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3 simple points with radical implications for governance

1. Government does not only ‘intervene’ in innovation policy, it is often a major **entrepreneurial** ‘agent’. Not only ‘enabling’ innovation but actually doing it (not just basic research also applied products: internet, new drugs etc).
2. Especially true for ‘**radical**’ innovations, with high uncertainty.
VC funds often less willing to take on very risky phase. (e.g. Priority NME drugs in Fig. 1)
3. The Government as ‘entrepreneur’ means we must:
 - a. Allow government to **fail**. Exploration and learning produce many. So cannot have evaluation committees scared of failure (rewriting it as a success). Fig. 2
 - b. Understand **the organisation specific conditions** that allow innovation efforts to lead to good performance—even in Government (as with our sectoral studies Figs. 3-4)
 - c. Need to think more explicitly about how *governance of innovation* differs for **radical vs incremental innovations**. Are current governance structures geared more towards incremental (competence enhancing) innovations which strengthen incumbents?

Fig 1

Out of a total of 1072 drugs approved by the FDA between 1993 and 2004, only 146 were NMEs with priority review, only 14% of the total.

FDA APPROVALS (1993-2004)		
tot n° drugs approved	1072	% on tot drugs approved
tot n° NMEs	357	33 %
tot n° variations of old drugs	720	67 %
tot n° P NMEs	146	14 %
tot n° S NMEs	206	19 %

year	P NMEs
1993	13
1994	13
1995	9
1996	18
1997	9
1998	16
1999	19
2000	9
2001	7
2002	7
2003	9
2004	17

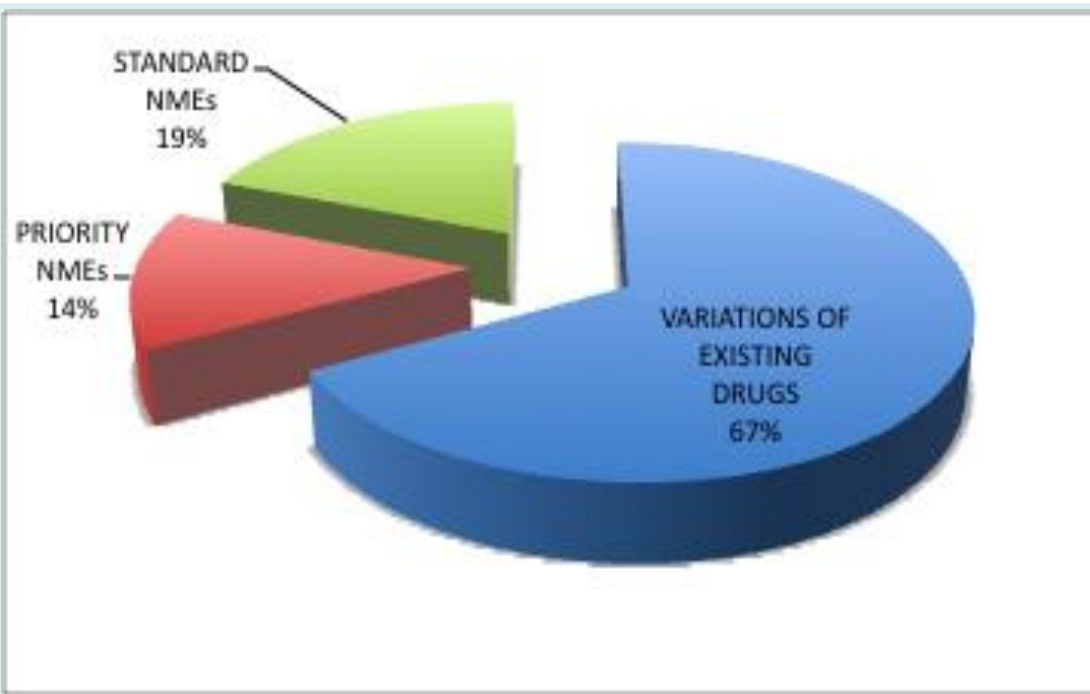


Fig 2

Periods of entrepreneurship are followed by SHAKEOUTS....

