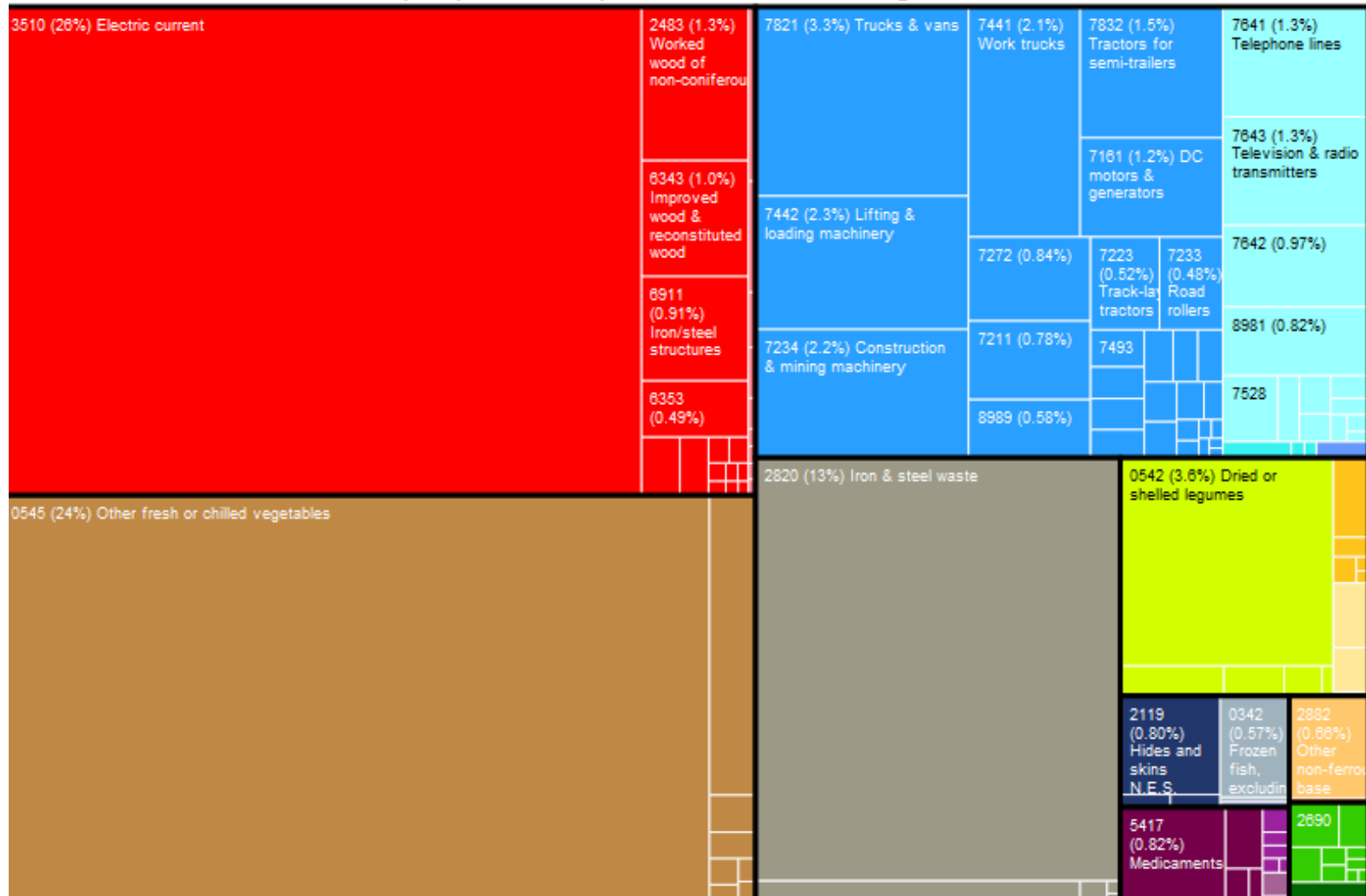
...and it serves markets that are far away...



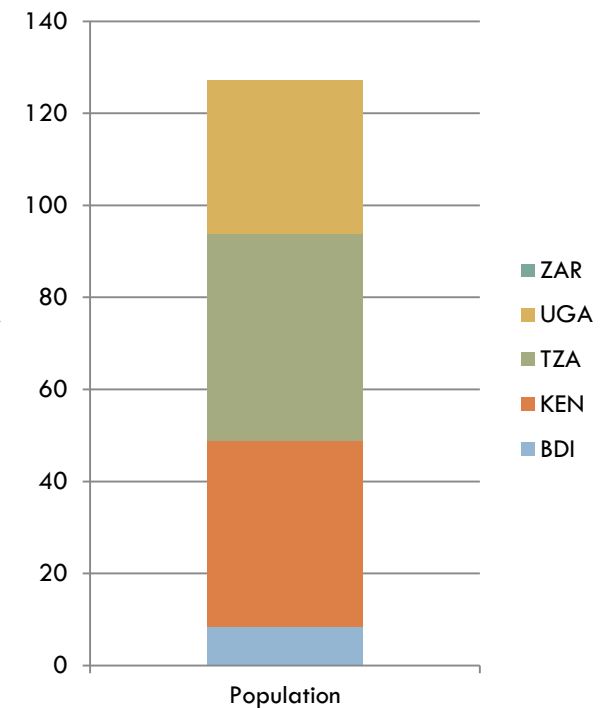
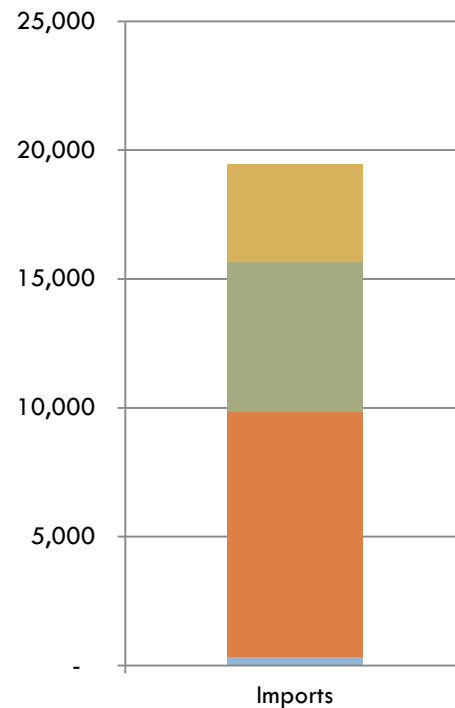
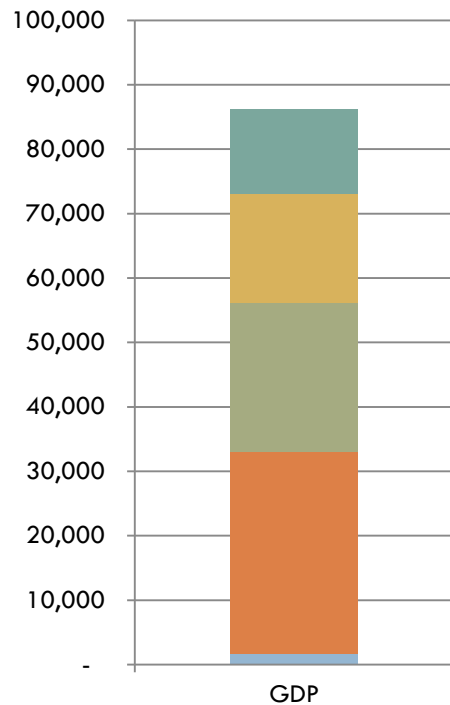
...with different products going to Belgium...



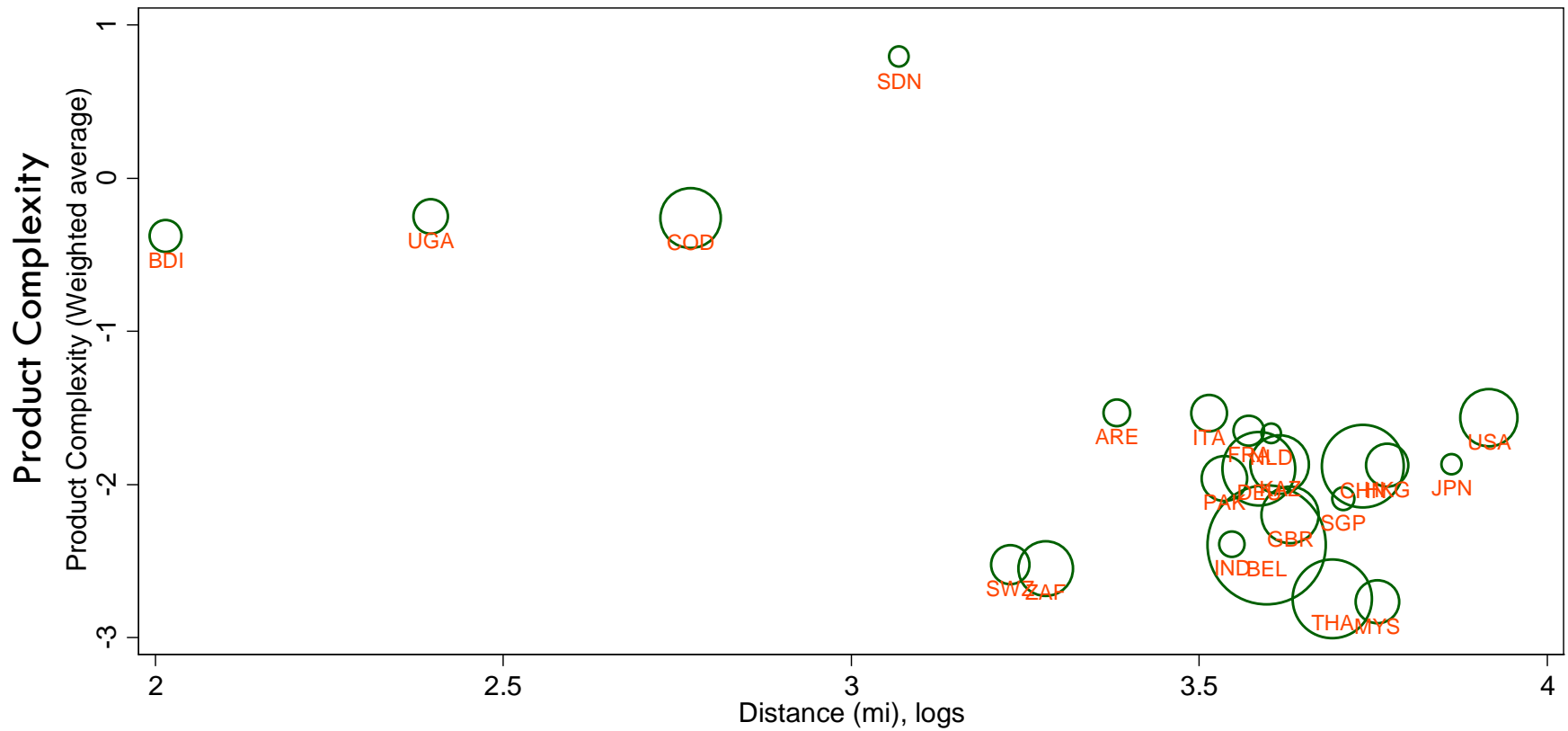
...than to Uganda...



...even though there is a significant neighboring market...

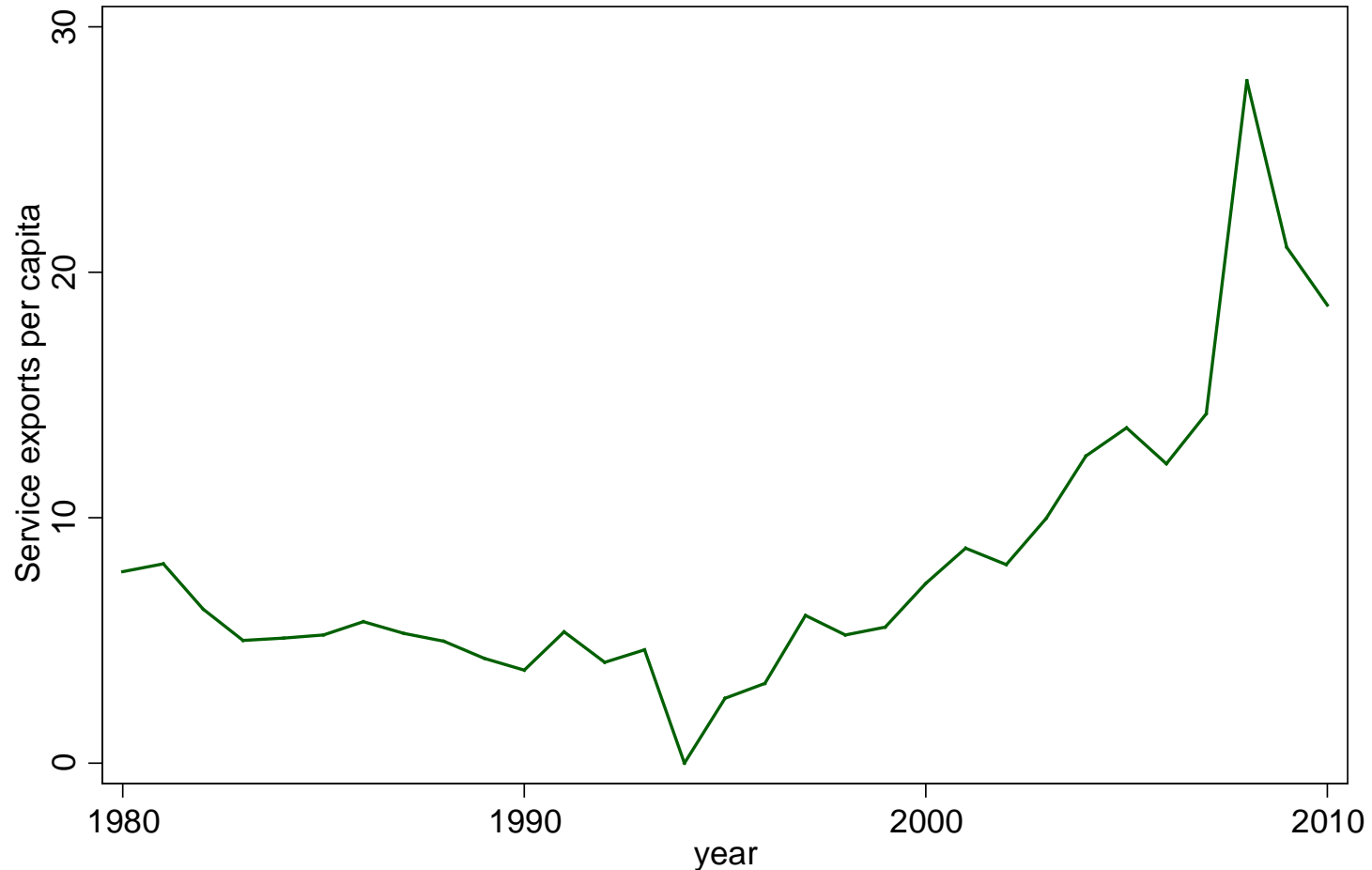


Nearby markets require more complex products



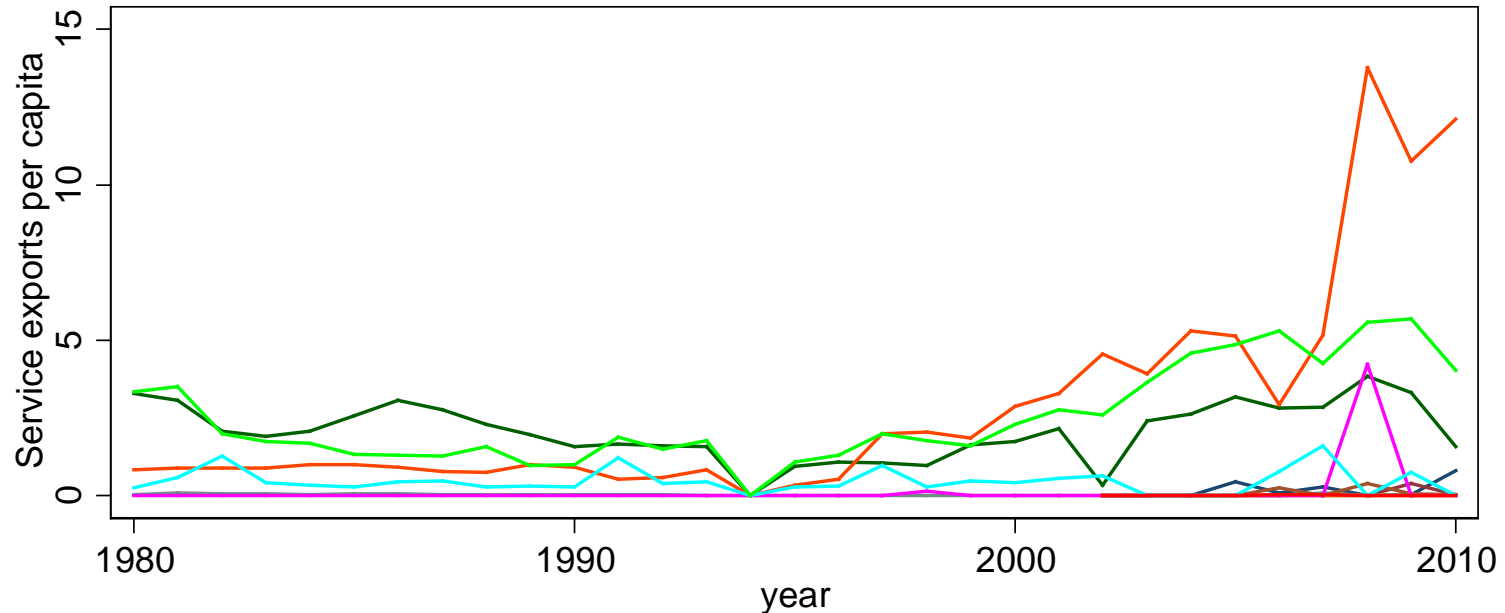
Size of the node is relative to share in RWA export basket.

Service exports per capita have been rising...



* Deflated using GDP deflator

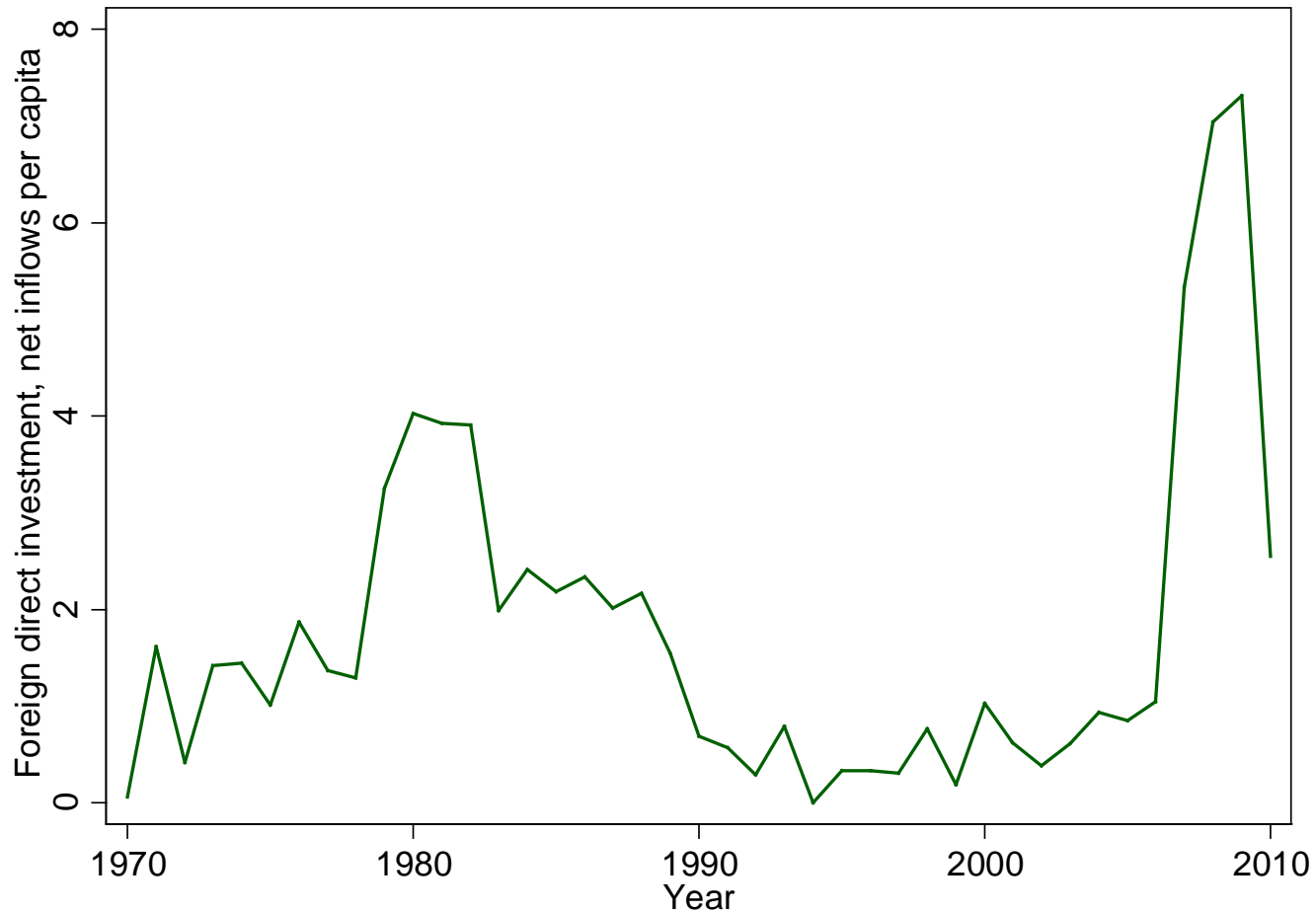
...mainly because of tourism and aid-related activities



* Deflated using GDP deflator

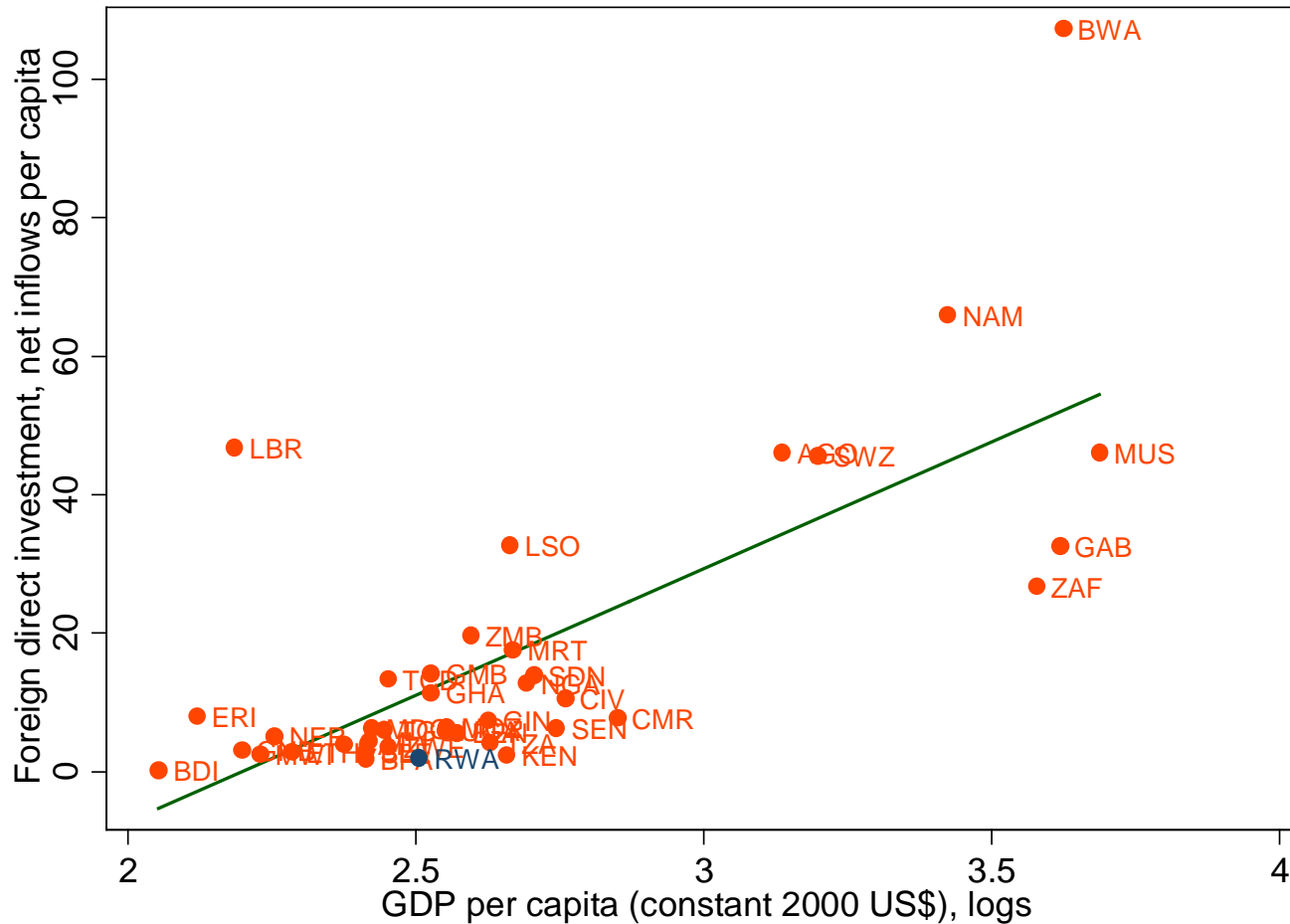
FDI has shown limited dynamism...

