

Value Chain Integration and Firm Productivity: Evidence from Turkish Manufacturing

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Contribution of the paper

- Highly relevant topic
- Unique firm-level dataset
- Interesting results

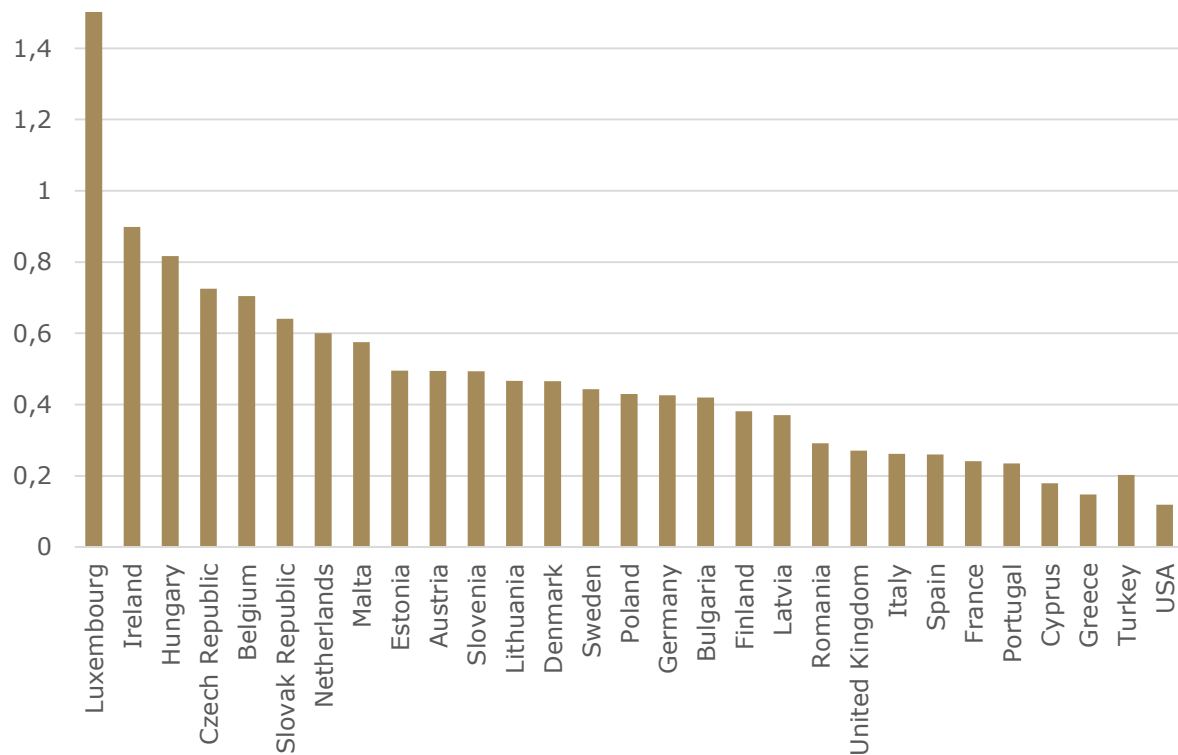
Summary of the paper

- Examines how manufacturing firms' position in value chains affects their labour productivity
- Both domestic and global value chains
- Intermediate supplier and consumer position
- Turkish firm-level data (20e population, years 2003-2015, combination of a survey and hard data)
- Results by size class and technology intensity

