

GLOBAL VALUE CHAINS AND SUSTAINABLE DEVELOPMENT

IMPACTS, POLICY QUESTIONS, AND
MEASUREMENT



WORLD BANK GROUP
Trade & Competitiveness

Seminar on Global Value Chain
Measurement for
Sustainable Development

United Nations Statistical Commission
14 March, 2016

Outline

1. GVCs and Economic Upgrading
2. GVCs and Social and Environmental Upgrading
3. Relevant Policy Questions
4. GVC Measurement for Sustainable Development

1. GVCs and Economic Upgrading

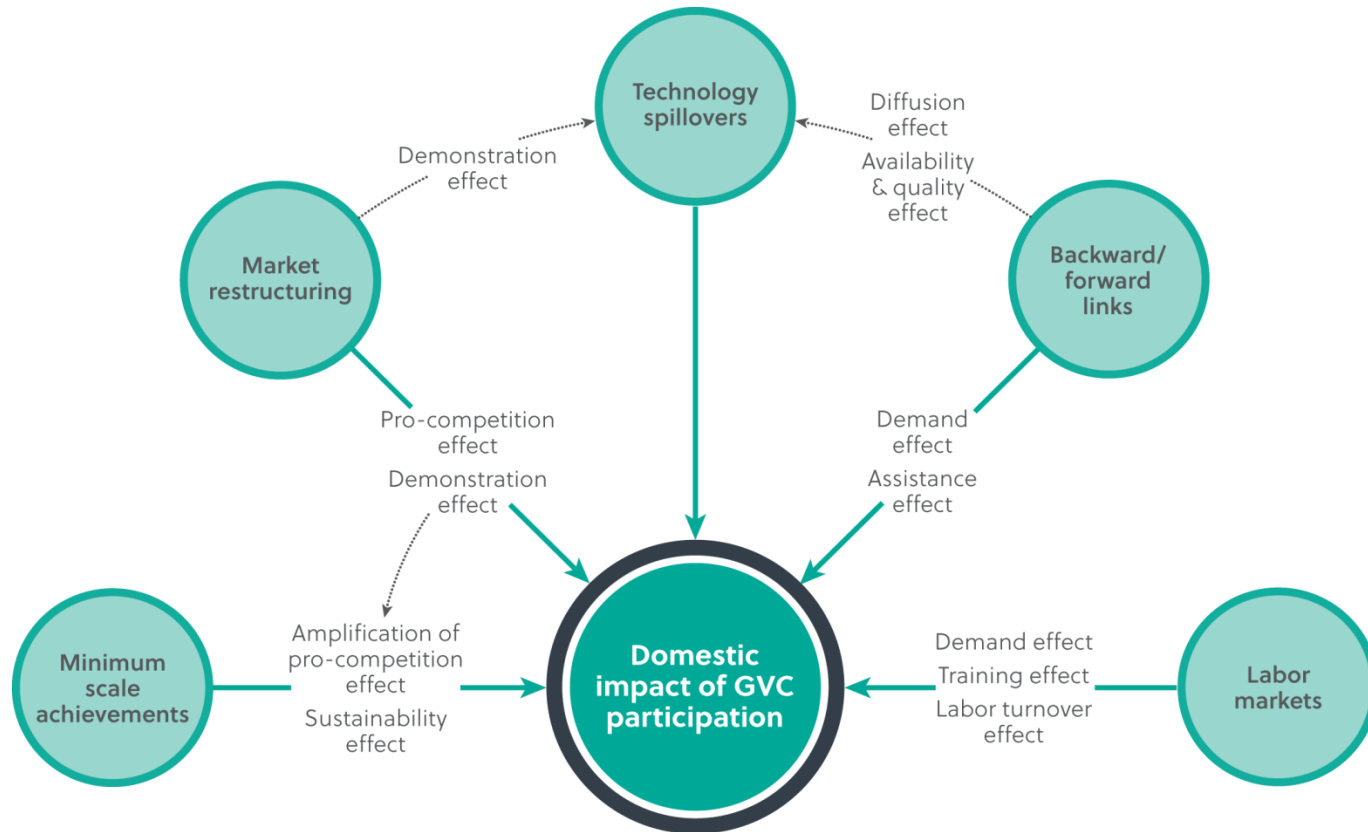
Stylized facts:

- Today we have a **multipolar global economy** with diverging performances and GVC integration.
- In an increasingly globalized and specialized world, borders between economic sectors become increasingly blurred and a **focus on tasks** becomes more meaningful.
- Traditional views of development neglect more nuanced interpretations that focus on **promoting economic, social and environmental upgrading and inclusive growth**.

The role of GVCs for economic upgrading:

- GVC participation will become increasingly important to achieve **structural transformation** in the 21st century.
- **Economic upgrading** in GVCs allows to achieve higher value-added production in the form of product, functional, and intersectoral upgrading via better skills and know-how, capital and technology, and processes.
- The **transmission channels** include backward and forward links,