(per capita, constant dollars)



* Deflated using GDP deflator

...and is low by Sub-Saharan standards

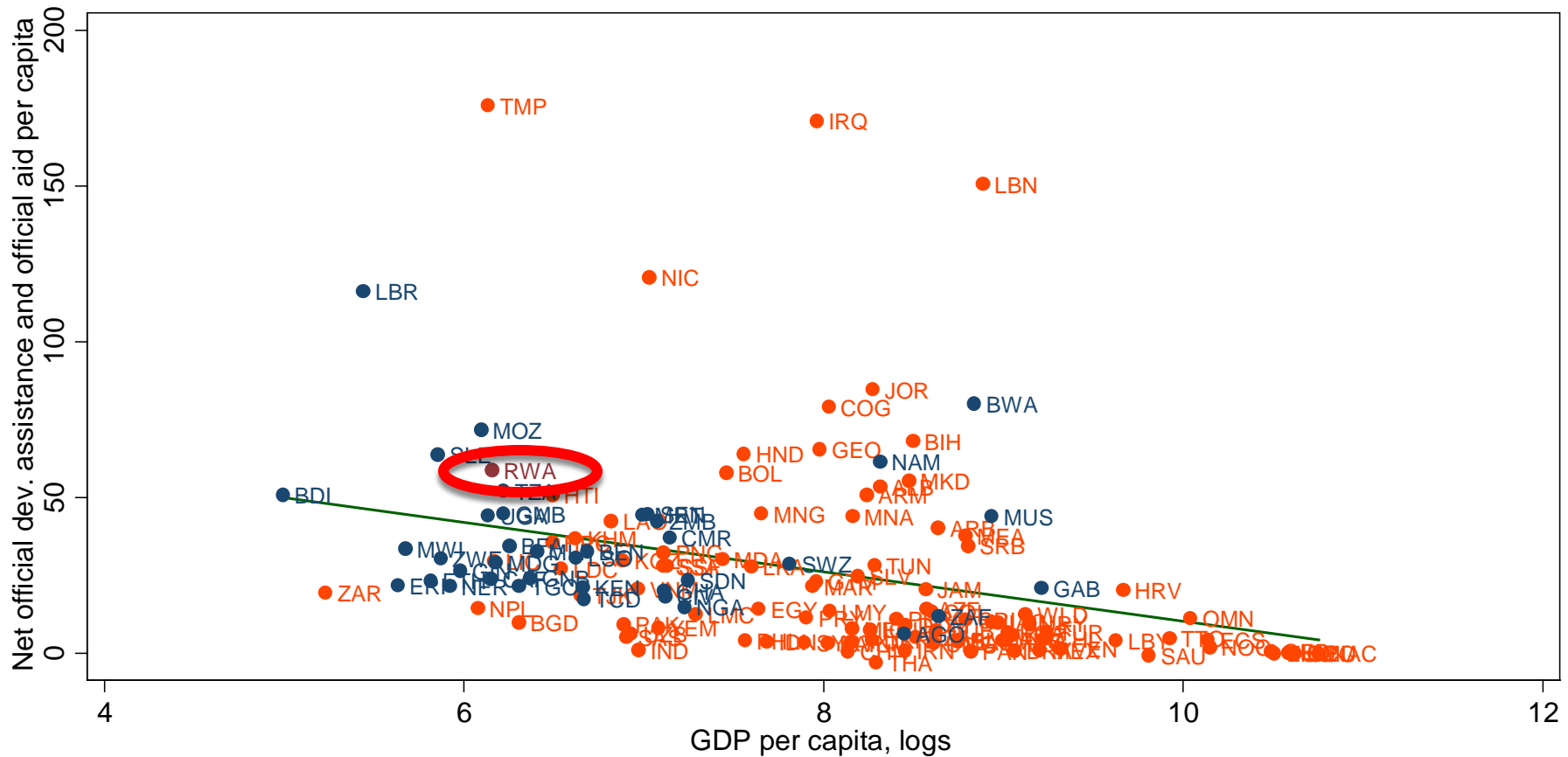


*Net FDI – average 2005-2010

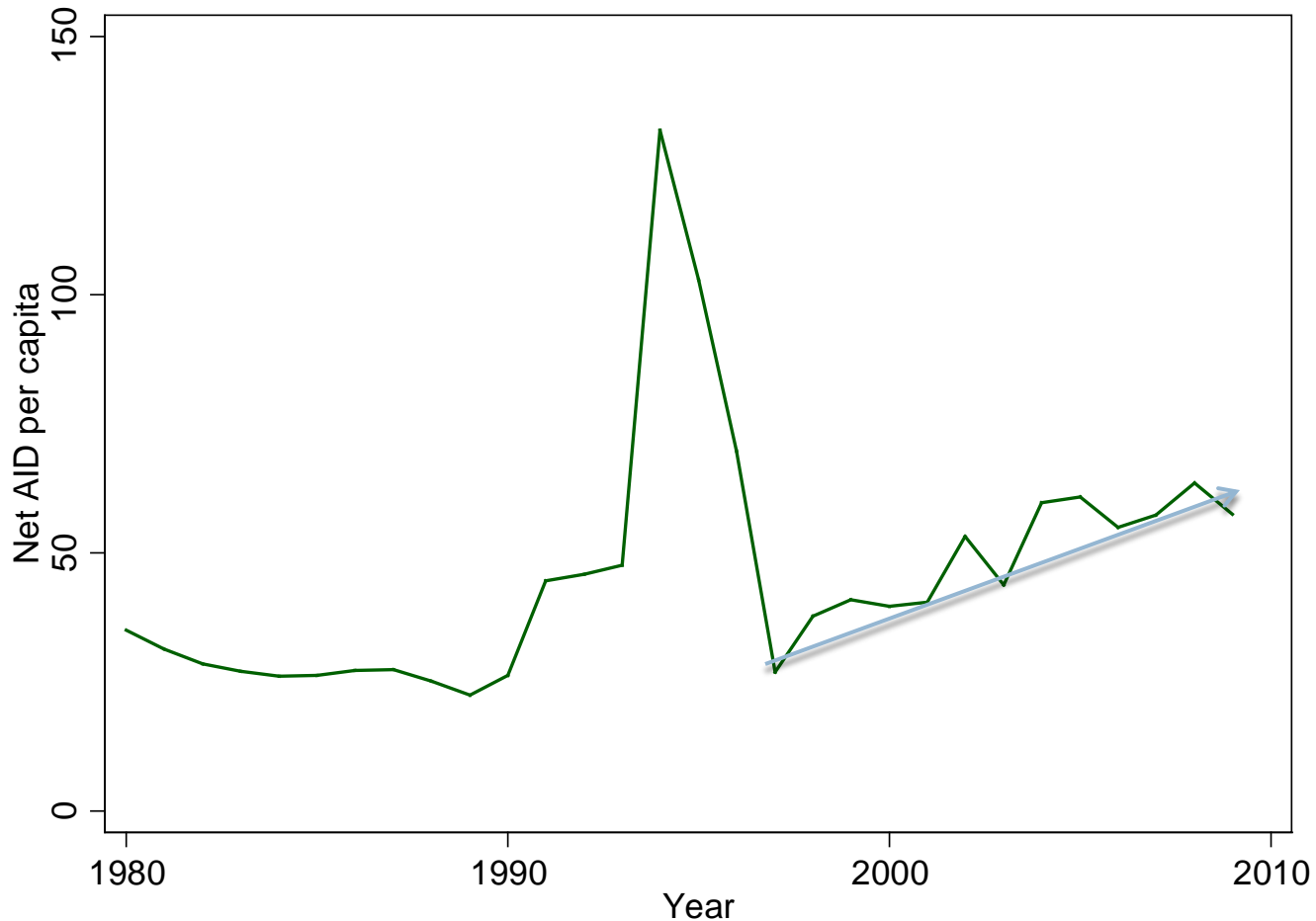
...while aid per capita has been fairly high

...

(average 2005-2010)

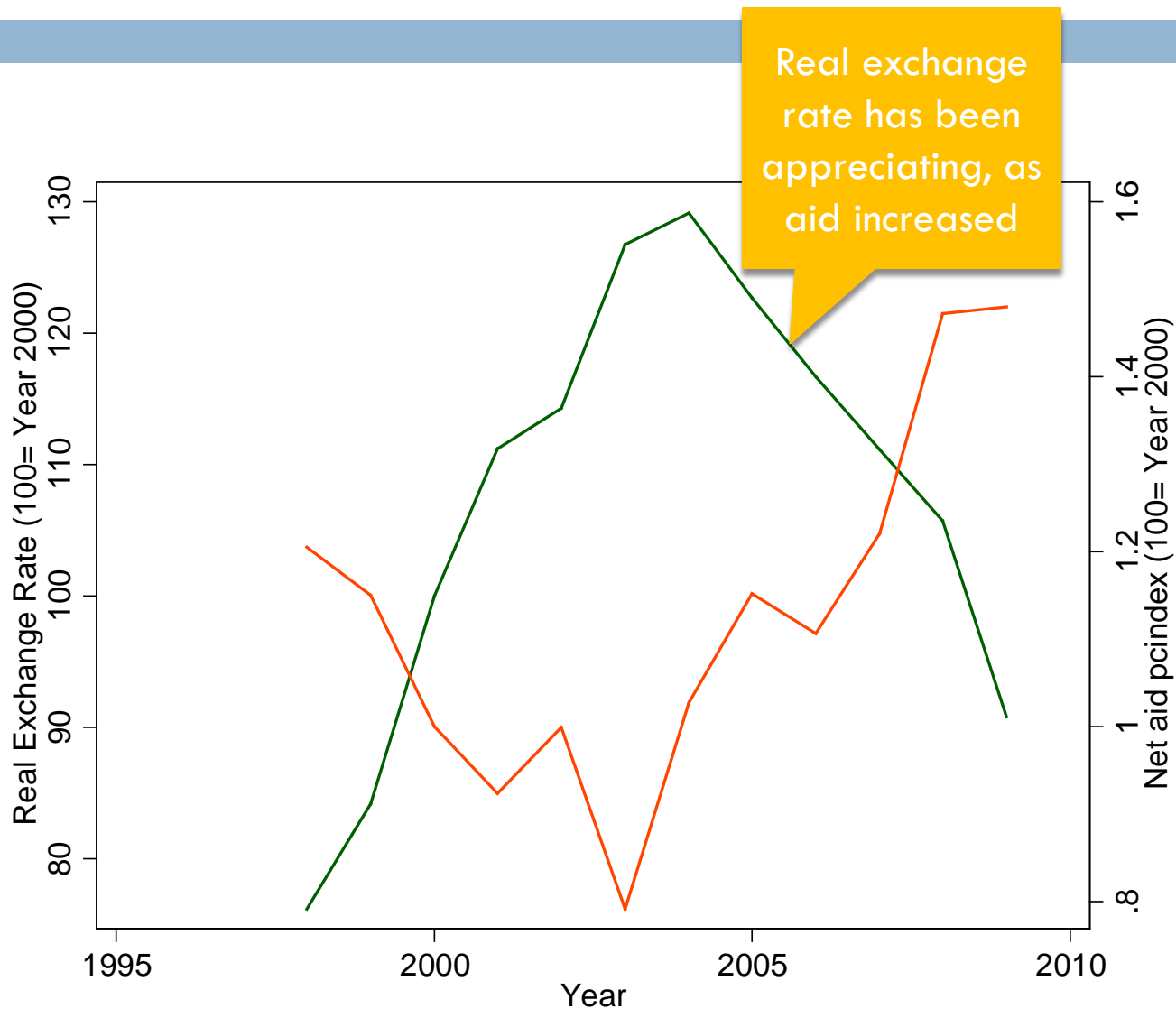


...and rising Net aid per capita

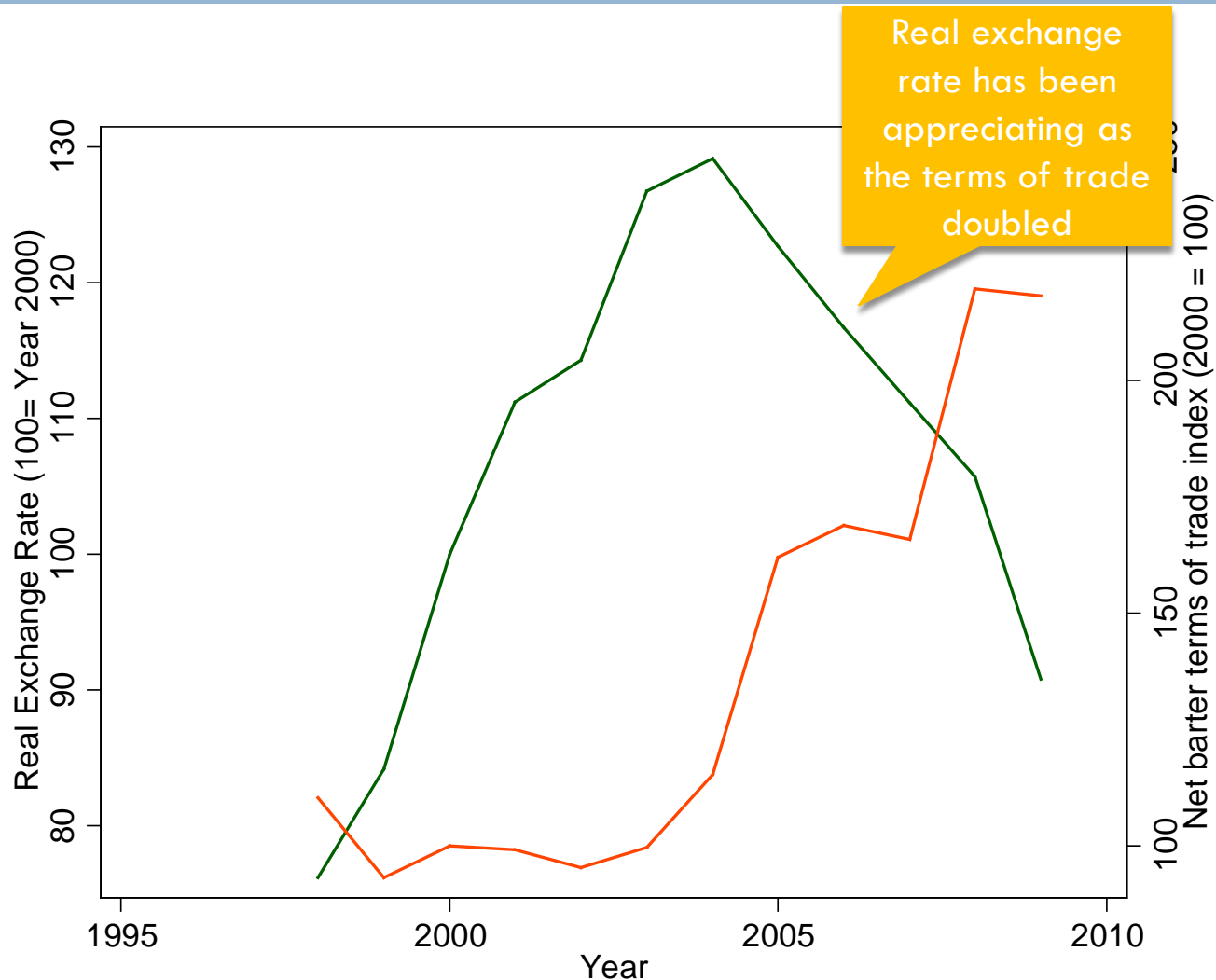


* Deflated using GDP deflator

RER and Net Aid: Evidence of Dutch disease?



RER and Terms of Trade: Evidence of Dutch disease?



Comments

- Rwanda's income is still below the average of the least developed countries
- Rwanda has gone through its best decade since 1960
- This performance was predicated on rising export prices and aid flows but very little FDI
- Exports are comparatively low while aid is high
- There has been a large real appreciation, making export growth more challenging



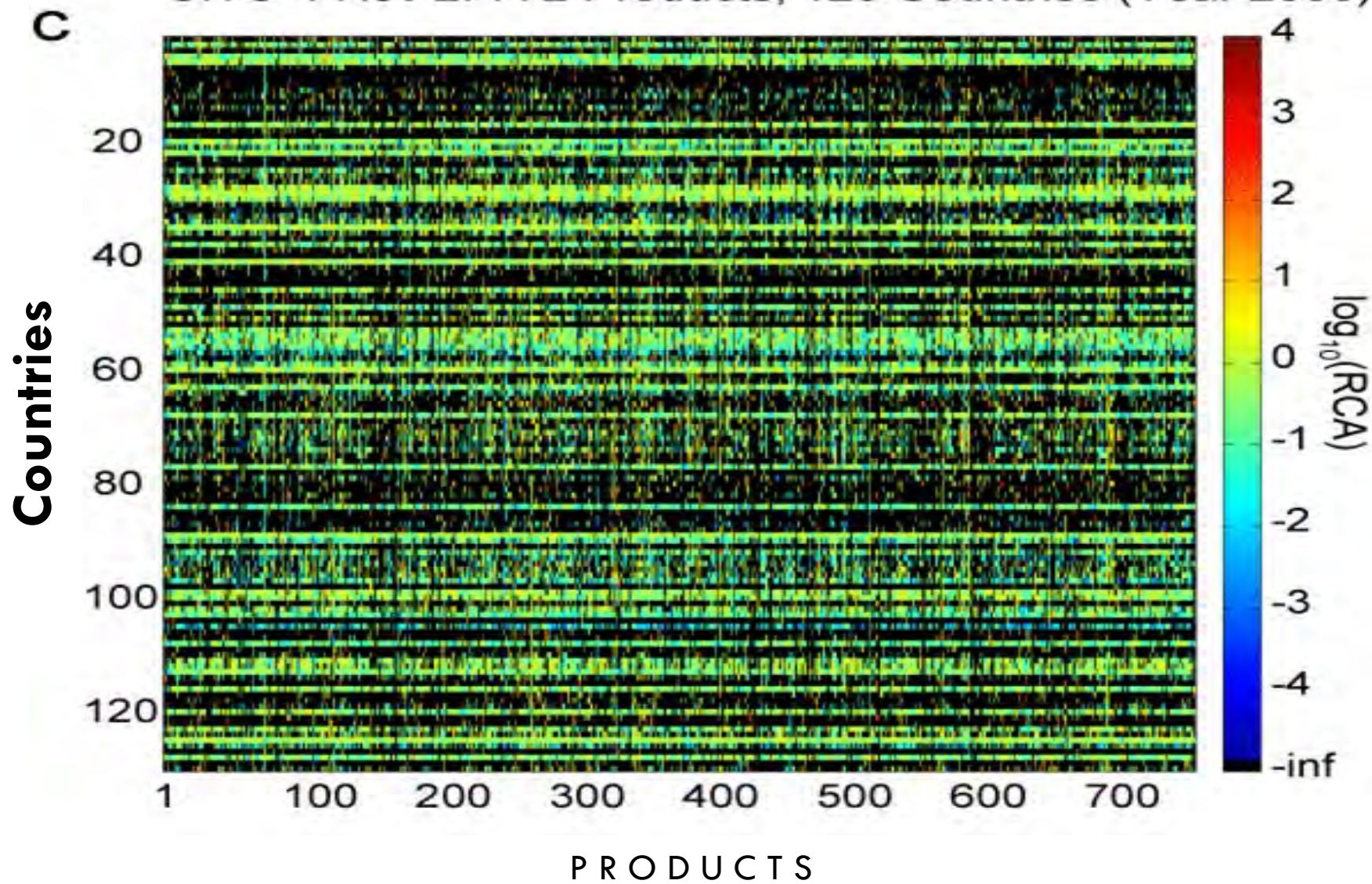
Why are some countries richer than others?

