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Capitale intangibile e governance delle imprese

Discussione

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Data, intangible capital and productivity: are there new drivers of growth? Main takeaways

- Intangible capital should be treated as investment. It is an input in the production function as physical capital
- Rising importance of intangible capital in the digital economy
- Data and digital platforms as intangible assets
- Proprietary nature of big data with opposing effects on productivity (efficiency and appropriability effects)

Data, intangible capital and productivity: are there new drivers of growth? Open issues

- Heterogeneity of intangible assets. Complementarity/substitutability with employment; different degrees of appropriability; different position in GVCs
- Complementarity between in intangibles and difficulties to measure their independent impact on output and productivity
- How do you disentangle the two effects: efficiency and appropriability? I would expect strong differences between micro and macro effects. The impact on productivity might vary across percentiles of the distribution. Directly detecting the polarizing effects of such assets also distinguishing among assets
- Policy implications: supportive measures for investment in innovation? Diffusion, property rights, how to ensure that the benefits of this “innovation in the method of innovation” are not concentrated in few firms
- If we take into account global value chains how does the balance between the efficiency and appropriability effect changes? And what is the impact on diffusion/polarization? See, for example, (dynamic) smiling curve

Intangible capital and global value chains

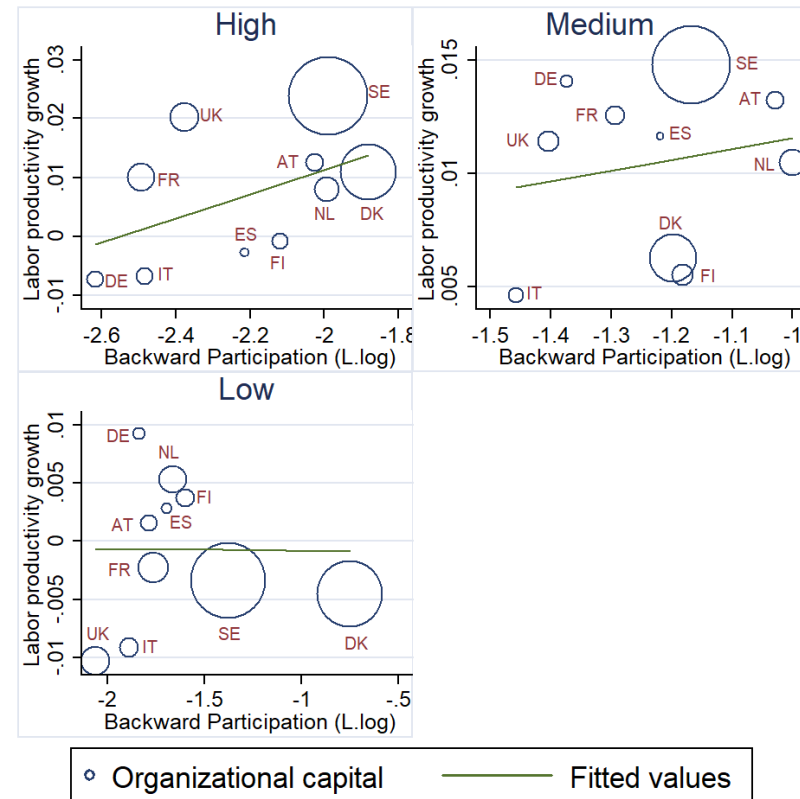
- Intangible assets are typically scalable assets, imposing negligible marginal costs following the initial investment and resulting in infinite returns to scale. The difference in scale economies between tangible and intangible assets implies that the firms controlling intangible-intensive parts of the chain will receive a disproportionate share of the gains from the network as output expands (Durand and Milberg, 2018).
- Jona, Meliciani and Manzocchi (2019) find that intangible capital, particularly organizational capital, is positively correlated with value appropriation in GVCs
- Organizational capital positively moderates the relationship between GVC participation and productivity growth (Jona and Meliciani, 2019; Jona, Meliciani and Sopranzetti, 2023). This effect is significant in digital industries. Complementarity between IT and firms' organizational capital (Brynjolfsson and Hitt, 2000; Garicano and Heaton 2010; Bloom et al. 2012)
- Bontadini, Evangelista, Meliciani and Savona (2019; 2023) find that different patterns of GVC integration and functional specialization depending on the initial patents/intangibles intensity of the country-sector integrating in GVC and those of the partners. Overall integration in GVC in Europe coexists with growing disparities in intangible assets and functional specialization

