

Public hearing: "What future for EU research policy: Taking stock and looking ahead". Committee on Industry, Research and Energy (ITRE), European Parliament, 29 November 2016



Synergies and national capacity building: cohesion or two-speed Europe?

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* The opinions expressed in this presentation are those of the author and do not necessarily reflect the views of his employing institution



Synergies within the European Research Area





FoodConnects
consortium awarded
EIT Food status by the
European Institute of
Innovation and Technology
(17/11/2016)

News 17/11/2015

European Commission hails great opportunity to attract the best entrepreneurs, students and researchers

- Important role of partners from EU-13
- Co-location centre in Warsaw coordinating Eastern European and Nordic regions



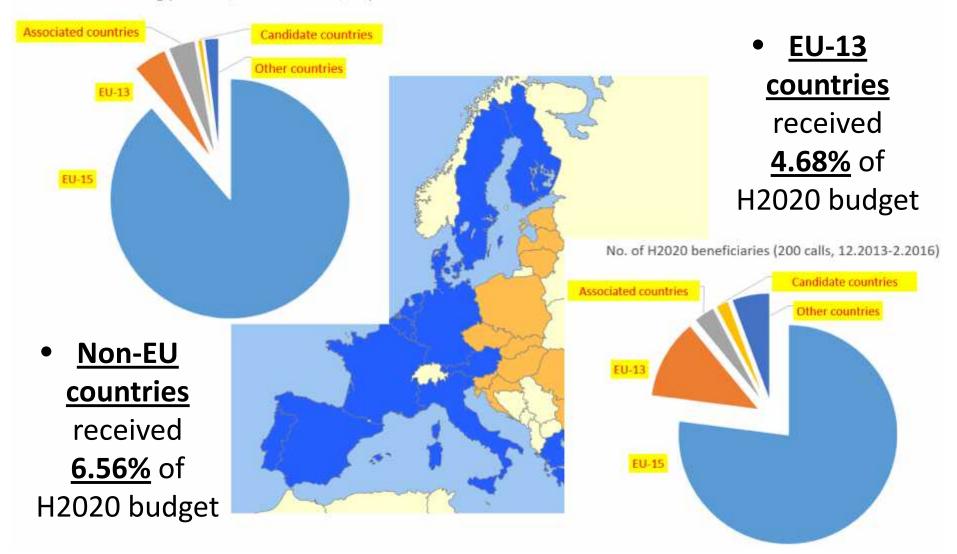
Faculty of Management, University of Warsaw



Two-speed Europe EU-15 and EU-13 (H2020, 200 calls)



H2020 funding (200 calls, 12.2013-2.2016, m€)





Two-speed Europe - R&D expenditures, publications

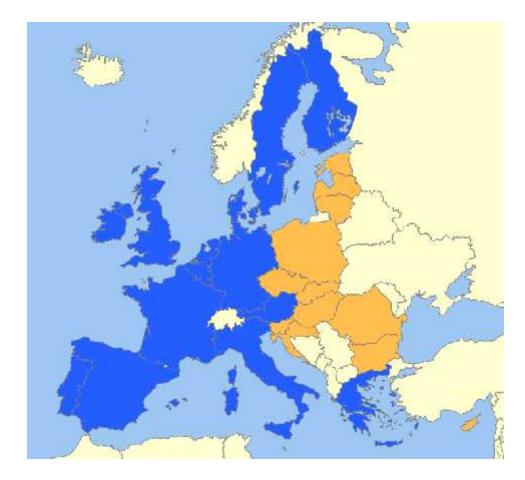


Gross
Expenditures on
Research &
Development,
2006-2015

EU-28: +38.4%

EU-15: +34.2%

EU-13: +122.1%



Scientific publications in English language, Scopus database, 2006-2015

EU-28: +51.9%

EU-15: +47.5%

EU-13: +96.0%

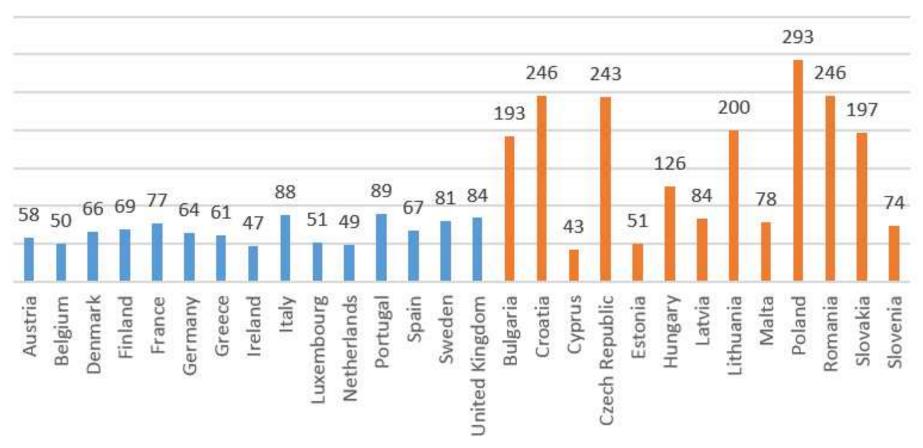
EU-13 invests proportionally more in R&D

