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# The Economics of Trade in Services

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# Economics of Trade in Services: *Topics*

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  - Contrasting goods and services
  - Defining the characteristics of services
  - Major services sectors
  - How services are traded
  - Key facts about services in an economy
- Part II
  - Gains from trade in services
- Part III
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# Contrasting goods and services

- Services not necessarily traded across borders (importance of factor mobility and movement of consumers/suppliers)
- Services are highly regulated (less easy to liberalize via traditional trade negotiations)
- Services are often very heterogeneous even within narrow product categories
- Measurement, statistical and data challenges

# Defining the characteristics of services

In contrast to goods:

- *Intangibility* (e.g. distribution, education)
- *Invisibility* (e.g. communication)
- *Non-storable* (e.g. health-related services)
- *Simultaneous production and consumption* (e.g. surgery, haircutting)
- *Physical proximity* (e.g. construction, tourism)
- *Heterogeneity in products at very fine levels of disaggregation* (individual service transactions are often customized)
- *Significant data challenges* (arising from several of the above factors plus the fact that many services are embodied in goods production and counted as output in goods)

**BUT** a number of exceptions to some of these (e.g. carrier mediums) and evolving technological factors (e.g. facilitating remoteness)

# Major services sectors

- Business services
- Communication services
- Construction services
- Distribution services
- Educational services
- Environmental services
- Financial services
- Health-related and social services
- Tourism and travel
- Recreational, cultural and sporting services
- Transport services
- Other

# How services are traded

Movement often required (or preferred) of products, factors, suppliers/consumers. Four modes of supply:

- *Cross-border*
- *Consumption abroad*
- *Commercial presence*
- *Presence of natural persons*



# Key facts about services in an economy

- Certain services are a key input into virtually all economic activity (financial, telecoms, business, transport, construction, energy)
- There is a growing share of services in production, trade, investment and employment in most countries.

## Contributory factors:

- Technological advances
- Liberalization and regulatory reform



## Part II

# The gains from trade in services

- Why Trade?
  - Benefits from specialization (traditional comparative advantage)
  - Imperfect competition, economies of scale, intra-industry trade
  - Heterogeneous firm trade theory
  - Trade in tasks
  - Distributional issues
  - Non-economic objectives



# Comparative advantage

- Relative production costs, absolute and comparative advantage (Ricardian productivity differentials and Heckscher-Ohlin relative factor abundance)
- Sources of the gains from trade – differences in:
  - Natural resources
  - Factor endowments
  - Technology
  - Government policy
  - Institutions etc.
- Permanent versus temporary sources of comparative advantage

# Imperfect competition (new trade theory)

- ‘New’ trade theory
  - Horizontal differentiation
  - Economies of scale
    - Internal economies of scale
    - External economies of scale (agglomeration)
  - Gains from increased variety
  - Intra-industry trade explained (but ‘representative firm’)

# Heterogeneous firm trade theory

- Firms are heterogeneous (different cost structures)
- Exporting is costly (fixed costs of entry – beach-head costs)
- Only few firms are exporting (3% of total US firms in 2000, top 10% accounted for 96% of total US exports in 2000)
- Exporters are bigger than non-exporters in the same industry (91 % by employment, 105% for shipments)
- Exporters are more productive (14% v-a by worker, 3% for TFP)
- Exporters have higher wage bills (98%)
- Exporters are more capital- and skill- intensive than non-exporters (20% and 8% respectively)

# Heterogeneous firm trade theory (continued)

Why are exporting firms more productive?

- Self-Selection or learning by exporting
  - High productivity → Exporting?
  - Exporting → High Productivity?
- What's the evidence?
  - Most studies indicate that high productivity precedes exporting – i.e., the most productive firms “self-select” into export markets, suggesting that liberalization can contribute to productivity in two ways



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# Heterogeneous firm trade theory (continued)

## Policy Implications

- Trade liberalization raises industry productivity through the contraction and exit of low-productivity firms and the entry into export markets of high-productivity firms (ruled out previously by ‘representative firm’ assumption)
- Trade will lead to greater firm concentration – where does this leave SMEs?
- Implications for adjustment (firms, not sectors)
- Political economy: support/opposition sensitive to firm size and whether liberalization is reciprocal

# Trade in tasks

- Thinking about production and exchange of complete goods dominates international trade theory
- But revolutionary progress in communication and information technologies has enabled an historic break-up of the production process
- Countries participate in global supply chains in which the many tasks required to manufacture complex industrial goods and services are performed in several, disparate locations
- To understand the implications of this trend, a new paradigm is needed that emphasizes trade in specific tasks, i.e. offshoring

# Trade in tasks (cont.)

Hard evidence on the extent of task trade is difficult to come by for several reasons:

- Part of task trade occurs between affiliates of multinational firms
- Task trade does not necessarily involve the movement of physical goods across international boundaries
- Trading tasks inherently concern the disintegration of the production process and the adding of value at disparate locations but trade data are collected and reported as gross flows

# Trade in tasks (cont.)

BUT

- The share of imported inputs in both total inputs and gross output has increased in the last 35 years
- Related party trade as a share of US imports has increased over the last 15 years
- Total imports of business, professional and technical services have increased in the last decade
- The share of routine tasks in the US economy has decreased compared to the sixties while that of non-routine tasks has increased



