

The Juncker Plan: European *industrial renaissance* to meet *Societal Challenges?*

A few questions

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Outline

1. I try to assess the EU industrial policy instruments within the main axes of the Juncker plan: *Industrial Renaissance* to meet *Societal Challenges* (competitiveness, inclusion and sustainable growth)
2. I flag out issues that might lower the effectiveness of an *Industrial Renaissance* policy – rather than proposing a complementary (or alternative) wishing list of instruments
3. I discuss a few of these in terms of side effects and I ask ‘what to do’



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The instruments (I)

Table 1. European initiatives related to industrial policy

	EU Initiative	Budget (Euro)	Sub-initiative relevant for an EU Industrial Policy	Budget (Euro)	Theme
Competitiveness for growth and jobs (€125.6 billion, 13% of the Multiannual Financial Framework budget)	Horizon 2020	77 bln (56%)	KET (Key Enabling Technologies)	6.6 bln	Innovation
			SME Instrument	2.8 bln	SMEs/ICT
			Eurostars	287 mln	SMEs Internationalization
			Fast Track to innovation	200 mln	Research and Innovation
			SILC II	20 mln	Tech/non-tech innovation
	Connecting Europe Facility	19,3 bln (15%)	Energy infrastructure	5.1 bln	Energy connections - Single market
			Broadband infrastructure	1 bln	Digital connections - Single market
			Transport infrastructure	13.2 bln	Transport connections
	COSME	2 bln (2%)	Access to finance	163 mln	Loan guarantee facility, equity financial instruments
			Access to market	57 mln	Internationalization
			Framework conditions	34 mln	simplification measures

The instruments (II)

			Entrepreneurship	9 mln	Entrepreneurship
	EaSI	815 mln (1%)	Progress	497.1 mln	Employment
			EURES	146.7 mln	Employment services
			European Progress Microfinance Facility	1711. mln	Microfinance
Economic social and territorial cohesion (€325.1 billion, 34% of the Multiannual Financial Framework budget)	Cohesion Policy	322 bln (99%)	ERDF	100 bln	Innovation, Res., Digital agenda, SME, low-carbon economy
			ESF	n.a.	Active labor market policies
			Cohesion fund	66.3 bln	Digital infrastructure, energy, transport infrastructure
Sustainable growth and Natural res. (€373.2 billion, 39% of the Multiannual Financial Framework budget)	Community Agriculture Policy (CAP) - Pillar II	84.9 bln (23%)	European Agricultural Fund for Rural Development (EAFRD)	84.9	Diversification and dev. of non- agricultural SMEs in rural area
	European Maritime Affairs and Fisheries	6.6 bln (2%)	European Maritime and Fisheries Fund (EMFF)	6.6 bln	Fishing industry - adaptation to changing conditions

Source: European Parliament (2015), p. 31

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Are the instruments adequate to the ambition of the objectives?

- Large and fragmented portfolio of interventions (from large infrastructure to SMEs) (Vannuccini, 2015)
- Belonging to different Directorates general
- Implicit assumption: an Industrial Renaissance would emerge at some point, simply by removing financial bottlenecks, and meet the societal challenges.



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A few key questions

1. What type of **de-industrialisation** really represents a threat for Europe?
2. What type of **re-industrialisation** do we need to meet societal challenges, most especially those linked to climate change or **wage and income inequality**?
3. Relatedly, what type of structural transformation can industrial policy pursue **in a context of increasing international fragmentation of production**, both across European countries and worldwide?
4. What type of industrial policy shall we advocate, that goes **beyond the traditional manufacturing sectors**?
5. What type of **governance** should be envisaged to ensure a smooth implementation of any industrial policy?



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Which de-industrialisation represents a threat ? Loss of High skills, for competitiveness

- Probably not the Kaldor (1966) one, as the causes of the *productivity slowdown* occurring in the UK in the 60s are not the same.
- Definitely not the Rodrik (2015) one, as European countries are not “*prematurely*” de-industrialising as LACs and African countries.
- What we should fear is the loss of high-skilled, high-value added knowledge base, *being it mature and non-mature manufacturing but also high value added business services*



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Which de-industrialisation represents a threat? Loss of low-medium skill, for inclusion