Why are some countries richer than others?

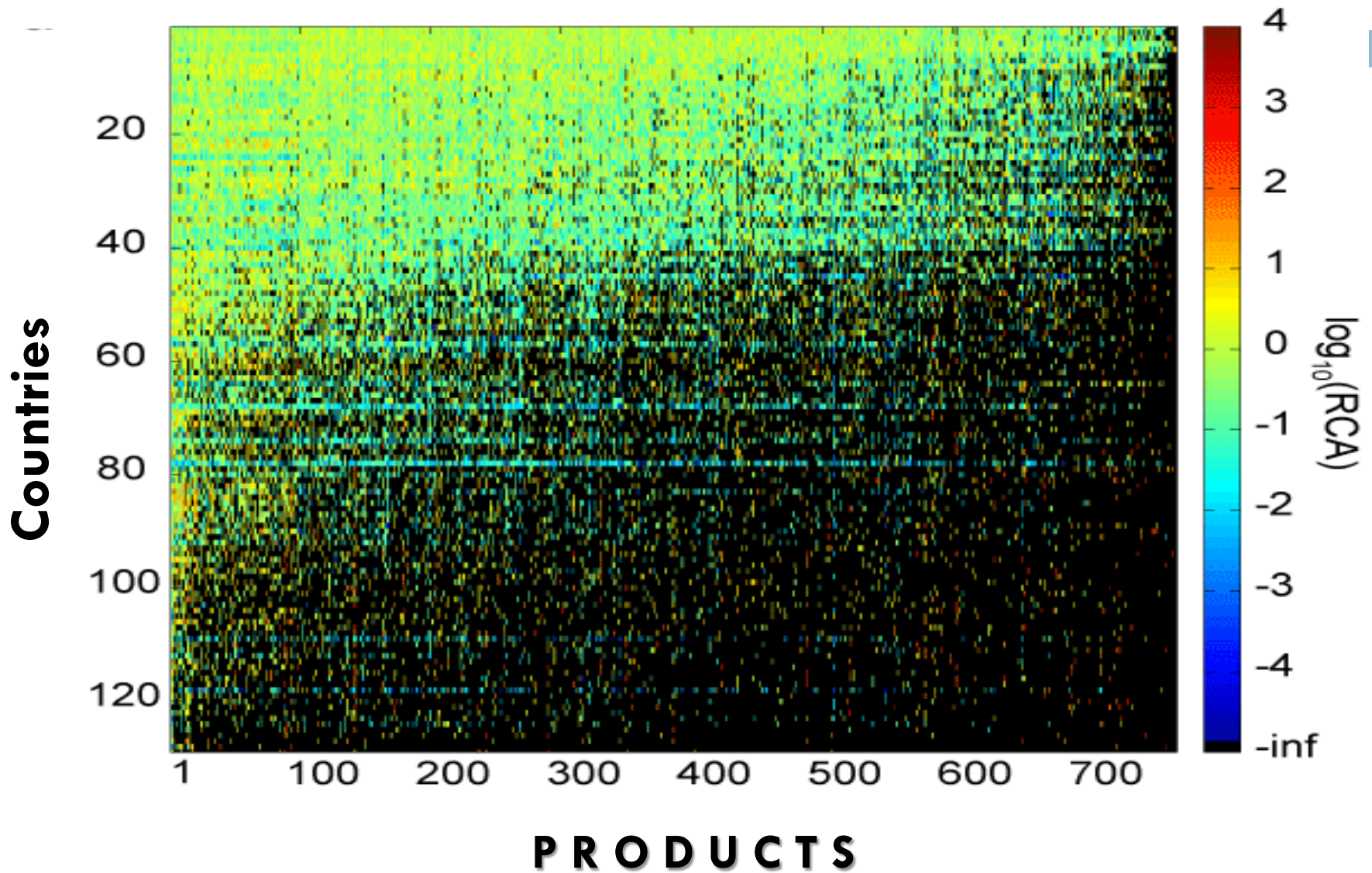
- Because they have more productive knowledge
- ...that they can use to make more products
- ...and products that require more knowledge (i.e. more complex products)



SITC-4 Rev 2: 772 Products, 129 Countries (Year 2000)

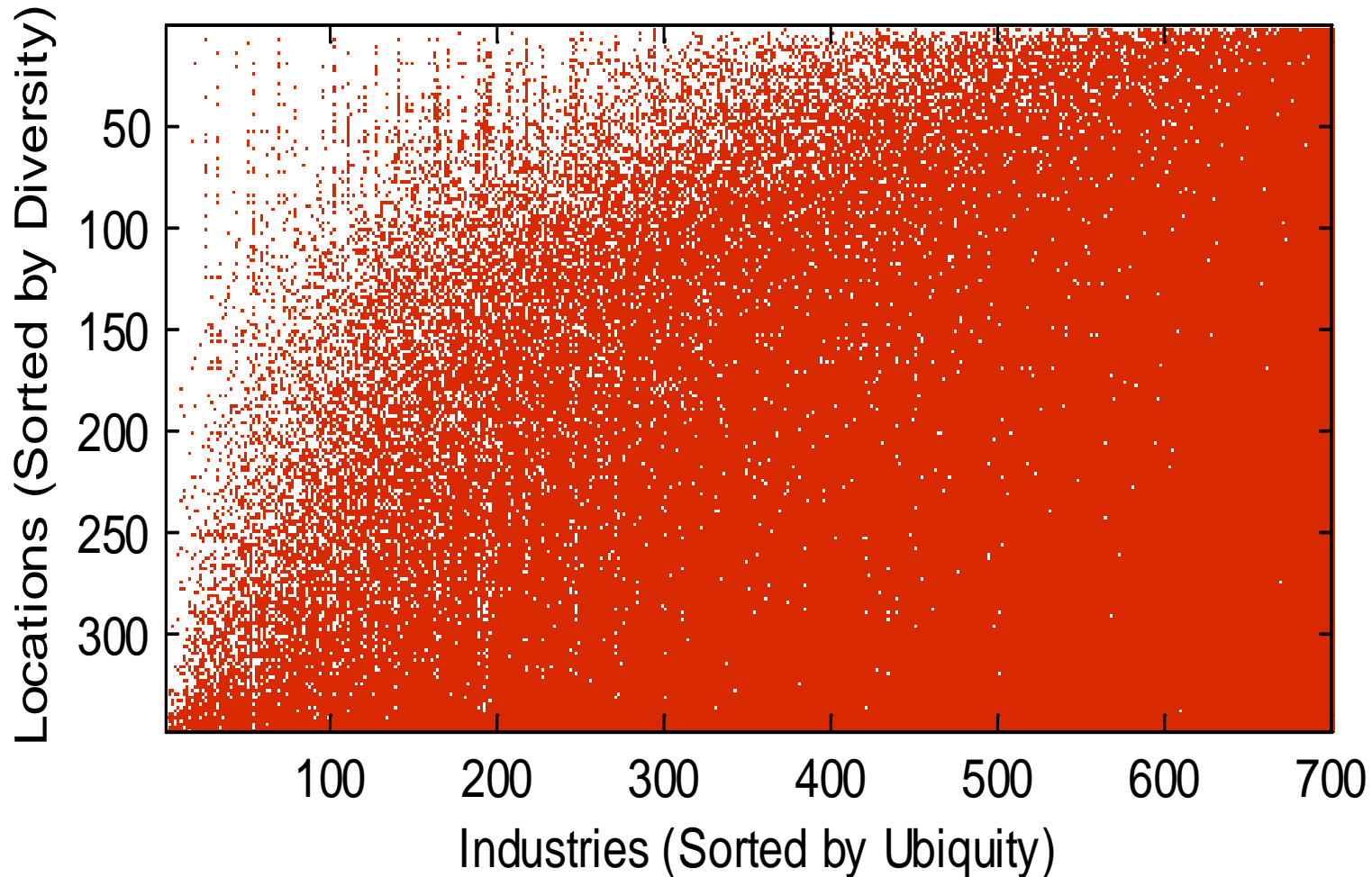


SITC-4 Rev 2: 772 Products, 129 Countries (Year 2000)

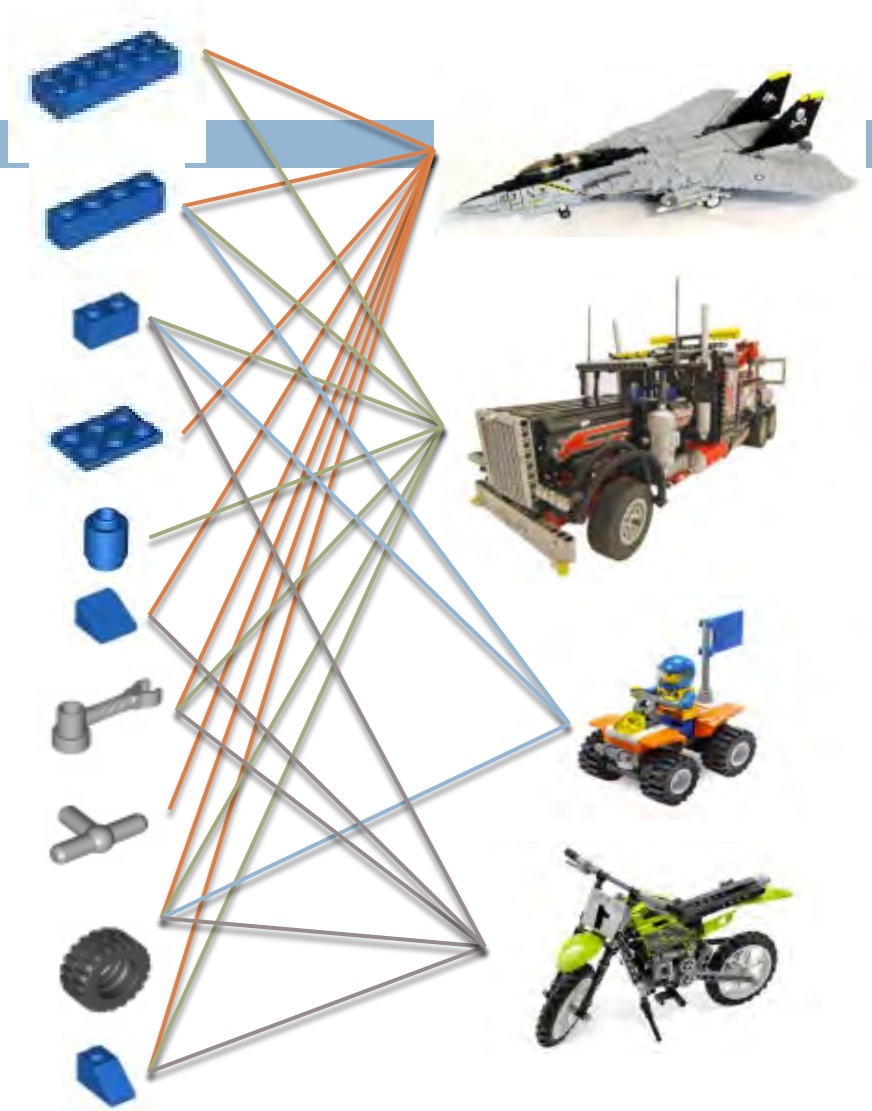


Happens within countries too:

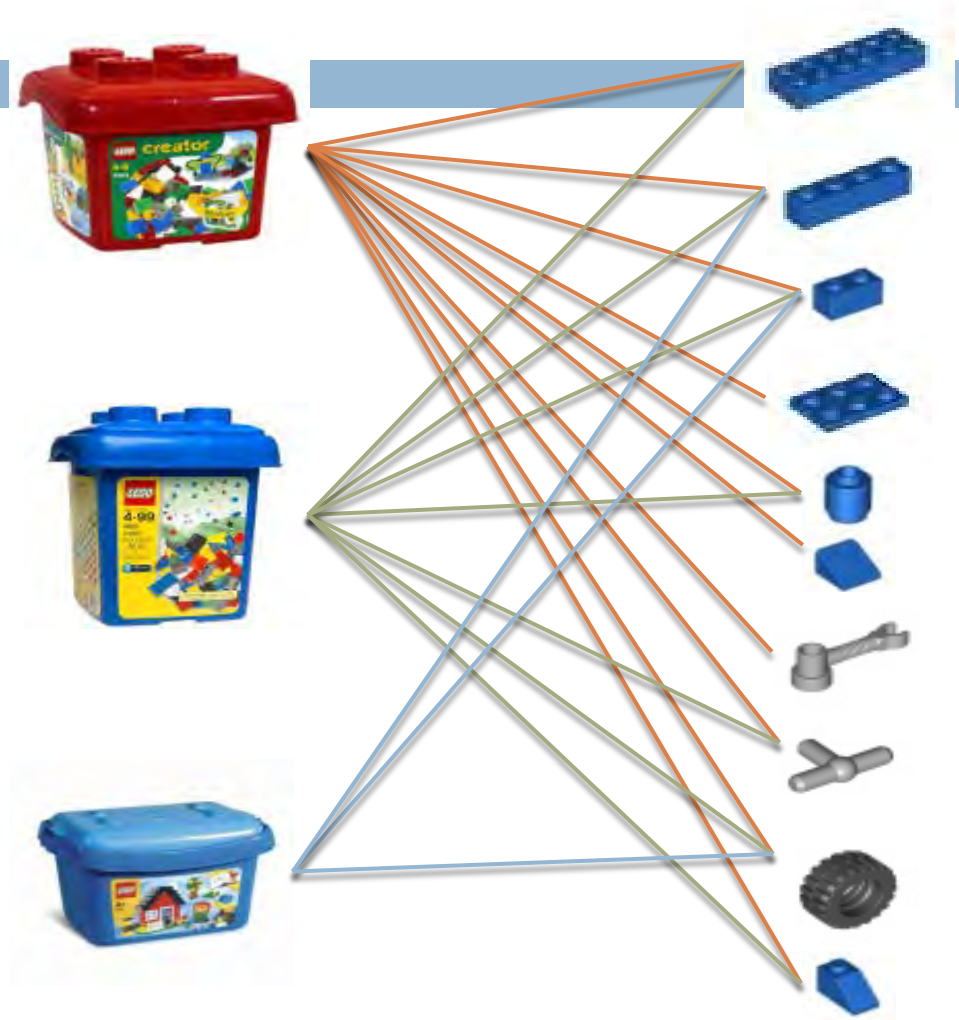
Chile



Products differ
in the set
of personbytes
they require



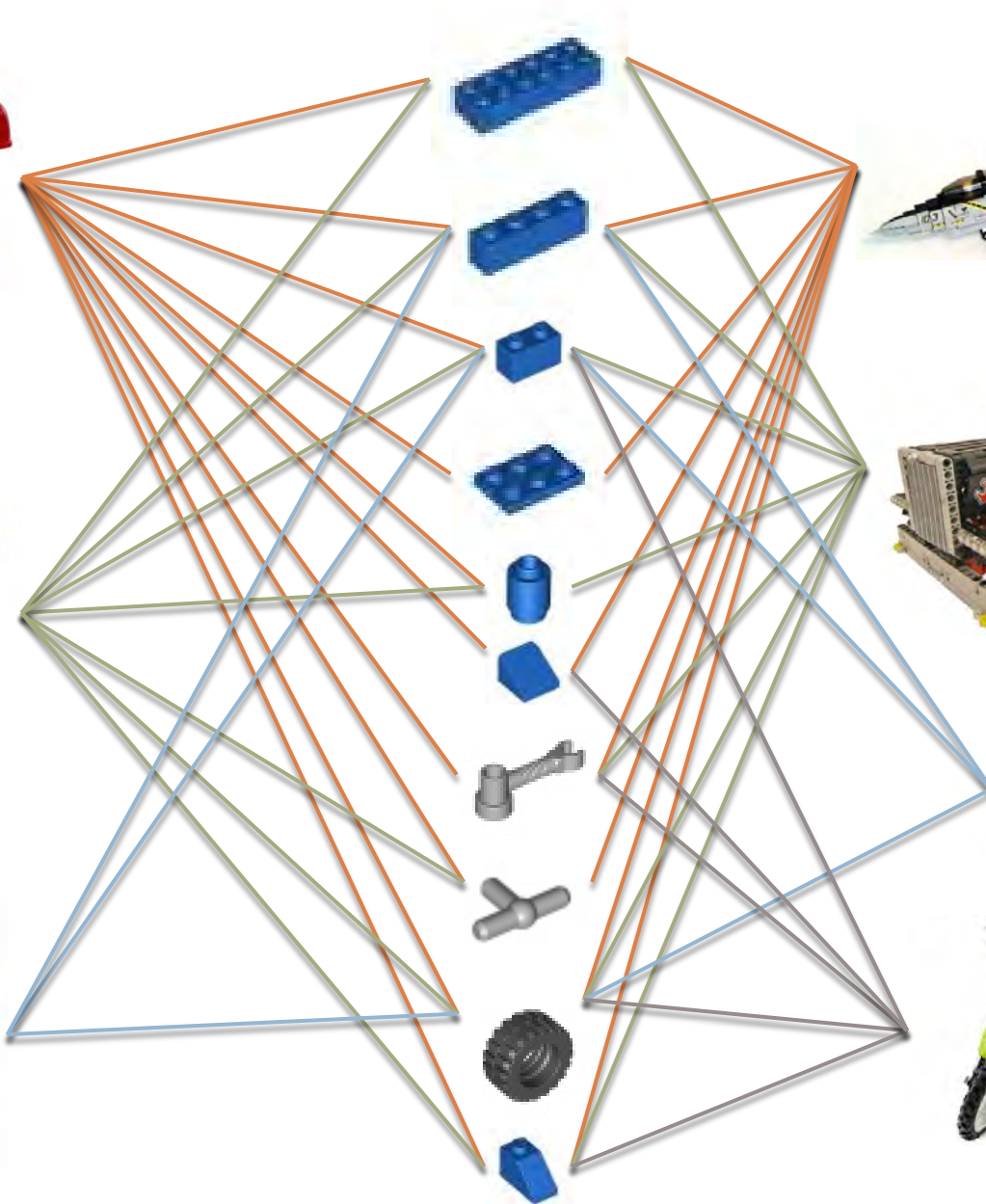
Countries differ
in the set of
personbytes
they have