Main conclusions of the paper

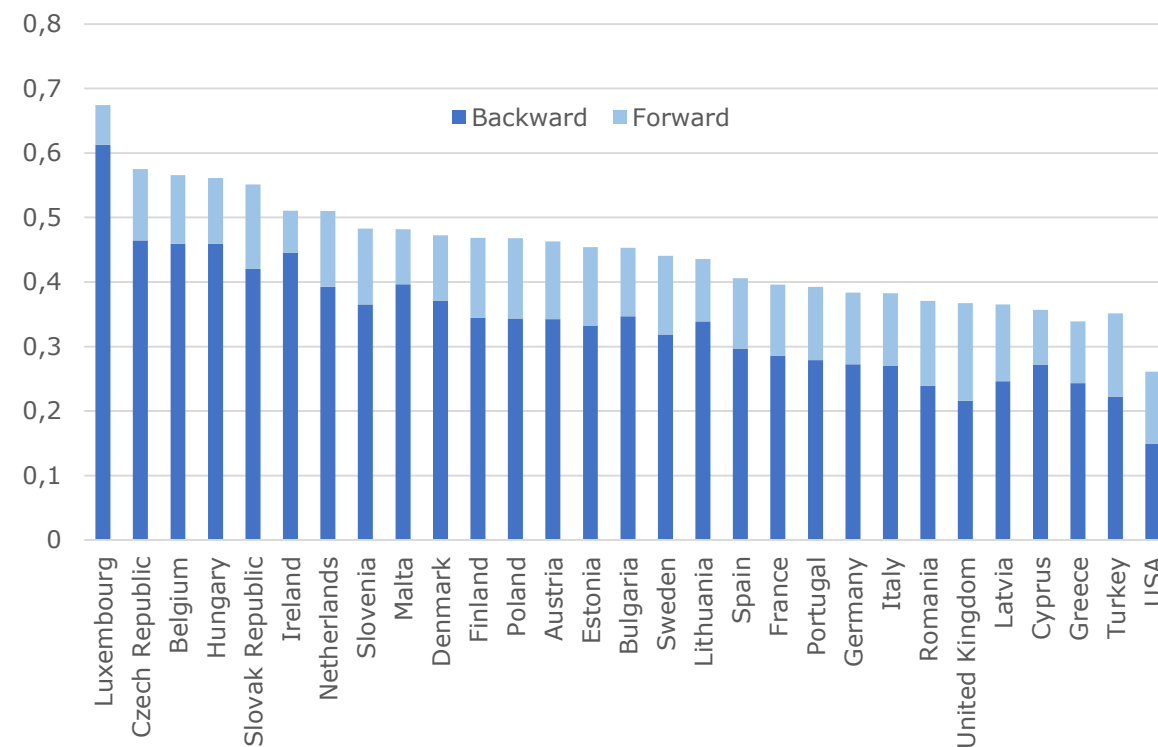
- Participation in value chains does not necessarily bring higher firm productivity
- Consumers show higher productivity regardless domestic or global value chain participation, but suppliers, especially in domestic value chain, exhibit lower productivity
- Smaller firms tend to benefit more from the consumer position in GVCs (large ones in DVCs)

Trade Openness



Note: Gross exports as a share of gross domestic product
Source: CompNet Diagnostic Toolkit for Competitiveness