- However, in terms of *societal challenges* such as job-friendly, more equal growth and inclusiveness, robotisation and the loss of low and medium skilled working class (yes, working class!) hollow out and fracture a collective bargaining power in favour of individual "rights"; provoke shifts in education being driven by the needs of employers, and are detrimental to class consciousness more lately.
- What we really need to ask is **what kind of de-industrialisation we are seeking to avoid**, and what type of tertiarisation we are willing to bargain against (some) loss of industrial core, where our criteria of assessment should be reducing unemployment, inequality and ensure knowledge-related competitiveness (Todd, 2014; Lundvall 2016)



The analysis:

Wirkierman, Savona, Ciarli (2016)

Lopez-Gonzalez, Meliciani, Savona (2015)



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Varieties of growth regimes, innovation systems and structural changes in Europe (Wirkierman, Savona, Ciarli, 2016)

- Key questions
 - We aim to a **diagnosis of the the interrelations between intensity of R&D investments (as capital formation), structural change, change in the functional income distribution, degree of mechanisation and productivity dynamics**
 - Can we identify specific growth regimes in Europe since mid-1990s onwards that account for the above factors in different EU areas?
- Key contributions:
 - Methods: Use of EUROSTAT ESA-2010 National accounts data that have Intellectual Property Products investments among Gross Fixed Capital Formation (GFCF) – Knowledge Stock as a proxy of Innovation Systems’ “health”.
 - DE, FR, IT, AT, NL, IE, SE, FI, ES, GR, PT, CZ, SK, HU, SI over 1995-201
 - We employ several **Structural Decomposition Analyses** that account for innovation investment, distribution, employment and structural changes
 - Conceptual/empirical: Novel account of Innovation and growth/distribution/employment macro regimes by way of a structural accounting exercise



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Varieties of growth regimes. Preliminary findings (Wirkierman, Savona, Ciarli, 2016)

- We use two types of SDAs: (1) Productivity, Investments in IPP and Employment; (2) Gross Value Added, Profitability and Capital Investments
- We obtain *intrinsic (within sectors) and structural (across sectors)* factors of changes in the above variables
- We identify **four regimes**:
 - Regime 1 (DE, HU, NL, IE): Increasing inequality, increasing intrinsic (within sectors) IPP intensity of investment, profitability and mechanization;
 - Regime 2 (ES, AT, SI, SK, CZ): Increasing inequality, increasing intrinsic IPP intensity of investment, increasing structural profitability and mechanization (structural shifts towards more profitable/mechanized sectors);
 - Regime 3 (PT EL IT): Decreasing inequality (in most cases), increasing intrinsic IPP intensity of investment, decreasing mechanization, investment reduction in real terms (Productivity slowdown);
 - Regimes 4 (FR SE FI): Decreasing inequality, increasing structural IPP intensity of investment, increasing degree of mechanization, though slower productivity growth.

