Agenda

• Center Background, Activities & Analytic Framework
• North Carolina in the Global Economy website
Duke Global Summit

GOVERNANCE AND DEVELOPMENT IN A VALUE CHAIN WORLD

WEDNESDAY, OCTOBER 29 THROUGH SATURDAY, NOVEMBER 1, 2014

DURHAM, NC

Source: https://dukegvcsummit.org/
Recent Clients

World Health Organization
Surdna Foundation
USAID
CORFO
OECD
EDF
RTI International
Robert Wood Johnson Foundation
The World Bank
Inter-American Development Bank
World Economic Forum
What is a value chain?

“A value chain describes the full range of activities that firms and workers carry out to bring a product from its conception to its end use and beyond”
737 Classic at start of production
10% outsourced

747 series at start of production
20% outsourced

787 Dreamliner at start of production
80% outsourced

SOURCE: International Association of Machinists and Aerospace Workers; Boeing; Reuters; McKinsey Global Institute
Global Value Chains

• Global perspective, not just U.S.-centric
• Organization of entire industries: raw materials to production to final sale & beyond
• Linkages across firms and countries – coordination and integration
• Upgrading opportunities
• Power in the chain (drivers)
Industrial Upgrading*

- **Products**: Moving to higher value niches in GVCs (goods & services)
- **Industries**: Moving from labor-intensive to capital intensive to knowledge & technology intensive industries
- **Roles**: Assembly – OEM – OBM – ODM
- **Capabilities**: Production to Design to Commercialization to Innovation

* Also relevant to “downgrading”/ “base of the pyramid” analyses
Major components of the framework

FOUR dimensions:

1) Input-output structure: raw materials $\rightarrow$ inputs $\rightarrow$ final product
2) Geographic scope: local to global
3) Analysis of lead firms and governance
4) Institutional framework: rules, forums of exchange, and key organizations
Input-Output Structure

Source: Gereffi, Brun & Guinn, 2013
Geographic Scope

Source: Gereffi, Brun & Guinn, 2013
Governance Structure

Prime
- Prime Contractor (project management; IRB management)

Tier 1
- Platform system integrators (propulsion & auxiliary systems)
- Mission systems integrators (command, surveillance & armament systems, outfit & furnishings)
- Shipbuilder (hull, outfit & furnishings)

Tier 2
- Sub-system manufacturers (HVAC, Sensors, Communications, Winches...)
- Suppliers to Tier 1

Tier 3
- Sub-system components
- Suppliers to Tier 2

Tier 4
- Raw materials and subcomponents for sub-systems
- Suppliers to Tier 3

Source: Gereffi, Brun & Guinn, 2013
Data Layers: workforce

- R&D
- Inputs
- Cultivation
- Packing & Cold Storage
- Processing

Skill Levels:
- Low
- Low-Medium
- Medium
- Medium-High
- High

Job Profiles:
- Agronomist
- Extension Agent
- Irrigation Technician
- Soil Erosion Control Technician
- Nursery & seed multiplication staff
- Producer
- Cold Unit Manager
- Operator/Technician
- Packer
- Business/Operation Manager
- Collector/Aggregator
- Warehouse Manager
- Quality Control Technician
- Mechanic/Machine Operator
- Line Worker

Color Codes:
- Red: New Jobs
- Gray: Existing Jobs

- Low: No formal education or experience
- Low-Medium: Literacy and numeracy skills, experience
- Medium: Technical education/certification
- Medium-High: Technical education/undergraduate degree
- High: University degree and higher
Key take-aways

• Value chain analysis is a **tool** to help:
  • Identify *companies* in each segment and phase of a project
  • Identify needed *skills*
  • Understand how *policies* affect the conduct and performance of an industry and close gaps
  • Identify key *stakeholders*
North Carolina in the Global Economy (NCGE)

Seven key industries in North Carolina:

• Tobacco
• Hog farming
• Textiles & apparel
• Furniture
• Information technology
• Biotechnology
• Banks & finance

http://www.ncglobaleconomy.com/index.shtml
North Carolina in the Global Economy (NCGE)

Sections of the website for each industry include:

- Industry overview
- Introduction to the value chain
- Important NC companies/employers
- Labor market, trade & policy analysis
- Tables, charts and maps
- Key resources
Geographic Analysis at Three Levels
NC, U.S. & Top States

- Data can all be viewed at three levels:
  - NC, U.S. & U.S. (Top) States
  - Graphics & Text Analysis
- Applies to data on establishments, employment, wages, exports & imports
Data Formats: Three Types
Tables, Charts & Maps

- Data can be viewed in three formats: table, chart or map
- Similar numbering convention makes it easy to find comparable information across formats
  - North Carolina tables/charts/maps all end in “a”
  - U.S. tables/charts/maps all end in “b”
  - Top U.S. states/all states tables/charts/maps all end in “c”
Interactive Visuals
Example: NC County Maps

Current: NC Textile Establishments by County

New: NC Textile, Textile Product & Apparel Establishments by County

• Previous maps only showed two years of data, for one variable without showing data for each county

• County-level maps allow you to view data for each county for all years (1992-2012) across multiple variables
U.S. Level Data

- Data is now available for the United States and other U.S. states using the same industry definitions for North Carolina
- Data is designed to easily show trends in default visual, but is also interactive
- Applies to labor market and trade data sections
NC in the U.S. Economy

Section: Workers & Wages

Users can easily see NC’s contribution to the U.S. economy and how the NC industry compares to other U.S. states.
Other Updates

• Corporations section updated for all industries
  • Overview
  • Brands & Market Segments
  • Strategy & Competitiveness
  • Geographic Footprint

• Value Chain
  • 2012 data & updated employer footprints

• Policy
  • Key issues at state, national & international levels

• Resources
  • Industry Associations, Education & Training, Government Resources, Web-Based Resources and Books, Reports & Articles

• Overview
  • Links to key sections
  • History & updated trends

• Inter-Industry Trends
  • Updated employment analysis across industries (1992, 2002, 2012)
Thank you for your attention!