in relation to received H2020 funding





Scientific publications per 1000€ H2020 funding (Scopus, 2014)

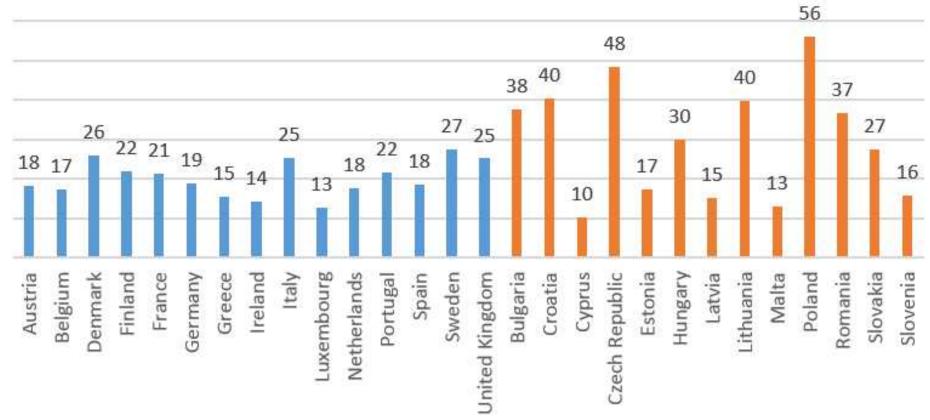


Most EU-13 perform better than EU-15 in scientific publications, citations received, patents and hightech exports in relation to how much they receive in H2020 funding





Citations to scientific publications per 100€ H2020 funding (Scimago-Scopus, 2014)

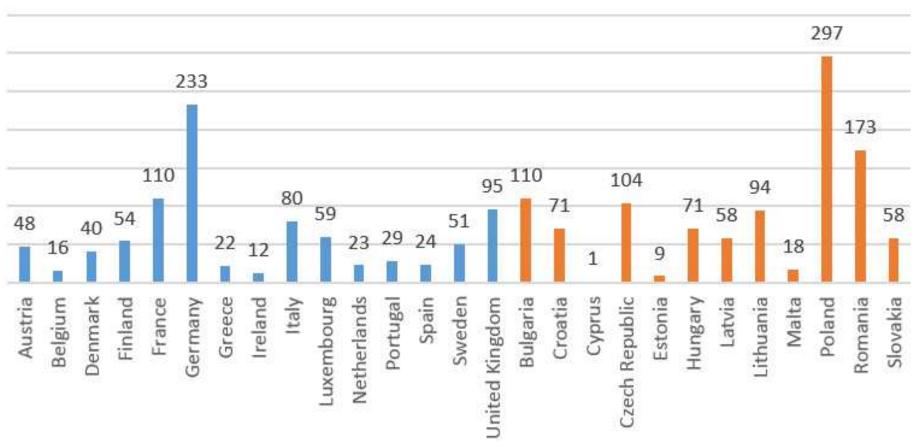


Most EU-13 perform better than EU-15 in scientific publications, citations received, patents and hightech exports in relation to how much they receive in H2020 funding





Domestic patents per 100€ H2020 funding (WIPO, 2014)



Most EU-13 perform better than EU-15 in scientific publications, citations received, patents and hightech exports in relation to how much they receive in H2020 funding

