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«European Higher Education Systems under austerity, addressing the pressures of equity promotion and capacity for high-skill formation policies: the cases of Portugal and the Netherlands (2008-2017)»

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Have European Higher Education systems been able:

 $\rightarrow$  to live up to their equity standards,

 $\rightarrow$  to address the challenge of capacity creation for high skill

formation, given the restriction constituted by the opposing

austerity force?

Why?



## I. PUZZLING PERFORMANCE OF TWO MOST DIFFERENT CASES: PORTUGAL & THE NETHERLANDS

### **II. TWO EXPLANATORY HYPOTHESES**

# PART 1

## PUZZLING PERFORMANCE OF TWO MOST

## DIFFERENT CASES: PT & NL

Mill's Method of Agreement (1843) from "A system of Logic"

= "Most different case design" (MDCD)\*

Table 5.2 Method of agreement		
	Case A	Case B
Explanation 1	Absent	Present
Explanation 2	Low	High
Explanation 3	Present	Absent
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Explanation N ('IV')	Present (high)	Present (high)
Outcome ('DV')	Present	Present

from Hanckè, B. (2009: 75)

Table 2.2 Mathed of agreement

\*Method Limitations: see sl. 24

"everything between the two cases is different, except for the explanation and the outcome"

"Since all other potentially relevant dimensions vary, but your outcomes are the same, **only the similarities** between cases <u>on the explanation</u> **can cause the agreement between the cases** <u>in terms of</u> <u>outcomes</u>"

## 1<sup>st</sup> Policy aim: equity promotion policies >>student financial support systems

Lisbon Strategy Aim (March 2000) "the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion"

"85% of 20 to 24 year-olds should have an upper secondary education by 2010" (Anderson, 2015)

# shared outcomes: equity promotion policies

Table 1 Evolution in public funding between 2008 and 2015 in 30 higher education systems

Evolution in public funding	Country/system	
2000-2013	Change adjusted for inflation	Nominal change (not adjusted for inflation)
Between 20% and 40% increase	Germany, Denmark, Luxembourg (*), Norway, Sweden, Turkey	Austria, Belgium (fr and fl), Germany, Denmark, Iceland, Luxembourg (*), Norway, Poland, Sweden, Turkey
Between 10% and 20% increase	Austria, Belgium (fr and fl), Poland	France, Portugal, Netherlands, Serbia,
Between 5% and 10% increase	Switzerland (**)	Switzerland (**)
Between 5% increase and -5%	France, Finland (***), Netherlands,	Croatia, Finland (***),
decrease	Portugal	Slovakia, Slovenia
Between 5% and 10% decrease	Croatia, Iceland, Siovakia, Slovenia	Italy, Spain
Between 10% and 20% decrease	Czech Republic, Spain, Italy,	Czech Republic, Estonia (****), Hungary, United Kingdom
Between 20% and 40% decrease	Estonia (****), Hungary, Ireland, Lithuania, Serbia, United Kingdom	Ireland, Latvia, Lithuania
Decrease superior to 40%	Greece, Latvia	Greece

From: EUA, Public funding Observatory (p. 14, 2016)

NB: (\*) For the period of 2009-2014; (\*\*) for the period of 2009-2013; (\*\*\*) for the period of 2010-2014; (\*\*\*\*) for the period of 2008-2014, see methodological notes for more details.

# ...specifically: fees, grants, loans, tax benefits

PORTUGAL, 2012-13

Fees Increase 2012: 630,50 - 999,71 € 2013: 630,50 - 1067,72 €

NETHERLANDS, 2015
General grant abolished
280 € university based
100 € home based
→ Releasing 1bn/year for HE

Figure 4: Main criteria for allocating grants to full-time students, first cycle, 2015/16



From: "Student Financial Support System Report 2015-16" (Eurydice, 2016)

# 2<sup>nd</sup> Policy aim: capacity creation for high skill formation

- EU) Lisbon Strategy Aim (March 2000) "the most
- competitive and dynamic knowledge-based economy in the
- world, capable of sustainable economic growth with more
- and better jobs and greater social cohesion"

# 2<sup>nd</sup> Policy aim: capacity creation for high skill formation

D1: Emergence of a "knowledge integrated community" (Heitor & Bravo, 2010: 220)

 $\rightarrow$  national research community

«Performance in competitive knowledge environments depends basically on the quality of human resources (namely their specializations, skills, educational level, and learning capacity) and on activities and incentives which are oriented towards knowledge creation and diffusion (...)»