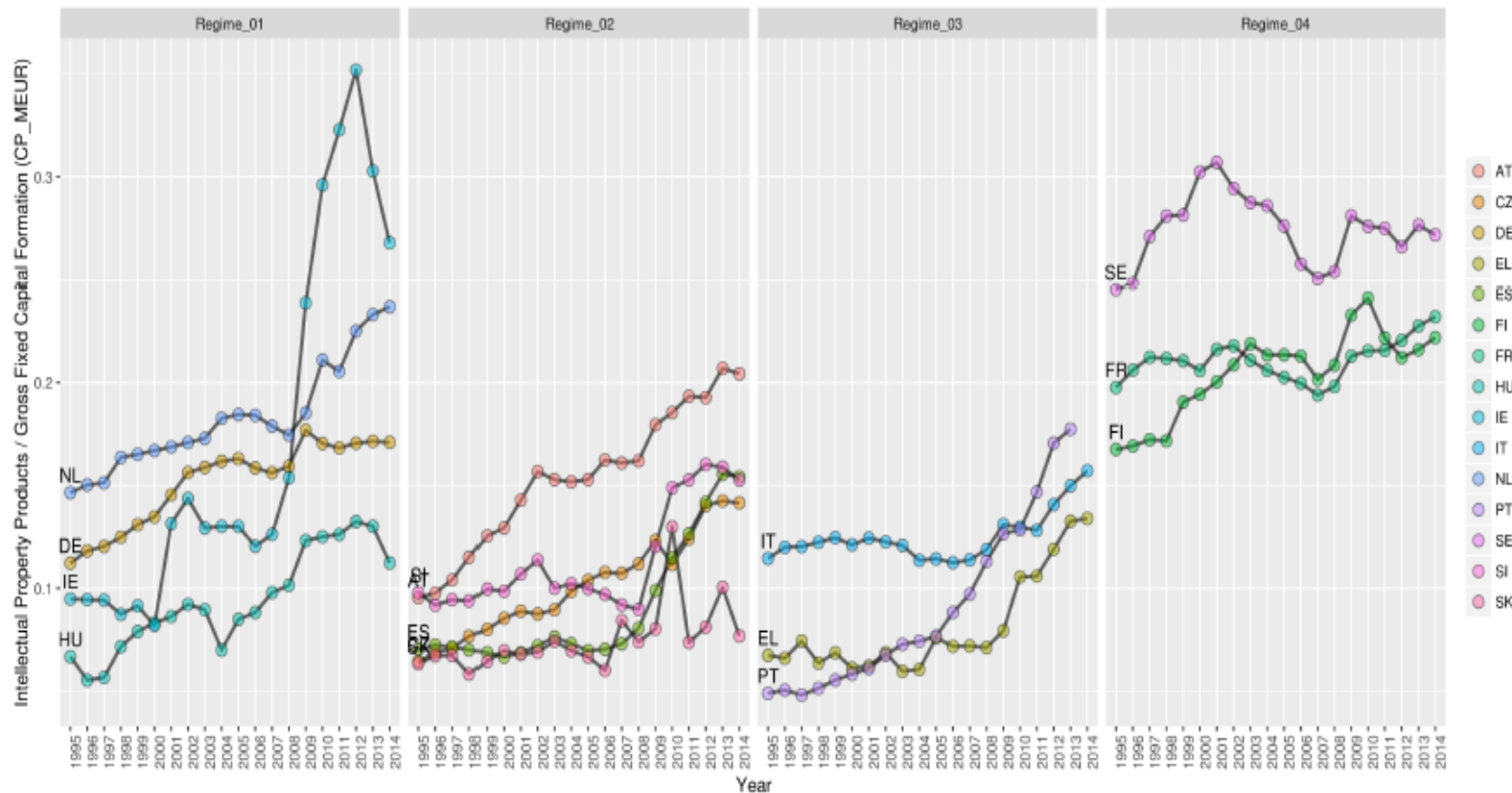


Faster productivity growth and increasing inequality

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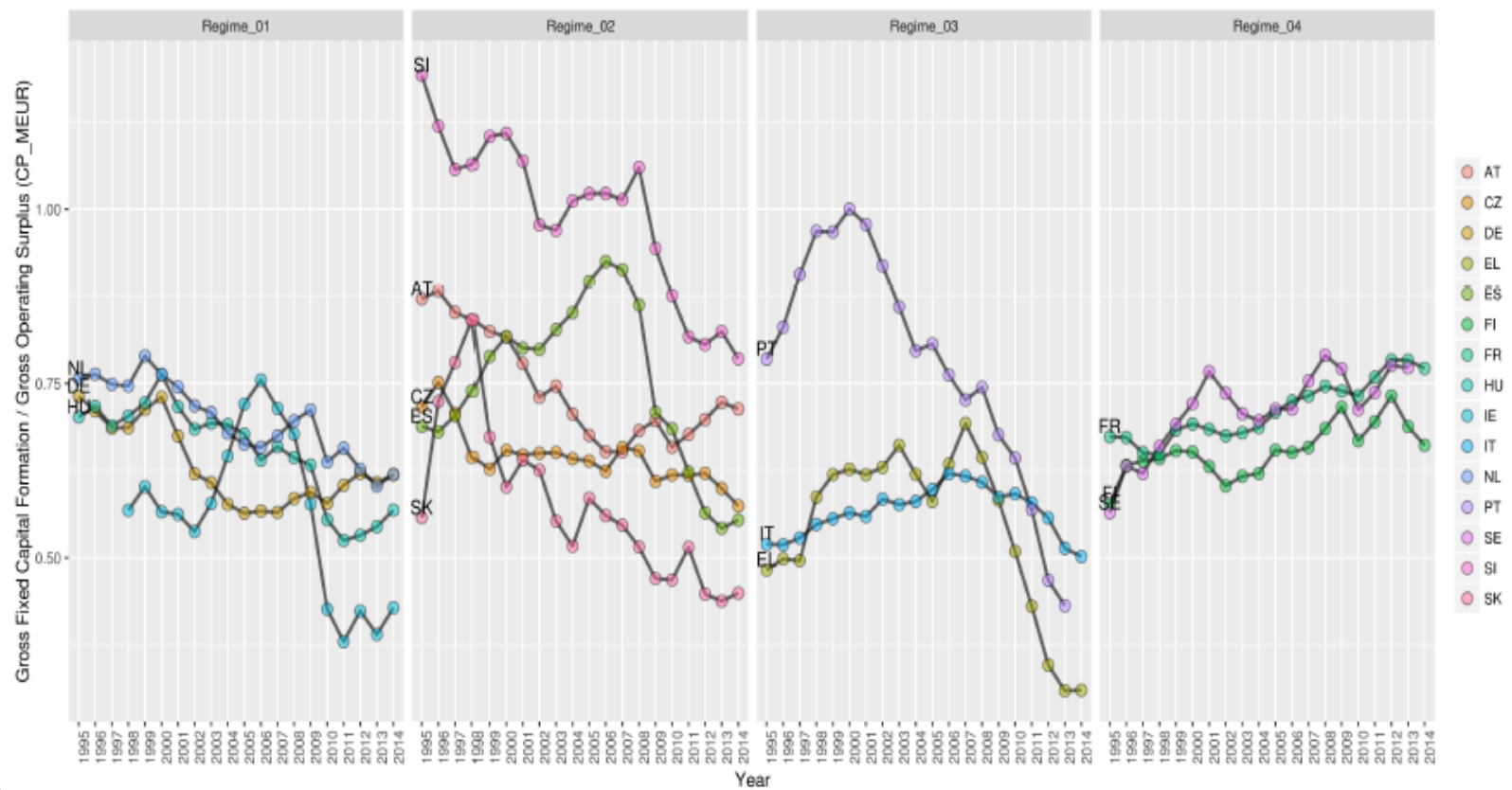
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Innovation intensity of investments