Number of Firms and Industry Age

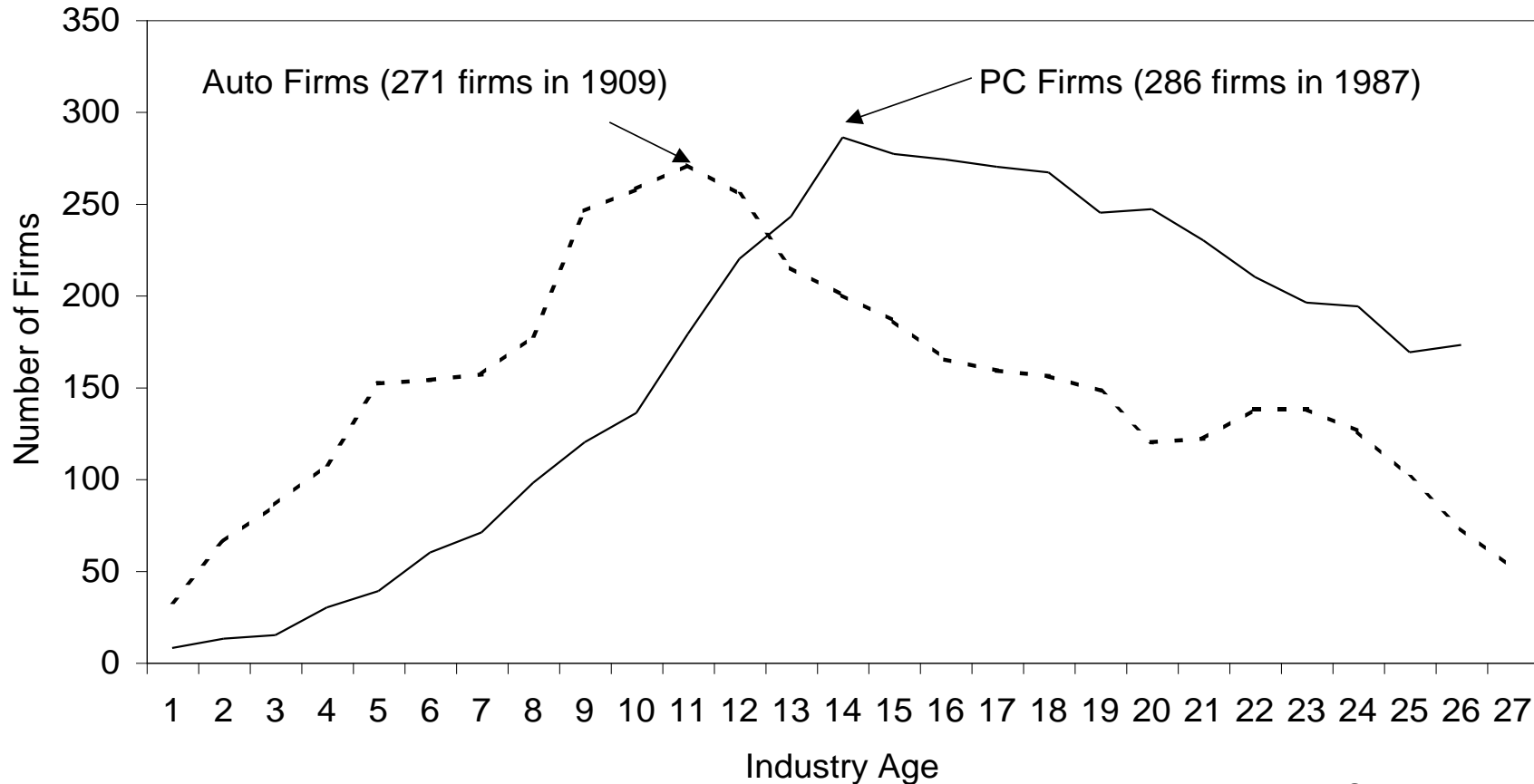
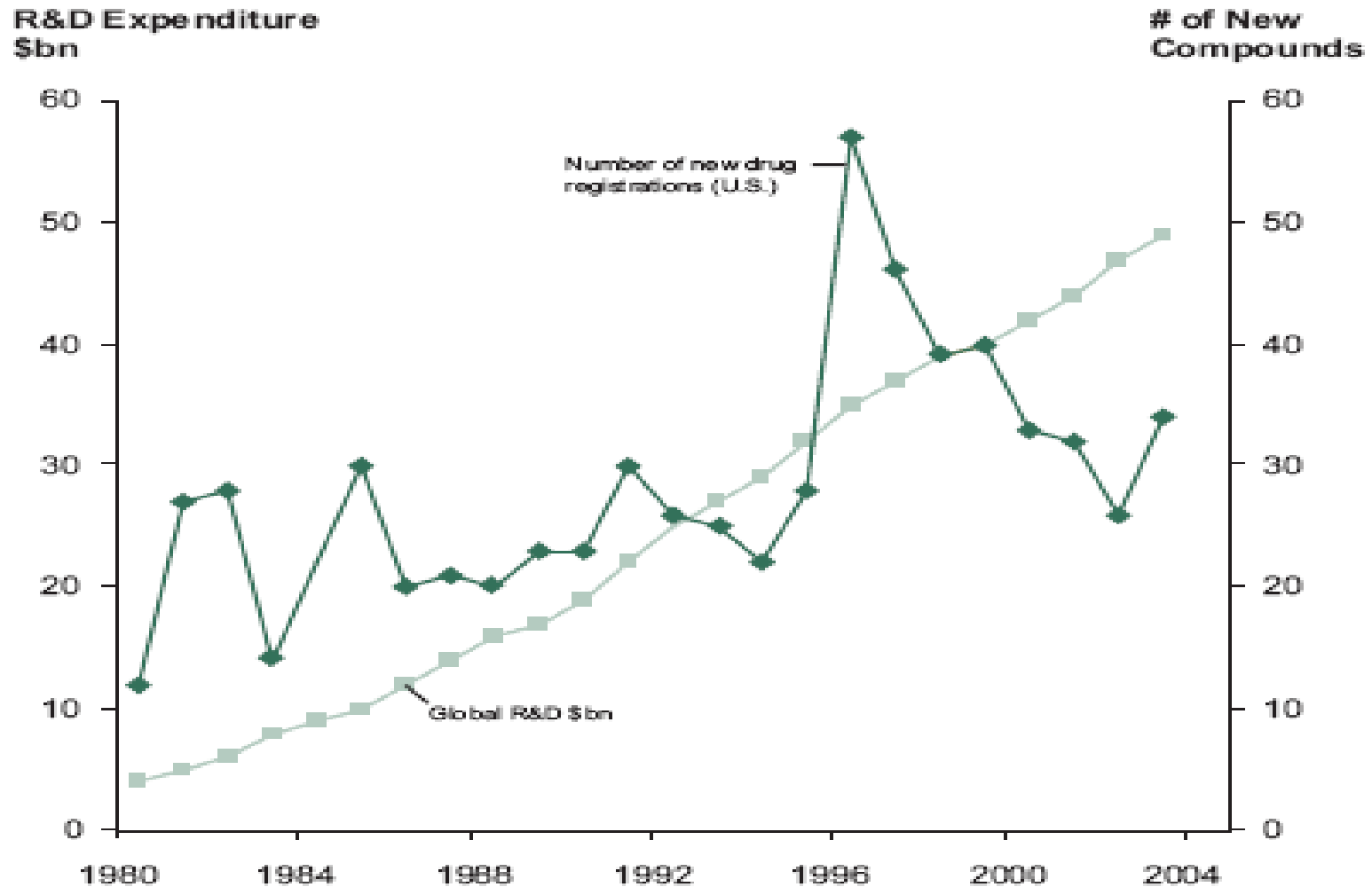