- $\rightarrow$  Indicator: PhD students numbers
- → Indicator: R&D Expenditures

D2: High-end skill formation (Durazzi, 2018: 2)

«the institutional set-up of a higher education system
and its connection to the labour market, in particular
to those segments of the labour market that are
reliant on high skills (such as advanced manufacturing
and dynamic services)»

- → Indicator: Changes to curriculum (Durazzi, 2018)
- → Indicator: Inter-university degrees on specific subjects (Heitor & Bravo, 2010)

# D1: Emergence of national research system

	2013	2014	2015
PT	+ 3,3%	+ 3,7%	+ 2,3%
NL	+ 1,2%	+ 1,4%	+ 1,5%

Sum of age-specific entry rates, by demographic group

*From: Table C3.1 in OECD, Education at a Glance (2015, 2016, 2018)* 

PERCENTAGE OF NEW DOCTORATE HOLDERS PER 10.000 INHABITANTS J.M. Santos et al. / Technological Forecasting & Social Change 113 (2016) 352-362



**Fig. 1.** Flow of new PhDs, as measured by the number of new PhDs per 10,000 inhabitants, 2004–2012. Source: Educational attainment and education outcomes (EDAT), Eurostat.

## D2: High skill formation: indicator changes to curriculum

### PORTUGAL

→ "Strategic Guidelines for HE" (2014)
 Rationalisation of courses aim
 2013-14: +33 degree courses in technology sector

# INCODE

 $\rightarrow$  "National Initiative for Digital competences"

Specialisation: "offer of computing and ICT skills in HE at all levels from short cycle degrees/diplomas (TeSP) to 1<sup>st</sup> and 2<sup>nd</sup> Bologna cycles" (FCT, 2019)



NETHERLANDS

- Need of profiling degrees in order to render students' skills more recognisable to employees
- 4 degree courses "distinctive feature of

Ministerie van Onderwijs, Cultuur en

entrepreneurship" (MECS, 2015:72)



... multiply x2 the search of independent variables (I.V.)

explaining the agreement on the two outcomes of the two

dependent variables (D.V.)

Mill's Method of Agreement (1843) from "A system of Logic"

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Table 2.2 Method of agreement

#### Real GDP growth rate - volume

Time / Geopolitical entity (reporting) Time frequency: Annual Unit of measure: Chain linked volumes, percentage change on previous period National accounts indicator (ESA 2010): Gross domestic product at market prices



## Dep. Var. 1, Students' financial support policies

**Candidate Explanations (I.V.):** 

Portugal

Netherlands

Welfare State Type ? (Willemse & De Beer, 2012)

Mediterranean WS

**Conservative WS** 

Politics / Ideology ? (Capucha et al., 2013)

Student movements ? (Altbach, 1989)

2009, centre left government by P. M. Socrates 2014, labour + conservative coalition lead by P.M. Rutte

\*PRESENT

\*PRESENT

## Dep. Var. 2, Capacity for High Skill formation

#### **Candidate Explanations (I.V.):**

Internationalisation strategy integrating high-end skills in curriculum (Graf, 2019) Portugal

Mixed Market Economy (MME)

#### Netherlands

Coordinated Market Economy (CME)

(Hall & Soskice, 2001)

Investment in R&D (Heitor & Bravo, 2009)

\*PRESENT

\*PRESENT

# PART 2 Explanatory Hypotheses (IV1, IV2)

Mill's Method of Agreement (1843) from "A system of Logic"