Countries

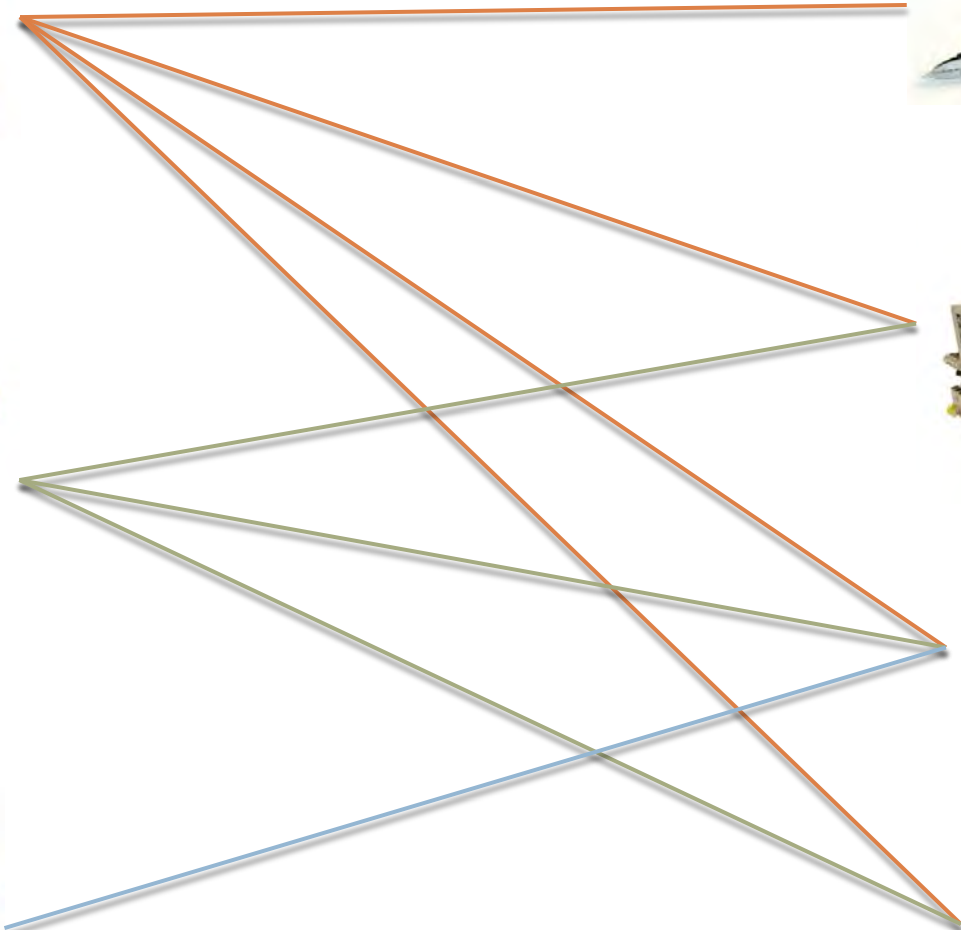
Personbytes

Products



Countries

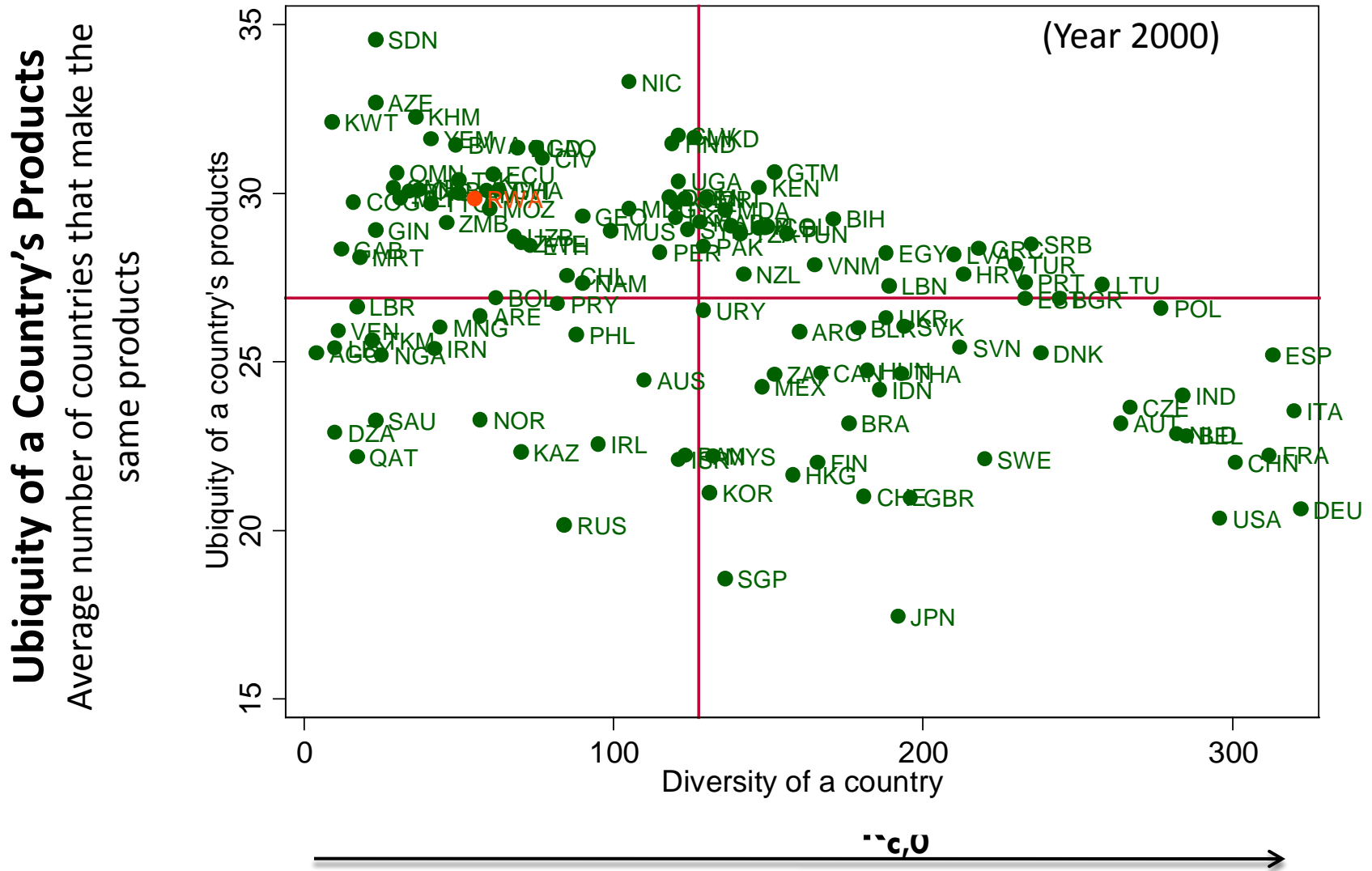
Products



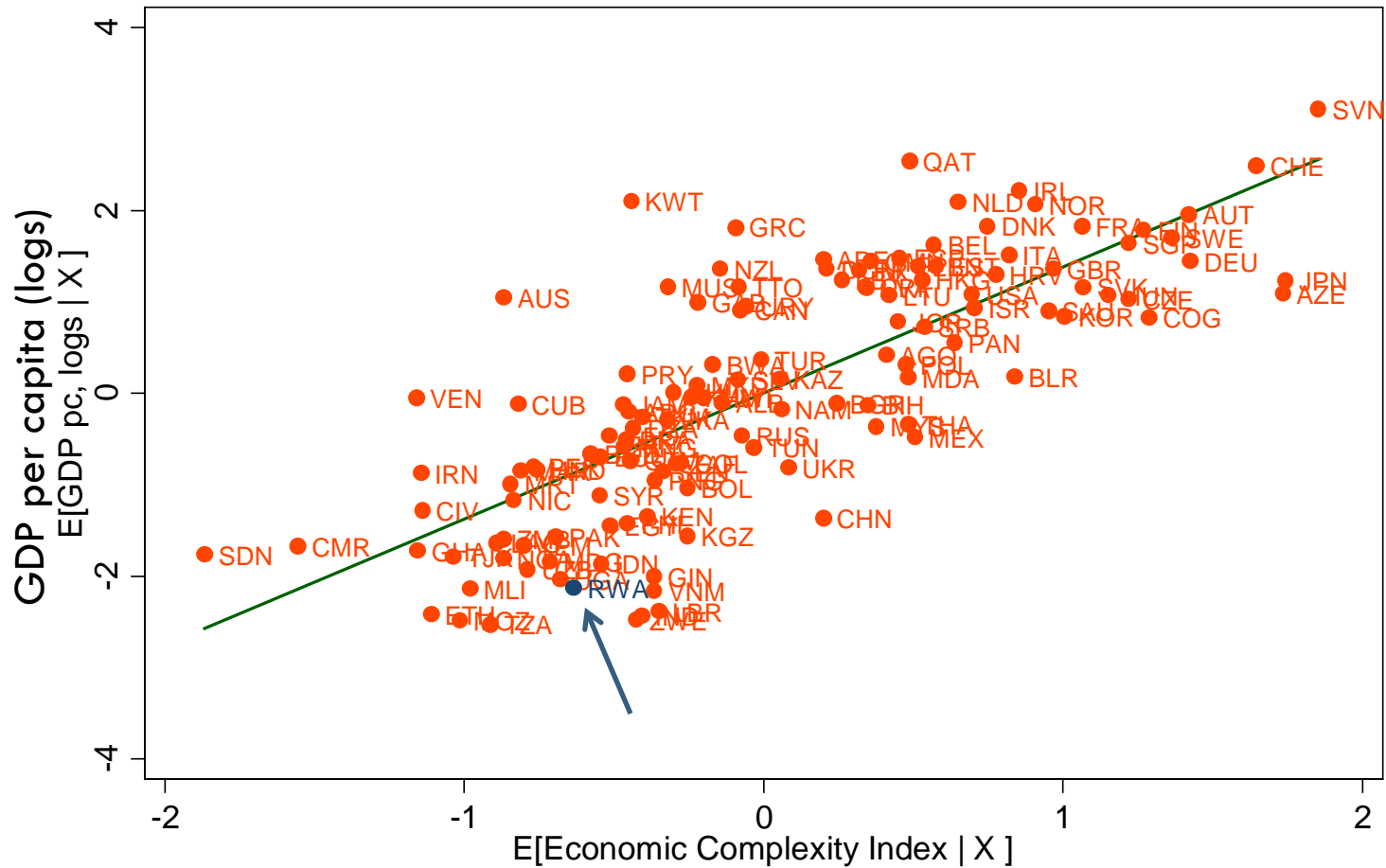
INTUITION

- Countries that have more personbytes will be able to make more products
They would be more diversified
- Products that require more personbytes will be made by fewer countries
Products will be less ubiquitous
- Countries that have more personbytes will be able to make products that require more personbytes
- Products that are less ubiquitous
- Products that require many personbytes are made countries that have many personbytes, but countries with many personbytes should be more diversified

Diversity and ubiquity are negatively related: evidence that Rwanda has few personbytes



Income and complexity



* Controlling for natural resource abundance

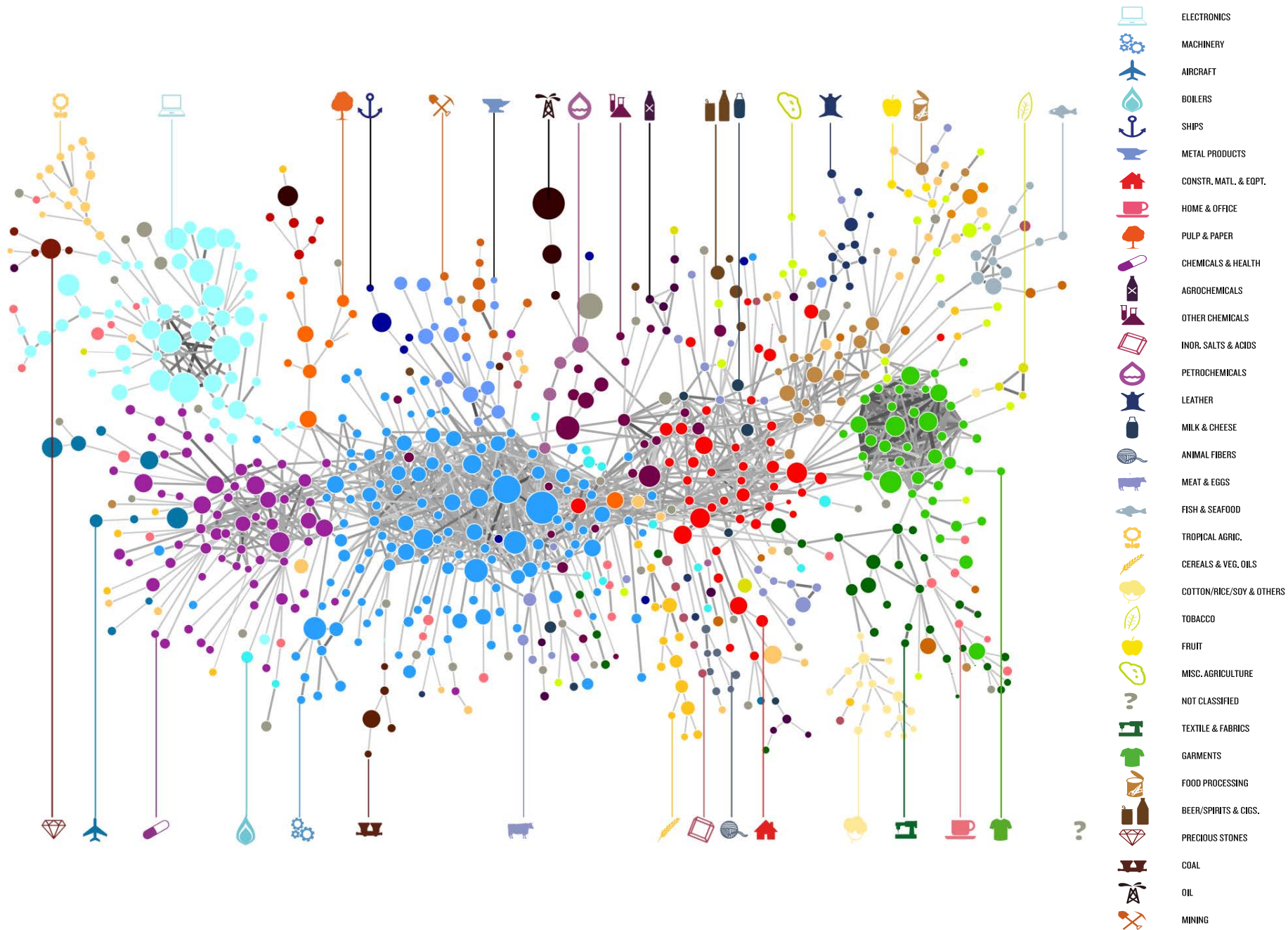
How do countries grow?

By accumulating more capabilities and expressing them into more products and more complex products

The chicken and egg problem

- You cannot make watches without watchmakers
- You don't want to be watchmaker if nobody makes watches
- You cannot become a watchmaker because there are not watchmakers to learn from
- How does the world deal with this?
- By moving towards “nearby” products

