











## **Global Services Forum**

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#### **Session E**

presentation by

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## Trade, technology and Mode 5 services:

what is at stake for developing countries?

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## Background and rationale

- Technology and growing importance of services
- Services trade: GATS and mode 5
- The economic impact of a multilateral initiative on mode 5: CGE estimates
- Thinking ahead

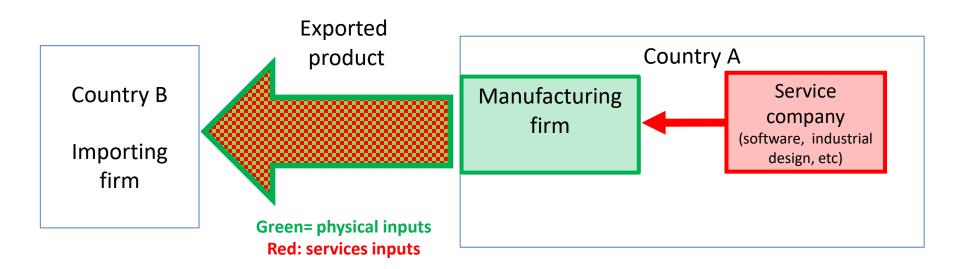
# Services trade negotiations: what's your mode today?

- Services trade negotiations are fundamentally shaped by modes of supply defined in the WTO GATS agreement
- Standard GATS modes: mode 1 (online delivery), mode 2 (health tourism), mode 3 (local office), mode 4 (foreign service provider temporarily comes to you)
- Somewhat surprisingly, the trade negotiators do not possess a crucial metric that would allow them to successfully assess the importance of each mode of supply and services sector
  - There is a critical lack of services trade statistics by modes of supply

## What is Mode 5?

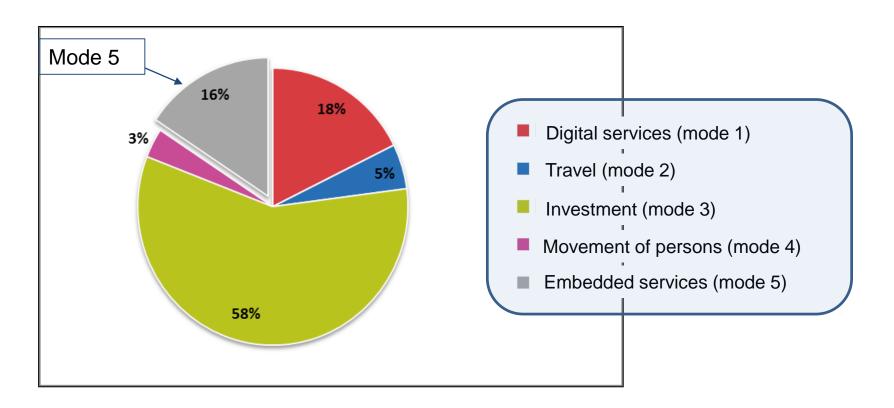
### **Basic definition:**

Mode 5 = services exported as part of a good



Mode 5 = "Services in a box"

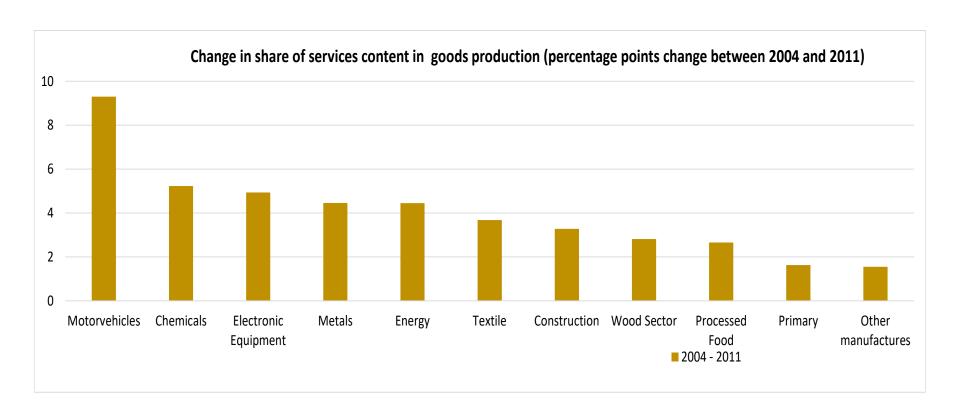
# Services: Key drivers of EU competitiveness The €2.5 trillion export success story



Mode 5 services however represents in many cases over 30% of the value of the manufactured product containing them

1 in 4 jobs (8 million jobs) supported by EU total exports are mode 5 jobs

# The growing importance of mode 5



# Industry 4.0, IoT, precision agriculture: Some mode 5 services examples

#### "The internet of farms" and "connected bananas"

- Kenyan farms: water tank sensors, soil moisture sensors and infrared light sensors lead to higher yields, lower farming costs, lower water consumption
- Colombian farmers use IoT technologies for:
  - harvesting projection
  - optimized water usage
  - plagues and disease prevention
  - traceability and SPS compliance



#### From mining to "data mining"

Traditional mining equipment may require:

- 900 hours of downtime and \$650,000 in repairs
- With sensors and IoT technology this becomes less than 24 hours and only \$12,000.