Transmission Channels



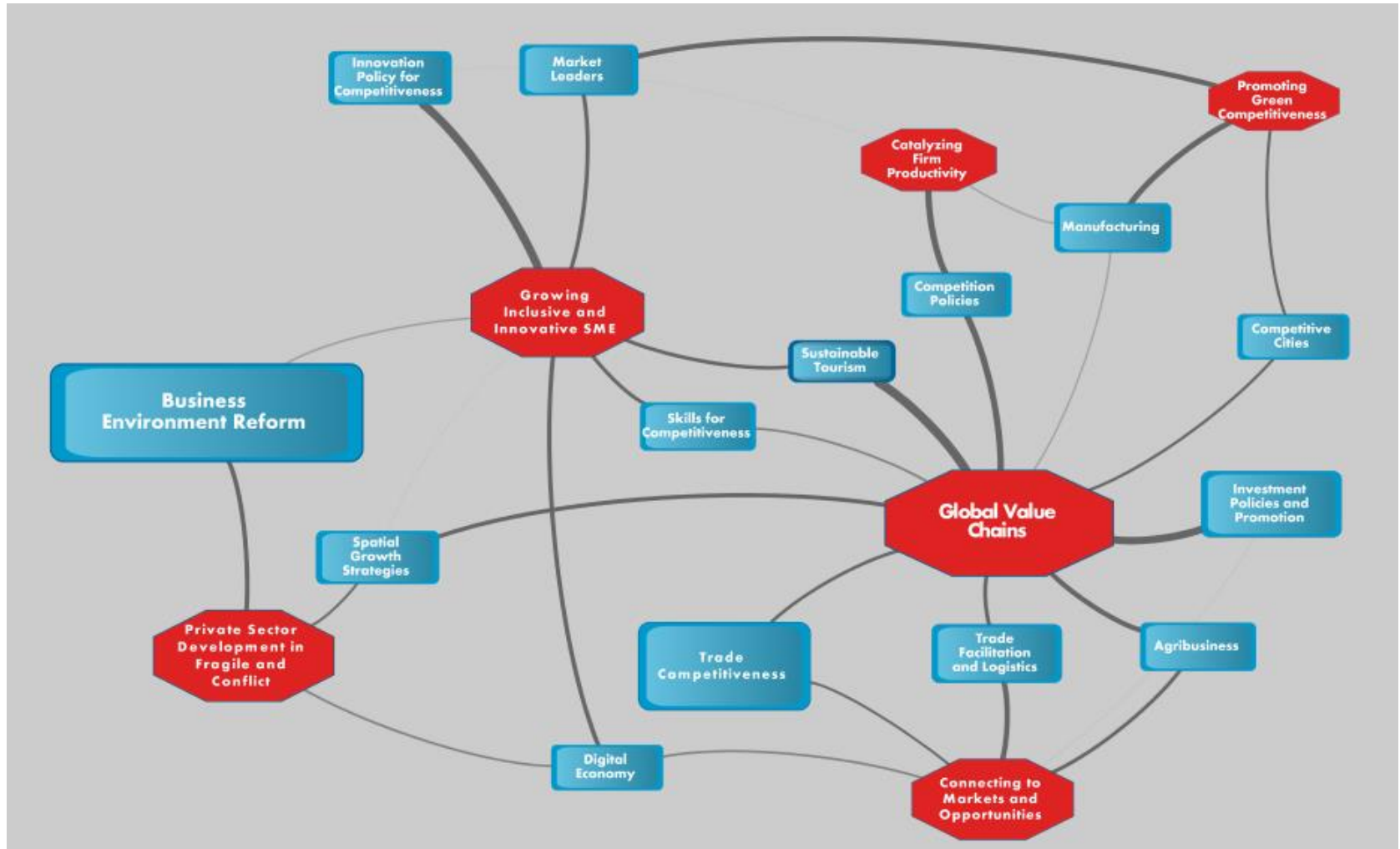
Source: Taglioni and Winkler (2016).

1. GVCs and Economic Upgrading

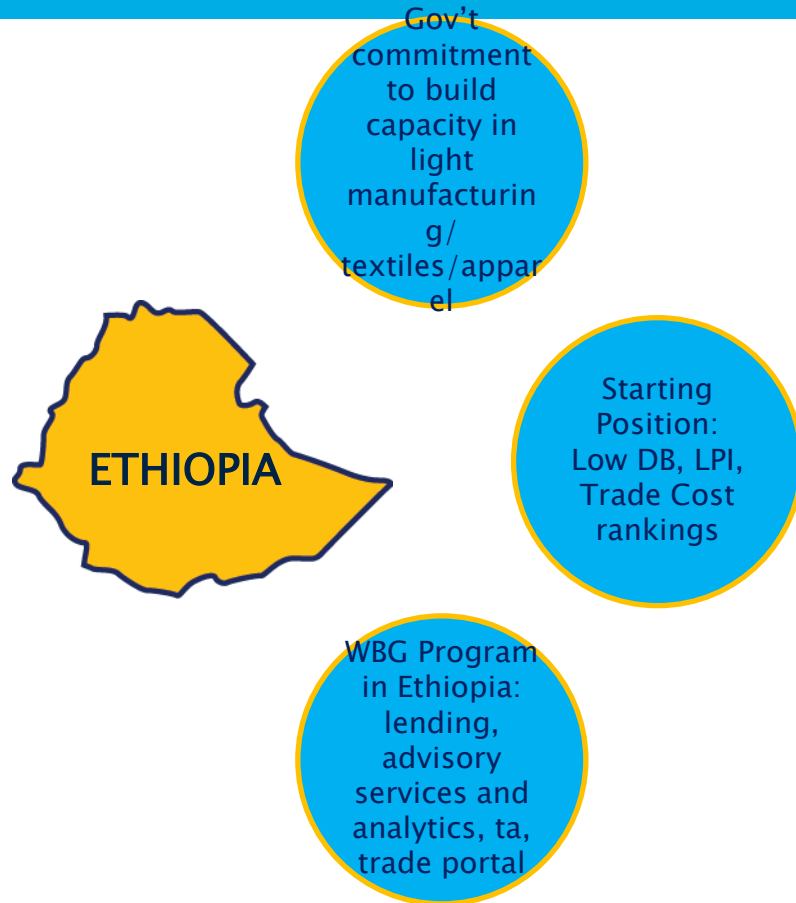
The WBG's involvement:

- GVCs is one of the Global Solutions Groups in Trade & Competitiveness, with 160 affiliates, and an integrated strategic framework for policy intervention connecting the many different parts.
- Customized country and sector diagnostics that lead to...
- ...pro-competitiveness interventions.
- WBG's integrative engagement across many countries, sectors and topics helps achieve results at a scale, replicate best practices across sectors and countries, and avoid “race to the bottom” scenarios in countries competing at the low end of GVCs.
- The WBG has established a strong global network of partnerships.

The WBG's GVC Global Solutions Group Community of Practice



Synergies between country dimension and global dimension of WBG engagement



Similar discussions underway in:

CAMBODIA



LAO PDR



MYANMAR



- Tie-in with ongoing trade negotiations
- Tie-in with various initiatives on standards
- Changing technology and skills

WBG engagement across many countries and topics acts as an integrator. This helps to achieve results at scale, replicate best practice across sectors and countries and avoid “race to the bottom” scenarios in countries competing at the low end of GVCs.

Note: DB = doing business; LPI = Logistics Performance Index;; TA = technical assistance.