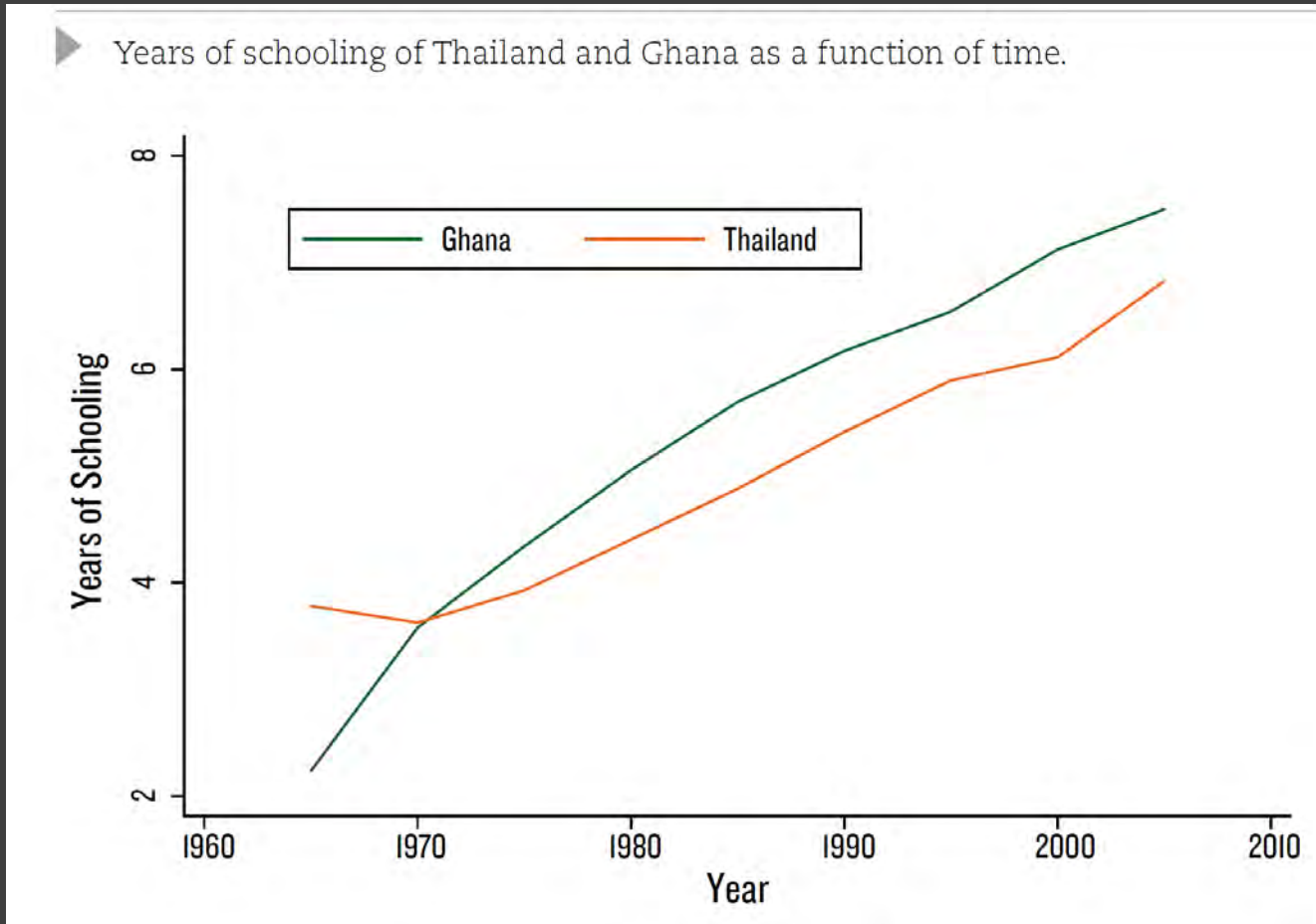




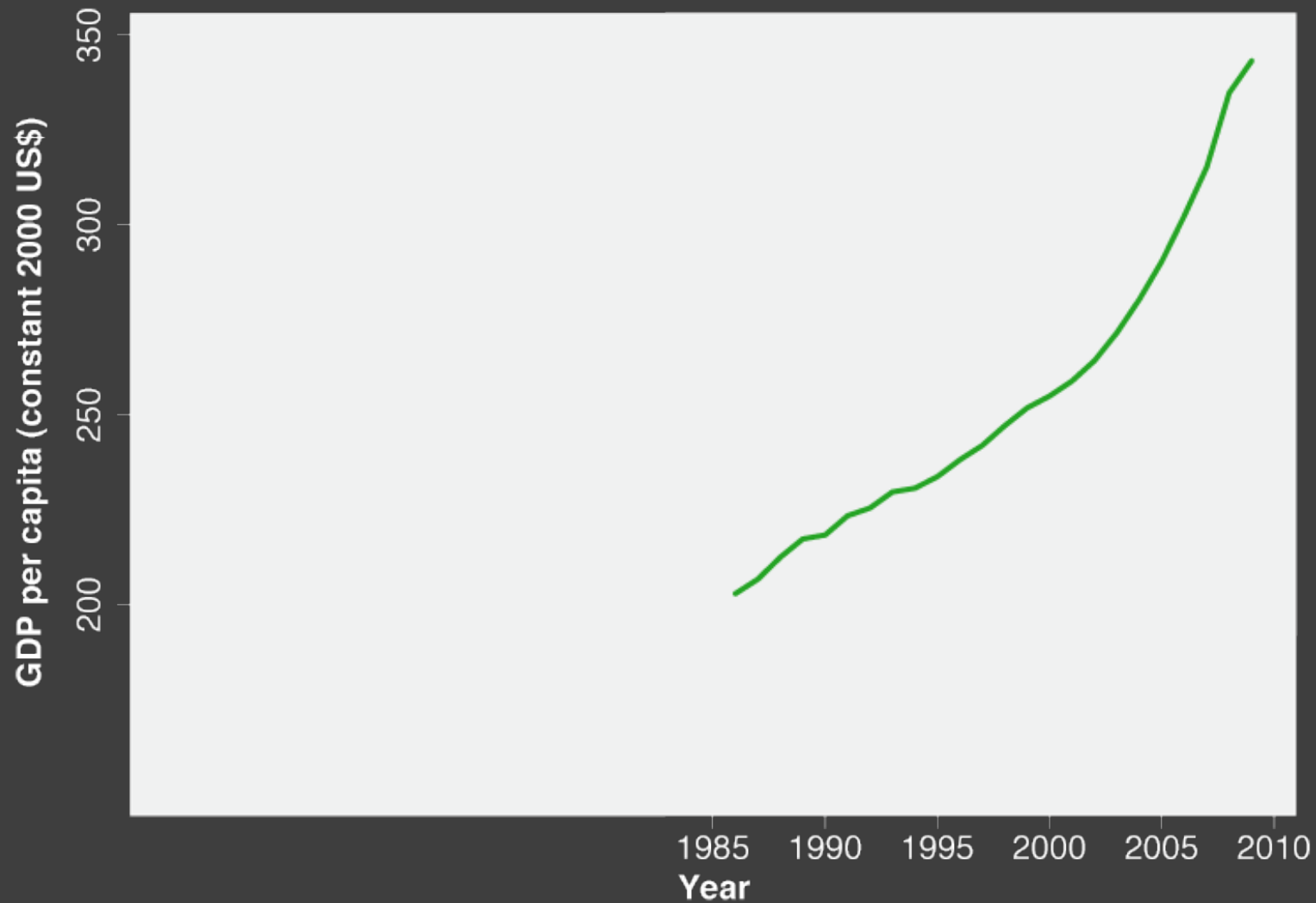


GHANA

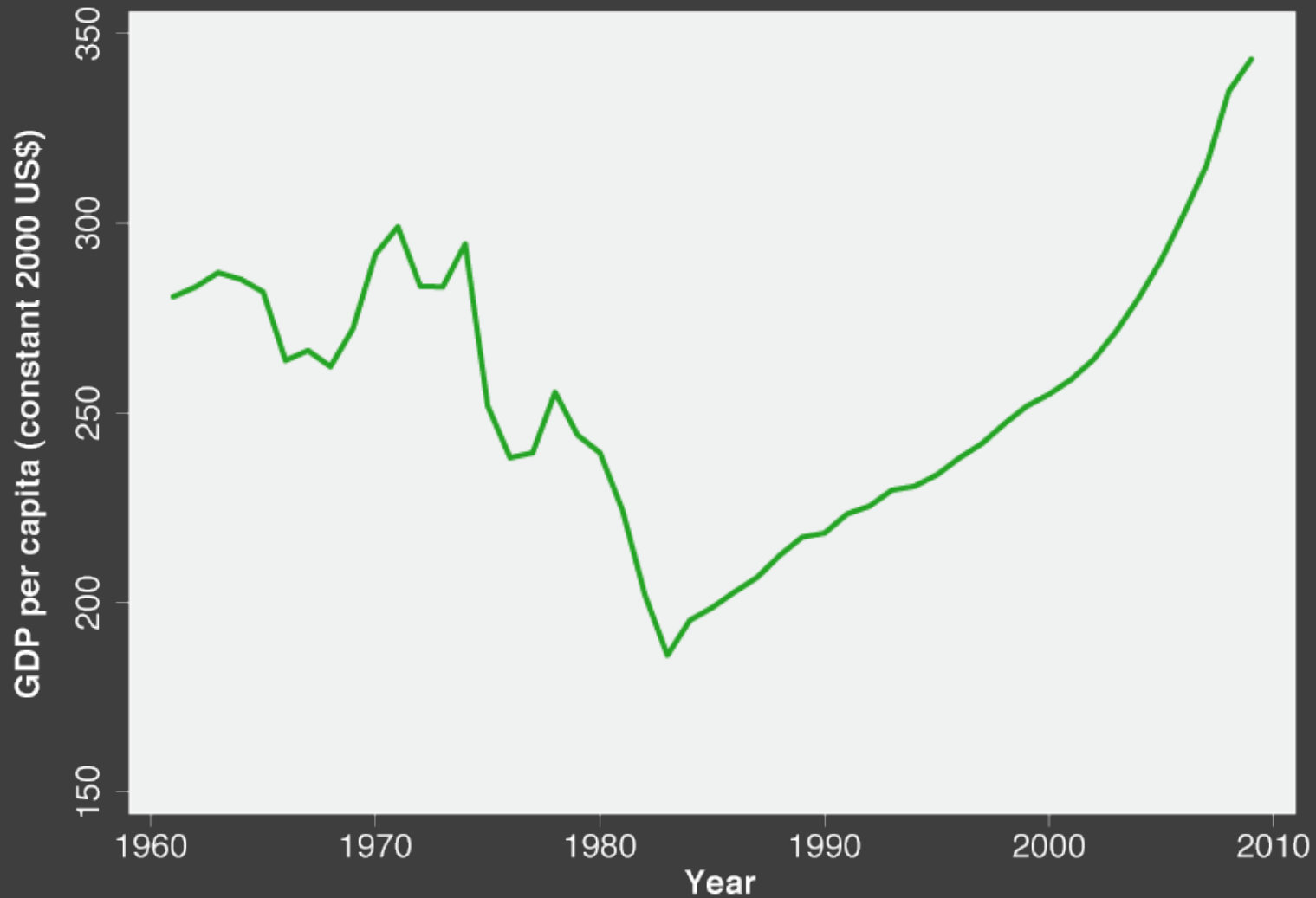
...more education than in Thailand

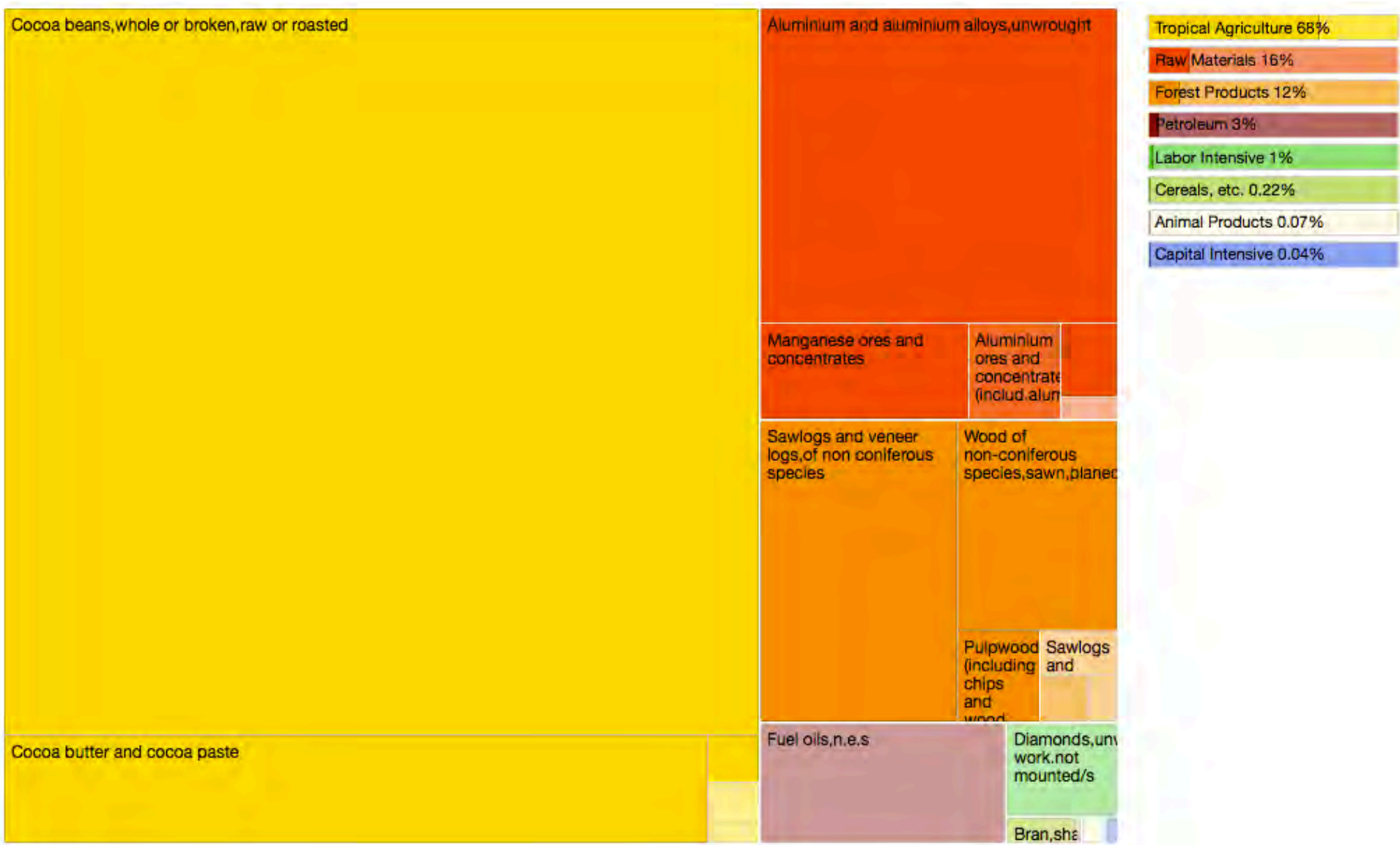


Ghana: a success story?

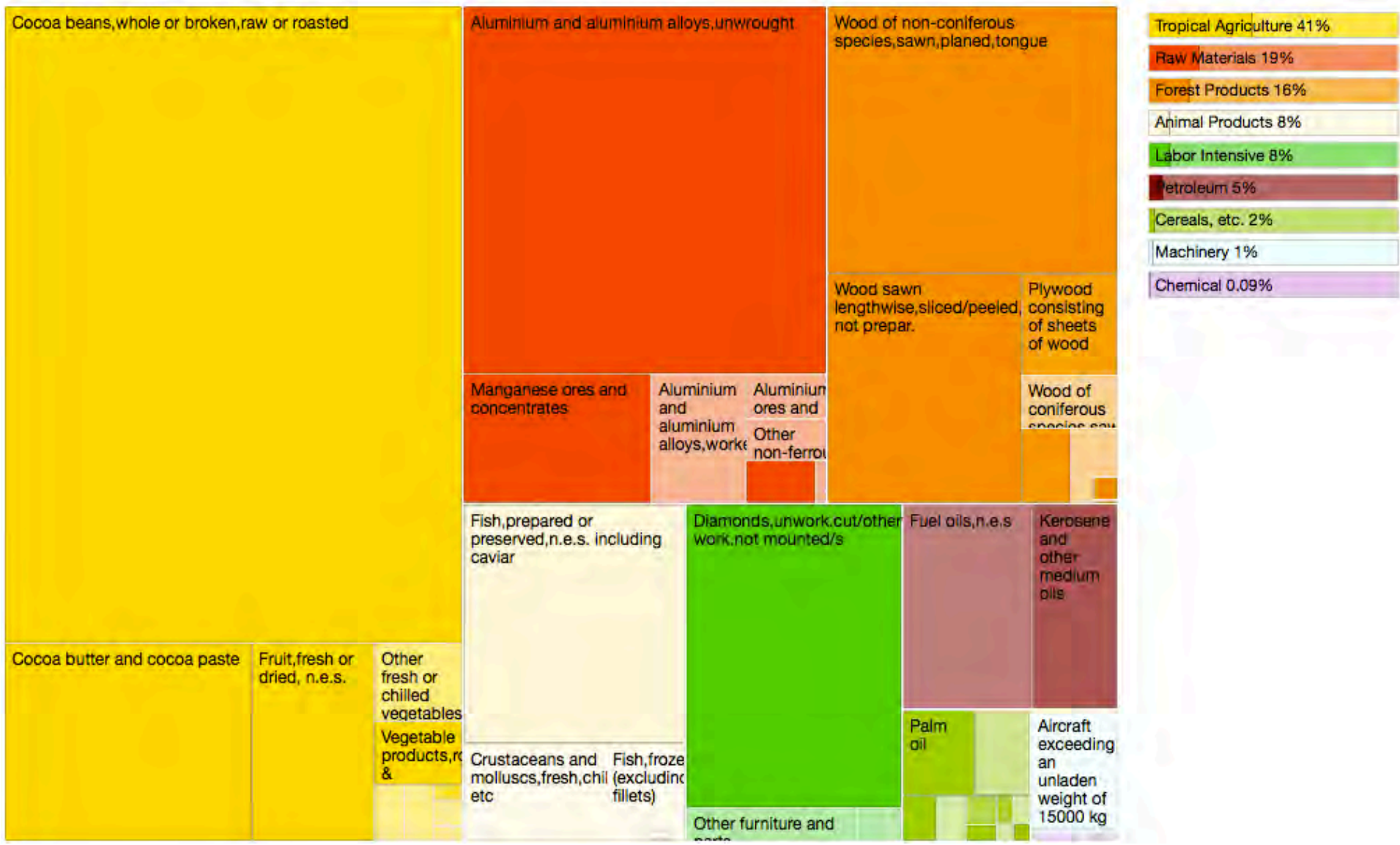


Ghana: a success story?