Intangible capital and value appropriation in GVC

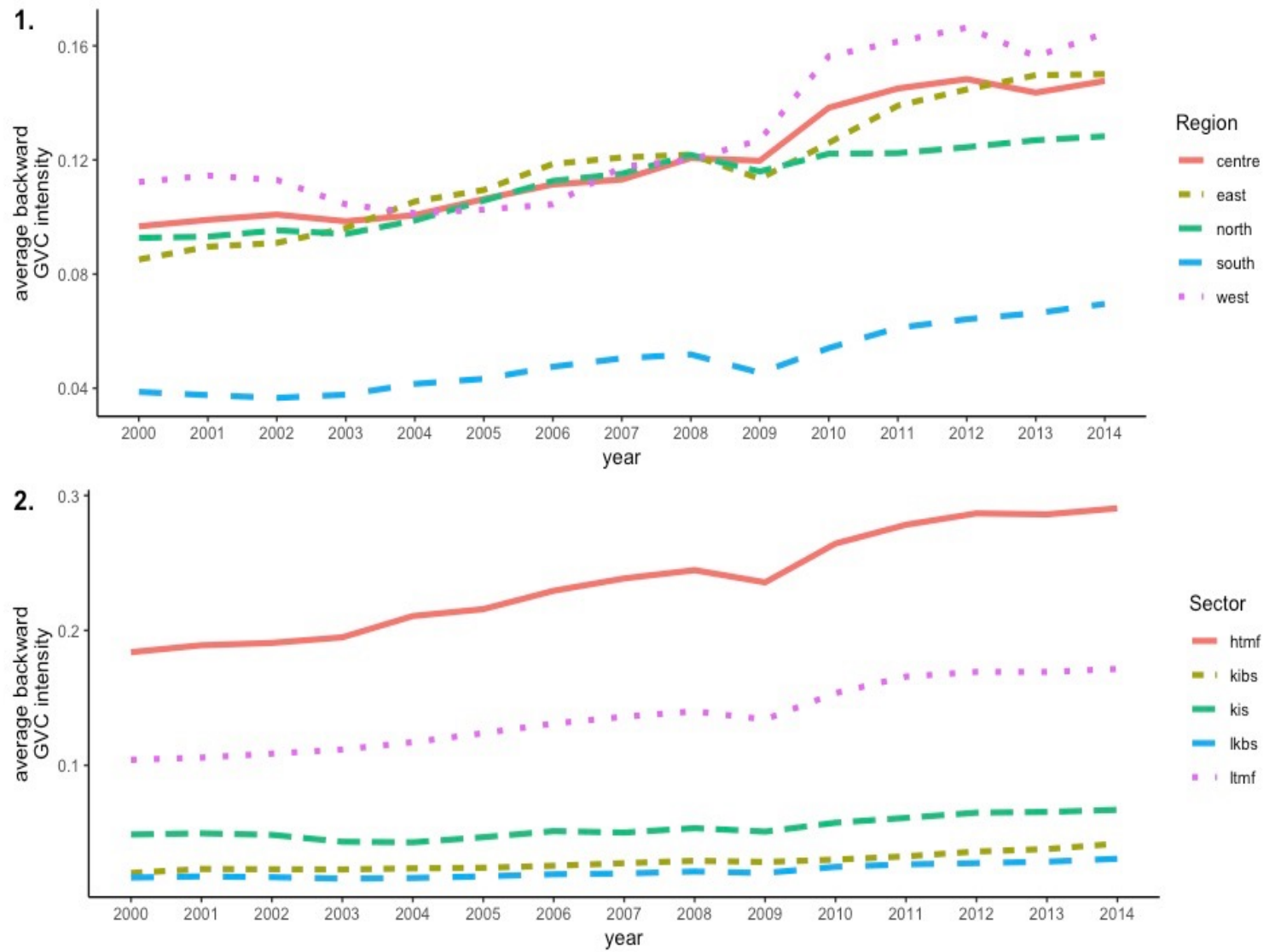
VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Dependent variable: $\ln(dvafex/fvadex)$							
lnH_D_totintg	0.127** (0.057)							
lnH_D_rd_kstock_k		0.085*** (0.030)		0.086* (0.044)				
lnH_D_intg_xrd_kstock			0.185** (0.083)	-0.004 (0.119)				
lnH_D_train_kstock_k					0.268*** (0.064)			
lnH_D_adv_mkt_kstock_k						-0.112 (0.096)		
lnH_D_arch_des_kstock_k							-0.158** (0.071)	
lnH_D_orgcap_kstock_k								0.197*** (0.043)
lnH_D_k_ict	-0.375*** (0.067)	-0.286*** (0.044)	-0.403*** (0.074)	-0.284*** (0.074)	-0.400*** (0.063)	-0.220** (0.092)	-0.216*** (0.068)	-0.419*** (0.065)
lnH_D_all_tang_kstock_k	0.302***	0.273***	0.269***	0.274***	0.123*	0.361***	0.373***	0.261***

