International trade and the relation between economic and social upgrading

Thomas Bernhardt and William Milberg

Abstract

Does improved export performance result in social upgrading? While most research presumes economic upgrading leads directly to social upgrading in global value chains, this connection has not been analysed in a systematic fashion. Research on apparel, horticulture, mobile phones and tourism value chains in ten or more developing countries (1990-2009) indicates:

• Economic upgrading is generally a necessary but insufficient condition for social upgrading.
• Economic downgrading, and especially social downgrading, is more common than previous research would indicate.
• Trade policy could play an important role in shaping and connecting economic and social upgrading.

Keywords
exports, global value chains, upgrading, economic development

Authors
Thomas Bernhardt is a PhD candidate in the Department of Economics of the New School for Social Research, New York, US.
Email: bernt495@newschool.edu

William Milberg is Professor of Economics at the New School for Social Research, New York, US.
Email: milbergw@newschool.edu
...economic upgrading occurs when world export market share and export unit value increase.

Introduction

Production of goods and services in the late 20th century increasingly became organized within global value chains – with lead firms coordinating suppliers, logistics and marketing in multiple locations. The path of economic development thus changed, becoming associated with ‘industrial upgrading’ within these networks or global value chains (GVCs).

There is ample case study literature on industrial upgrading, but little comprehensive, cross-country and cross-GVC analysis. Moreover, there is an untested assumption that industrial upgrading automatically brings social improvement in terms of wages, employment and social standards.

Bernhardt and Milberg used published data in a study of four GVCs (apparel, horticulture, mobile phones and tourism) to assess economic and social upgrading and the connection between them. Here, we draw out the implications of their results for trade policy, and in particular for Aid for Trade programmes.

Conditions for achieving economic and social upgrading

We define economic upgrading in a given sector in a given country as occurring when the following two conditions are fulfilled:

- There is an increase in the world export market share (i.e. its exports are internationally competitive).
- There is an increase in the export unit value, implying the production of higher-value products in the sector concerned.

Social upgrading occurs in a given sector when the following two conditions are fulfilled:

- There is an increase in employment.
- There is an increase in real wages.

The analysis draws on the available international datasets:

- UN Comtrade (exports, unit values);
- UN Conference on Trade and Development Handbook of Statistics (tourism exports, unit values);
- UN Industrial Development Organization INDSTAT4 (employment, earnings);
- International Labour Organization Laborsta and KILM (earnings);
- World Trade and Tourism Council Economic Data Search Tool.

Relation between economic and social upgrading

To analyse the relation between social and economic upgrading, we combine the two measures of economic and of social upgrading into a single measure of each. The results can be presented in a 2x2 matrix (see Figures 1-3). Cases that fall into the northeast quadrant

Notes


www.capturingthegains.org
are those where both economic and social upgrading occur. In the southwest are cases of economic and social downgrading. The other quadrants show either economic upgrading and social downgrading (southeast quadrant) or social upgrading and economic downgrading (northwest quadrant).

Results for two of the GVCs studied are presented below. In the mobile telecom sector, there has been clear economic upgrading but very little social upgrading. Figure 1 shows there has not been a single case of economic downgrading. The best overall performer is Mexico, with spectacular upgrading on both the economic and the social fronts. The two Asian giants, China and India, are the only other countries that qualify as overall upgraders in the sector; both have combined an excellent economic performance with weak social upgrading. By far the worst performer has been the only African country in our sample: South Africa. Recording the smallest improvements in economic terms and the largest deteriorations in social terms, South Africa actually performed worst on both fronts.

Figure 1. Economic and social upgrading and downgrading in mobile telecom, 1990s-2000s

Notes
3. We propose a simple method for combining the two variables in each realm that gives equal weight to each component. To get a composite indicator for economic upgrading, for example, a weight of 50 percent each is assigned to both the percentage change in export market share and the percentage change in export unit value. The underlying formulas for the calculation of upgrading are:

\[
\text{ec. upgrading} = 0.5 \times (\% \text{ change in market share}) + 0.5 \times (\% \text{ change in export unit value})
\]

\[
\text{soc. upgrading} = 0.5 \times (\% \text{ change in employment}) + 0.5 \times (\% \text{ change in real wage})
\]

Bernhardt and Milberg present results using two other weighting schemes. The results are not significantly different.

In apparel, we focus on the post Multi-Fibre Arrangement period: 2004-2009 (Figure 2). Five countries achieved both economic and social upgrading and eight experienced economic and social downgrading. China’s impressive economic gains were matched by similar social gains. African and most Central American countries suffered on both economic and social grounds. Broadly speaking, there appears to have been a positive correlation between economic upgrading and social upgrading in apparel, although a number of countries experienced economic upgrading and social downgrading.

Figure 2. Economic and social upgrading and downgrading in apparel, 2004-2009

Notes


Note: For Haiti, the measure of social upgrading is based solely on the % change in real wages.
...the general pattern is of employment growth and considerably less growth of real wages.

Key recommendations

The main findings of the analysis can be summarized as follows:

• Regarding economic upgrading, in all sectors except for apparel, positive growth in world export market share is generally associated with economic upgrading. However, export market share growth is generally associated with less-than-proportional growth or declines in export unit values. Regarding social upgrading, the general pattern is of employment growth and considerably less growth of real wages. This indicates that participation in GVCs does not necessarily raise worker bargaining power, and legal and institutional support may be required.

• Contrary to the spirit of much analysis of GVCs, economic downgrading and social downgrading are both fairly regular occurrences, with social downgrading more common in particular because of stagnant real wages.

Notes

Capturing the Gains brings together an international research network to examine economic and social upgrading in business communities across the developing world.

The programme explores the connections between business competitiveness and social prosperity with attention to firm innovation, trade expansion, labour standards and decent work.

Its research allows policy-makers and business leaders to better understand the relationship between business growth and poverty reduction in the global South.

Following the Capturing the Gains summit, a revised version of this paper will be made available on the Capturing the Gains website in 2013.

Key recommendations continued

Meso-level findings indicate the benefits vary significantly depending on whether workers are regular or casual, and the latter group is significant.

- There is a variety in the pattern observed across GVCs in terms of the relation between economic and social upgrading. In apparel and horticulture, we generally find a positive correlation between economic upgrading and social upgrading. In mobile phones, there is widespread economic upgrading without social upgrading. And in tourism there are many cases of social upgrading with less economic upgrading.

- Overall, economic and social upgrading occurred together in 15-17 out of 30 cases, depending on the measurement technique adopted. These results were found to be generally robust across a few alternative measurement techniques. In sum, our evidence shows that economic upgrading does not translate automatically into social upgrading. However, in all sectors, except tourism, there has been no social upgrading without economic upgrading.

- The question that remains to be answered in specific case study research is just what the institutional and policy conditions are that lead to a closer alignment of economic and social upgrading. It seems evident that programmes such as Aid for Trade could potentially serve to connect economic and social upgrading if they were designed with this goal in mind.

- There are, however, limitations related to the availability, quality and comparability of data. Data gaps are particularly severe for social upgrading indicators, as well as for export quantities. Data gaps on social upgrading are greatest for agriculture – yet this is where GVCs could have important poverty reduction effects. Given the increasing international fragmentation of production and its organization in global production networks and value chains, the current way of categorizing and collecting data may need rethinking. This would help indicate whether Aid for Trade and other policy measures are leading to social upgrading in value chains and helping promote wider development. We support the ongoing discussions at the UN, the World Trade Organization, the Organisation for Economic Co-operation and Development and elsewhere seeking to rethink trade and related data collection and presentation. We suggest this be extended to incorporate employment data.