

EuropaBio Event
EU2020 & Beyond:
The role of biotech in Europe's
responsible innovation
Brussels, December 9th 2010

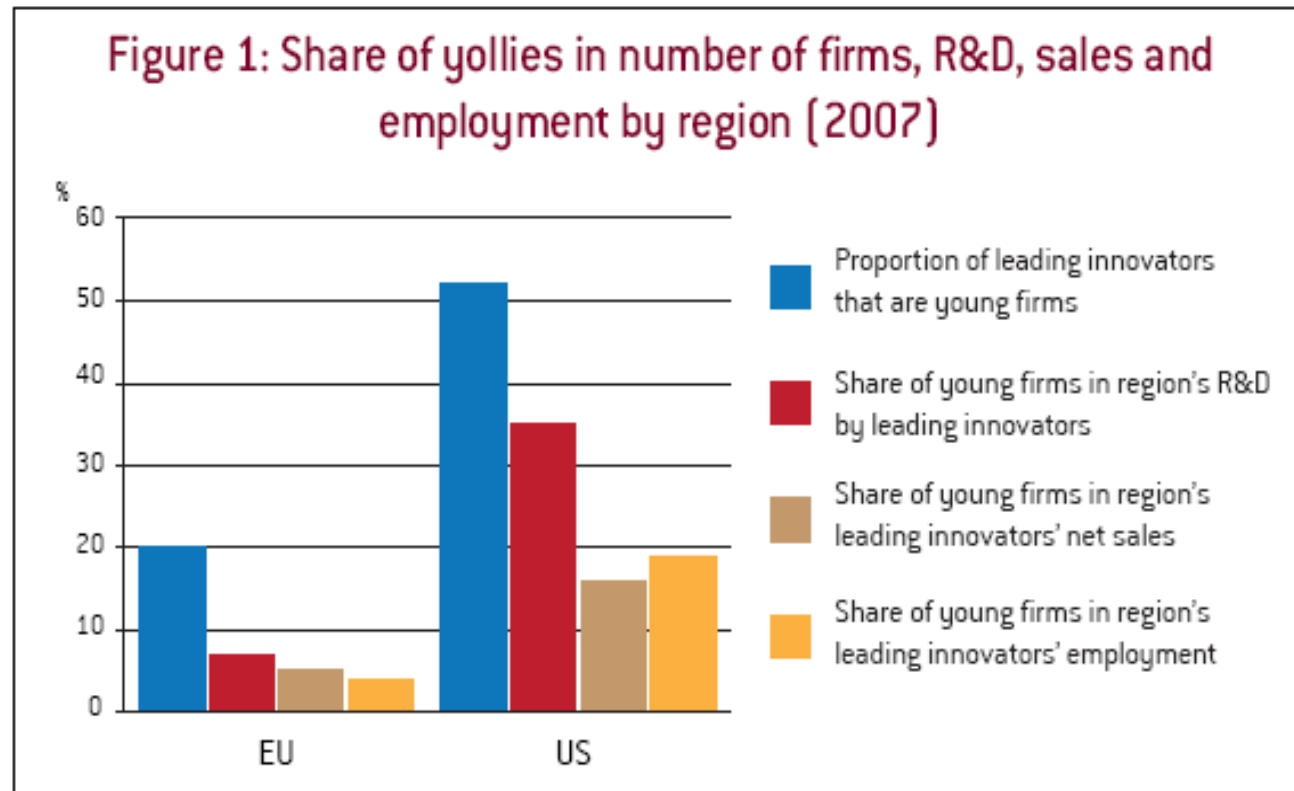


Reinhilde Veugelers

Prof at University of Leuven
Senior Fellow at Bruegel

What the US has but the EU lacks: Yollies

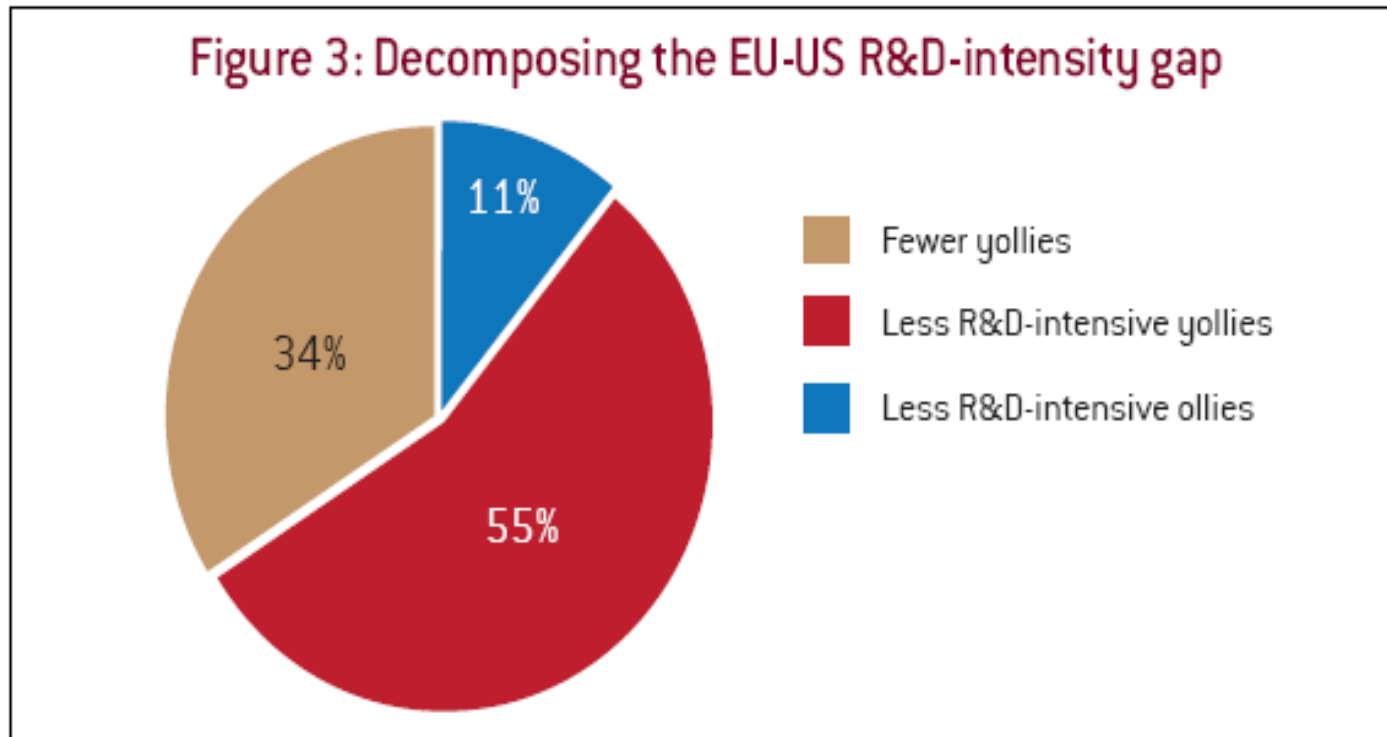
Yollies = Young Leading Innovators created after 1975



There are fewer EU-based than US-based Yollies

Sources: Bruegel/European Commission JRC-IPTS on the basis of the EU Industrial R&D Investment Scoreboard (European Commission, 2008).

Missing Yollies matter critically for closing EU's R&D gap



The lower R&D intensity of EU Yollies is the largest factor responsible for the total EU-US R&D intensity gap

Sources: Bruegel/European Commission JRC-IPTS on the basis of the EU Industrial R&D Investment Scoreboard (European Commission, 2008).

There is an EU problem of missing yollies in the 'right' R&D intense sectors, especially biotech and internet

Table 1: Comparing EU to US yollies in key sectors

	European Union			United States		
	Yollies RDI	Ollies RDI	Yollies as % of firms	Yollies RDI	Ollies RDI	Yollies as % of firms
Semiconductors	17	16	10	18	16	20
Biotechnology	18	10	12	27	12	17
Telecom eqpt.	18	13	3	14	11	8
Pharmaceuticals	25	15	5	14	15	6
Healthcare	11	4	2	10	7	4
Computer h'ware		6	-	6	4	7
Internet			-	11		3
Computer services	3	5	7	6	6	1
Electronics	6	6	9	5	5	2
Software	17	14	20	15	13	17