Labour Productivity and Backward participation in the digital sectors

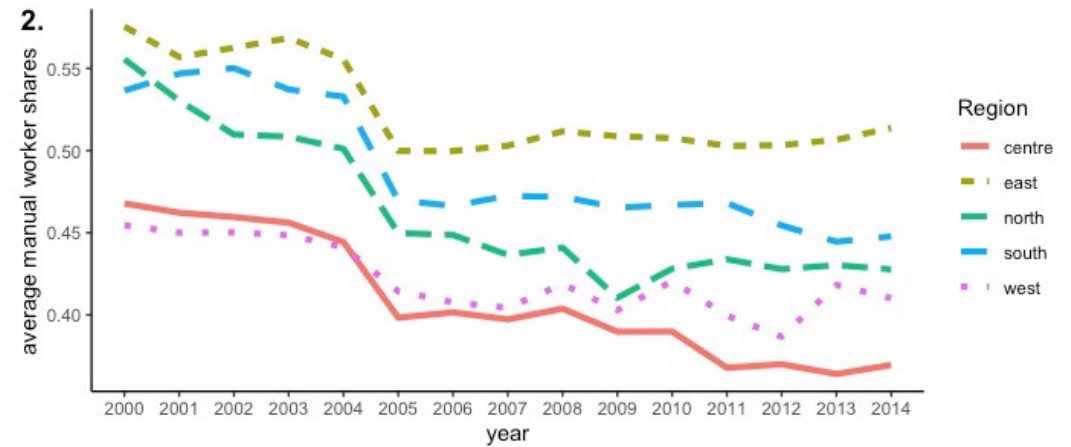
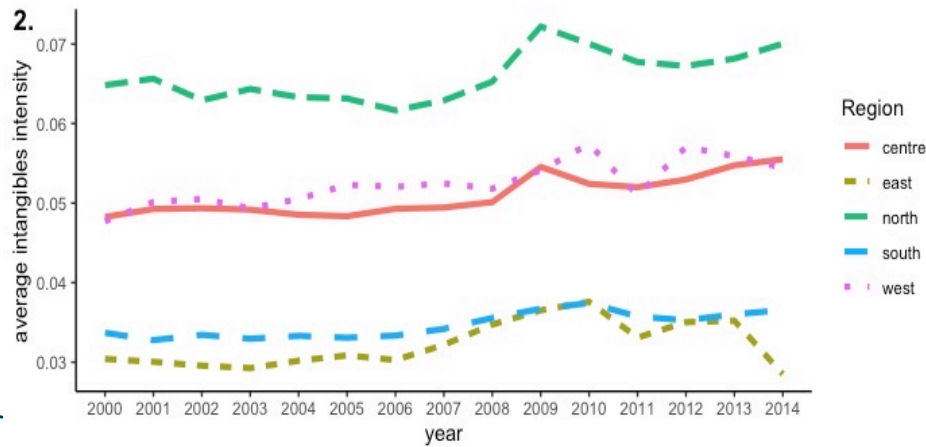
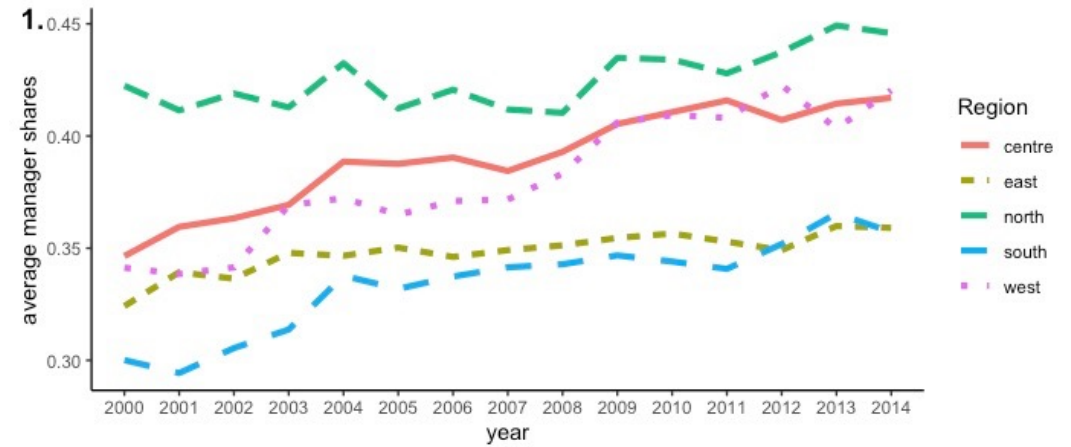
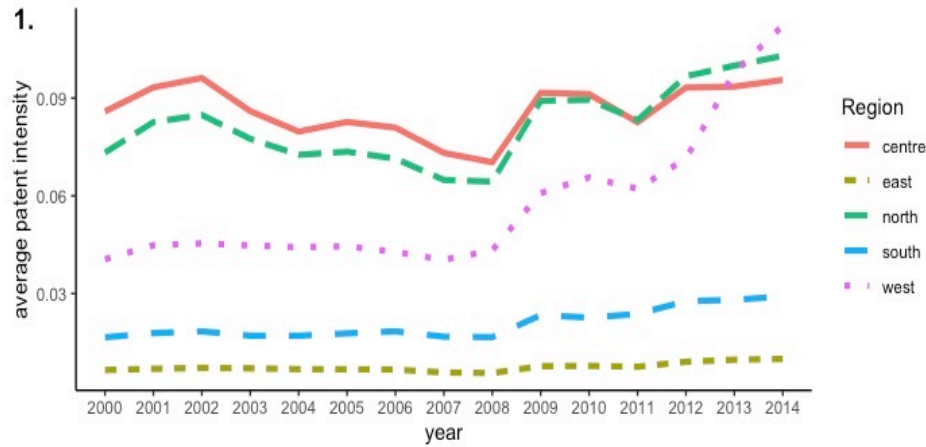
- Correlation between productivity and backward participation growth is significantly positive in the high and medium digital sectors while, in the low digital ones there is no signal of a clear correlation.
- Countries with the highest productivity and GVC participation have the highest organizational capital in the high digital sector while this relation is less straightforward in the medium and the low digital sector.