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Table 2.2 Method of agreement

# IV1: Explaining cuts to student social support systems

Dismantling the institutional access point for students' voice

#### PORTUGAL

Law 62/2007: student

component of Senate

-15% of the composition

(Gonçalves, 2012)

#### NETHERLANDS

2013)

Since 1997, students relegated to University Council, only advisory powers (Amaral et al.,

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## Connecting hypothesis and outcome (George & Bennett, 2005: 258) : Lack of institutional access point to channel **"opposition"** and **"initiative" themes**

Allan Päll, Chairperson of the European Students' Union, said: *"We strongly disagree with the political measures related to higher education and cuts in social support to students in Portugal. This especially endangers those that come from disadvantaged backgrounds. Investment into higher education should be seen as a way out of the crisis in the longer term."* (ESU, 2012)



"It is a manifestation of a broad discontent with the focus on *rendement* thinking in Dutch higher education and the lack of democracy since 1997 with the abolition of student participation on university boards, and with the boards and deans being appointed by external supervisors. In this it reflects the increasing discontent in Dutch society with politics and privatisation, which also explains the broad attention to the protests."

(Professor Hans de Wit, in Myklebust, 2015)

### IV2: Explaining D1 Emergence of national research community 2014-15 Mission and Governance reforms of national research funding institutes: PhD research proposal requirements

**2013:** "scientific merit and innovative nature of the project from an international standpoint; scientific merit of the research team; feasibility of the work plan and reasonability of the budget; contribution to the body of knowledge in the field and improvement in the competence of the scientific community"

2014: "potential economic value of the technology"



2015: In order to award funding, the researchproposals need to have "pragmaticapplications" and "narrowly defined researchquestions"



Connecting hypothesis and outcome (George & Bennett, 2005: 258): creation of an incentive structure for researchers

### **Employability theme (PT)**

"involving companies in advanced training and recruitment of researchers" (FCT, 2015a: 12)



"Particularly, we offer deeper ties between the business sector and the public research

institution by setting up a program to establish what we call cooperative laboratories, to fuel the creation of better employment, through knowledge and business." (Manuel Heitor, Minister of Science, Open Access, 2015)

### **Employability theme (NL)**

"top sector policy", initiated by the 2014/2015 "Knowledge and Innovation Contract" between the Dutch Industry, NWO and the Universities (NWO 2014).

- 2017 creation of industrial PhDs, to accelerate the collaboration between universities and industries (NWO, 2017)



for Science

# **Concluding remarks**

>> **Outcome**: Cut in student financial support system

→ Hp) dismantling of student access point for waiving opposition in university governance >>Outcome: emergence of national research community

→ Hp) reform of PHD proposal requirements, incentive structure for prospective researchers

 Limitations: 1. MDCD does not account for ^complex causation ^equifinality (Hanckè, 2009: 73)
 D2 to be further investigated

# **References & additional resources**

- Amaral, A., Tavares, O., & Santos, C. (2013). Higher Education Reform in Portugal: A Historical and Comparative Perspective of the New Legal Framework for Public Universities. *Higher Education Policy*, *26*(1), 5–24. https://doi.org/10.1057/hep.2012.29
- Anderson, K. M. (2015). Social policy in the European Union. London ; New York: Palgrave Macmillan.
- Barr, N. A. (2012). *Economics of the welfare state* (5th ed). Oxford ; New York: Oxford University Press.
- BBC (2011) "Portugal reaches deal on EU and IMF bailout" Available at: https://www.bbc.co.uk/news/business-13275470\_Accessed: 2<sup>nd</sup> June 2019
- BBC (2012) "Dutch coalition under PM Mark Rutte Sworn in by queen" <u>https://www.bbc.co.uk/news/world-europe-20207801</u> Accessed: 2^nd June 2019
- Bryman, A. (2016). Social research methods (Fifth Edition). Oxford ; New York: Oxford University Press.
- Capucha, L., Sebastião, J., Martins, S. da C., & Capucha, A. R. (2016). Crisis and Education in Southern Europe: The Effects of Austerity and Ideology. *Comparative Sociology*, *15*(5), 593–620. https://doi.org/10.1163/15691330-12341402
- Change.org (2015) "The new university" Available at: https://www.change.org/p/university-of-amsterdam-executive-board-support-the-newuniversity\_Accessed: 16<sup>th</sup> July, 2019
- Coelho, M., & Arau Ribeiro, M. D. C. (2018). Internationalization strategies in Portuguese Higher Education Institutions – time to move on and to move beyond. 33–25. https://doi.org/10.29007/dcmw