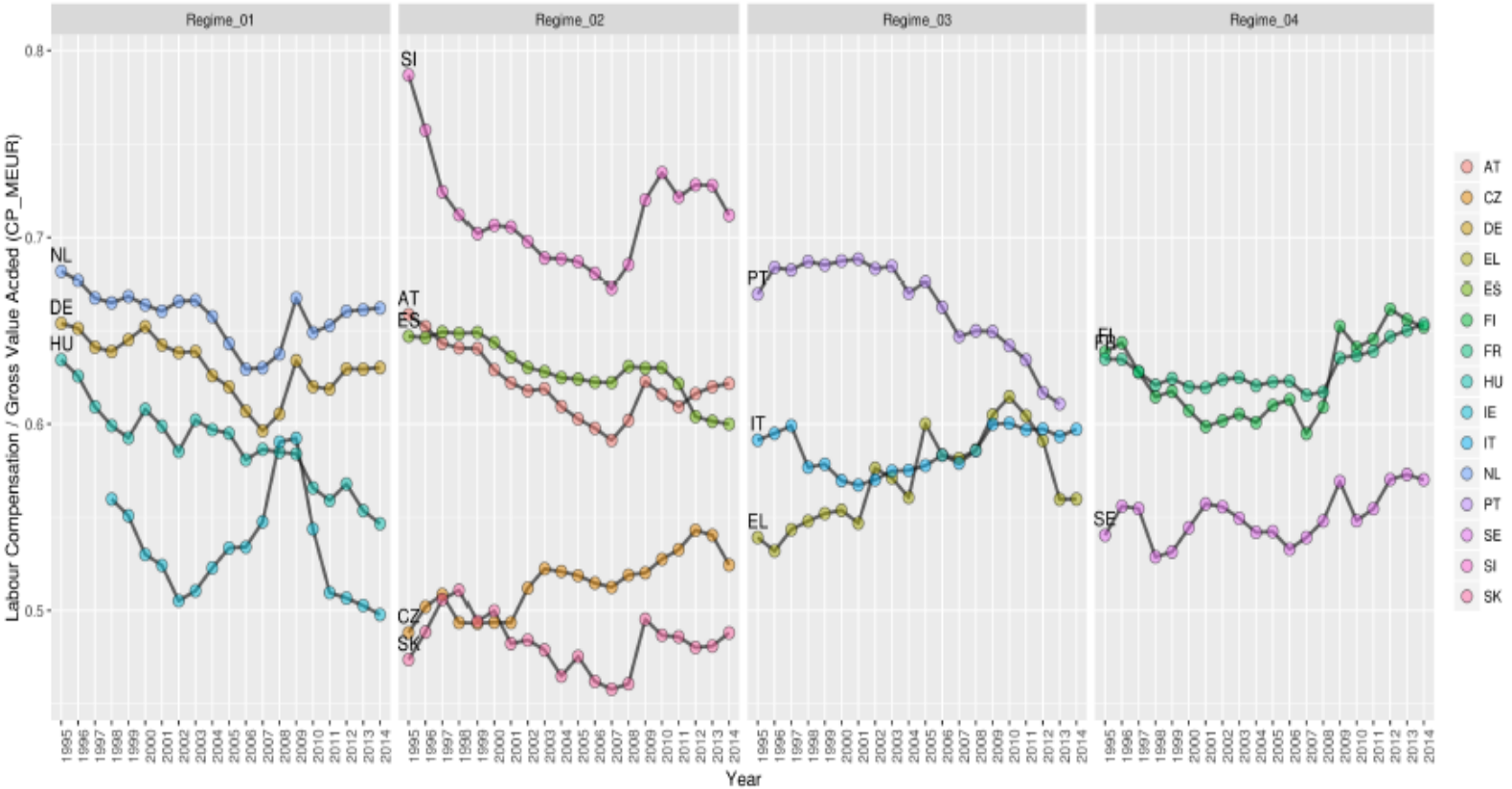
Source: Own computations based on EUROSTAT, ESA 2010 National Accounts database