Trends in backward GVC participation

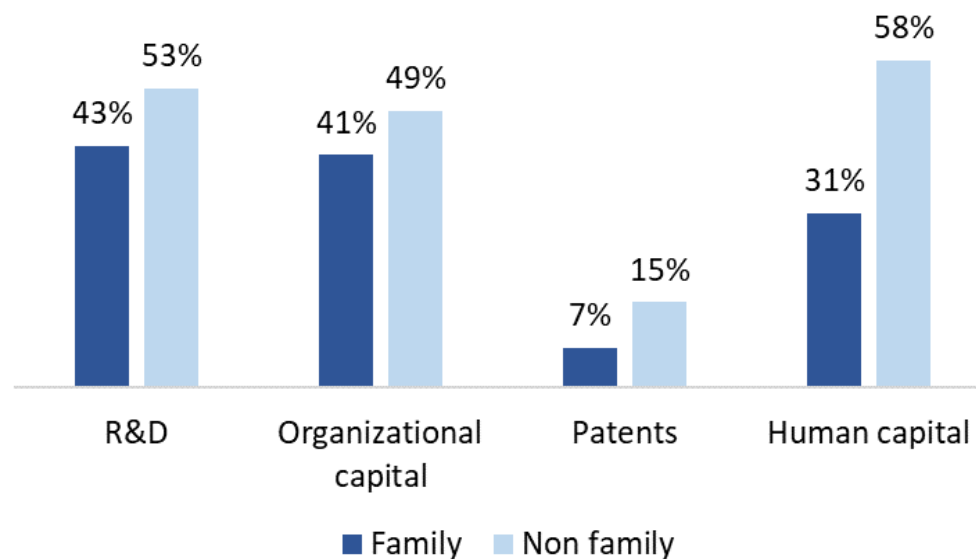


Technological asymmetries and asymmetries in the structure of employment



Intangible capital and family governance

Investment in intangible assets: enterprises with family and non-family management, % of total enterprises



R&D: imprese che programmano investimenti in Ricerca e Sviluppo nel 2022-24

Organizational Capital: imprese che programmano innovazione organizzativa nel 2022-24

Patents: imprese titolari di brevetto

Human Capital: imprese che programmano investimenti nella formazione (upskilling/reskilling, ecc.) nel 2022-24