United Nations Conference on Trade and Development

SEMINAR ON COMMODITY DEPENDENCE AND SUSTAINABLE DEVELOPMENT

21 June 2019, Geneva

Specialization within GVCs

by

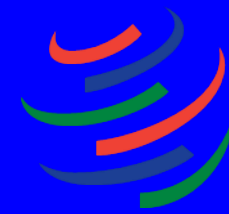Roberta Piermartini, Economic Research and Statistics Division, the World Trade Organization

Specialization *within* GVCs

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Economic Research and Statistics Division

World Trade Organization

UNCTAD, 21 June 2019

What did we know so far about what determine specialization ..

... in GVC?

Specialization according to comparative advantage ...fragmented production

When some goods are produced in a GVCs

- Capital

- Labour

- **Institutions**

- **Timeliness**

  - GVC-goods are institutional intensive and time sensitive

Specialization across stages of production

- Suppose sequential processing

1   2   .....   n

Upstream
sector

downstream
sector

- **Who specialize in the downstream sectors?**

Who specialize in the downstream sectors?

Countries with

- a lower probability to make mistake

- Better institutions

- IP rights

- Closeness to a large market

(Costinot et al. (2013)

What is new in our study ?

Piermartini R. and R. Lanz

https://econpapers.repec.org/paper/zbwwtowps/ersd201805.htm

Focus on Transport costs

- Transport costs have an important fixed cost componet ... are ADDITIVE non ad-valorem

- If they are high upstream, they will MAGNIFY along the supply chain

- Therefore quality of transport infrastructure give a comparative advantage upstream

Our regression

Export$_{ik}$ =

β_1 upstreameness$_k$*INFRASTRUCTURE$_i$

+ β_2 upstreameness$_k$*INSTITUTIONS$_i$+ controls

- Upstramness= measure that increases with the number of stages separating a sector k from the final stage
- Several measures of institutions and quality of transport infrastructure

Our Results

Dependent var.: X_{ij}	(1)	(2)	(3)	(4)	(5)	(6)	(7)
upstream$_j$ x T1$_i$	0.189***	0.300***	0.230**	0.182''	0.195*	0.186*	0.193*
	(0.050)	(0.094)	(0.101)	(0.110)	(0.109)	(0.105)	(0.110)
upstream$_j$ x Q$_i$		-0.083	-0.148*	-0.163**	-0.146*	-0.142*	-0.142*
		(0.072)	(0.078)	(0.079)	(0.077)	(0.075)	(0.076)
upstream$_j$ x Remoteness$_i$		0.364	0.387	0.369	0.368	0.360	0.363
		(0.263)	(0.274)	(0.275)	(0.276)	(0.266)	(0.276)
upstream$_j$ x K$_i$			0.110**	0.030	0.032		0.036
			(0.045)	(0.090)	(0.072)		(0.071)
upstream$_j$ x H$_i$			0.012	-0.003	-0.004		0.002
			(0.090)	(0.091)	(0.092)		(0.092)
upstream$_j$ x GDP p.c.$_i$				0.129	0.107		
				(0.132)	(0.118)		

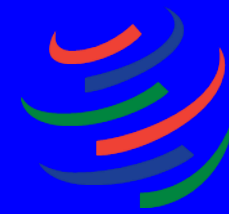# Policy implications

For a commodity dependent countries good transport infrastructure is key to participate to GVC

Good institutions key to move up the value chain

Thank you for your attention