- Comparing the internationalisation of German and British universities: European Journal of Education, Part II. *European Journal of Education*, 44(4), 569–585. https://doi.org/10.1111/j.1465-3435.2009.01401.x
- Conselho Nacional Educação (CNE) (2013) "Estado da educação 2013" Available at:

http://www.cnedu.pt/content/edicoes/estado\_da\_educacao/Estado-da-Educacao-2013-online-v4.pdf

 Conselho Nacional Educação (CNE) (2014) "Estado da educação 2014" Available at:

http://www.cnedu.pt/content/edicoes/estado\_da\_educacao/Estado\_da\_Educa%C3%A7 %C3%A3o\_2014\_VF.pdf

• De Jonge Akademie (2018). A Beginner's Guide to Dutch Academia, Amsterdam. Available at:

https://www.dejongeakademie.nl/shared/resources/documents/Abeginnersguide.pdf

- Durazzi, N. (2018). The political economy of high skills: Higher education in knowledge- based labour markets. *Journal of European Public Policy*, 1–19. https://doi.org/10.1080/13501763.2018.1551415
- DutchNews (2015) "Dutch invest EUR 135m. in developing a quantum computer" Available at: <u>https://www.dutchnews.nl/news/2015/06/dutch-invest-e135m-in-developing-a-quantum-computer/?fbclid=lwAR3YP04o147plMKbCaWkCteRxvy85sB--j97AsnYfRRVjOmBBNfOgTjGiVM Accessed: 16<sup>th</sup> July, 2019
  </u>
- Esping-Andersen, G. (1990). The three worlds of welfare capitalism.
   Cambridge, UK: Polity Press.
- ESU (2010) "Portugal- FAIRe- Academic federation for Information and External Representation" <u>https://www.esu-online.org/?member=portugal-faire\_Accessed</u>: 4<sup>th</sup> July, 2019
- ESU (2018) "Bologna with student eyes 2018" Available at: <u>https://www.esu-online.org/publications/bologna-student-eyes-2018/</u>

- European Commission (2017) "Public (government and higher education) ReD expenditures as a percentage of GDP" Available at: <u>https://rio.jrc.ec.europa.eu/en/stats/public-government-and-higher-</u> <u>education-rd-expenditure-gdp</u>
- European Student Union (2012) "Cuts in social support force Portuguese students to leave education" Available at: <u>https://www.esu-</u> <u>online.org/?news=cuts-in-social-support-force-portuguese-students-to-</u> <u>leave-education</u>
- European University Association (EUA) (2012) "EUA's Public funding observatory – June 2012" Available at:

https://eua.eu/resources/publications/713:eua%E2%80%99s-public-funding observatory-2012.html

- Eurydice. (2011). National Student Fee and Support Systems in European Higher Education—2014/15. 50.
- Eurydice. (2013). National Student Fee and Support Systems-2013/14. 44
- Evaluation panel (2015) "FCT evaluation report" Available at: https://www.fct.pt/docs/Evaluation of FCT Report EP.pdf
- FCT (2013) "FCT Project grant schemes" Available at: <u>https://www.fct.pt/apoios/projectos/guioes#todos\_avaliacao\_Accessed: 15th July, 2019</u>
- FCT (2014) "FCT project grant schemes" Available at: <u>https://www.fct.pt/apoios/projectos/guioes#todos\_avaliacao\_Accessed</u>: 15t<sup>h</sup> July, 2019
- FCT (2015a) "Self-evaluation report" Available at: <u>https://www.fct.pt/docs/FCT\_Self\_Evaluation\_Report.pdf</u> Accessed: 16<sup>th</sup> July, 2019
- FCT (2015b) "FCT PhD Programmes" Available at:

https://www.fct.pt/apoios/programasdoutoramento/index.phtml.en\_Accessed: 21st July,