Partnerships: Driven by Strategic Alignment, Recognized Thought Leadership, Complementarity of Knowledge

Global Partners (objectives: flexibility in setting agenda, business development)	Academia, Research Institutes, & Think Thanks (objectives: talent development, thought leadership)	Other Multilaterals (objectives: thought leadership, talent development)	NGOs & other interest groups (objectives: business development, thought leadership)
<ul style="list-style-type: none"> - Germany (G7 presidency) - China (G20 Presidency) - New Zealand - The Netherlands (EU Presidency) - UK (DFID) <p>Potential collaborations:</p> <ul style="list-style-type: none"> - Australia - Denmark - Norway - Sweden (SIDA) - Switzerland (SECO) - USA (USAID & US-8 ITC) 	<ul style="list-style-type: none"> - CEPR - JETRO - UIBE - Duke - MIT - Harvard <p>Potential future targets:</p> <ul style="list-style-type: none"> - Harvard Institute for Strategy & Competitiveness - European Foundation for Cluster Excellence - Holland International Distribution Council 	<ul style="list-style-type: none"> - OECD - WTO - ILO-IFC Better Work - Compnet (Eurosystem) <p>Initial discussions</p> <ul style="list-style-type: none"> - Asian Development Bank - UNIDO - ILO (beyond Better Work) 	<ul style="list-style-type: none"> - WEConnect - World SME Forum - WEF

2. GVCs and Social and Environmental Upgrading

The role of GVCs for social upgrading:

- Social upgrading refers to **measurable aspects of worker well-being** (employment, wages, and working conditions) and **enabling rights** (right to bargain, freedom of association, nondiscrimination, etc.).
- Economic upgrading does **not automatically lead to social upgrading**.
- The adoption of higher labor and social standards in GVC firms results in **small-scale worker upgrading, labor-intensive upgrading, and higher-skill upgrading**.
- Social upgrading can also lead to more **social cohesion** via jobs and working conditions, education and skill building, and health insurance and pensions.

GVCs and environmental upgrading:

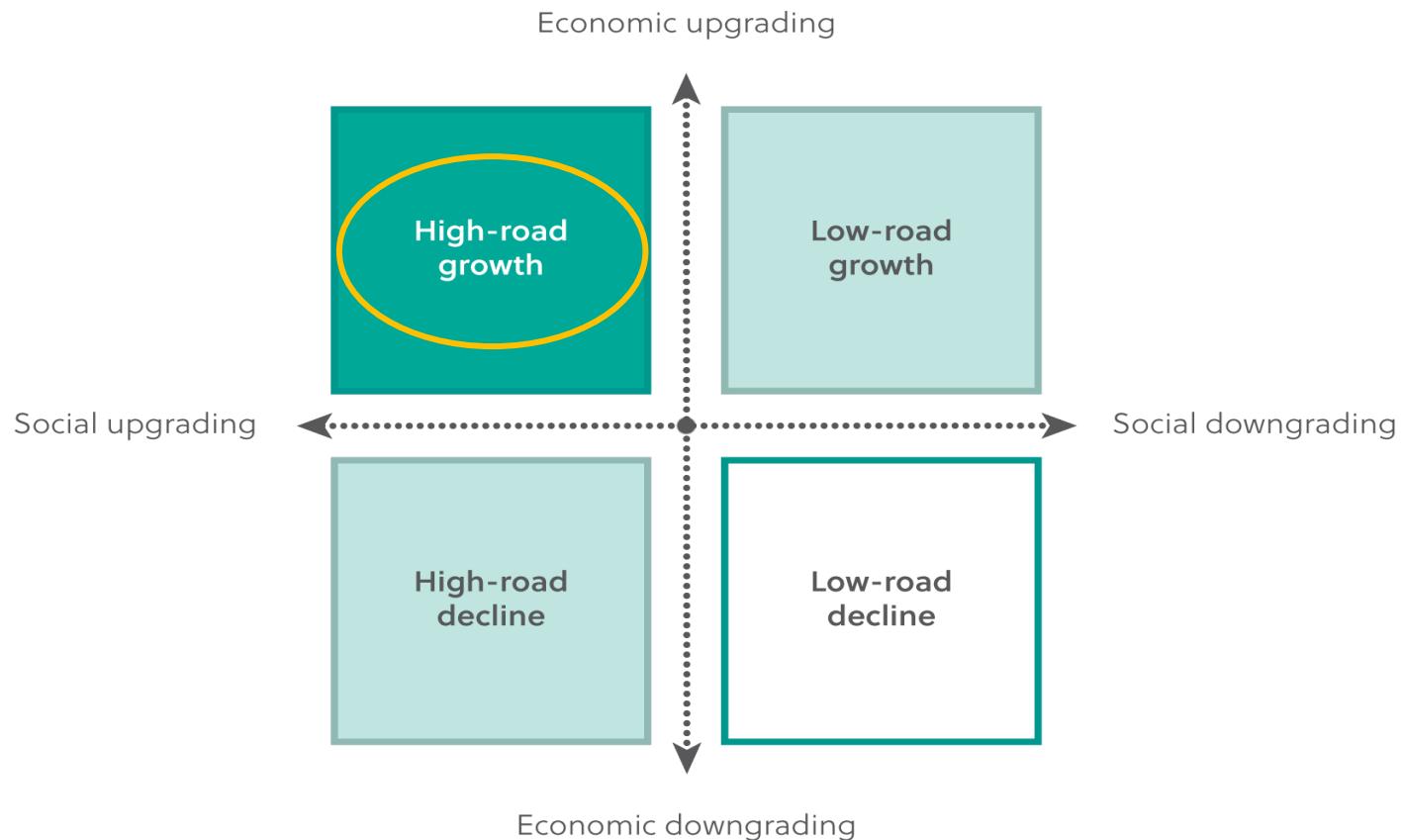
- **Climate change creates new challenges for GVC participation**, as firms need to ensure the predictable, reliable, and time-sensitive delivery of goods in the long-term.
- As a result, the global trade landscape is trending toward **more climate-friendly international standards** and mandatory sustainability