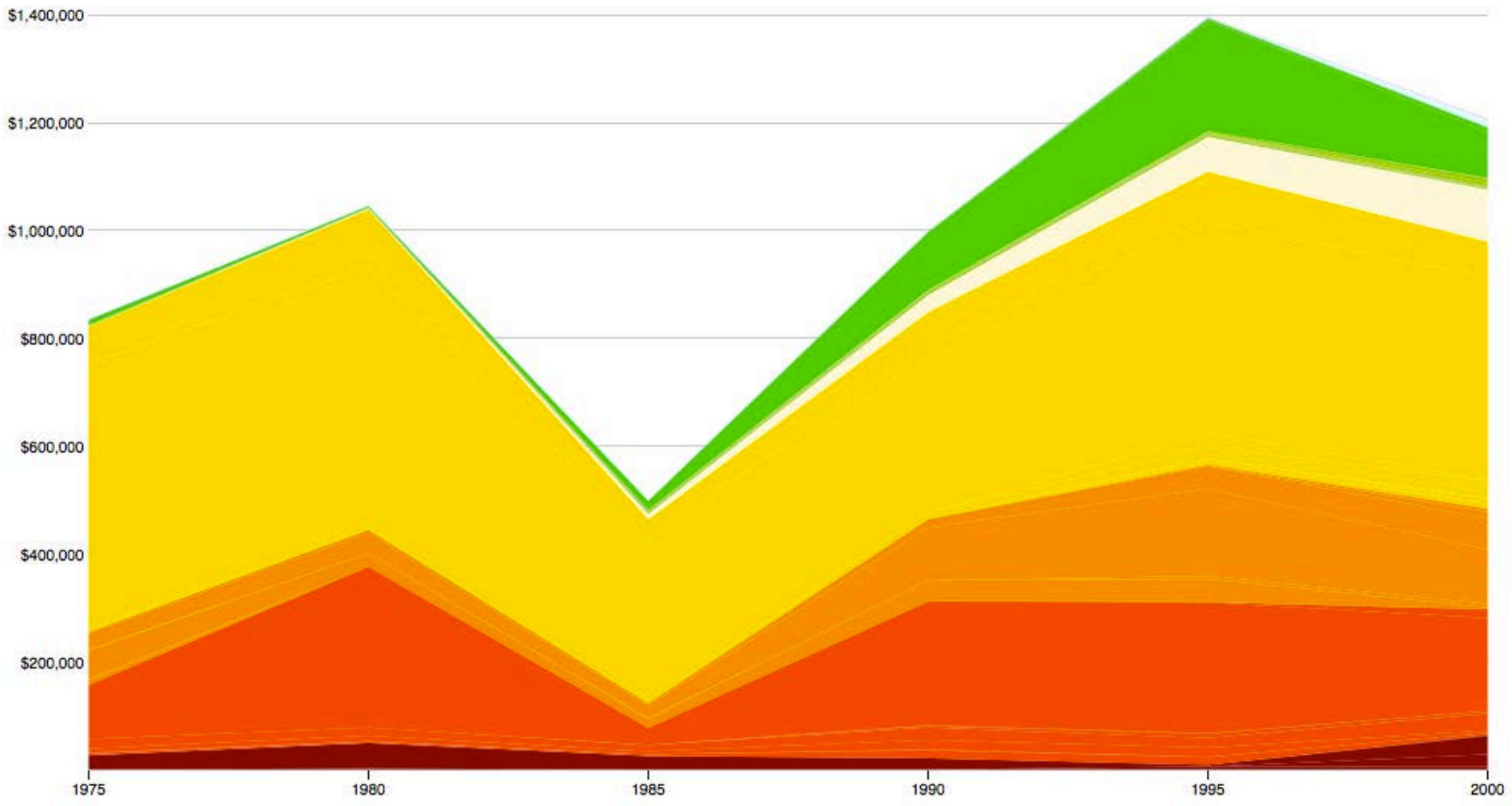




1975

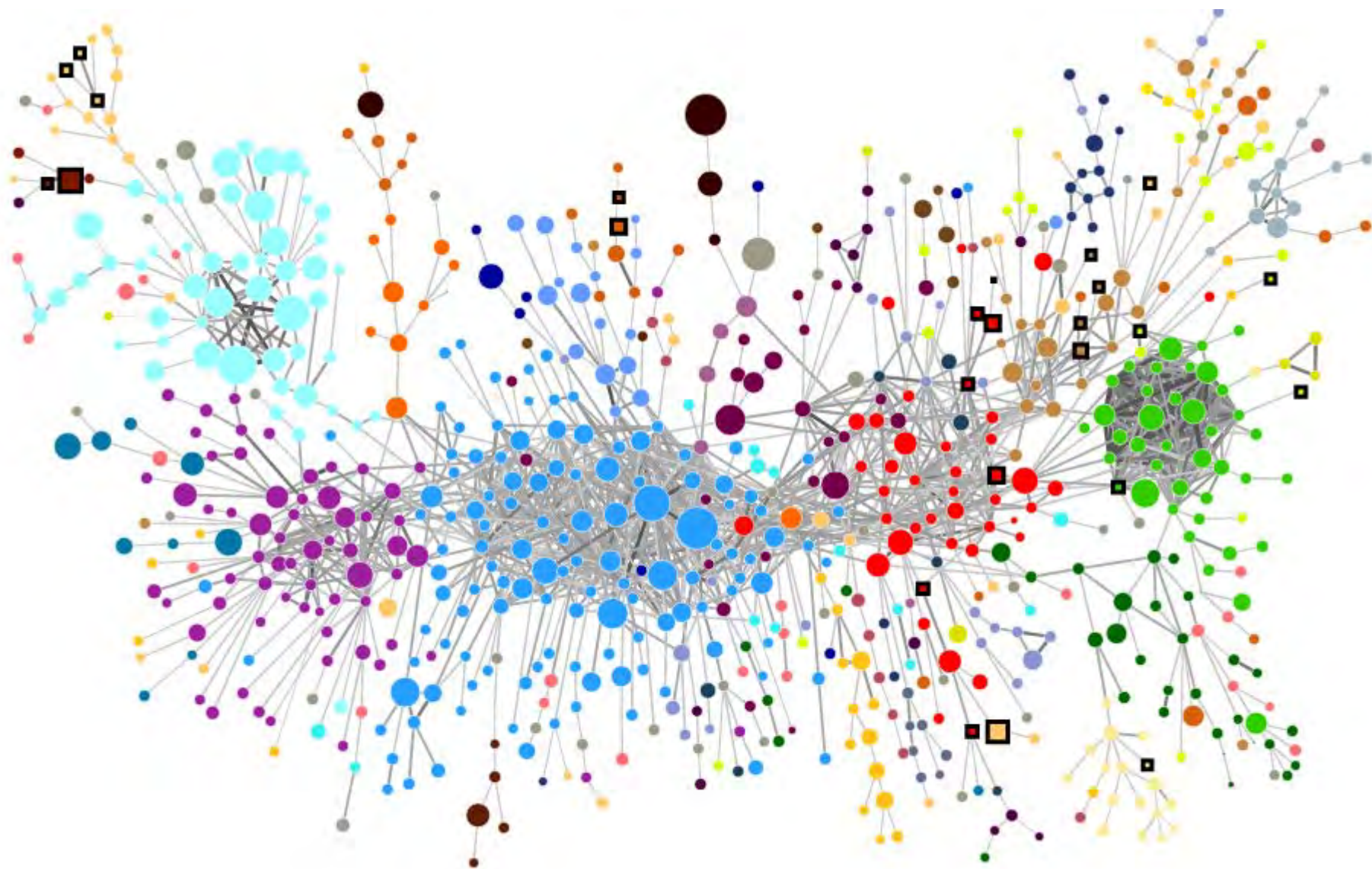


2000

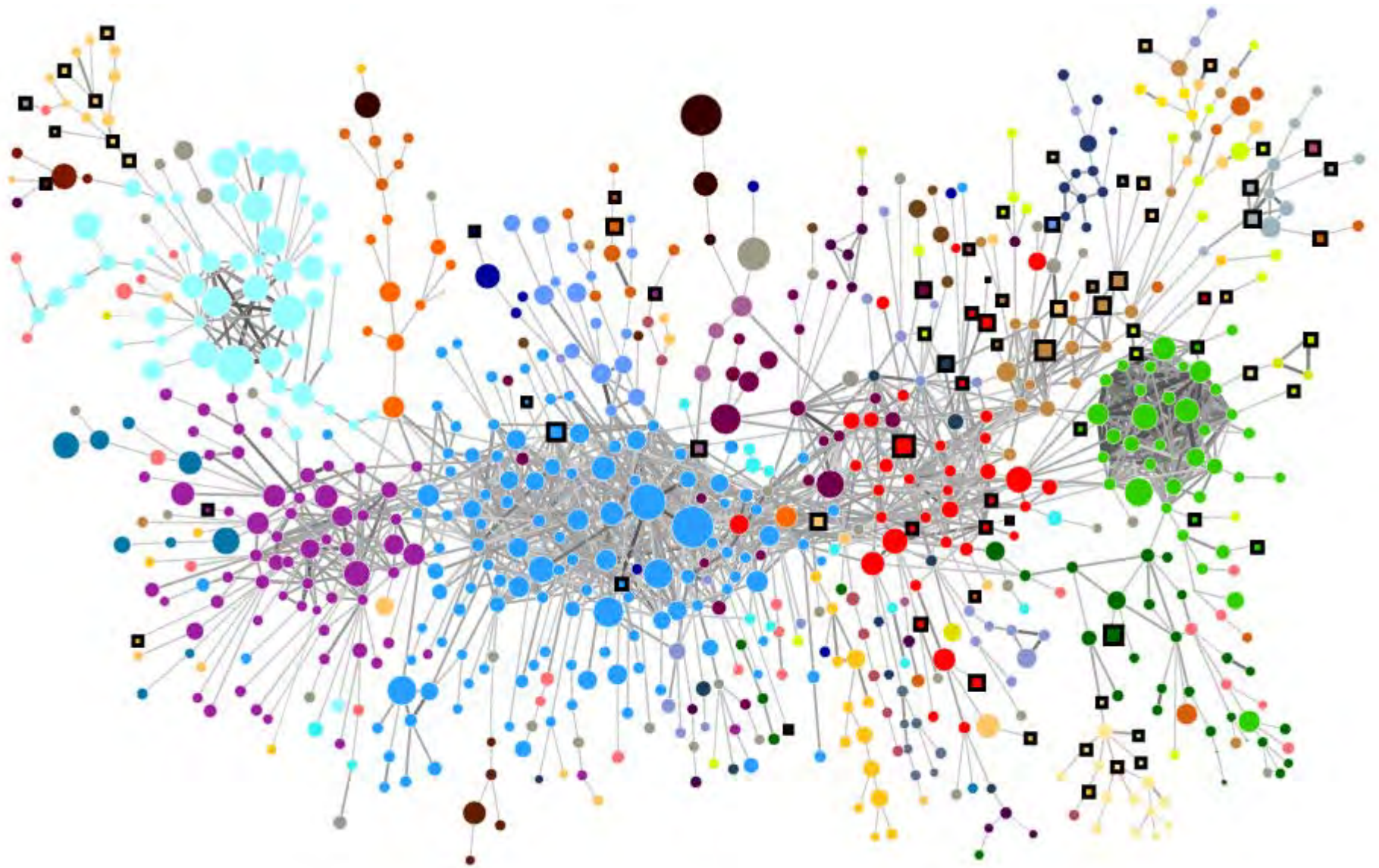


Value

Ghana 1975

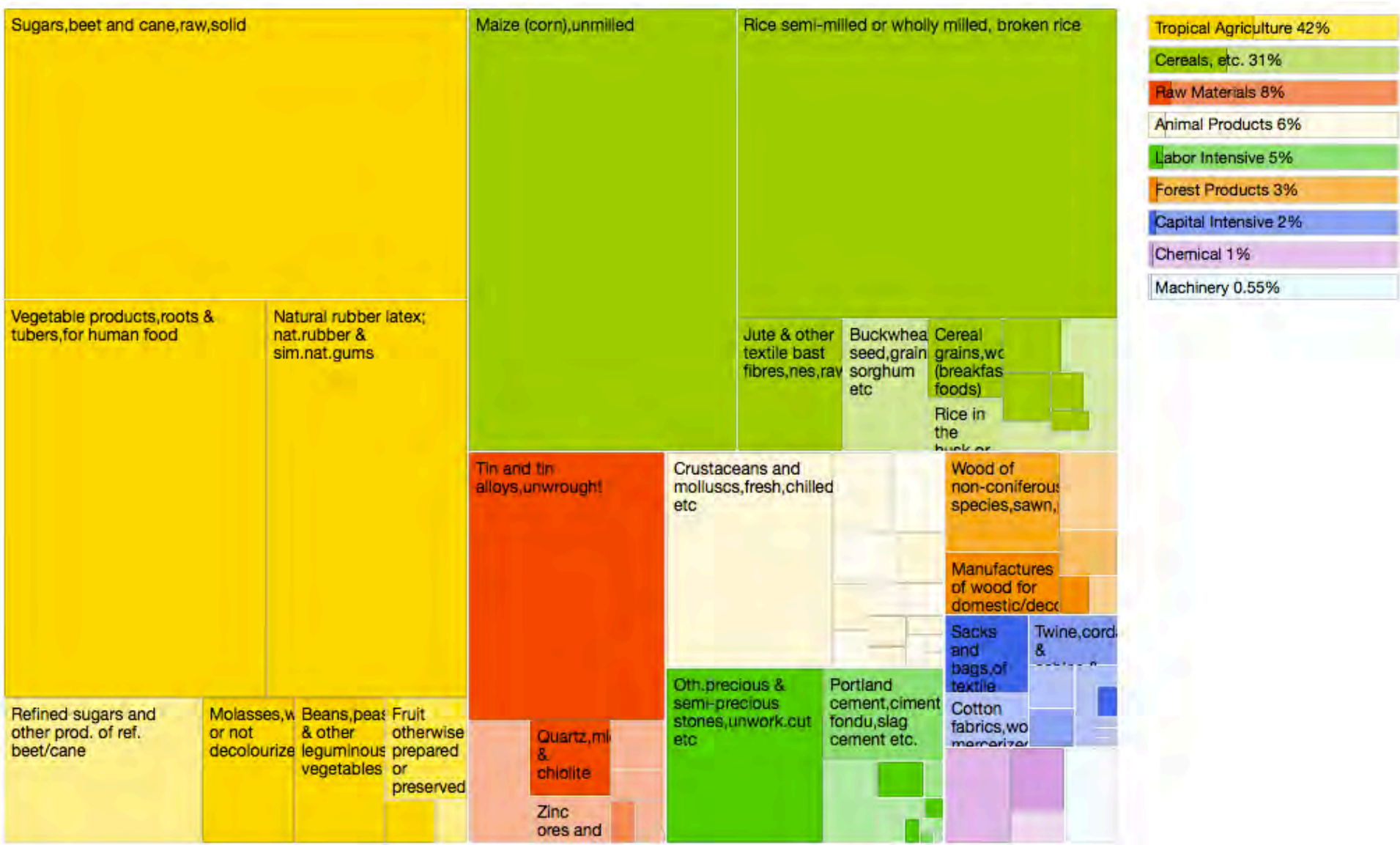


Ghana 2008

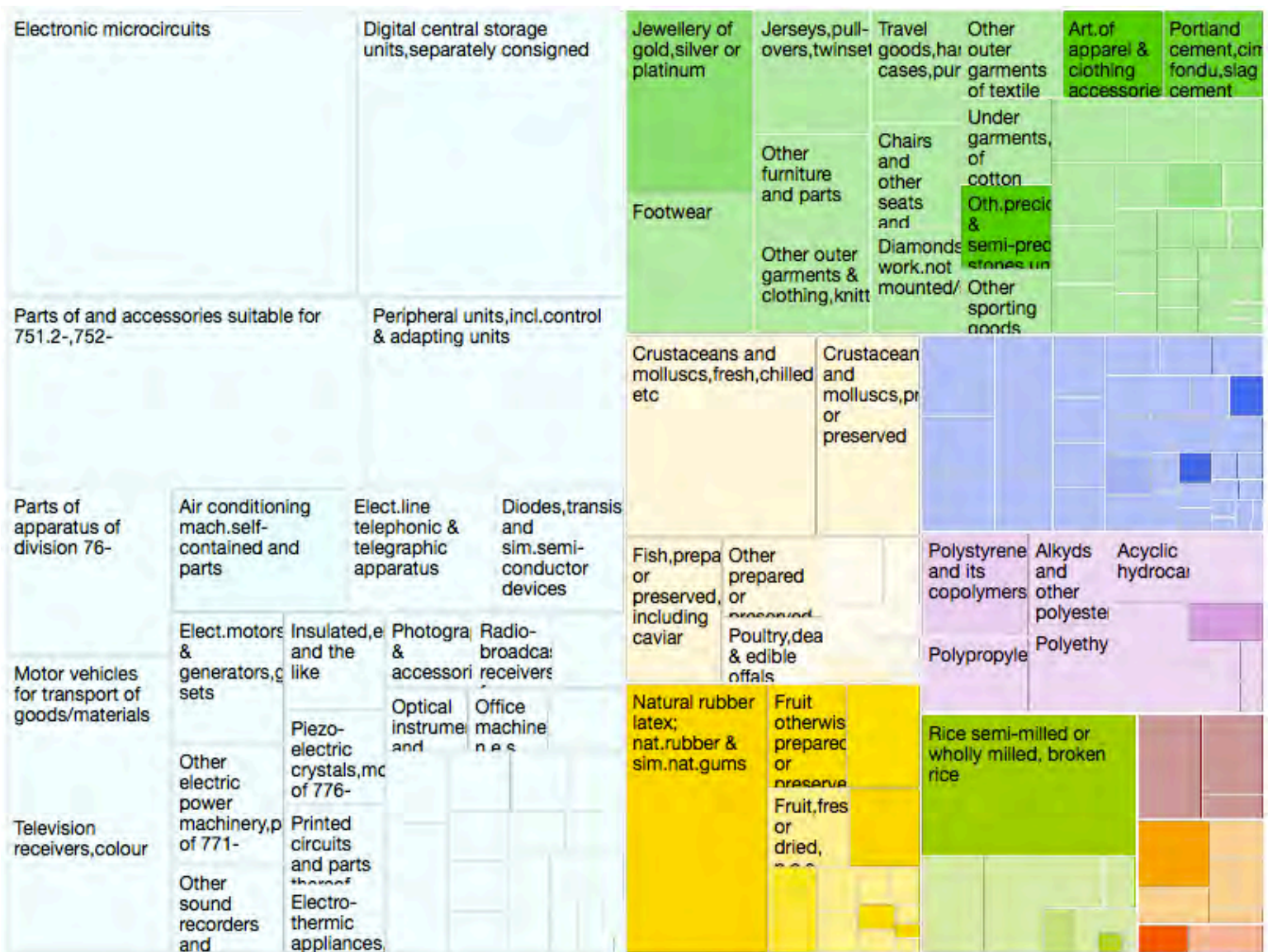




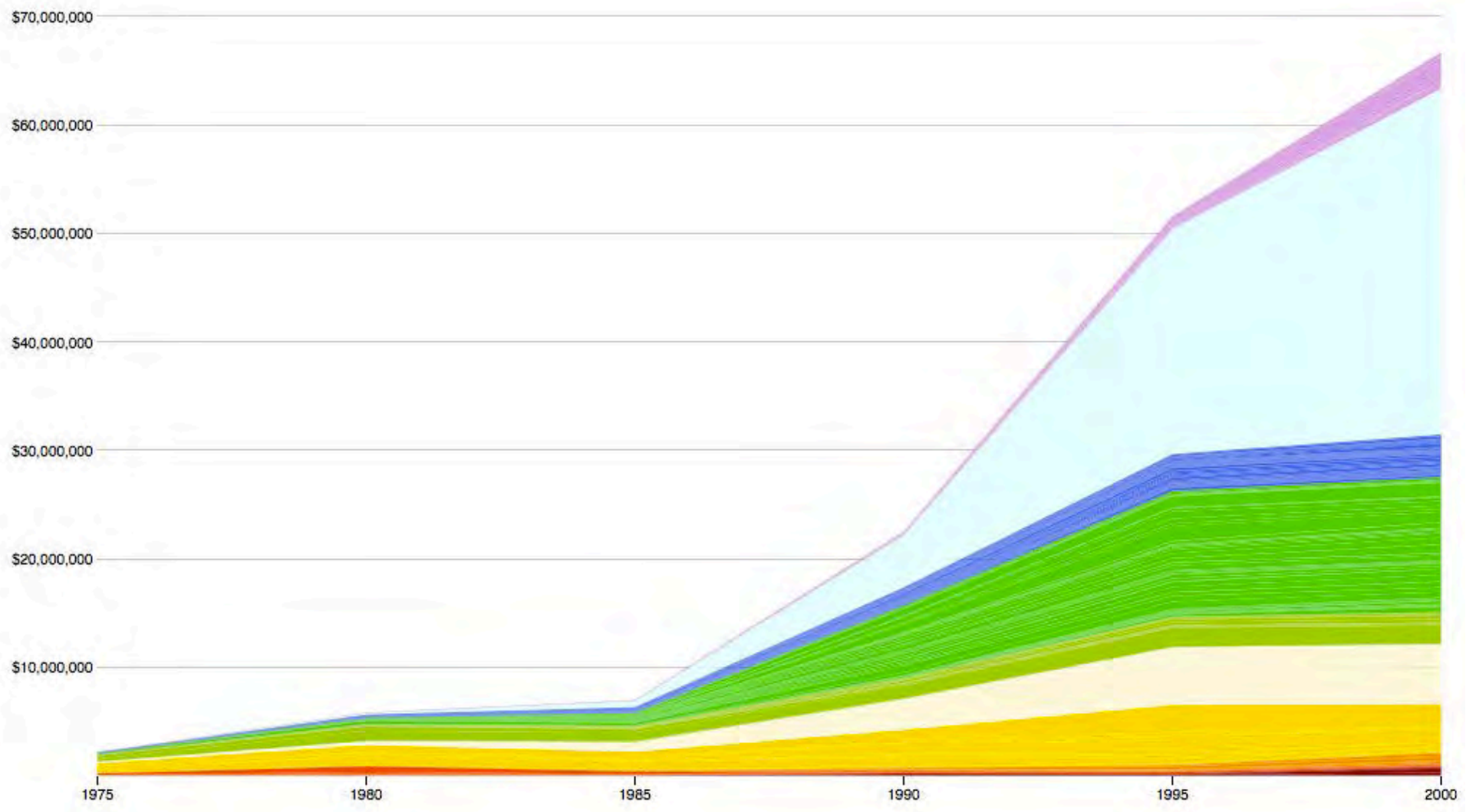
THAILAND



1975

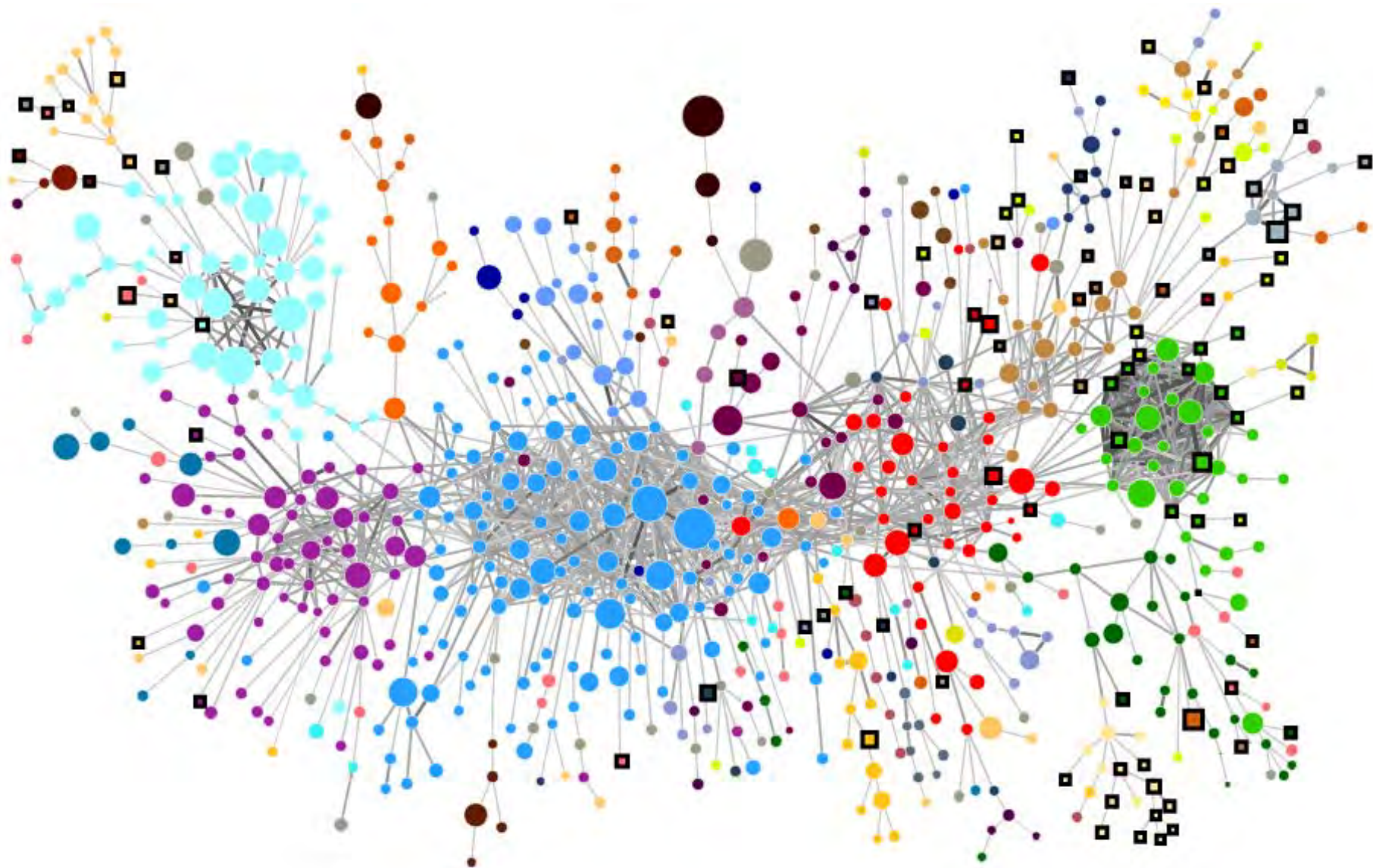


2000

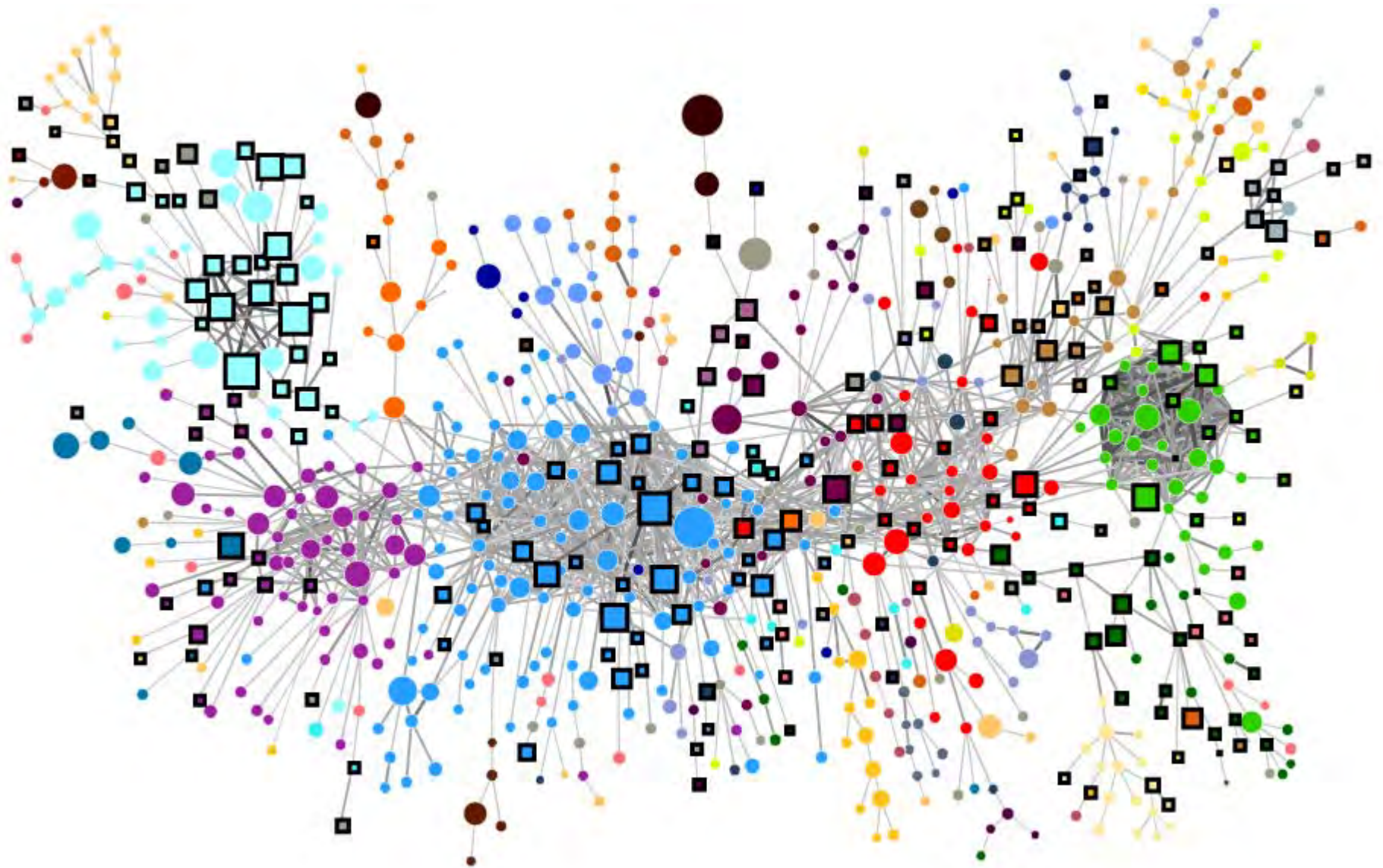


Value

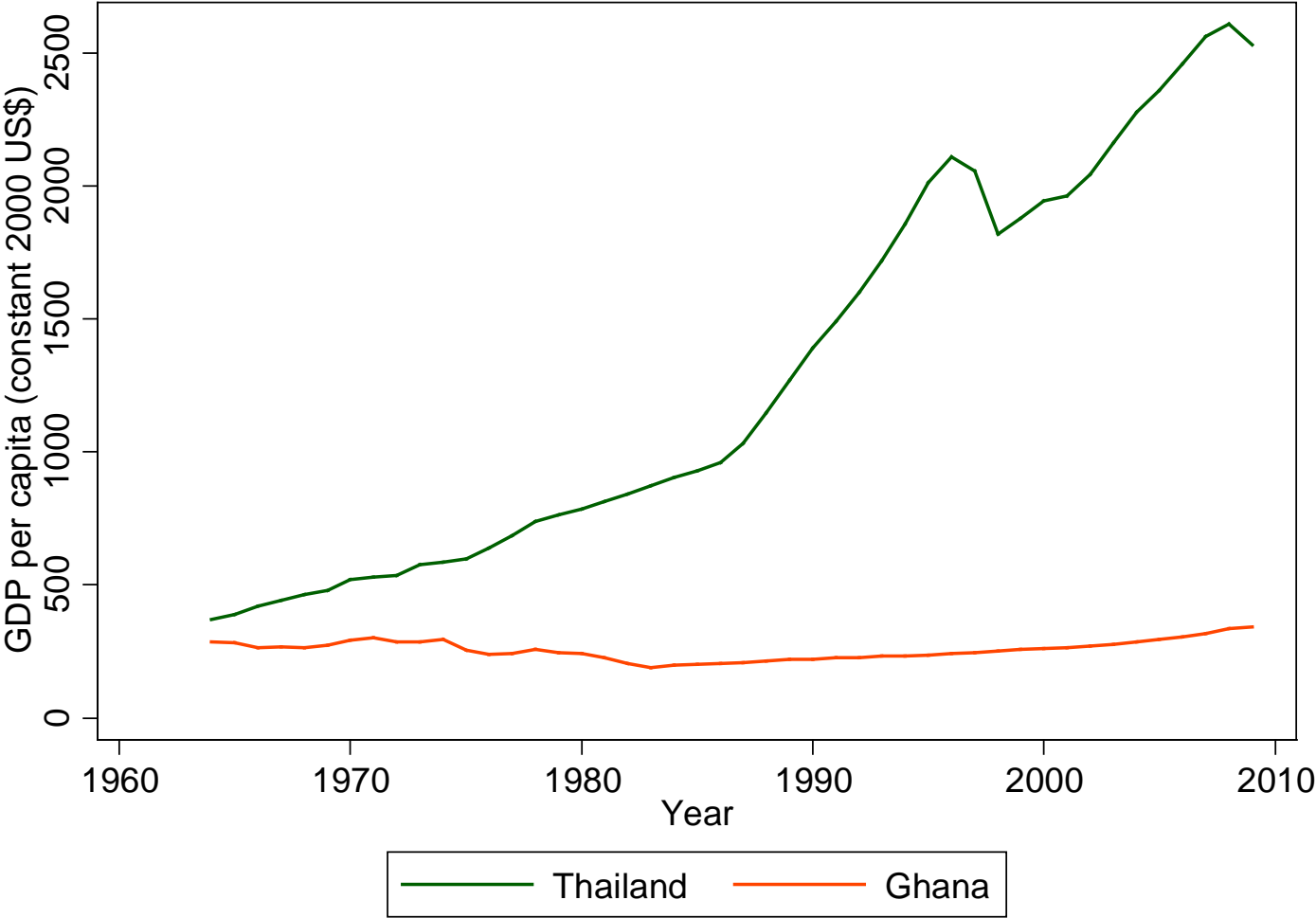
Thailand 1975



Thailand 2008



Thailand vs Ghana



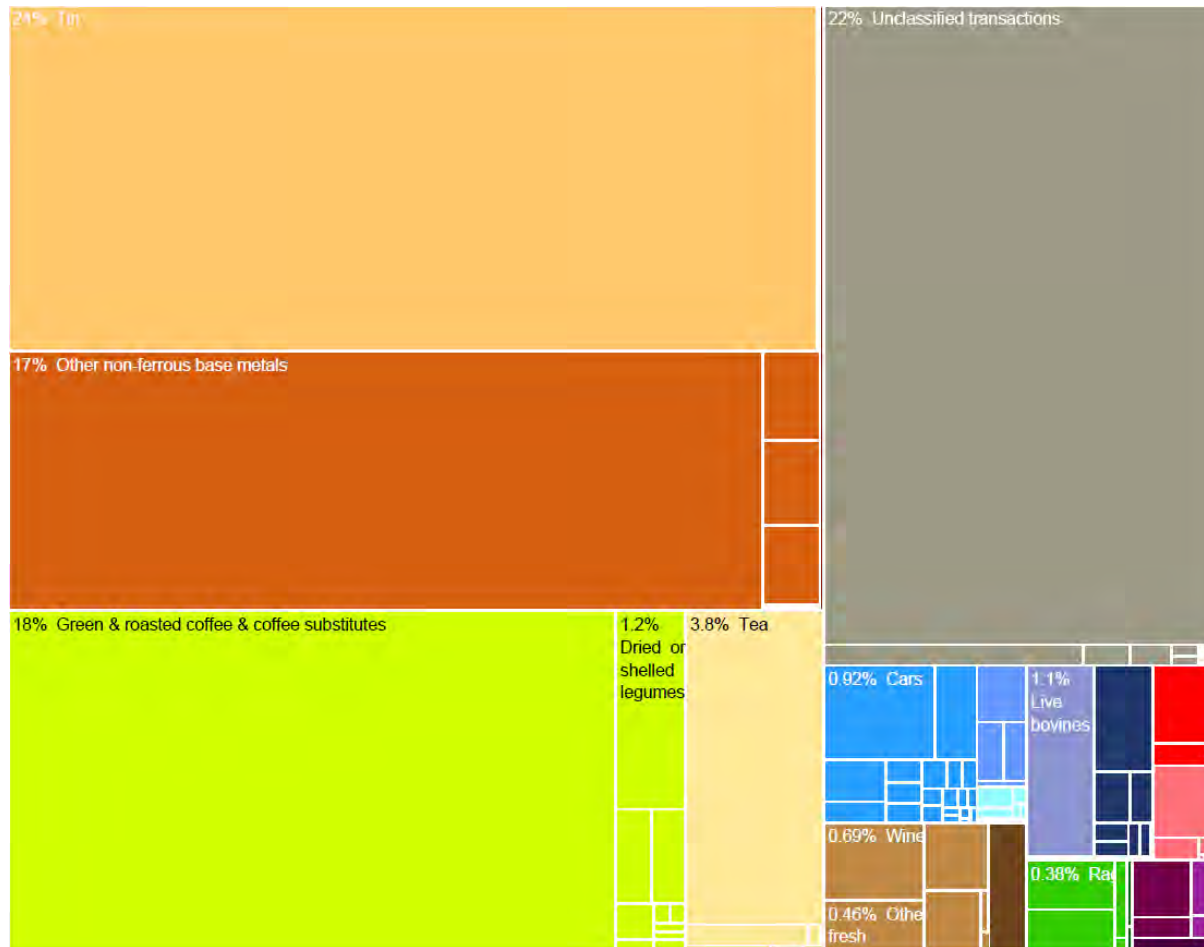
A decorative horizontal bar at the top of the slide, consisting of an orange square on the left and a blue rectangle on the right.

