

An industry view on Portugal's Higher Education system

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7th November 2017



Hovione

- 58 years supplying products and services to the global pharmaceutical industry
- In every one of the last 3 years we stand -as contract manufacturers- behind 10% of the new small molecule drugs approved by EMA and FDA
- Cures for Hepatitis C
 - the most significant medical breakthrough of the last 5 years
 - of the 4 marketed drugs, 3 come from a Hovione plant
- We employ 1800 people, 1000 in Portugal, over half have university training
- 380 are in R&D, we employ over 80 PhDs



Hovione and Portugal's Higher Education system A very successful relationship

- We hire -on average- 50 recent university graduates (BSc+MSc+PhD) per year
- "Welcome Back" we hired back from abroad >30 Pt PhDs (bolsas FCT)
- We have on going 7 PhD students with 2 supervisors Uni+Hovione, & 15 MScs
- Dozens of R&D projects every year with 8+ different universities
- €5m 9°W program over 3 years starting in 2016 :
 - Analytical chemistry lab at ISEL to improve the quality of vocational courses and assure better immediate employability – 30 students/year
 - Intelligent Lab digitalization Industry 4.0 project
 - Continuous processing of pharmaceuticals
 - Chair in analytical chemistry at U Aveiro

Hovione's success is to a large extent owed to the high quality of Portugal's higher education system



What got us here, won't get us there ... we are concerned with the future our HE

Portuguese university foundations are handcuffed by being included in state sector budget rules

- Faculty: insufficient freedom to pay on merit, will drive retention issues
- Finances: obliged to observe rules that apply to state sector entities, prohibited from having surpluses or losses, unable to carry forward surpluses or losses from one fiscal year to another
- Grants from industry cannot use them as intended by the donor
- To escape such handcuffs many universities create vehicles deliberately outside their consolidation perimeter, meaning also outside the control of its governance and reporting systems – this carries risks.

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As we set up relationships around R&D projects with Portuguese universities we note considerable amplitude in the variability of :

- Clarity of roles and responsibilities
 - quick decision-making or
 - dysfunctional changes in position and considerable delays
- Expectations as to the value of IP
 - Some projects never get off the ground
 - Others... repeat
- Complexity of contracts, lengthy negotiation

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Effective policies for innovation –

How can Portugal revitalise its industries, support the emergence of new sectors and strengthen firms' competitiveness through innovation?

Start by reducing tax,

corporate (IRC)

and

personal (IRS)



Strengthening linkages - How can Portugal ensure that public research and the knowledge transfer infrastructure help support a virtuous cycle of research and innovation? What are the main gaps in the current knowledge transfer infrastructure? What should be the main priorities in the short and long run?

It takes 2 to tango, and our Economy and Industry are no match to our HE







Thank you for your attention.

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