Sources: Bruegel/European Commission JRC-IPTS on the basis of the EU Industrial R&D Investment Scoreboard (European Commission, 2008).

Sectors are ordered according to highest contribution to overall structural effect of missing Yollies for EU's R&D gap

Why Europe is missing Yollies in new sectors (compared to US)?

- ❑ Risk-taking financial markets
- ❑ IPR regime
- ❑ Segmented product markets
 - Early users/lead markets
- ❑ Insufficient linking in “innovation system”
 - Industry science links
 - Links between large incumbents and small new entrants
 - Public Private partnerships
- ❑ (Re-)entry & exit costs
- ❑ Flexible labour markets
- ❑ Government policy
 - Funding
 - Procurement
 - Competition policy

How to realize EU's Yollies potential : Recommendations for EU's innovation policy

- ❑ An overall innovation policy is necessary
to develop an overall favorable innovation climate
but it is not sufficient;
- ❑ Policies also need to address the **specific** barriers of **new sectors**
and **new firms**
 - Generic specific measures
 - ❑ Access to risk finance
 - ❑ Reducing the costs of IPR protection
 - ❑ Competition policy for new innovative markets
 - Sector specific measures to nurture early stage innovations
and potential competition
 - ❑ Eg regulations...
- ❑ Invest in capacity for prospective technology analysis, sectoral
monitoring and policy experimentation/evaluation



Thank You For Your Attention

Reinhilde.veugelers@bruegel.org

Reinhilde.Veugelers@econ.kuleuven.be