## And a few more examples...

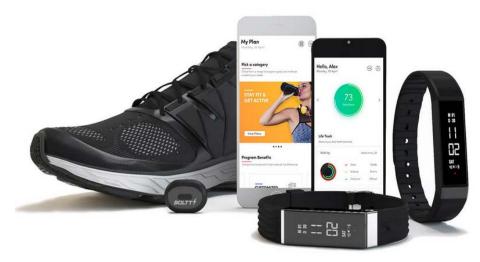
### "Wake-up like an Egyptian"

A Cairo-based technology firm developed an IoT solution that can be integrated in day-to-day gadgets like fridges, TVs, coffee machines and remote controlled from your phone



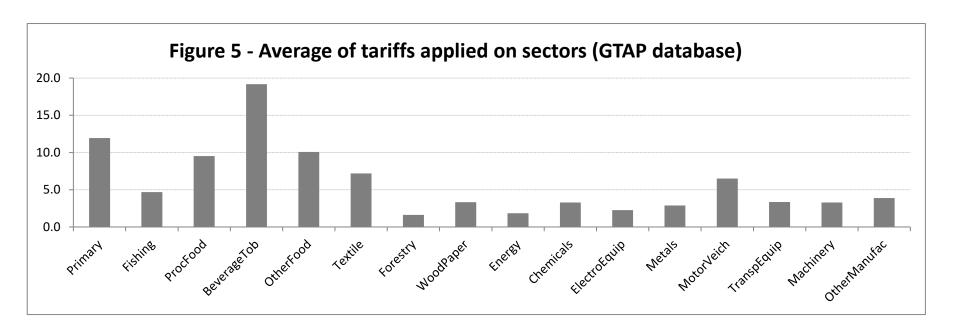
### "Boltt Indian idea"

Boltt is an Indian start-up builds connected shoes, connected bands with AI software for sleep, fitness, nutrition and activity tracking.



### Mode 5 services:

what tariffs do we charge on technological progres?



# A Mode 5 initiative: liberalization scenarios

#### Scenario 1

2022-2025:
Cuts on
tariffs (linked
to service's
content
shares by
country) and
trade
facilitation
for services

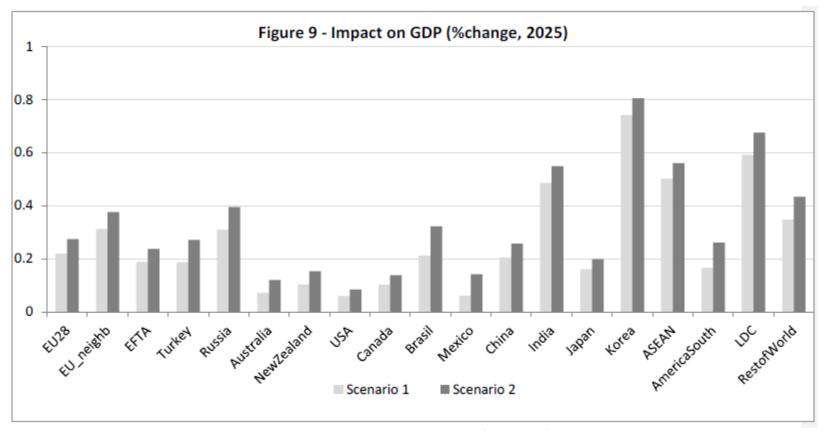
#### Scenario 2

**Scenario 1**+ capital
productivity

Scenario 1: we define the size of the tariff cuts on goods based on the service's input share in goods production, in line with GTAP database

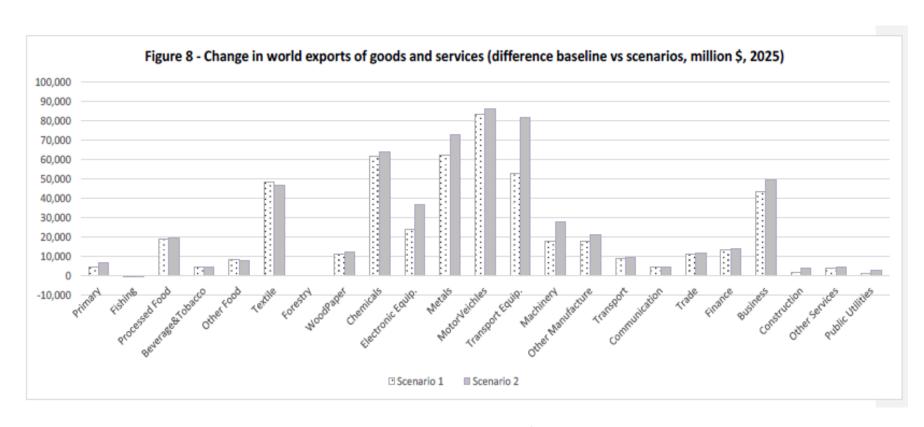
Scenario 2: tries to capture the growing role of technology & productivity gains expected from *servicification* 