2. GVCs and Social and Environmental Upgrading

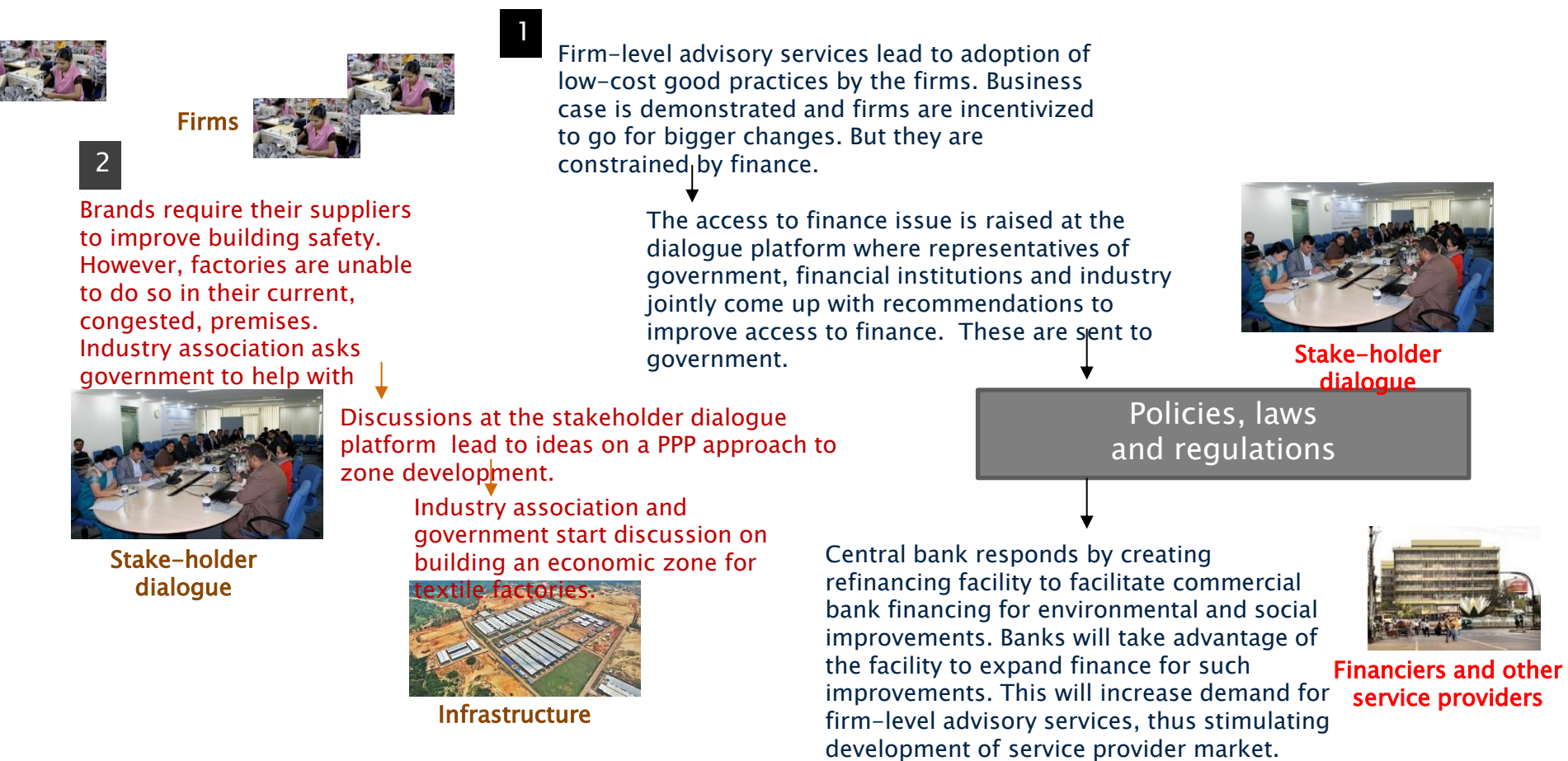
The WBG's involvement:

- **Standards** (product/quality, labor, social, environmental) are **important components of the WBG's GVC agenda**, driven by the need of firms to meet the standards of global buyers and lead firms, and rising consumer demand for sustainable production.
- Preliminary results of a cross-country econometric panel analysis for the BMZ show that higher national and firm-specific **product/quality, labor, social, and environmental standards increase value added through GVC participation** (Kummritz et al. 2016).
- Through a **combination of advisory, lending, and investment support**, the WBG helps client countries tackle the challenges to meet standards, which requires both a **long-term commitment and tailored incentives and mechanisms**.
- At the country-level, examples include a **[multi-pronged approach to upgrading the apparel sector in Bangladesh](#)**.

Promoting the High-road Growth Model of Economic and Social Upgrading



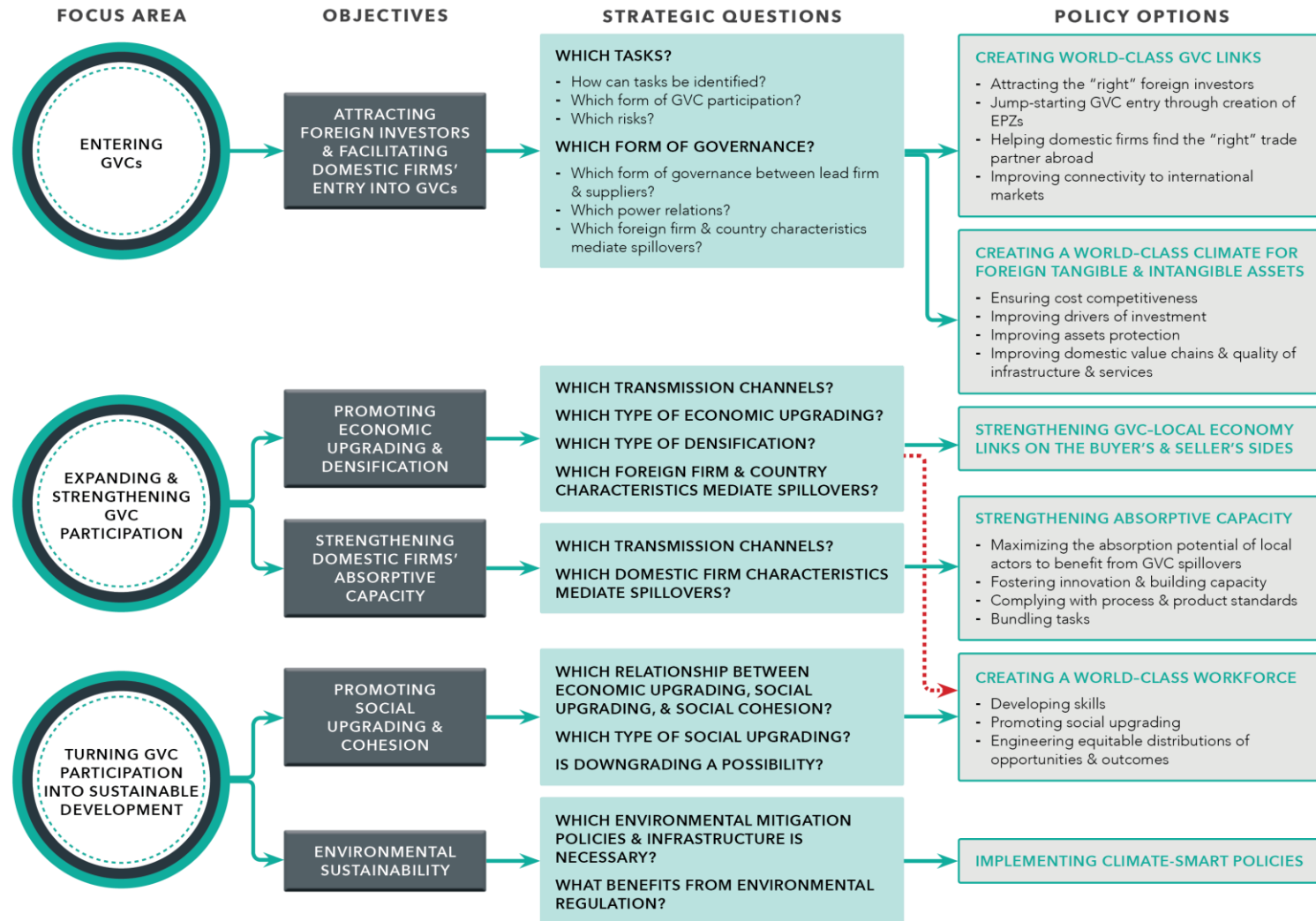
Example of Country Engagement: Multi-pronged Approach to Upgrading Apparel in Bangladesh, Interventions with Wider Demonstration Effects



