Economic Diversification in Low–Income Countries (LICs): Stylized Facts and Macroeconomic Implications

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Second Annual IMF/WB/WTO Joint Trade Workshop
Geneva, Switzerland
June 5 - 6, 2013
Motivation

- LICs have historically been heavily dependent on a narrow range of traditional primary products and on few export markets.

- While diversification has been a longstanding ambition for many LICs, we have limited experience of what aspects of diversification are important.

- Many developing economies have managed to diversify and transform their economies especially over the past two decades. But there remain significant differences across countries.

- What are the facts? What does diversification involve?

- Inform the policy debate on diversification and transformation.
Overview

Motivation

Diversification, growth and volatility

• Cross-country growth relationship
• Diversification episodes and volatility

Stylized Facts

Cross-country patterns: Link between diversification, and GDP or time

• Trade diversification indices across products and partners
• Quality upgrading
• Country case studies

Ongoing Work & Preliminary Messages

• Messages
• Working papers
Growth through Diversification

- Diversification associated with higher real GDP growth
Output volatility diminishes after major diversification episodes
Stylized Facts: Trade Diversification

Trade Diversification (across Products) vs. GDP

- Along the development path, diversification increases (until threshold)

Export Diversification and Concentration
Stylized Facts: Trade Diversification

Trade Diversification (across Products) vs. Time

- LICs and SSA have high concentration, but there is a break around 1990–5

By Income Group

By Region
Changes in diversification are paralleled by shifts in the relative importance of agriculture… … and manufacturing
Stylized Facts: Trade Diversification

Trade Diversification (across Partners) over Time

- After 1995, Asia and Africa greatly diversified across partners
Stylized Facts: Partner Diversification

Trade Diversification (across Partners) vs. Time

- After 1990, LICs and esp. SSA greatly diversified across partners

By Income Group

By Region
Stylized Facts: Partner Diversification

Trade Diversification (across Partners) vs. Time

- This is partly related to emergence of China and diminishing role of EU
Quality Upgrading

• Economic development is underpinned not just by new products and markets, but also by *quality improvements* to existing products.

• Ongoing work develops a toolkit to answer:
  – What is an economy’s export quality and how has it changed over time?
  – What is its present potential for quality upgrading?
  – How large is the need for diversification?

• Quality estimates improve on unit values, which can be imperfect quality proxies. Estimated quality measures smooth volatility and dispersion inherent in unit values.
The Toolkit

- Toolkit will be made publicly available and contains exporter country totals and 3 different breakdowns:
  - **SITC 4, 3, 2, 1 digit**
    - Over 1.5 million quality estimates available at the SITC 4-digit level (after aggregating over importers and units of measurement)
  - **BEC 3, 2, 1 digit**
    - BEC1: Useful breakdown into intermediate products, capital goods, and consumer goods
    - BEC2: Distinguishes, for instance, between (i) primary vs. processed varieties; and (ii) consumer durables vs. non-durables.
  - **3 broad custom categories**
    - Manufactures, Agriculture, and Non-Agricultural Commodities
Stylized Facts: Quality Upgrading

- Quality upgrading is a crucial component of development, particularly when trying to move to upper middle-income status.
- Some LICs need diversification, others need quality upgrading.

![Graph showing Quality across all Exports]

- **HIC**: High-income countries
- **MIC**: Middle-income countries
- **LIC**: Lower-income countries
- **Lowess Fit**: Line representing the trend in quality across exporter GDP per capita.
Stylized Facts: Quality Upgrading
Manufacturing and Agriculture

There seems to be potential to also quality upgrade in agriculture, though it may be more constrained by soil and climate conditions.
Stylized Facts: Quality Upgrading
Asia: considerable cross-country heterogeneity

- Some countries have converged or are continuing to converge to the world frontier.
- In other countries, convergence seems to have slowed since the mid-1990s.
In Africa, some countries show promise.

Other countries’ export quality has continued to stagnate.

Stylized Facts: Quality Upgrading
Africa: considerable cross-country heterogeneity
Potential for Quality Upgrading

Destination markets are no constraint for LICs

Quality demanded in destination markets is not an apparent constraint. Policy should focus instead on creating conditions broadly favorable to quality upgrading.
Countries experiencing faster quality convergence since 1995 also experienced faster growth in GDP per capita.

Additional per capita growth in fast quality convergers relative to slow convergers (percentage points)

- LICs and Lower Middle Income (incl. China)
- LICs and Lower Middle Income (excl. China)
- African LICs only
Drivers

Diversification and quality are driven by deep, underlying determinants, including:

- Institutions
- Labor and product market rigidities
- Public infrastructure, and investment efficiency
- Education (human capital)
- Financial development
Case Studies

Tanzania  Bangladesh

Vietnam  Malaysia
- Tanzania showcases successful LIC diversifier

- Exports grew rapidly
- Agriculture was ‘crowded out’ by gold and manufacturing

- Trade geography also changed
- EU’s share declined, giving way to Switzerland and China (reflecting gold) and regional trade
Tanzania

Output concentration decreased, reflecting diversification away from agriculture to manufacturing, construction, trade, and communications.
Potential for Both Quality Upgrading and Horizontal Diversification

Tanzania

Given its concentration in agricultural products & crude materials, Tanzania has potential for horizontal diversification but also quality upgrading in agriculture.
Case Studies: Some Takeaways

• Successful diversification typically underpinned by reforms that are general in scope, rather than industry-focused and narrowly targeted.

• Necessary reforms come in “waves” of interrelated measures, and depend on political economy considerations and external conditions.
Conclusions

Diversification closely linked with structural transformation, and an important element of the development process in developing economies.

Development strategies must promote sustained resource reallocation, and encourage continued quality upgrading.

Key issues:

- What goods are produced and exported, and of what quality?
- What are the specific bottlenecks to structural transformation in given countries? Why are some countries much more successful?
- Are the policies needed to promote initial diversification different from those required to then sustain quality upgrading?
Working Papers

- Economic Diversification in Low-Income Countries: Stylized Facts, C. Papageorgiou and N. Spatafora (February 2013)
- Export Quality in Developing Countries, C. Henn, C. Papageorgiou, and N. Spatafora, (May 2013)
- Economic Diversification: Recent Experiences and Policy Lessons from Five Case Studies, A. Pitt (forthcoming)

Work in Progress

- Diversified Structural Transformation (model)
- Growth through Diversification
- Diversifying exports and Macro Stability
- Export Quality and Complexity
THANK YOU
Quality Upgrading: Method

- Quality estimates improve on unit values, which can be imperfect quality proxies if:
  - Significant cross-country differences in production costs
  - Selection bias in quality composition (“Shipping the good apples out” effect)
  - Estimated quality measures smooth volatility and dispersion inherent in unit values.
Diversification Episodes
Trade Data: Products

Chile

Malaysia

Thailand

Ghana

Madagascar

Mauritania