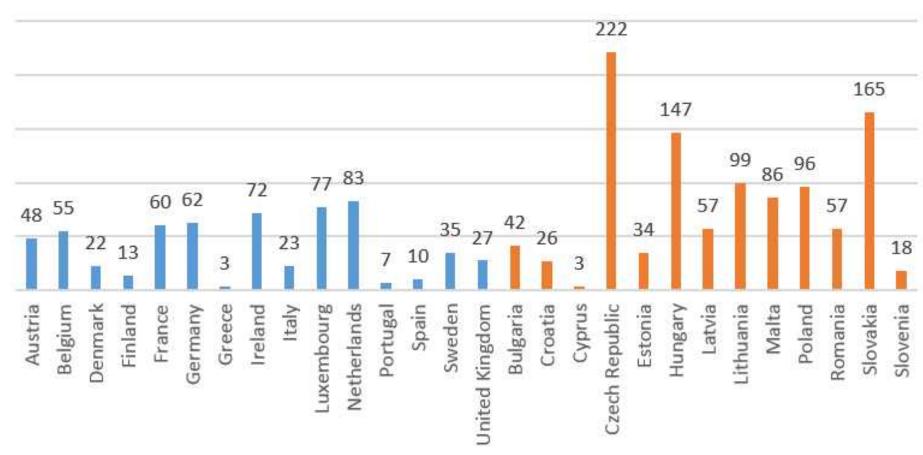
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Exports of hightech products per 1000€ H2020 funding (Eurostat, 2014)



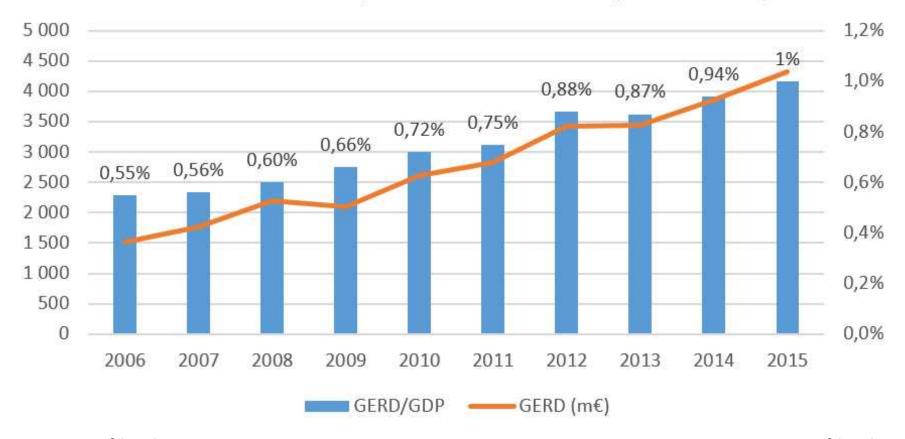
Most EU-13 perform better than EU-15 in scientific publications, citations received, patents and hightech exports in relation to how much they receive in H2020 funding



Two-speed Europe - Example of Poland



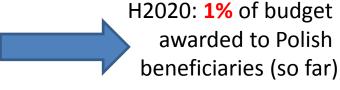
Poland - Gross Expenditures on R&D (2006-2015)



FP6: **1.3%** of budget awarded to Polish beneficiaries



FP7: **1.1%** of budget awarded to Polish beneficiaries







"The unspoken Eastern European underinvestment scandal [...]. EU project salary compensation offers no respite, rather it reinforces the tilted playing field and fuels the brain drain" (Galsworthy and McKee, 2013: 184)

Galsworthy, M. and McKee, M. (2013) Europe's "Horizon 2020" science funding programme: how is it shaping up? *Journal of Health Services Research & Policy*, 18(3)





"A PI from Poland winning an ERC grant can be paid much less than by an NCN [National Science Centre] grant, which is of course incomparably easier to get. It is also very difficult to pay for internationally competitive postdocs from an ERC grant in Poland. [...] This rule simply does not make sense and is deeply unfair. It means that exactly the same excellence is paid much less in one European country than in the other, and the funding is coming from the Błocki, Z. (2016) On knowledge divide in Europe. How to improve same source".

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Faculty of Management, University of Warsaw

Horizon 2020? Science Europe Workshop, Budapest, 26 October 2016



JOINT STATEMENT OF SCIENCE MINISTERS FROM BULGARIA, CZECH REPUBLIC, ESTONIA, HUNGARY, LATVIA, MALTA, POLAND, SLOVAKIA AND SLOVENIA

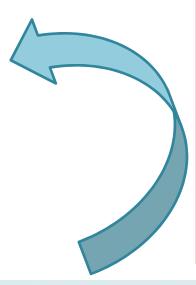
ON HORIZON 2020 REMUNERATION PRACTICES

HORIZON 2020, as the largest research and innovation support programme has an important role to play regarding future of European science. It needs not only to support excellent science and researchers but also to create conditions for circulation of best scientists and full use of intellectual capital of European citizens.