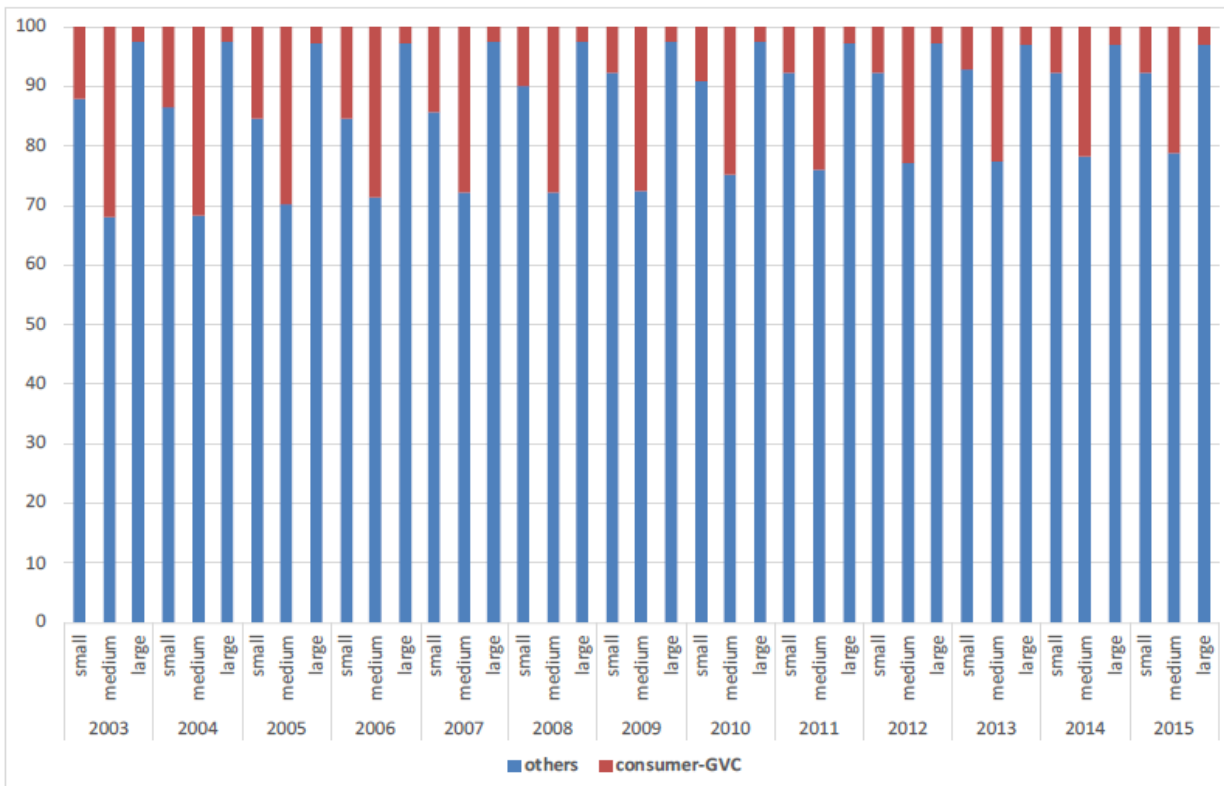
GVC Participation



Note: Foreign inputs and domestically-produced inputs as a share of gross exports
Source: CompNet Diagnostic Toolkit for Competitiveness

Approx. 15% consumers involved in GVCs

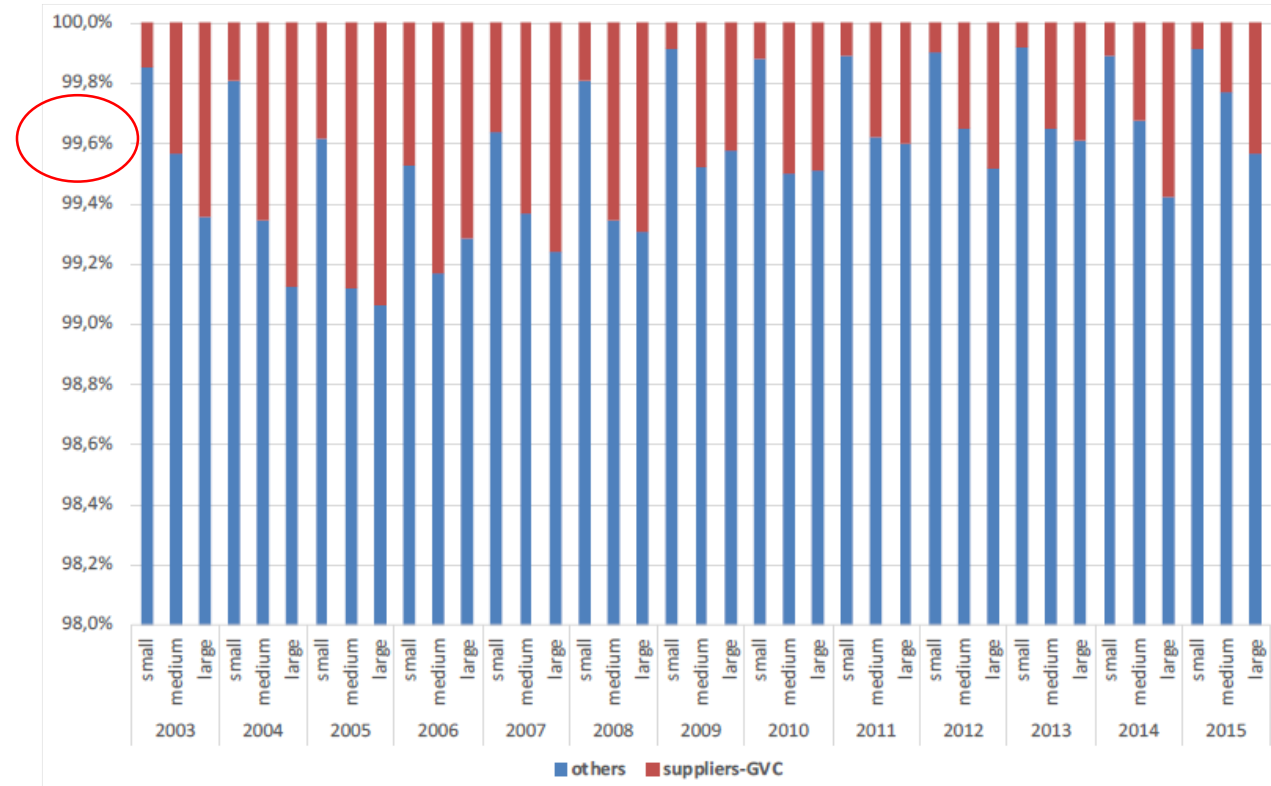
Figure 8. The percentage of GVC-consumer and non-GVC-consumer firm by firm size



