The Information Technology Agreement: Increasing Role of Developing Countries

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WTO Symposium on the 15th Anniversary of the ITA
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• Commission provides information and analysis to the President, the Office of the United States Trade Representative (USTR), and Congress to facilitate U.S. trade policy.

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Global Trade in ITA products over $4 trillion, three-fold increase since inception.

The ITA began in July 1997 with 29 WTO member countries. Presently 74 members, covers over 97% of world trade in information technology products.

Developing countries playing increasing role in membership and trade.

ITA expansion facilitate further growth in trade and diffusion of technology products.
Tariff Elimination

- Tariff elimination on MFN basis; benefits all WTO members
- Significantly lowering costs of trade and ITA products, particularly for developing countries

<table>
<thead>
<tr>
<th>ITA Members</th>
<th>Bound tariffs</th>
<th>Applied tariffs</th>
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<tbody>
<tr>
<td></td>
<td>Pre-ITA</td>
<td>Final ITA</td>
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<tr>
<td>Developed countries (average)</td>
<td>4.9%</td>
<td>0%</td>
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<tr>
<td>Major Developing Countries</td>
<td>6.5% - 66.4%</td>
<td>0%</td>
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Growth in ITA Trade

• Total ITA trade increased nearly $3 trillion; from $1.2 trillion (1996) to $4.0 trillion (2008) (Anderson & Mohs)

• Growth in ITA was uneven but outpaced general manufactures trade

• Annual growth rate was over 10% despite brief decline in 2001-02 (post-internet bubble) and severe decline during current global economic downturn

• Exports by developing countries increasing rapidly, accounted for 33% of ITA exports in 2008
Growth in ITA Trade

Robust Growth in ITA Trade

Total Trade and ITA Trade 1996-2010

Source: Compiled by USITC staff from UN Comtrade database.

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Expanding ITA Membership

- Participants increased from 29 to 74 countries

- Increasing developing country participation
  - Two members (1996) to 31 (2008)
  - Developing nations now 42% of membership

- Increasing economic and trade diversification of new members
Expanding ITA Membership

ITA members grew from 29 to 74 countries
Expanding ITA Membership

ITA developing members grew from 7% to over 40%
Expanding ITA Membership

Diversifying member economic and trade profiles

Profiles of ITA members, by income and trade levels

Total ITA trade represented by sphere size.
Computers and semiconductors lead ITA products; over 60% of total ITA trade

The internet boom of 1990’s and declining prices spurred increasing demand and trade for many ITA products, namely computers and semiconductors (Aizcorbe, Flamm and Khurshid)

Expanding global production networks fueled proliferation of intermediate goods and parts trade (Athukorala 2008)

Majority of world trade is in intermediate goods and services (Miroudot et al, 2009)
Growth in ITA Trade

Rising role of Developing Countries and diversification of ITA membership

Developing and Developed (High Income) Country ITA Exports 1996-2008

($Billions)
# ITA Products

## Computers
- Main frames
- PCs, laptops
- Peripherals (keyboards, scanners, monitors)

## Software
- Unrecorded media (discs, memory)
- Pre-recorded software

## Telecomm Equipment
- Cell phones, corded phones, answering machines
- Routers, hubs, switches

## Office Machines
- Calculators
- ATMs
- Certain photocopiers
- Postal machines

## Semiconductors
- Microprocessors
- Integrated circuits
- Memory chips (sram, dram, etc.)

## SME
- Lithography, dry-etching machinery
- Vapor deposition, dryers, sawing/cutting machines

## Scientific/Measuring Devices
- Chromatographs, spectrometers, flow meters
- Capacitors, resistors, certain electronic connectors

## Other
- Indicator panels
- Silicon wafers
- Electronic parts
- Translation devices
Computers and Semiconductors lead ITA trade
Computers and Semiconductors lead ITA trade
ITAL Trade by Product Segment

- Diversification in global trade and production patterns evident in computers, telecommunications, and semiconductor exports
- Developing members, particularly Asia, beneficiaries of ITA and global production networks
- ITA tariff liberalization fostered opportunities for production niches
ITA Global Value Chains

Developing Countries increasing participation - Network Equipment

- Network equipment) – backbone of information superhighway and broadband deployment

- ITA-member developing countries are benefiting; share of network equipment global exports (HS 851762) has doubled (8% to 18%) since 2007
ITA Global Value Chains

Developing Countries increasing participation - computer storage
ITA Global Value Chains

Developing Countries increasing participation – Hard Drives

Exports: Computer Storage Devices (HS 847170), 2011

- China
- Thailand
- Malaysia
- Philippines

Joined ITA

$millions

Developing Countries accounted for over 50% of 2011 exports.

Exports: Computer Storage Devices (HS 847170), 2011

- China: 26%
- Thailand: 17%
- Hong Kong: 16%
- USA: 10%
- Malaysia: 9%
- Singapore: 6%
- ROW: 16%
Conclusion

• ITA tariff liberalization was a catalyst for rapidly rising and resilient trade in ICT products.
• Increasing diversification of ITA members, rising participation by developing countries.
• Developing countries increasing share of ITA trade, particularly in Asia.
• ITA facilitated global production networks, including for developing countries.
• ITA expansion further increase diffusion of technology and production opportunities.