

A discussion of:

**Organizational capital and global value chain participation:
fostering productivity growth in the digital economy**

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The research question

- ▶ Does higher investment in organizational capital magnifies the productivity gains from backward participation in GVCs?

- ▶ Are such gains larger in highly digital industries?

The key findings

- ▶ Positive and statistically significant impact of **GVC backward participation** on **labor productivity** growth.
- ▶ The productivity returns from GVC backward participation increase with investment in **organizational capital**...
- ▶ ... but only in highly **digital sectors**.

- ▶ The paper focuses on the productivity of labor
- ▶ Extend to Total Factor Productivity (from EUKLEMS)
- ▶ Explain how and why labor productivity is adjusted to include intangible capital

GVC participation can be measured:

- ▶ **backwardly**, for imported inputs used to produce goods that are shipped abroad
- ▶ **forwardly**, for producing and shipping inputs that are further re-exported
- ▶ **two-sided**, for activities that are neither at the beginning nor at the end of the chain

The paper focuses on a measure of backward participation

- ▶ What about forward and two-way participation?
- ▶ Try using more updated measures (Borin and Mancini, 2017; Borin, Mancini and Taglioni, 2021)

- ▶ Key variable of the analysis.
- ▶ No unique definition
 - "unique systems and processes employed in the investment, production, and sales activities of the enterprise, along with the incentives and compensation systems governing its human resources." (Lev and Radhakrishnan, 2005)
 - "Organizational capital satisfies four properties: (1) it affects firm performance; (2) it changes slowly over time; (3) being intangible, it is not perfectly observable; and (4) it must be produced at least partly in-side the firm with the active participation of the firm's top management." (Dessein and Prat, 2022)
- ▶ More space could be devoted to explain how you measure this variable and why.

Not clear what makes a sector high, medium, and low digital

The main equation of the paper is:

$$\Delta \ln(Y/H)_{i,c,t} =$$

$$\alpha_1 \Delta \ln(K^J/H)_{i,c,t} + \alpha_2 \Delta \ln(K^I/H)_{i,c,t} + \alpha_3 \ln(P_{gvc})_{i,c,t-2} + \alpha_4 \ln(K^{org}/H)_{i,c} + \alpha_5 \ln(P_{gvc})_{i,c,t-2} * \ln(K^{org}/H)_{i,c} + \lambda_i + \lambda_t + \eta_{i,c,t}$$

Some questions:

- ▶ Is intangible capital both on the right and left hand side of the equation?
- ▶ Why is Organizational capital time-invariant? Is it the starting/avg/end level?
Would expect it to be lagged

Table 1 shows estimates of equation 1.

Table 1 – Benchmark estimates

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
	All sample			All sample		
	Total Intangibles			Intang Excl R&D		
DlnKH_intan	0.155*** (8.071)	0.154*** (8.018)	0.245* (1.655)			
DlnKH_intan_xrd				0.142*** (6.860)	0.139*** (6.777)	0.210*** (2.890)
DlnKH_rd				-0.001 (-0.126)	-0.000 (-0.051)	-0.060 (-1.628)
DlnKH_ICT	0.047*** (4.930)	0.047*** (5.002)	0.026 (0.692)	0.042*** (4.070)	0.043*** (4.188)	0.032 (0.719)
DlnKH_NonICT	0.179*** (7.382)	0.176*** (7.279)	0.079 (0.662)	0.182*** (7.422)	0.179*** (7.320)	0.121 (0.702)
DlnLH	0.107*** (2.824)	0.106*** (2.800)	-0.302 (-0.795)	0.098** (2.549)	0.098** (2.544)	0.022 (0.231)
lnKH_og_avg	0.002** (2.095)	0.008*** (2.591)	0.070** (1.988)	0.002 (1.567)	0.008** (2.372)	0.067** (2.447)
log_backp = L _t	0.003 (1.299)	0.020** (2.413)	0.160* (1.876)	0.004 (1.566)	0.021** (2.460)	0.165** (2.197)
c.lnKH_og_avg#c.l2.log_backp		0.003** (2.112)	0.030* (1.902)		0.003** (2.080)	0.030** (2.376)
Observations	1,507	1,507	1,440	1,374	1,374	1,350
R-squared			0.080			0.074
Number of ctrysec	126	126		115	115	
Year and Ind FE	gls		IV	gls		IV
z-statistics in parentheses						
*** p<0.01 ** p<0.05 * p<0.1						

Both the research questions assessed in the paper and the authors' main findings are extremely interesting but they could be clearer on several methodological aspects.

Thank you