Source: Kiliçaslan et al. 2020

... only less than 0.5% suppliers involved in GVCs

Figure 3. The percentage of GVC-supplier and non-GVC-supplier firm by firm size



Source: Kiliçaslan et al. 2020

⇒ A simple table comparing absolute (average or last year) numbers of GVC and DVC suppliers and consumers would be useful to include in the paper.

ITALIAN AND GERMAN FIRMS IN GVCS

	Total sample	Italy	Germany
INT	1,996 (48.5%)	1,358 (58.7%)	638 (35.4%)
INT-FMC	991 (24.1%)	688 (29.7%)	303 (16.8%)
INT-DMC	1,005 (24.4%)	670 (29.0%)	335 (18.6%)
CPI	264 (6.4%)	105 (4.5%)	159 (8.8%)
INT&CPI	212 (5.1%)	104 (4.5%)	108 (6.0%)
Generic	1,645 (40.0%)	746 (32.2%)	899 (49.8%)
Total	4,117 (100%)	2,313 (100%)	1,804 (100%)

share of suppliers

share of consumers

Accetturo and Anna Giunta (2016, 2018) find (much) higher share of GVC suppliers and lower share of consumers (purchasers) in Germany or Italy

What could be the reason for so different shares?

- Sample vs. population
- Industrial structure
- Firm concentration
- Level of development
- Other factors?

INT: dummy equal to one if SPTO=100; INT-FMC: dummy equal to one if an INT firm has its main customer outside the country (INT-FMC+INT-DMC=INT); INT-DMC: dummy equal to one if an INT firm has its main customer inside the country (INT-FMC+INT-DMC=INT); CPI: dummy equal to one if the firm buys a customized intermediate good from abroad; INT&CPI: dummy equal to one if an intermediate firm buys a customized intermediary from abroad; Generic: residual class.

INT, CPI, and INT&CPI are mutually exclusive.

Table 2: Measurement of GVC/DVC-supplier/consumer

	Global	Domestic
Supplier	=1 if firm is exporter and PTO/Sales>.51	=1 if firm is non-exporter and PTO/Sales>51%
Consumer	=1 if firm is intermetiate good importer	=1 if f DCI/Expenses>15%

Source: **Kiliçaslan et al. 2020**

Note: domestic customized intermediaries (DCI), produced to order (PTO)

In **Accetturo and Anna Giunta (2016, 2018)** supplier has PTO/sales=100 and the share of suppliers is still much higher.

=> More discussion on the chosen definition would be welcome in the paper

- How is PTO defined in the survey?
- Why not TFP instead of LP? (at least as an additional robustness test)
- Have you considered to split the sample? (lower share of GVC suppliers after the crisis mentioned in the paper)
- Do you expect further decline in the share of suppliers after the COVID-19 crisis?
- What is your view? How hard are the Turkish trade and value chains hit by the COVID-19?