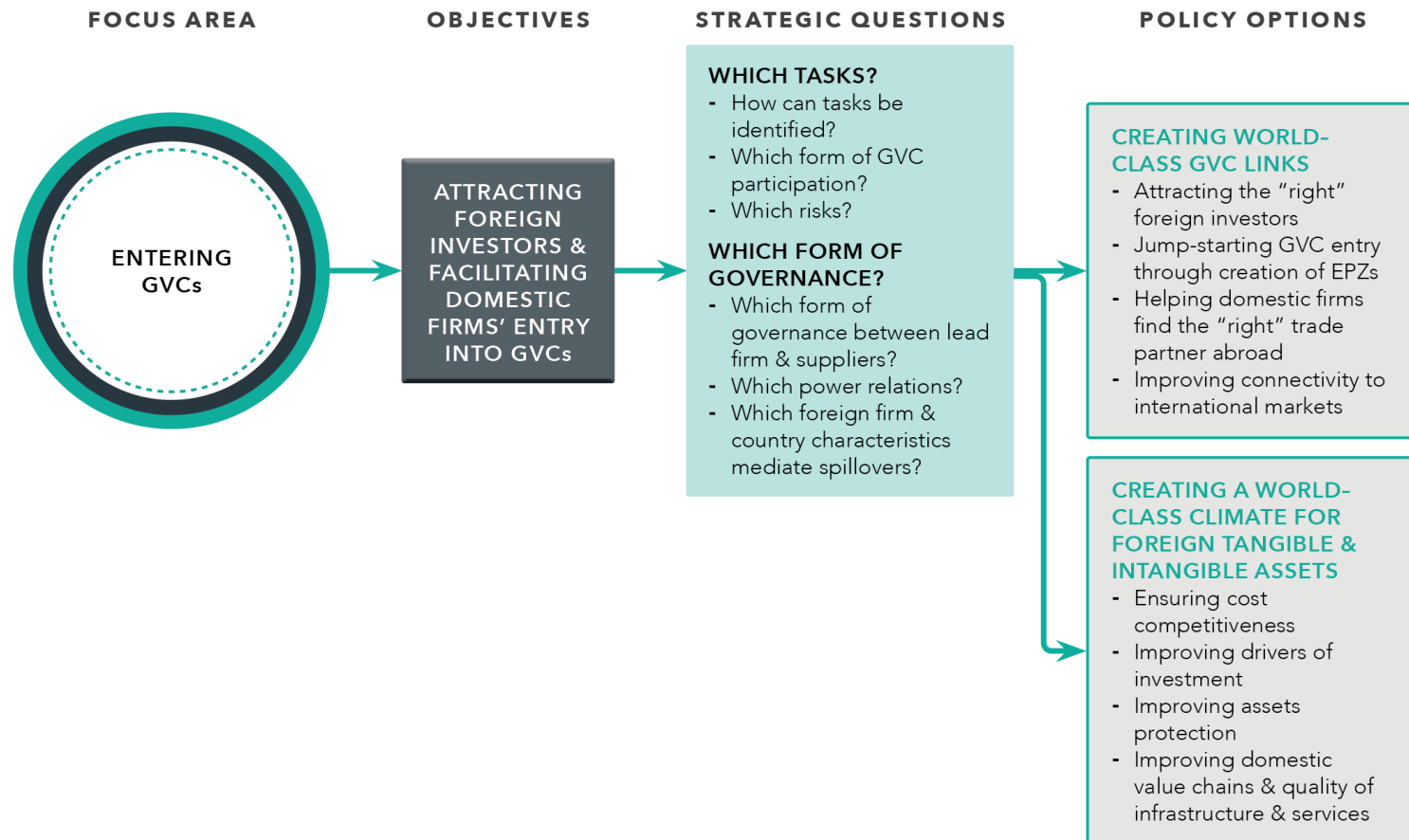
3. Relevant Policy Questions

- The WBG applies an **integrated strategic framework for policy interventions** to specific country contexts:
 - **Entering GVCs:** Which policies help (i) create world-class GVC links and (ii) a world-class climate for foreign tangible and intangible assets?
 - **Expanding and strengthening GVC participation:** Which policies help (i) strengthen existing GVC-local economy links and (ii) absorptive capacity of local actors?
 - **Turning GVC participation into sustainable development:** (i) Which policies help create a world-class workforce? (ii) How can climate-smart policies be implemented? (iii) Which policies help integrate SMEs and LICs (inclusive GVC development)?
- The strategic framework leaves room for **specific client country questions**, e.g.:
 - Which position in GVCs should Poland target to follow a more sustainable development path in the future which focuses less on price competitiveness?
 - How does Vietnam's firm structure affect its productivity and potential