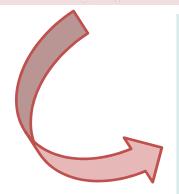
After the first year of the implementation of HORIZON 2020, the EU is still faced with significant differences regarding participation of researchers from different countries. It is the main challenge for full implementation of the European Research Area.

One of the reasons for such situation are large differences in researchers' salaries, which are the consequences of many historical and structural conditions. Due to many relevant legal regulations evolution of the national remuneration systems is a long-lasting process.

Currently the academic staff remuneration principles differ in EU Member States. For



Concerns regarding researcher salaries in H2020 addressed by the EC so far



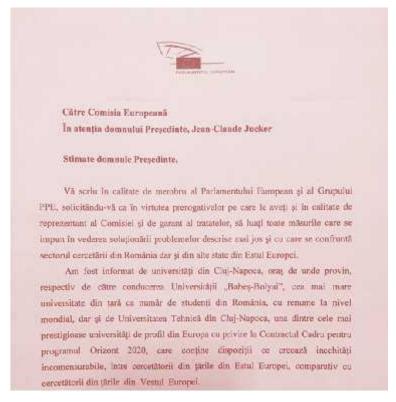
I am most grateful that you share your concerns concerning the remuneration practices in Horizon 2020 with me and I would like to thank you for your proposal to use the remuneration model of the Marie-Skłodowska Curie Actions as a pilot option in the Horizon 2020 programme. I agree that ensuring the appropriate remuneration of researchers across the EU is of critical importance for increasing the attractiveness of the European Research Area as a place to carry out research. You certainly will agree with me that this should be done in a fully sustainable manner, which means that all actors in the European science, research and innovation landscape should play a role in this and that self-evidently the Member States, responsible for the great majority of public research funding in Europe, should take the lead on this. The question is whether Horizon 2020 could also play a role in this.





Researchers from Babeş-Bolyai University in Cluj-Napoca, Romania refused to sign a H2020 grant agreement

 Salary costs in accordance with H2020 rules do not cover the actual personnel costs of research



Din pheate, observam că astăzi avem de-a face cu o situație cure ne generază o Europă a Vestului și una a Estului, pe care însă personal refuz să o accept, convins fiind că și dumneavoustră faceți acest încru.

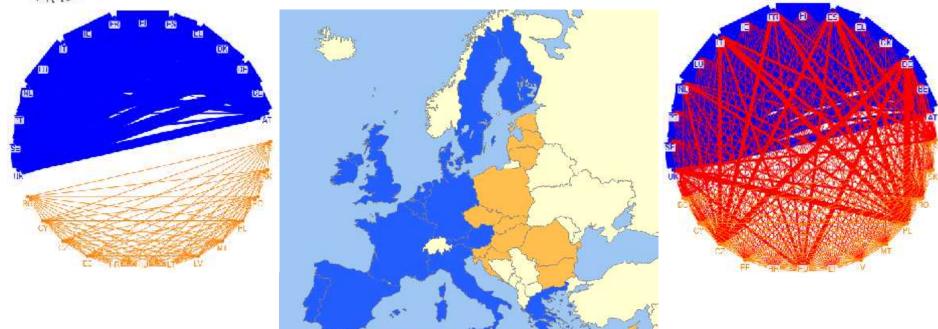
În speranța unci rezolvări de îndată a problemelor semnalate primiți, domnule președinte, expresia înaltei mele considerații și aprecieri pentru acrivitatea pe cure o desfisurați.

