

Structural Transformation in Central Asia

**“It is not the strongest of the species
that survives....
It is the one most adaptable to change”
Charles Darwin**

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Objectives of the Session

- To Understand why Structural Transformation matters and is key to Central Asia's development
- To share with you recent developments on Structural Transformation (latest methodologies)
- To think about how to devise a realistic program of Structural Transformation for your countries and use it for policy advice

Key Questions

- What is Central Asia's growth model?
- What are Central Asia's main growth constraints?
- What is structural transformation?
- Where do you want to be 25 years from today?
- Where is your labor force going to be employed?

Structure of the Session

Introduction

Key concepts

Data Issues

Network Theory and the Product Space

S.T. in the CAREC Countries

Industrial Policy

Way forward

Some Growth Theories

Neoclassical

- Growth is a function of changes (and accumulation) in factors of production and technology

Structural Change

- movement from rural to urban sector
- shift resources from agriculture into industry and services
- “discovery” of new products

Endogenous Growth Models

Why endogenous growth models?

→ In Solow's growth model there is no role for savings and investment in steady state growth

Romer → variety of intermediate goods

Aghion & Howitt → creative destruction (Schumpeter)

Grossman & Helpman → variety of consumption goods

→ Assume a continuum of products

→ There is always a slightly more advanced product that countries can produce as they upgrade their technology

The particular products that a country produces carry no consequence for future growth....

Traditional Trade Theory

- Ricardian model → technology differences



clothing



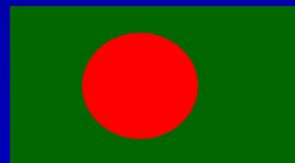
wine

- Heckscher-Ohlin model → factor endowments

Transition between products is merely a passive consequence of changing factor endowments

→ **Policy implication: Free trade**

→ Predicting the broad trade pattern: Leamer (1984)



hats



bed sheets

→ Growth is a process of specialization in the products in which a country has comparative advantage

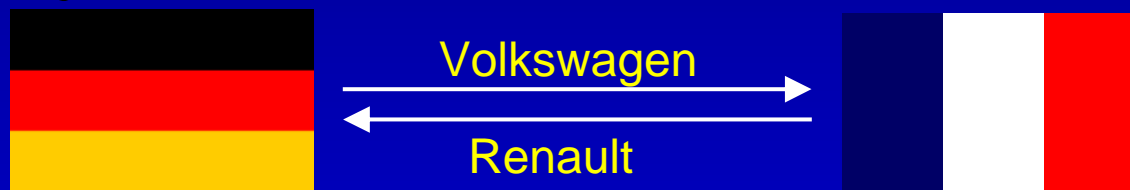
→ Two premises: 1) **TOT adjustment**: 2) **Full employment**

→ **Products have no major significance**

Reactions to the Problems of Traditional Theory

- The basic predictions are supposed to hold over the long-run
e.g. PPP in the long-run (75 years!) Rogoff (1996)
- Relaxing the central assumptions of traditional trade theory:
 - identical preferences
 - no scale economies
 - perfect competition
 - no externalities

→ Intra-industry trade



→ **Policy implication: Strategic Trade Policy.....**

2008 Nobel prize winner, P. Krugman

Growth and Structural Change: The two sides of a coin

Growth

is not just more of the same:

“A growth miracle sustained for a period of decades...must involve the **continual introduction of new goods**, not merely continual learning on a fixed set of goods” (Robert Lucas)



Structural change

is about the transformation of the economy by:

- **Transferring resources to higher productivity activities**
- **Diversifying** production
- **Upgrading exports & production**
- **“Discovery” of new products**

Stylized facts about development

- Economic development requires diversification, not specialization
- Rapidly growing countries are those with large manufacturing sectors
- Growth accelerations are associated with structural change in the direction of manufacturing
- Specialization patterns are not pinned down by factor endowments
- Countries that export more “sophisticated” goods, given their level of income, grow faster

Why Exports?

The way countries succeed in development is often by finding a big hit in export markets

What will be the big hit is impossible to foresee

Two key policy areas on Exports: Diversification and Sophistication

1. A country's existing export basket reflects the capabilities that could be redeployed to the production of other commodities
2. Developed countries are able to **diversify** into a wider range of products given their existing set of capabilities.
3. There is evidence that the current **sophistication** of a country's export basket is a good predictor of future growth

Thank you

Neoclassical Growth Theory