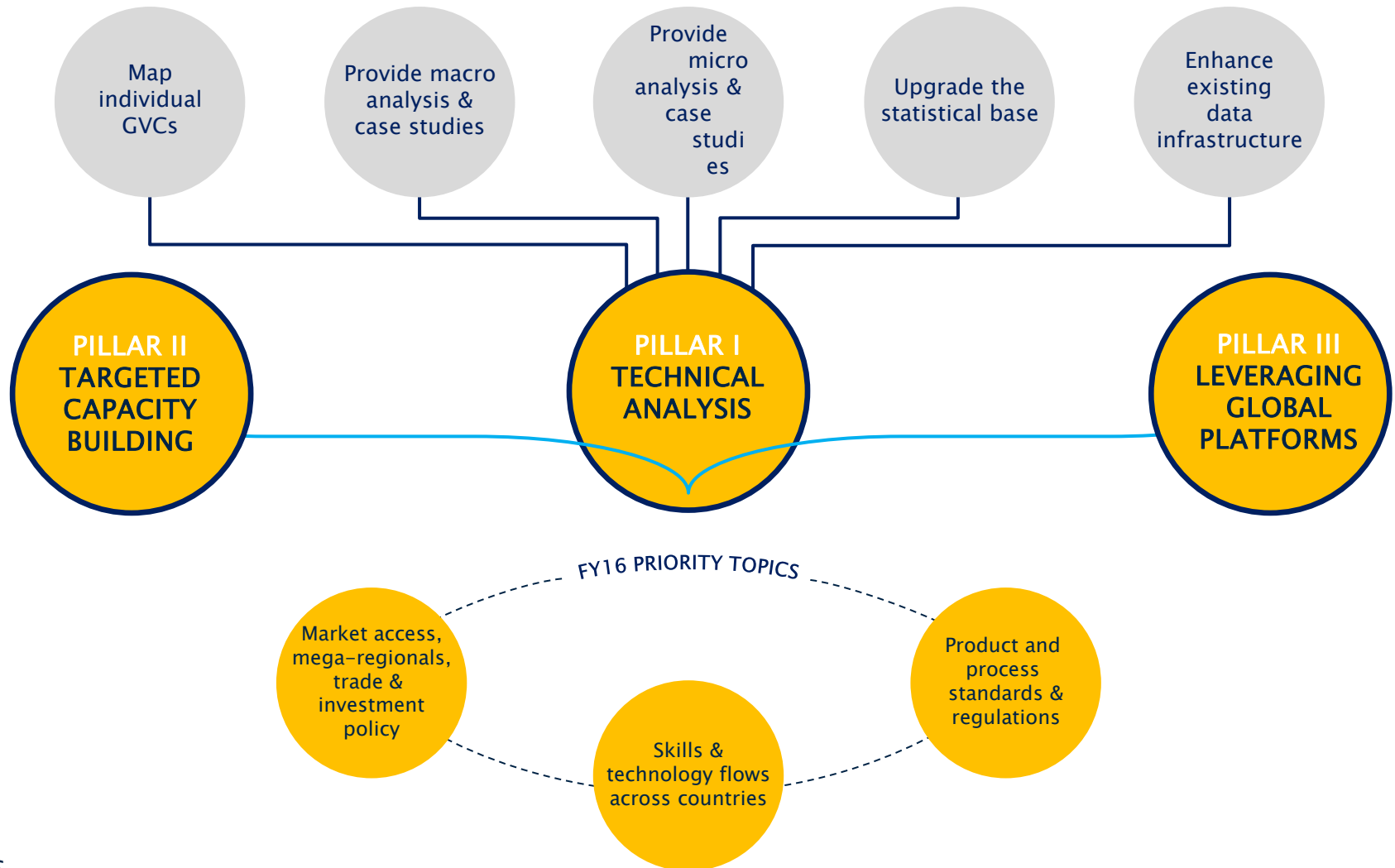
Design of a Strategic Framework for Policy Intervention



Entering GVCs



4. GVC Measurement for Sustainable Development



4. GVC Measurement for Sustainable Development

The WBG's GVC country assessments combine different perspectives and data:

- **Macro perspective: Network analysis** makes use of the complexity and heterogeneity of actors and trade links. Tree visualizations capture interaction patterns and structures in the network.
- **Micro perspective: Firms** are the main actors in GVCs who make strategic decisions and are heterogeneous in characteristics and performance. Analyzing GVCs at the firm-level thus can give additional insights on features, effects, and transmission channels in GVCs.
- **Gross trade perspective:** Gross trade data are available at a highly disaggregated product level. They can be combined with informed technical classifications (by final use, value chain category, clusters of activities) and with detailed input-output (I-O) tables.
- **Value added trade perspective:** Analyzing trade on the basis of value added more accurately accounts for a country's economic relevance (by avoiding double-counting). Value added trade data are based on international I-O tables which allow to differentiate between domestic

4. GVC Measurement for Sustainable Development

Data and measurement gaps addressed by the WBG:

- **Macro perspective:** publication of [global trade network visualization](#) and [Measuring Export Competitiveness](#) database
- **Micro perspective:** development of [GVC module](#) as part of the Enterprise Surveys
- **Gross trade perspective:** development of MC–GVC database
- **Value added trade perspective:** publication of [Export of Value Added Database](#)
- **Development perspective:**
 - impact of GVC integration on value added and the mediating role of policy (incl. standards)
 - impact of GVC integration on likelihood to reach higher income category
 - development of Labor Content of Exports Database (LACEX)
- **Policy perspective:** selection of [performance indicators](#) to identify policy priorities