Cu stimă,
Daniel Buda, Europarlamentar PPE

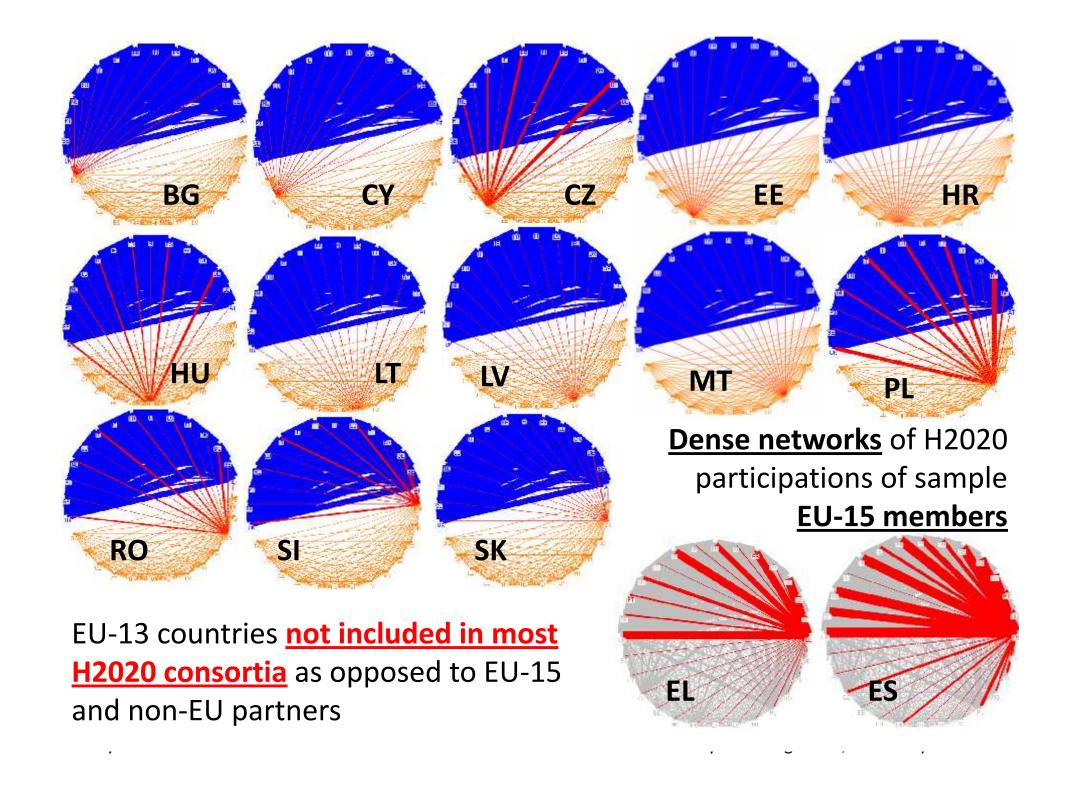


(2) Access to consortia





- EU-15 countries intensify their cooperative ties
- No incentives to <u>include EU-13</u> partners in project consortia (* few exceptions: EIT RIS scheme, Spreading Excellence & Widening Participation)





(2) Access to consortia



- European Technology Platforms
 - Recognised by the EC as official representation of R&I stakeholders in the EU
 - Role in <u>setting H2020 research agendas</u>
- Governance bodies of 36 platforms:
 - Only 9 have members from EU-13, but 10 have non-EU members
 - Only 5.88% of all members of governance bodies (N=833) come <u>from EU-13</u>

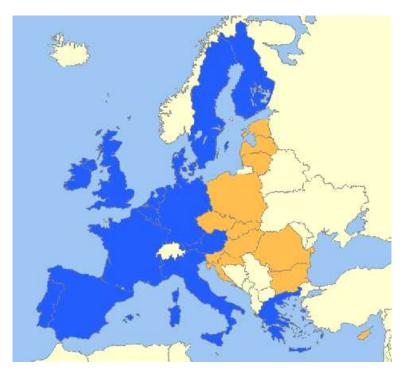


(2) Access to consortia



Spreading Excellence and Widening Participation (SEWP) measures in H2020

EU-15: 51.8% of SEWP budget €59.3m



EU-13: 48.2% of SEWP budget €55.3m

H2020 measures introduced to boost the participation of EU-13 offer more benefits to research actors from EU-15



(3) Synergies FP-ESIF



- Uncoordinated legal and financial frameworks for Framework Programmes (FP) and European Structural & Investment Funds (ESIF)
- Synergies difficult to implement, or even prevented by EU regulations
- Regional and national R&I priorities differ from pan-European themes



(3) Synergies FP-ESIF



- Poland's <u>draft</u> Operational Programme "Smart Growth" included an instrument <u>promoting the</u> <u>participation in H2020</u> that had to be deleted
- "The Commission remains opposed to financing the support for preparation of enterprises and scientific entities for their participation in international programmes (e.g. Horizon 2020, COSME etc.)."
 (quote from a document provided by the EC, DG REGIO, included in "Stairway to Excellence report Poland", p. 35)
- "In the context of Poland, the Commission found very limited justification to use the ERDF as a sort of a technical assistance proxy for the Horizon 2020"
 (written explanation by the EC, included in "Stairway to Excellence report Poland", p. 36)



How to address the shortcomings in H2020 design?



- 1. Salaries of researchers
- Alternative regulations taking into account performance-based salaries and ensuring comparable remuneration in various countries

- 2. Access to consortia
- Project selection criteria promoting participation of excellent EU-13 partners (territorial incentives for equally good proposals – like for gender and SMEs)
- 3. Synergies H2020-ESIF
- More flexibility in using ESIF in combination with FP and to use ESIF to support the participation in FP projects