Rwanda in the product space

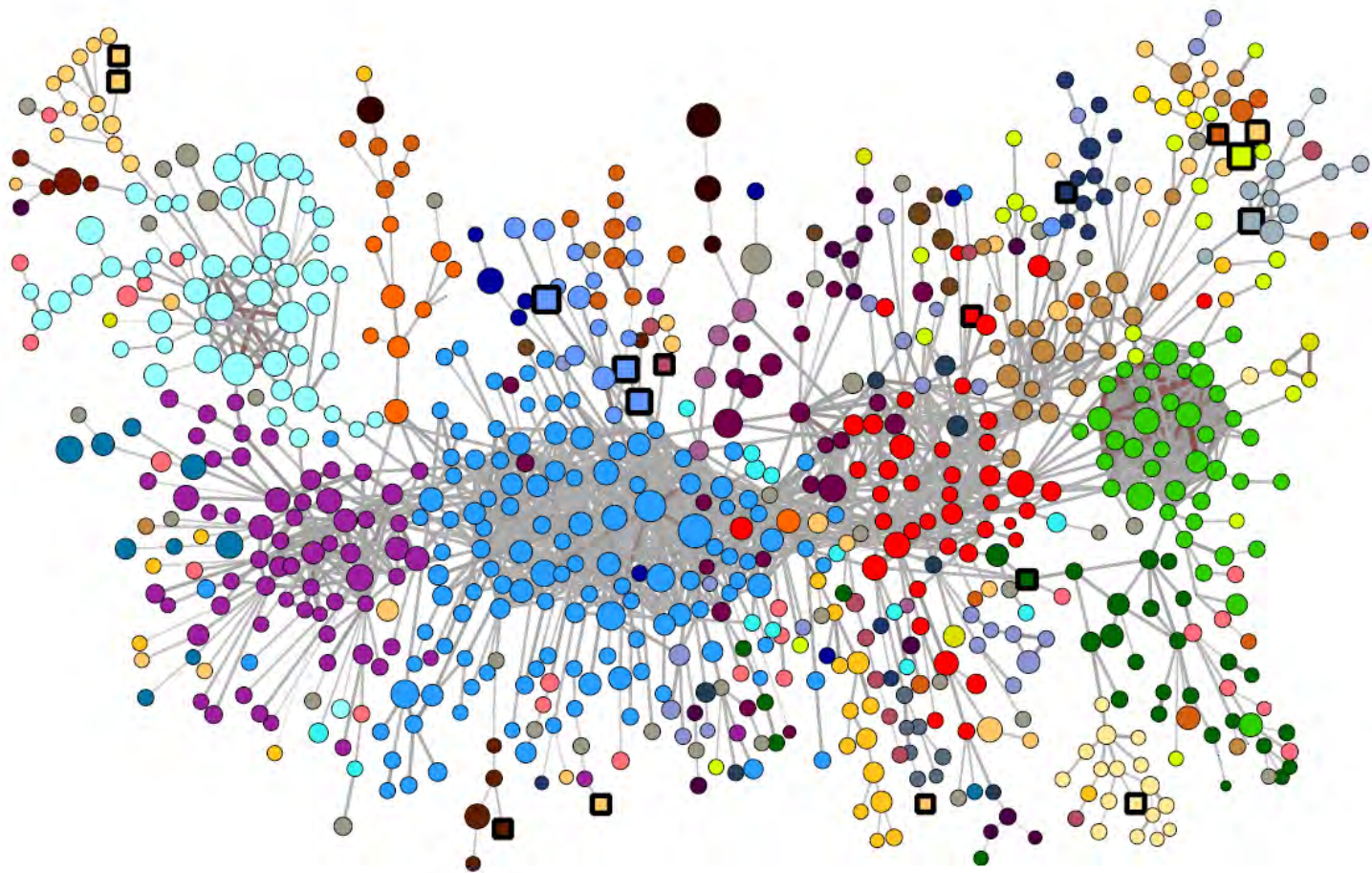
RWA 1998



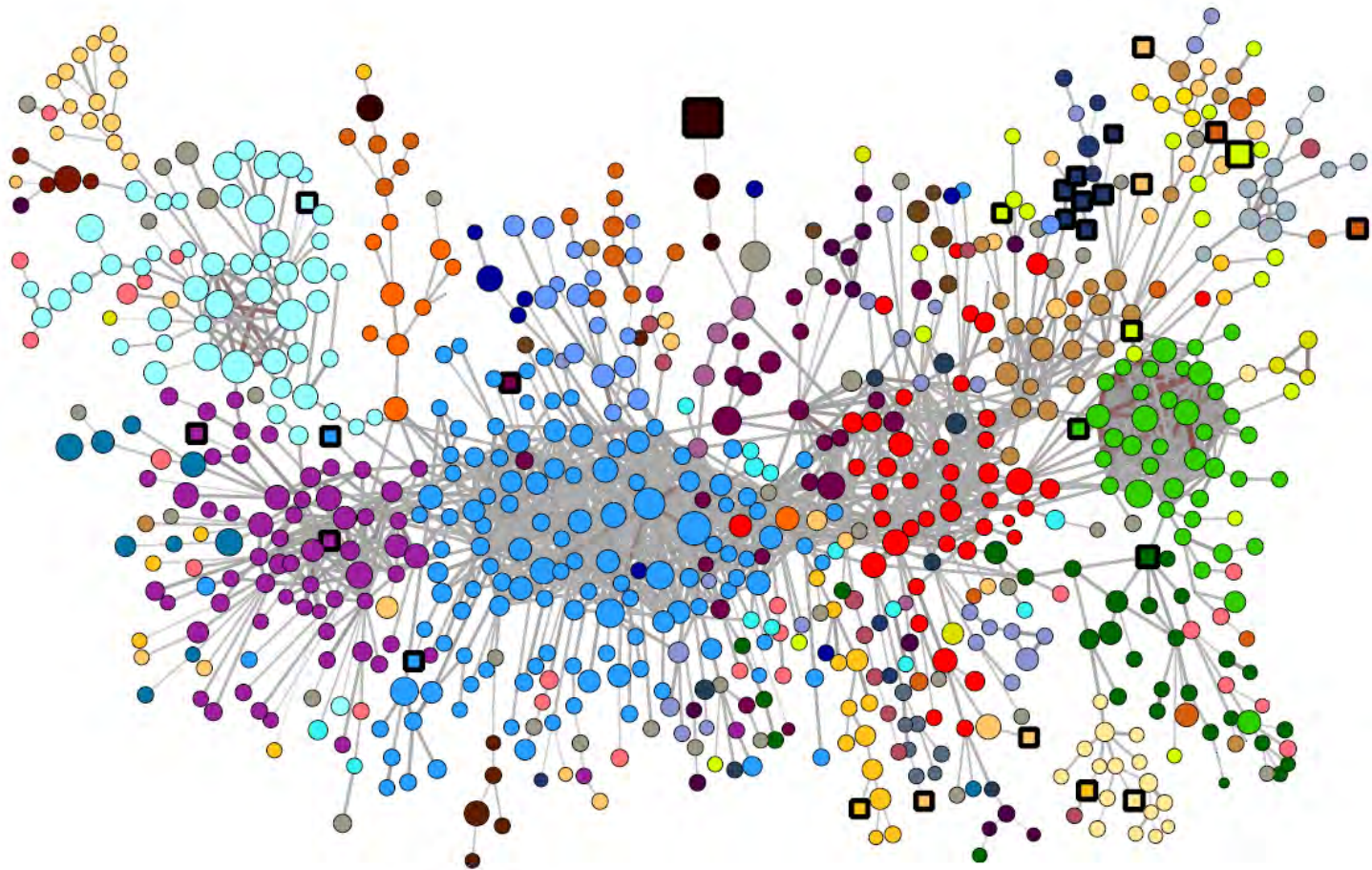
RWA 2008



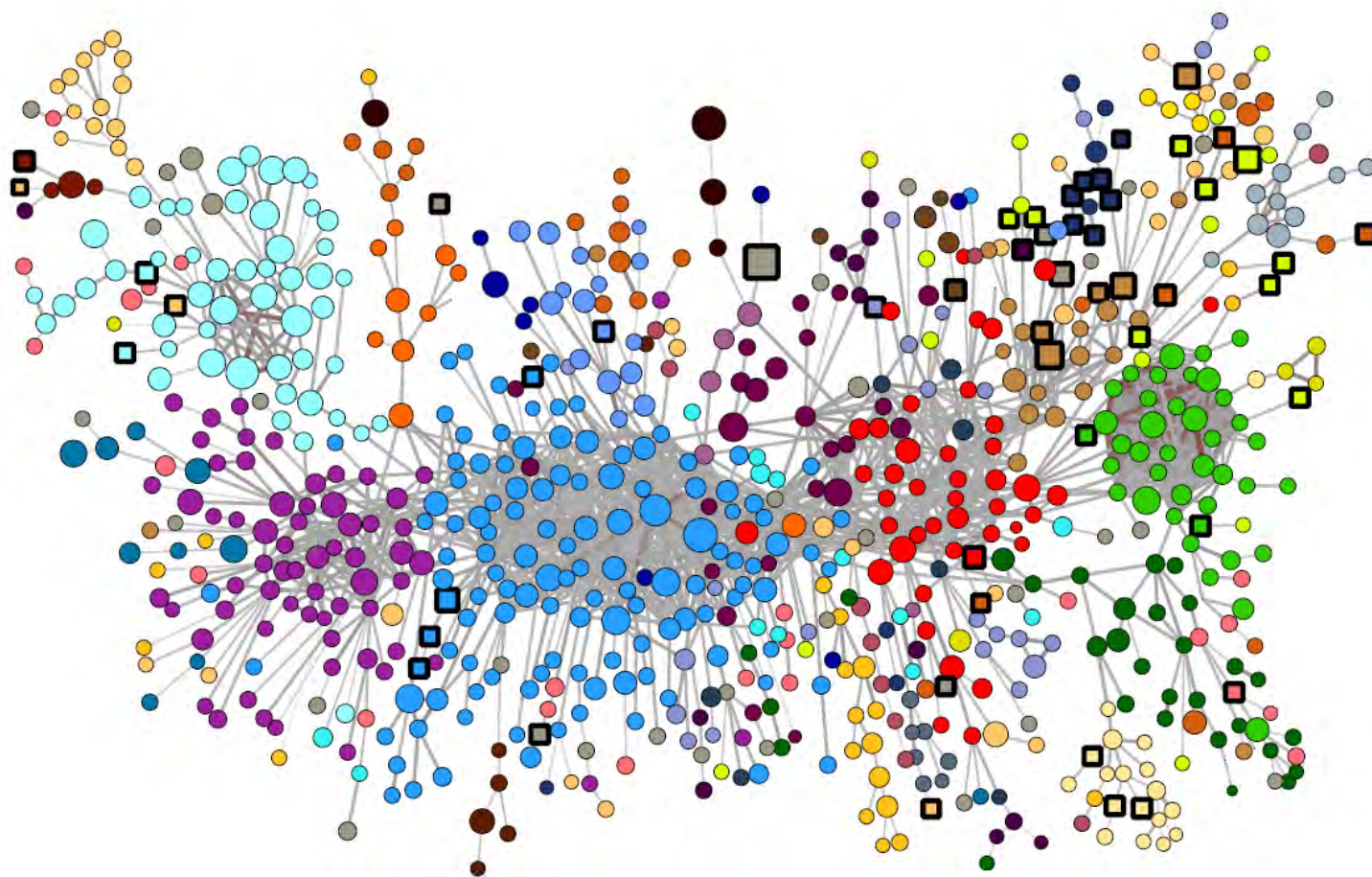
2000



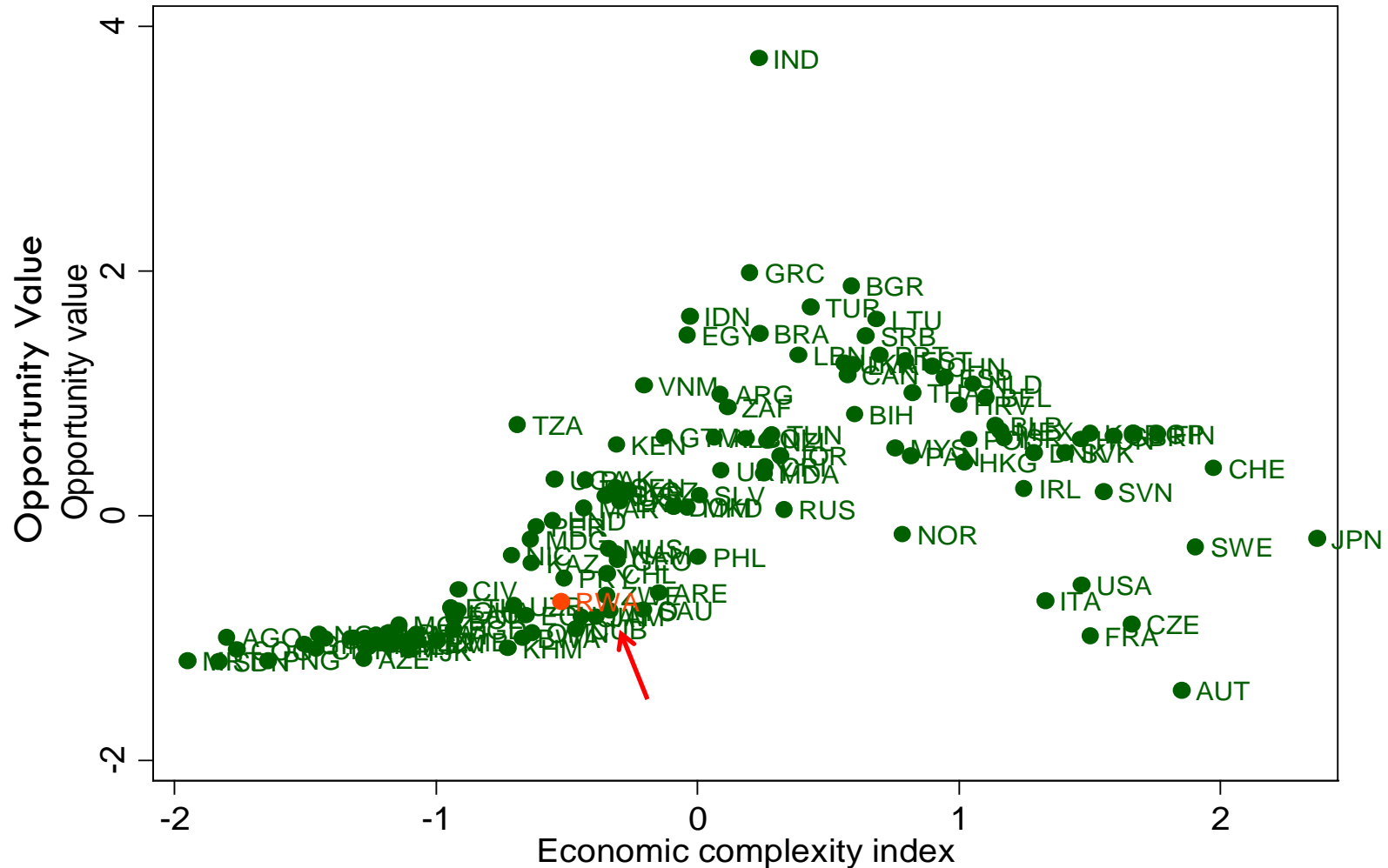
2004



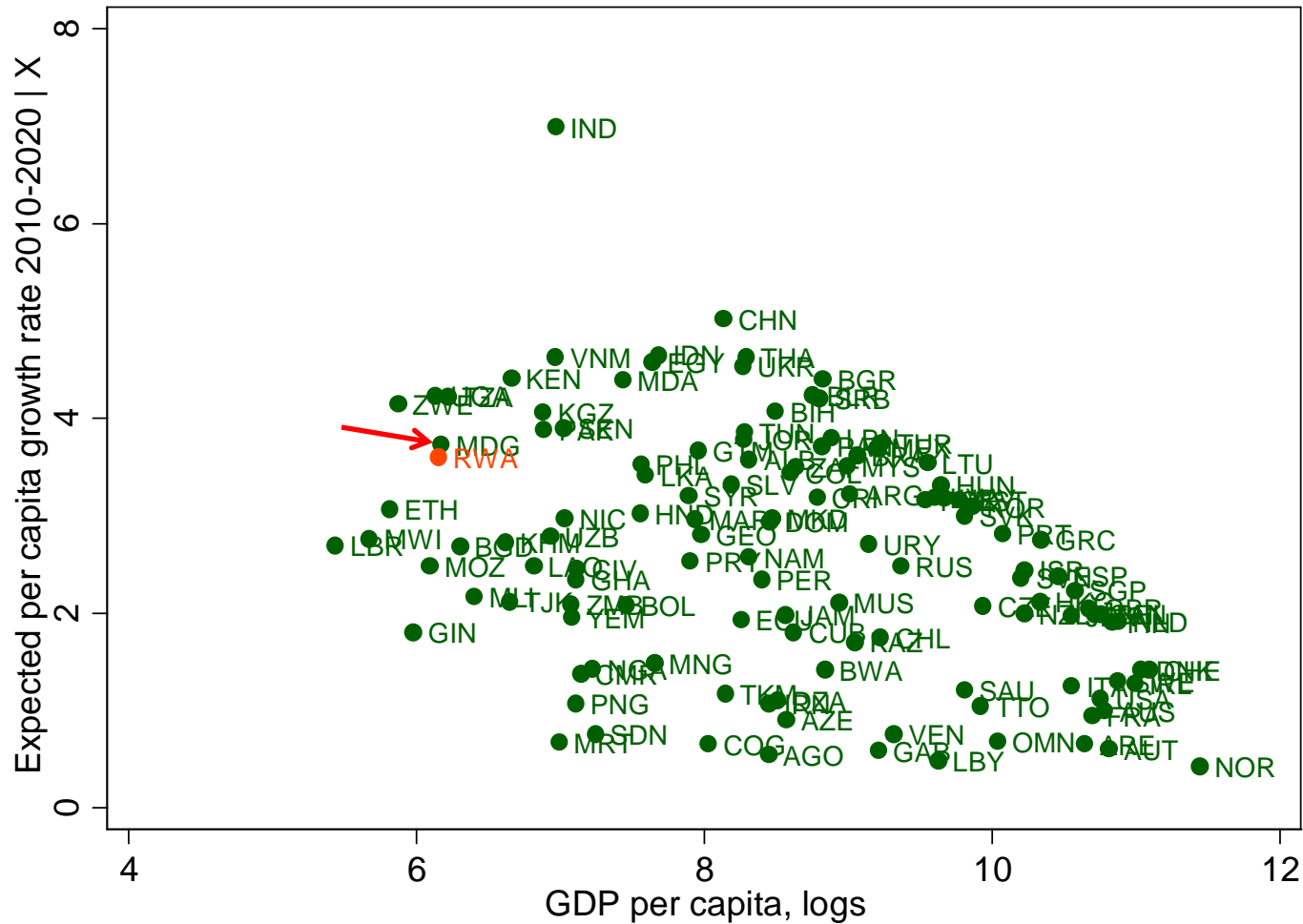
2008



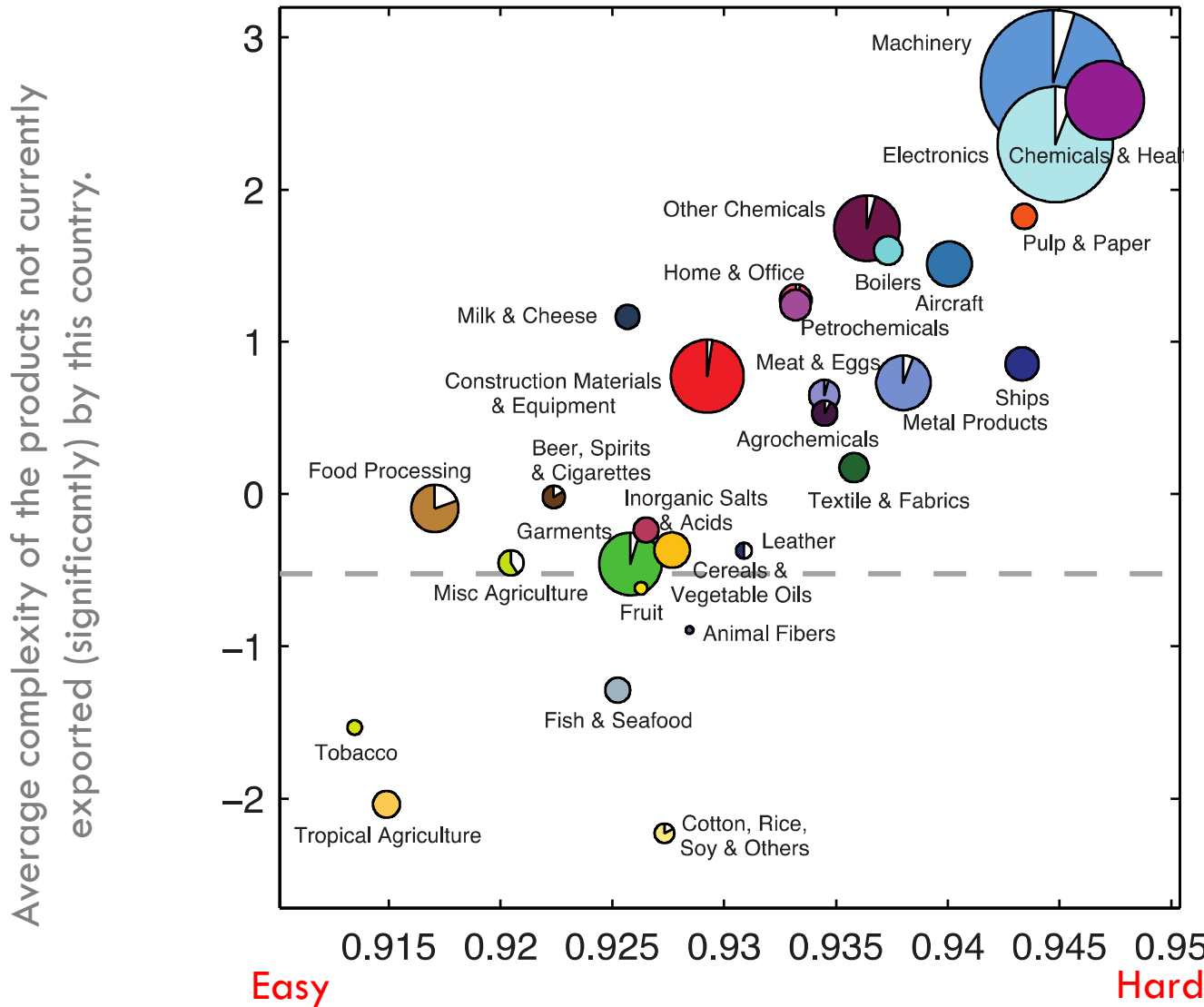
How well positioned is Rwanda in the product space?