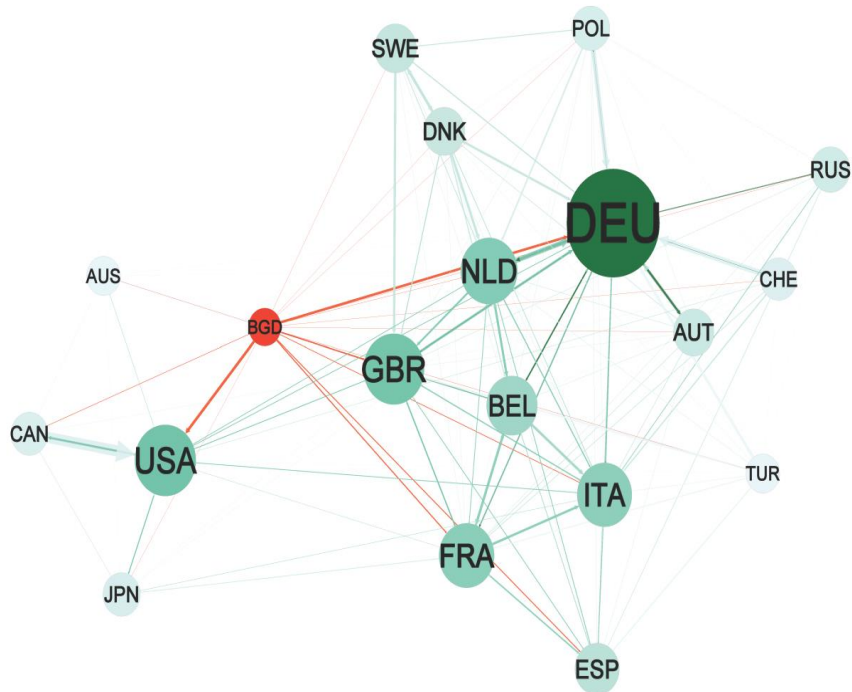
Additional data and measurement gaps:

- 18 Tracking and mapping GVCs across a wide range of industries
 - Computation of GVC measures for low-income countries and at the sub-

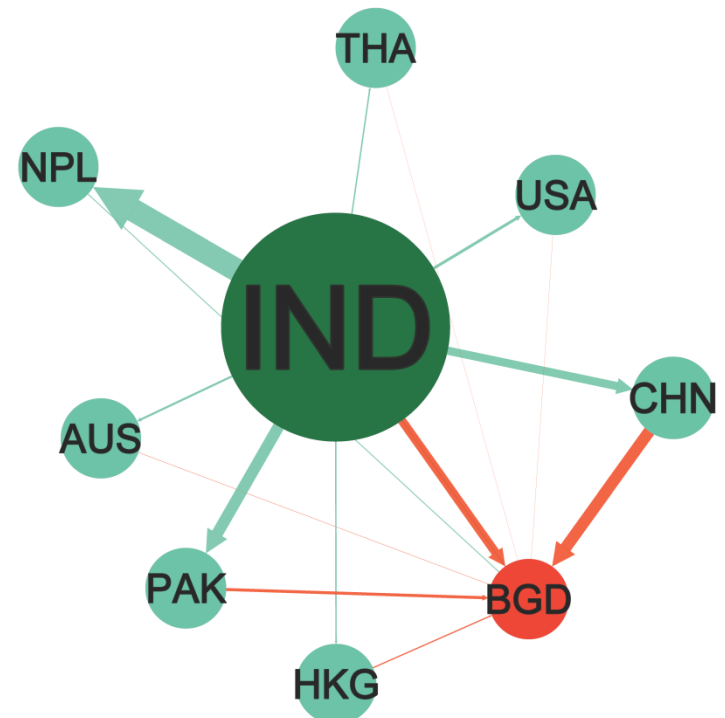
4. GVC Measurement for Sustainable Development

WBG's Country Application: Bangladesh Trade Network, 2013

Main buyers of BGD apparel (cotton) consumption products



Main suppliers of intermediates for BGD apparel (cotton) production



Source: BACI data from CEPII. Thickness of red arrows designates importance of main buyers/suppliers for Bangladesh.

World Bank Global Trade Network Visualization



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Trade Stats Tariffs

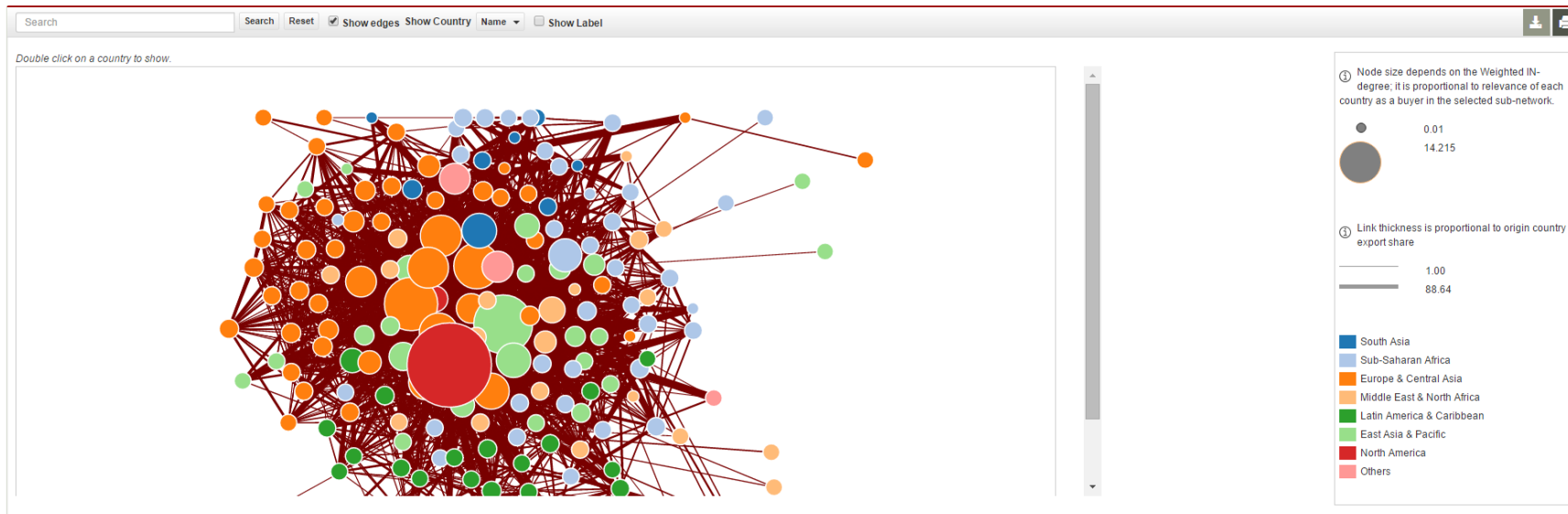
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Other Visualizations Help Custom Query

Bangladesh perspective Total - All-Groups, for Export and Buyer 2011

The following graph depicts the trade network for a selected HS product (or aggregate) from the perspective of a country i. Click on a specific node to highlight trade relations within country i sub-network. There are two possible viewpoints: Buyer and Seller. Buyer side shows the role of each country as source of demand in the selected sub-network; while Seller side shows the role of each country as supplier in the selected sub-network. For a given period (Year) the graph below reports the trade network from the perspective of a given country (Reporter) in the selected commodity (Product) identified using the preferred classification (Nomenclature). Underlying information may come from two sources: export declarations or mirror imports declarations (Trade Flows).