Fig 3



Source: McKinnon et al. (2004)

Impact of R&D on pharma firm growth

	Small Firms	Large Firms	All Firms
Patentee	+(*)	+	+
Non-patentee	+	-	+
Persistent Patentees	+	+	+
Non-persistent Patentees	0	0	0
Involved in Biotech	+	+	+
Not involved in Biotech	0	0	0

**Significant at 0.1 statistical level.*

Source: Mazzucato and Demirel (2009)

Work packages

The FINNOV project will lead to a deeper understanding of these complex relationships between innovation and financial markets in order to inform policy and practice within a post-financial crisis Europe. The key themes that will be explored across the 7 empirical Work Packages (WP) are:

- Finance and the Economics of Risk and Uncertainty
- The Interaction between Financial Institutions, Modes of Financing, and Innovation and Growth
- Links between Economics of Innovation and Inequality

The FINNOV project is comprised of seven research Work Packages (and one management and co-ordination Work Package, WP1).

Work package	Title	Lead Institution
WP 2	Co-Evolution of Industry Dynamics and Financial Dynamics	The Open University, UK
WP 3	Capital Markets and Innovation: Financing Business Experimentation in Europe	University of Cambridge, UK
WP 4	Finance, Constraints to Growth, Bankruptcy, and Employment Dynamics	Sant'Anna School of Advanced Studies, Italy
WP 5	Corporate Governance and Innovation: Implications for Stable and Equitable Economic Growth	University of Bordeaux, France
WP 6	Asset Prices, Consumption, and Income Distribution	Economics Institute, Czech Republic
WP 7	Modelling Micro Macro Links and Policy Implications	Polytechnic University of

Upcoming events

Kick-off meeting

7-8 May 2009

FINNOV project kick-off meeting, Open University Regional Office, London

Conference on Financial Institutions and Economic Security

21-22 May 2009

Regents College, London
The conference will create a high-profile forum to delve into the role of financial institutions in supporting or undermining economic security in the advanced nations of the West, and the implications for industrial innovation and economic performance.