Expected growth rate per capita 2010-2020



What products are feasible for your Rwanda?



Size of each node is proportional to world trade.

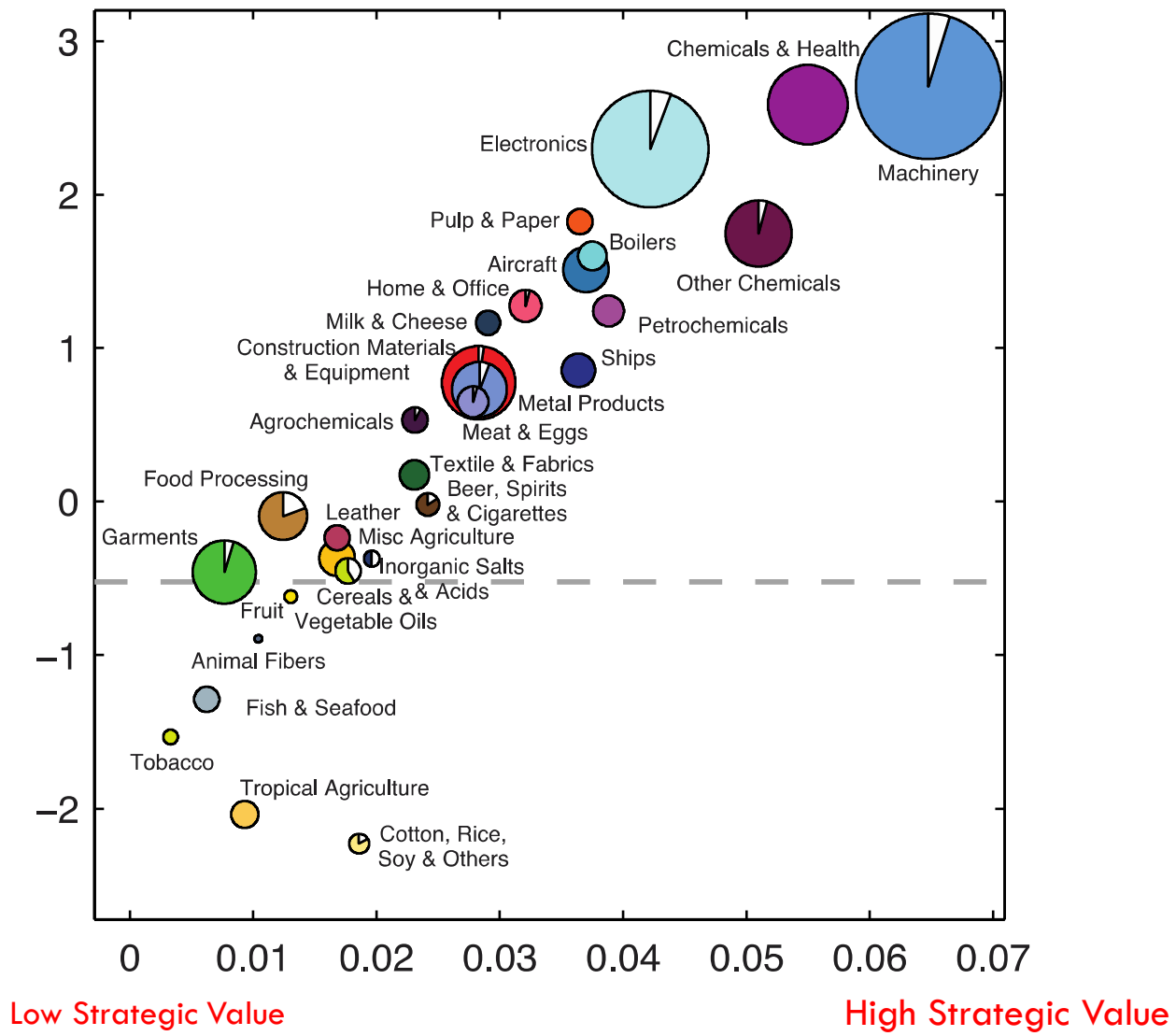
The fraction of each bubble in white represents the percentage of goods in that community that are exported by the country (significantly).

The dashed gray line indicates the average Economic Complexity (ECI) of the country's exports

How easy it is for your country to enter this product community.

What products are more strategic?

Average complexity of the products not currently exported by this country significantly.



How strategic is a product community for a country? How many other products become feasible once we export this product?

Strategic implications

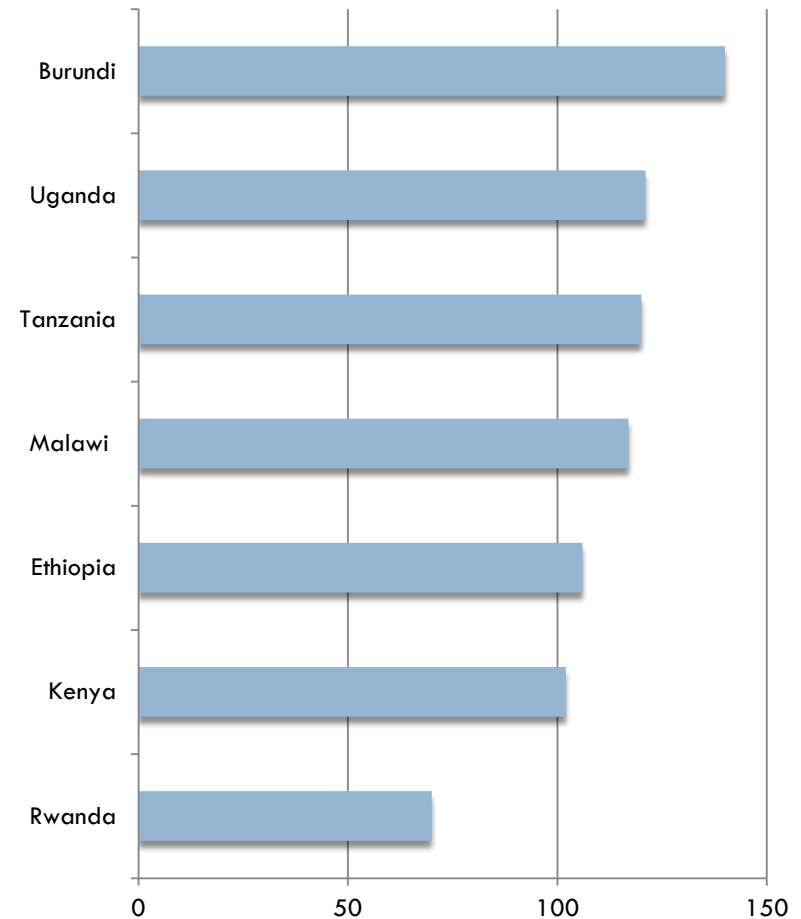
- Given Rwanda's high population density and high population growth, the country needs activities that are scalable
- This means that they cannot rely mainly on scarce resources such as land or apes
- The scalable activities involve manufacturing and business services
- Given the logistic challenges of the country, manufacturing for faraway destinations is difficult

Strategic implications (cont'd)

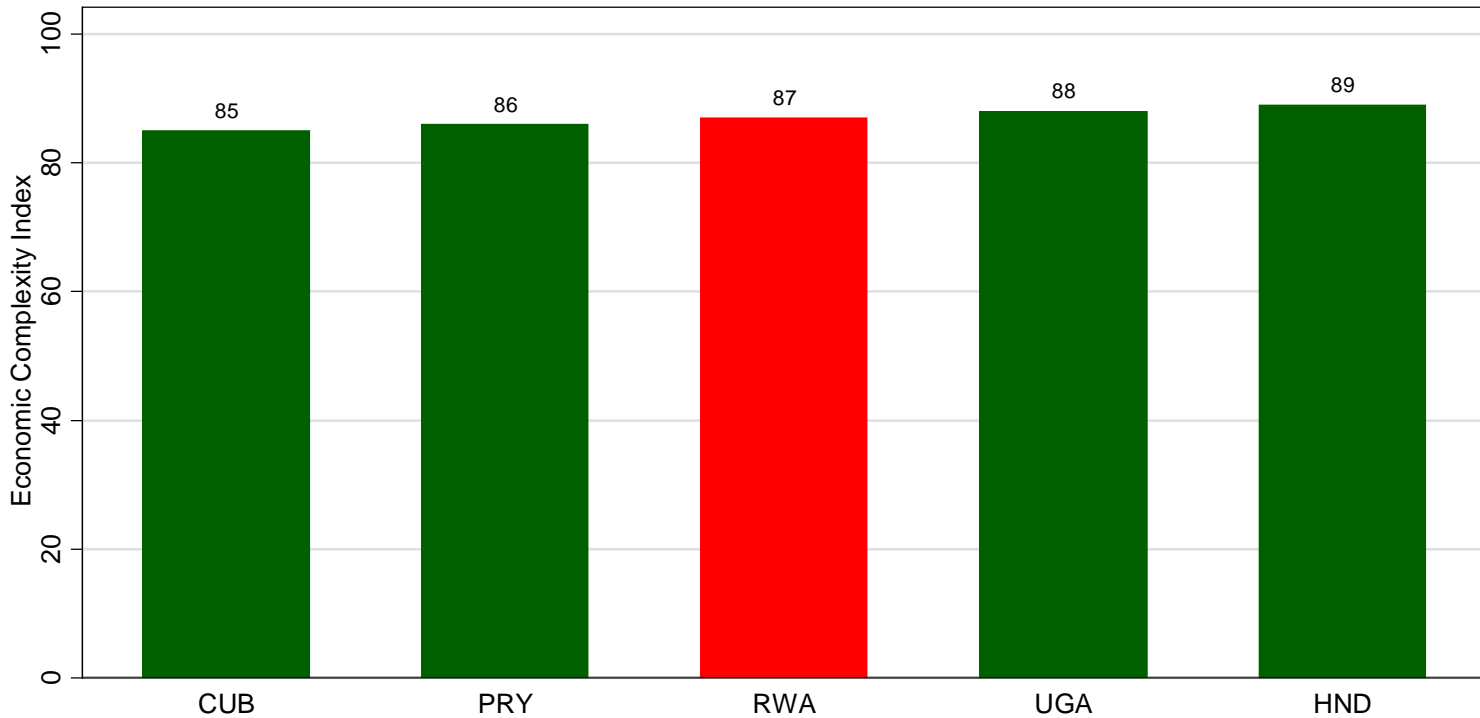
- However, there is a large regional market, but it requires products that are more complex than Rwanda's current basket.
- This explains the small share of this market in Rwanda's exports
- Food processing and construction materials are “near”
- This requires a (private) industrial zone approach to make sure that all the support systems are present
 - ▣ Power, water, logistics, urban transport, labor training, security, regulatory services
- Interesting global examples (Dominican Rep., Colombia)

Strategic implications (cont'd)

- Rwanda has the most competitive business environment in East Africa, as ranked by the WEF-GCR
- This puts it at an advantage to host businesses that cater to the regional market

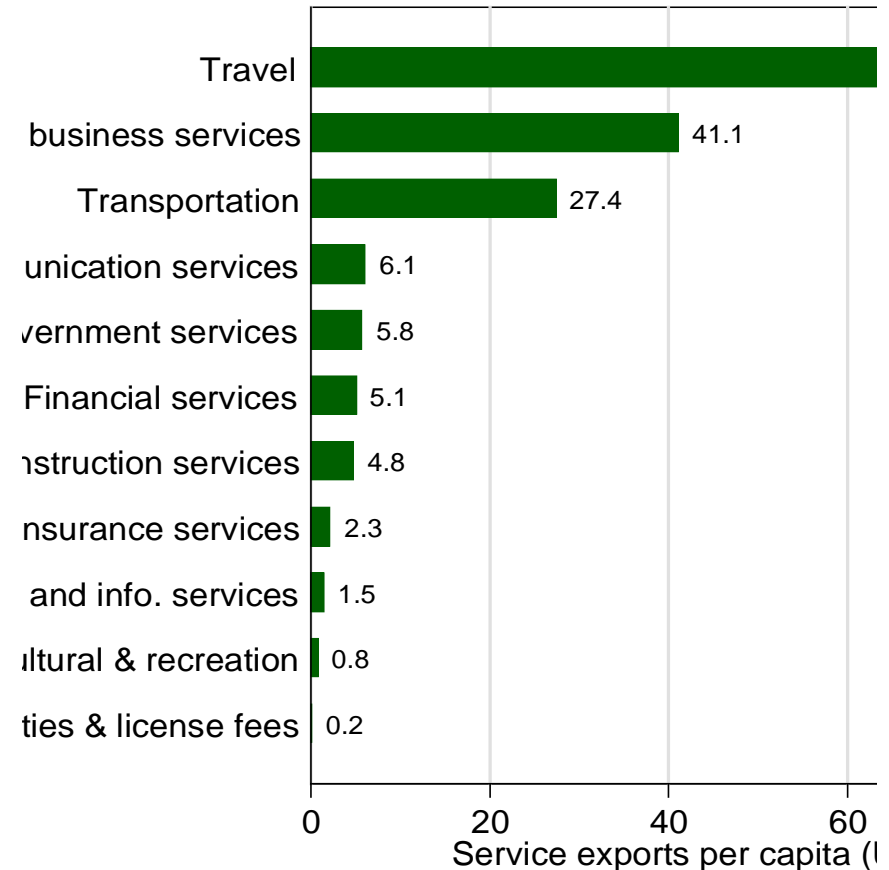


Rwanda in the Atlas of Economic Complexity



Strategic implications (cont'd)

- Business services are already the second export activity
- It can target companies that cater to the East Africa market
- Creation of business zones
 - ZonAmerica in Uruguay



Three activities

- Investment promotion
- Development banking
- Industrial and business zones
 - ▣ Not about special tax treatment
 - ▣ It is about the business ecosystem

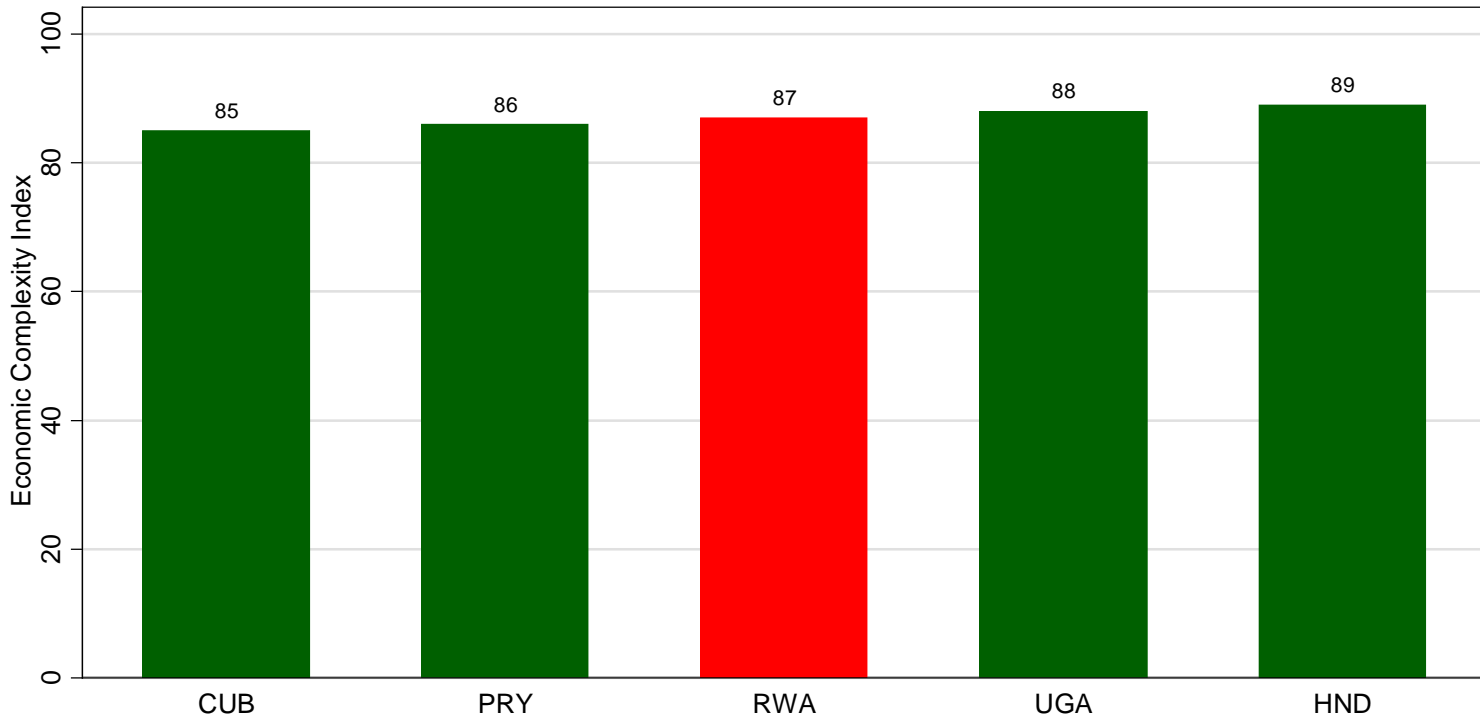


RWANDA

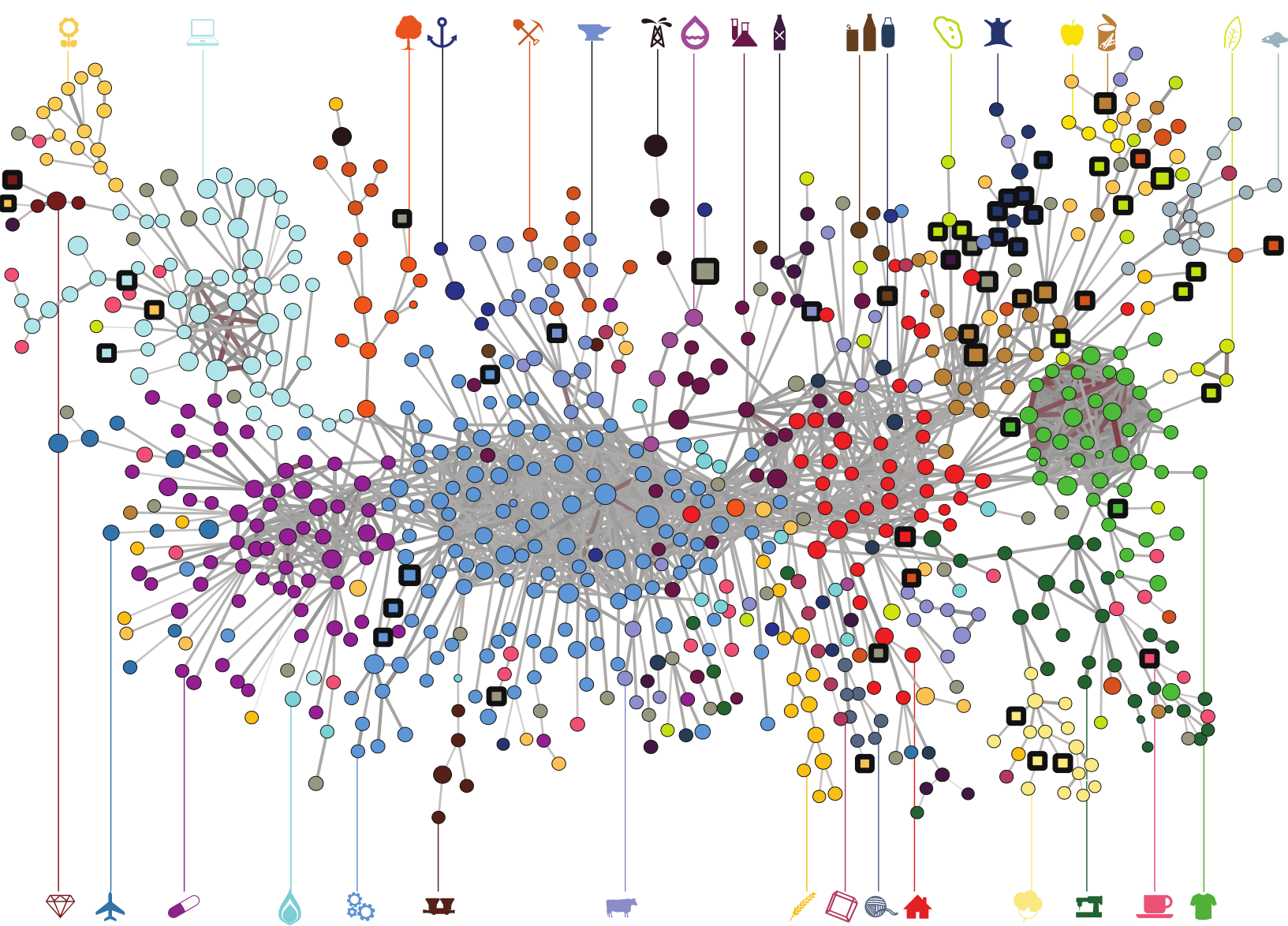
February 2012

Ricardo Hausmann

Rwanda 87/129



Rwanda on the product space (2008)



- ELECTRONICS
- MACHINERY
- AIRCRAFT
- BOILERS
- SHIPS
- METAL PRODUCTS
- CONSTR. MATL. & EOPT.
- HOME & OFFICE
- PULP & PAPER
- CHEMICALS & HEALTH
- AGROCHEMICALS
- OTHER CHEMICALS
- INOR. SALTS & ACIDS
- PETROCHEMICALS
- LEATHER
- MILK & CHEESE
- ANIMAL FIBERS
- MEAT & EGGS
- FISH & SEAFOOD
- TROPICAL AGRIC.
- CEREALS & VEG. OILS
- COTTON/RICE/SOY & OTHERS
- TOBACCO
- FRUIT
- MISC. AGRICULTURE
- NOT CLASSIFIED
- TEXTILE & FABRICS
- GARMENTS
- FOOD PROCESSING
- BEER/SPIRITS & CIGS.
- PRECIOUS STONES
- COAL
- OIL
- MINING

Each black square means the country exports the product with significant world presence.

The graph shows which industries are present in your country, and thus which industries are close by.

Service sophistication