Nomenclature HS 1988/92	Reporter Bangladesh	Year 2011	Product Total - All-Groups	Trade Flow (Source) Export	Threshold 0.01	View Point Buyer
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World Bank Measuring Export Competitiveness Database

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Measuring Export Competitiveness (MEC)

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How to use the MEC Database

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- Adjusted Market Share by Technology and Skill
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The comparator countries are computed using a methodology developed...

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Adjusted Market Share by Technology and Skill

FEATURED 5 of 6

Adjusted Market Share by Technology and skill

Adjusted Market Share data are available broken down by skill and technology.

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Measuring Export Competitiveness

Measuring Export Competitiveness Brochure

Over the past 30 years international trade has become an engine of growth for much of the developing world. And with the global economy changing so rapidly, countries need to know where they stand on the global trade and production map—even more so with South-South trade creating new opportunities and challenges.

How to use the MEC Database

To understand what's behind the change in a country's global export market share, please start with the Visualize Export Growth tab and follow the market share decomposition throughout the site. [Learn more at the How to use the MEC Database section.](#)

Partner Focus

A World Bank project in collaboration with the Banque De France and the International Trade Centre. To learn more, please visit the [Partners](#) section.

World Bank Enterprise Surveys

IFC International Finance Corporation
THE WORLD BANK

ENTERPRISE SURVEYS

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Enterprise Surveys collect information about a country's business environment, how it is perceived by individual firms, how it changes over time, and about the various constraints to firm performance and growth. The full data sets are available to researchers and include all questions from the surveys at the firm level. Data appearing elsewhere on this website is a subset of the complete data available here.

Standardized Data:

Standardized data 2006-2014: Questionnaire Data	Standardized data 2002-2005: Questionnaire Data
Eastern Europe & Central Asia 2005: Questionnaire Data	Eastern Europe & Central Asia 2002: Questionnaire Data
Eastern Europe & Central Asia 2009: Questionnaire Data	Eastern Europe & Central Asia Panel Data 2002, 2005, 2009: Questionnaire Data
Eastern Europe & Central Asia 2013: Data	Enterprise Surveys Indicator Database: Data

Central America Plus Ecuador Panel Data
Questionnaire | Data

Database

- Data
 - Country Data (467)
 - Panel Data (84)
- Survey Documentation
 - Questionnaire (497)
 - Implementation Notes (213)

Year

- 2002 (54)

Query Options: [Reset]

- Download data, survey documentation, and surveys by using the menu to the left.
- To limit the results set to specific countries, regions, or income level, use the menu below.

Include all economies in this region:

<input type="checkbox"/> Eastern Europe & Central Asia	<input type="checkbox"/> Middle East & North Africa	<input type="checkbox"/> Latin America & Caribbean
<input type="checkbox"/> South Asia	<input type="checkbox"/> Sub-Saharan Africa	<input type="checkbox"/> East Asia & Pacific

World Bank Export of Value Added Database

- Domestic value added content of domestic output and exports for 118 countries across 27 sectors (3 primary, 14 mfg., 10 comm. services) for the period 1997 to 2011.

The screenshot shows the World Bank website's 'Data' section. The header includes the World Bank logo and the tagline 'Working for a World Free of Poverty'. The navigation bar lists 'Home', 'About', 'Data', 'Research', 'Learning', 'News', 'Projects & Operations', 'Publications', 'Countries', and 'Topics'. The 'Data' section is highlighted in red. Below it, there are tabs for 'By Country', 'By Topic', 'Indicators', 'Data Catalog', 'Microdata', 'Initiatives', 'What's New', 'Support', and 'Products'. The main content area is titled 'Export of Value Added Database' and includes a 'SHARE' button. The text describes the database's scope and provides a detailed explanation of value-added trade data. A 'Print' button is located at the bottom right of the main content area.

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This page in [English](#)

Export of Value Added Database

[SHARE](#)

The Export Value Added Database provides information on the domestic value-added content of domestic output and exports for 118 countries across 27 sectors of the economy, including 9 commercial services sectors, 3 primary sectors, and 14 manufacturing sectors, spanning intermittent years between 1997 and 2011.

Trade data is usually measured at transaction values, which are gross values, or value added plus domestic and foreign intermediate inputs. The measure of gross exports may undervalue (overvalue) the real contribution of a sector to trade if value added from this sector is embedded as inputs in other sectors' exports (or overvalue if exports embed other sector's value added inputs). This is particularly true for services (or manufacturing) exports. Measuring trade on a value-added basis, as achieved in the Export Value Added Database, overcomes this shortcoming. Thus this alternative measure to trade makes explicit the direct value-added contribution of a sector to domestic production as well as exports, as well as the linkages that the sector provides to all other sectors of the economy in terms of value added. This includes both forward linkages-the contribution of a particular sector as an input to others sectors' exports-and backward linkages- the contribution of all other sectors to a particular sector's exports.

Print

Not available in the API

[Export Value Added Database \(.zip\)](#)

[Export Value Added Database \(.csv\)](#)

Related Links

[EVAD Documentation - zip](#)

[EVAD Documentation - docx](#)

Policy Options and Select Performance Indicators by Focus Area, Overview

Focus area	Policy options	Select performance indicators
Entering GVCs	- Increasing connectivity to international markets	- LPI (international)—overall; efficiency of customs (WDI)
	- Ensuring cost competitiveness	- Unit labor costs
	- Improving drivers of investment	- Ease of doing business index—overall (WDI)
	- Improving assets protection	- Ease of doing business index—protecting investors (WDI)
	- Improving domestic value chains and quality of infrastructure and services	- LPI (domestic)—quality of infrastructure, quality and competence of services (WDI)
Expanding and strengthening GVC participation	- Fostering innovation and building capacity	- R&D intensity
	- Improving standards	- Surveys / field assessments in country
Turning GVC participation into sustainable development	- Developing skills	- Education statistics
	- Promoting social upgrading	- Wage statistics; employment statistics

Source: Taglioni and Winkler (2016).

Thank you!