Financing of investments out of profits



Source: Own computations based on EUROSTAT, ESA 2010 National Accounts database

Functional income distribution



Source: Own computations based on EUROSTAT, ESA 2010 National Accounts database

Structural transformation and IR within GVC

- “Not wine for cloth anymore”: international fragmentation of production includes not only the manufacturing but business services too (Grossman and Rossi-Hansberg, 2008; Lopez-Gonzalez, Meliciani, Savona, 2015)
- International fragmentation of production is polarising European countries even more than austerity, amplifying pre-existing ones
- Case of Italy: old and new de-industrialisation: loss of low-value added segments to East Asia in the 1990s; loss of high-value added segments to Germany in the 2000s (Gaddi and Garbellini, 2016)
- Germany’s “Strategic shopping” and selected FDI are exploiting a sort of “reverse technology transfer” from Italy to Germany.



What to do?



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Re-industrialisation and societal challenges: What to do?

- **Green re-industrialisation:** public procurement and national development banks to support specific sectors
- **Race with the machines rather than against:** achieve inclusiveness means re-insert low and medium skills in the process of industrial rejuvenation of mature industries
- Governments should be creative and ensure a **variety of vocational training for low and medium skilled workers;** include Arts and Humanities alongside Science Technology and Engineering training: invention and innovativeness might not necessarily come from hard sciences



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Structural transformation toward IR within GVC: what to do?

- **Going back to Hirschman high development backward and forward linkages:** Beneficiation and upgrading towards high value added intangible and business services linked to core manufacturing
- **Technological Upgrading** means fostering the emergence of highly knowledge intensive tasks that in Hirschman's words would be backward linked to traditional, or mature, industries.
- Part of this debate is being revamped now in Latin America on the role of highly intensive services serving Natural Resource Industries (Katz 2016).



Structural transformation and smart specialisation

- The *entrepreneurial discovery process* at the basis of “smart specialization” is important, but only part of the story
- Starting from the existing sectoral (even declining) advantages
- Pointing at Hirschman’s linkages (related variety?) to ‘rejuvenate’ manufacturing, low-tech services, natural resource-based industries
- Upgrading specialization advantages through Knowledge Intensive Business Services-networks (possibly on top of GPT-networks such as nanotechnology illustrated earlier)
- KIBS are related enough but also ‘General Purpose’ to other sectors to spur radical innovation



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Structural transformation, related and unrelated diversification

- Frenken (2016) argues that additionality of public spending in closely related sectors - favouring therefore “related diversification” - might be much lower than the policy’s additionality for “unrelated diversification” which is by definition more costly, risky and uncertain.
- Also, public spending supporting diversification only in related activities might run the risk of saturation of opportunities
- Defining a direction for industrial and innovation policy might have to imply **ambidexterity of policy**, which combines related (close to existing capabilities) and unrelated (jumps to the frontier, for instance for a green re-industrialisation) diversification. (Frenken, 2016)



Wrapping up

- Diagnosis of de-industrialisation and direction of re-industrialisation when advocating for *Industrial Renaissance*
- Industrial renaissance should include intangibles, close to high value added manufacturing sectors *and ideally borrow from Hirschman backward and forward linkages and high development theory*
- *Meeting Societal challenges* requires large public investments (European Investments Bank and National Promotional Banks-European Stabilisation Mechanism Fund)



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