## Mode 5 initiative: GDP impact



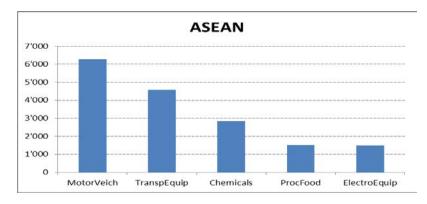
- World GDP would increase between \$240-\$300 bn per year
- Several developing countries expected to gain considerably

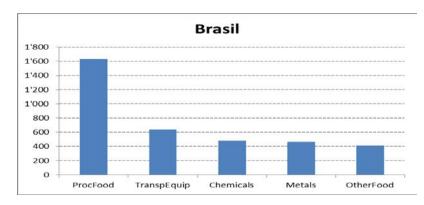
## Mode 5 initiative: trade results

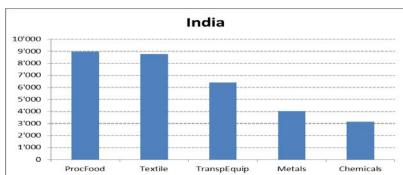


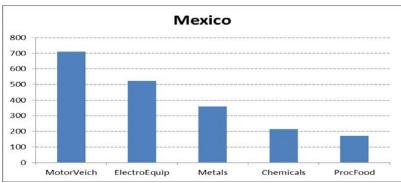
World exports would increase by over \$500 bn per year

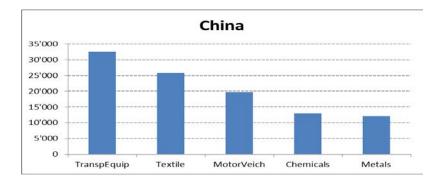
### Mode 5 and development gains: Top 5 sectors with largest increase in export

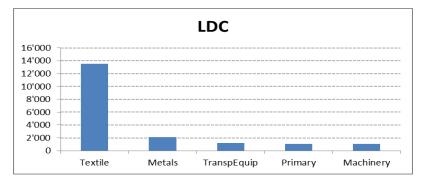








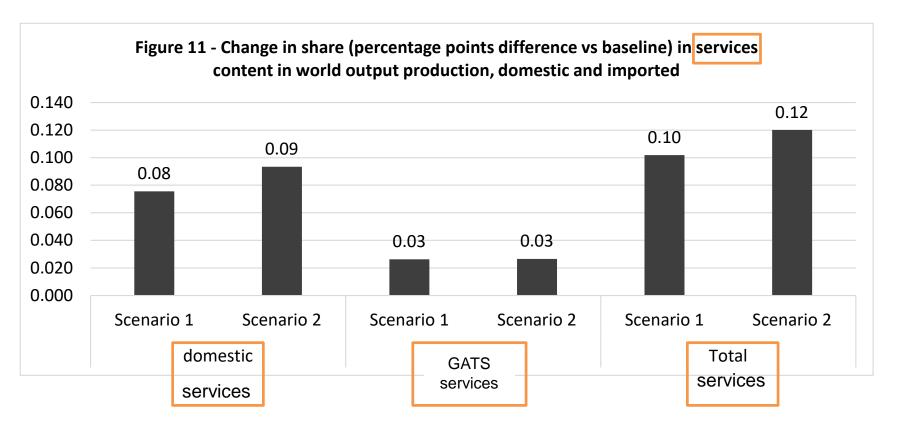




# Mode 5 and GATS services: Complements not substitutes!

Mode 5 – a triple win:

i) domestic firms; ii) services exporters; iii) manufacturers



# Thinking ahead

- Mode 5 services will account for a growing share of global trade flows
- Technology is key for the future of some economic sectors and mode 5 services may be the key for technological leapfrogging in developing countries
- Women have a strong presence in Mode 5 services will help reduce the gender gap in terms of trade and job creation
- Trade rules may need to evolve to keep the pace with GVCs, technology and innovation
  - The "future is already here" and may require adapting existing trade rules, e.g. customs valuation, RoO, big data.
  - Mode 5 would be a meaningful candidate for both bilateral and multilateral initiatives