# Trade in tasks (cont.)

## IMPLICATIONS

- The changes in trade costs do not line up with sectors as much as before
- Decline in trade costs depends upon the nature of the “task”, not the factor intensity of the good, or the sector
- Tasks that can be done remotely become trade-able, so employment disappears if true productivity gap is less than wage gap
- Key distinction is between services that can be delivered electronically over long distances with little or no degradation of quality, and those that cannot
- History of globalization’s winners and losers is less relevant to future globalization

# Trade in tasks (cont.)

## DEEPER IMPLICATIONS

- **Old paradigm: trade in goods, firms/sectors/skill groups are the proper level of analysis**
- **New paradigm: Competition at the level of tasks not firms or sectors**
  - **Winners and losers according to tasks**
  - **Firms/sectors/skill groups not fine enough disaggregation**
  - **Globalization happens with a finer level of resolution**
- **Policy making:**
  - **Unpredictability: the winners and losers from globalization are much harder to predict**
  - **Not just IT costs, organization issues matter**
  - **Suddenness**
  - **Individuality**
  - **Policies for sectors/firms/regions, not individuals**

# How different is trade in goods and services?

Much is similar in the economics of gains from trade as between services and goods, but some differences:

- In the case of services, all modes are relevant (e.g. call centres, tourists, barbers, nurses)
- Alternative modes mean consumer and labour movement as well as investment are important
- Services as intermediates – efficiency implications of import policy in both domestic and export markets

# Trade policy and services

- If trade in all modes is unconstrained, firms can choose the optimal mode or combination of modes in which to trade
- Some kinds of trade require particular modes (e.g. tourism, construction, fast-food outlets)
- Modes may be complements or substitutes in trade
- Implications of differential degrees of market access under alternative modes of supply (affects benefits of agreements to different countries)

# Modes of supply as substitutes

- Substitutability determined by:
  - Technology
  - Consumer preferences
  - Regulation
- If modes are perfect substitutes, gains from trade are realizable if only one mode is open
- Where modes are imperfect substitutes, efficiency and trade opportunities may be compromised (e.g. Insurance mode 1 or 3, medical treatment mode 2 or 4)

# Modes of supply as complements



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- Some services may be supplied as an ‘integrated’ package involving more than one mode (e.g. construction services and construction workers, or intra-firm trade)
- Some services may also be vital complements of goods trade (e.g. transport, insurance, distribution, training)
- In both of these cases, policy-induced distinctions on access rights among modes can have significant effects on trade opportunities.



## Part III

# Trade policy instruments in services

- While goods are typically affected by tariffs and non-tariff measures (NTMs), services are affected largely by the latter (hardly any tariffs exist on cross-border flows of services)
- Services are regulation-intensive (i.e. NTMs are of the essence and prolific)
- Moreover, instruments may act on any of the four modes
- Services negotiations are complex because of modal distinctions, sectoral heterogeneity, and the multiplicity of relevant policy instruments



# Trade policy instruments in services (cont)

- Tariffs are not a significant trade policy instrument for services, but it may be useful to consider the economics of tariffs in order to think about other instruments in terms of quasi-equivalence
- Redistributive effects of a tariff, towards producers and the government (revenue) and away from consumers
  - Deadweight static efficiency losses in production and choice in consumption
  - But arguments for tariffs:
    - Revenue
    - Dynamic externalities in production
    - Income distribution and foreign exchange (unconvincing)





# Trade policy instruments in services (cont)

- Main policy instruments affecting trade in services:
  - Discriminatory regulations
  - Licensing and certification requirements
  - Quotas
  - Subsidies
- What scope for measure substitution – efficiency of fiscal instruments versus quantity-based instruments (direct and indirect taxes)

# Trade policy instruments in services (cont)

## Measurement challenges

- As with data on services trade flows, there are huge difficulties involved in measuring the impact of policy interventions
  - Challenges and pitfalls in measuring price equivalence (wedges)
  - Establishing incidence in an environment of multiple policy interventions
  - Limitations of frequency counts and challenges facing restrictiveness indices
- Public policy and protection – where they intersect and overlap
- Remember effective versus nominal protection

# Trade policy instruments in services (cont)

## **Discriminatory regulations**

- Measures with protection effect and maybe intent, of no direct benefit to consumers, possibly deadweight losses (e.g. administrative delays and/or opacity affecting foreign supply or suppliers of services, country-specific standards, preferred procurement)

# Trade policy instruments in services (cont)

## **Licensing and certification requirements**

- These measures are most pervasive in professional services (e.g. doctors, lawyers, accountants)
- They are public policy measures aimed in part at protecting consumers and filling information gaps
- But they can easily have protectionist intent as well
- The potential role of mutual recognition



# Trade policy instruments in services (cont)

## Quotas

- These are widely used in services and example can be found in all modes of supplies (broadcasting restrictions, access to foreign education, limited number of banks, ceiling on foreign natural persons)
- These tend to be protectionist in intent and far easier to use than price-based measures (non-equivalence propositions), but they may also have public policy objectives (e.g. prudential considerations relating to number of banks)

# Trade policy instruments in services (cont)

## **Subsidies**

- As with the discussion on price versus quantity-based measures, so there is an efficiency argument for subsidizing instead of taxing (avoid consumption distortion)
- But subsidies still need to be financed
- They may or may not be discriminatory
- Lack of empirical evidence but subsidies not uncommon in services