 FCT (2015c) "Career development" Available at: <u>https://www.fct.pt/apoios/contratacaodoutorados/index.phtml.en</u> Accessed: 16<sup>th</sup> July, 2019

- FCT (2019) "INCoDe action lines" Available at: <u>https://www.incode2030.gov.pt/en/action-lines#qualification\_Accessed: 18th</u> July, 2019
- FCT(2017) "INCoDe progress report" Available at: https://www.incode2030.gov.pt/en/documents-publications
- Ferreira Gomes (2014) "DGES- Strategic Guidelines for Higher Education" Available at: <u>https://www.dges.gov.pt/en/pagina/strategic-guidelines-higher-education\_Accessed</u>: 30<sup>th</sup> June 2019
- George, A. L., & Bennett, A. (2005). *Case studies and theory development in the social Sciences*" Cambridge, Massachusetts: MIT Press
- Gonçalves, M. E. (2009) "Changing legal regimes and the fate of autonomy in Portuguese universities" In Neave, G.; Amaral, A. "Higher education in Portugal 1974-2009: a nation, a generation" (pp.161-177)
- Graf, L. (2009). Applying the Varieties of Capitalism Approach to Higher Education:
- Gray, J. (2015) "Dutch student protests ignite movement against management of universities". The Guardian. Available at: https://www.theguardian.com/higher-education-network/2015/mar/17/dutchstudent-protests-ignite-movement-against-management-of-universities Accessed: 18<sup>th</sup> July, 2019

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- Hall, P. A., & Soskice, D. (2001). Varieties of Capitalism. https://doi.org/10.1093/0199247757.001.0001
- Hancké, B. (2009). Intelligent research design: A guide for beginning researchers in the social sciences. Oxford ; New York: Oxford University Press.
- Heitor, M., & Bravo, M. (2010). Portugal at the crossroads of change, facing the shock of the new: People, knowledge and ideas fostering the social fabric to facilitate the concentration of knowledge integrated communities. *Technological Forecasting and Social Change*, 77(2), 218–247. https://doi.org/10.1016/j.techfore.2009.10.006
- Klemenčič, M. (2014). Student power in a global perspective and contemporary trends in student organising. *Studies in Higher Education*, *39*(3), 396–411. https://doi.org/10.1080/03075079.2014.896177
- Maassen, P., & Stensaker, B. (2011). The knowledge triangle, European higher education policy logics and policy implications. *Higher Education*, *61*(6), 757–769. https://doi.org/10.1007/s10734-010-9360-4
- MECS (2014) "2025 Vision for science: choices for the future" Available at: https://www.government.nl/documents/reports/2014/12/08/2025-vision-for-sciencechoices-for-the-future
- Ministry of Education, Culture, and Science (MECS) (2015) "The value of knowledge: strategic agenda for higher education and research 2015-2025" Available at: <u>https://www.government.nl/documents/reports/2015/07/01/the-value-of-knowledge</u>
- MIT (2013a) "MIT-Portugal programme" Available at: <u>https://www.mitportugal.org/</u>Accessed: 8<sup>th</sup> July, 2019

May, 2019

• MIT (2013b) "MIT-Netherlands programme" Available at:

https://misti.mit.edu/student-programs/location/netherlands\_Accessed: 12th

 Myklebust J. P. (2015) "Angry students protest against university reforms" University world news. Available at: https://www.universityworldnews.com/post.php?story=20150304091046262

Accessed: 18<sup>th</sup> July, 2019

 Neth-er (2016) "Bussemaker: there is still much work to be done to improve the quality of education" Available at: <u>https://www.neth-</u>

er.eu/nl/nieuws/Bussemaker-There-still-much-work-be-done-improve-quality-education Accessed: 10<sup>th</sup> June, 2019

- NWO (2014) "NOW and the Top sectors" Available at: https://www.nwo.nl/en/policies/top+sectors\_Accessed: 12<sup>th</sup> April, 2019
- NWO (2015) "NWO mission and vision" Available at: <u>https://www.nwo.nl/en/about-nwo/mission+and+vision</u> Accessed: 12<sup>th</sup> April, 2019
- NWO (2017) "Industrial Doctorates" Available at: <u>https://www.nwo.nl/en/news-and-</u>

events/news/Year/2018/Month/6/Science+area/scienceareaENW/Programme/Industrial-Doctorates\_Accessed: 12<sup>th</sup> April, 2019

- OECD(2015a) "Education policy outlook 2015: making reforms happen "<u>Available at:</u> <u>https://www.theewf.org/uploads/Education-Policy-Outlook%202015 Making-</u> <u>Reforms%20Happen.pdf</u>
- OECD (2015b) *Education at a Glance 2018: OECD Indicators*, OECD Publishing, Paris.
- OECD (2016), *Education at a Glance 2018: OECD Indicators*, OECD Publishing, Paris.
- OECD (2017), *Education at a Glance 2018: OECD Indicators*, OECD Publishing, Paris.
- OECD (2019) "Gross domestic product (GDP)" Available at: https://data.oecd.org/gdp/gross-domestic-product-gdp.htm
- Open Access (2019) "Science and Higher education for the future of Portugal" Available at: <u>https://www.neth-er.eu/nl/nieuws/Bussemaker-There-still-</u> <u>much-work-be-done-improve-quality-education\_</u>Accessed: 3<sup>rd</sup> May, 2019

- Philip G. Altbach. (1989). Perspectives on Student Political Activism. Comparative Education, 25(1), 97–110.
- Santos, J. M., Horta, H., & Heitor, M. (2016a). Too many PhDs? An invalid argument for countries developing their scientific and academic systems: The case of Portugal. *Technological Forecasting and Social Change*, *113*, 352–362. https://doi.org/10.1016/j.techfore.2015.12.013
- Santos, J. M., Horta, H., & Heitor, M. (2016b). Too many PhDs? An invalid argument for countries developing their scientific and academic systems: The case of Portugal. *Technological Forecasting and Social Change*, *113*, 352–362. https://doi.org/10.1016/j.techfore.2015.12.013 sciences. Cambridge, Mass: MIT Press.
- Taylor-Gooby, P., Leruth, B., & Chung, H. (Eds.). (2017). After Austerity (Vol. 1). https://doi.org/10.1093/oso/9780198790266.001.0001
- Thelen, K. (2019). Transitions to the Knowledge Economy in Germany, Sweden, and the Netherlands. *Comparative Politics*, *51*(2), 295–315. https://doi.org/10.5129/001041519825256623
- Tremlett (2011) "Portugal in crisis after Prime Minister resigns over austerity measures" Available at:

https://www.theguardian.com/business/2011/mar/23/portugal-governmentcollapses-eu-bailout-looms Accessed: 3<sup>rd</sup> March 2019

- Van Vught, F. (2011) "Responding to the EU Innovation Strategy: The Need For Institutional Profiling in European Higher Education and Research" in H.De Boer, J.Enders, Westerheijden D. F. "Higher Education Reform in Europe" (pp.63-81). Rotterdam, Netherlands: Sense Publishers
- Willemse, N., & de Beer, P. (2012). Three worlds of educational welfare states? A comparative study of higher education systems across welfare states. *Journal of European Social Policy*, *22*(2), 105–117. https://doi.org/10.1177/0958928711433656