

**Evaluation of Government Funded R&D Activities
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**TWELVE MEDITATIONS ON THE ROLE OF GOVERNMENT
IN FINANCING INNOVATION VIA PUBLIC EARLY-STAGE
VENTURE CAPITAL SUPPORT INSTRUMENTS**

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Rather than writing a traditional academic paper replete with theory development, a testable research proposition, accumulation of appropriate data, statistical analyses and conclusions, I thought that I would attempt to communicate my own experiences (and prejudices) as a student of venture capital studies.

I have been involved as an assessor of a number of publicly supported venture capital initiatives specifically directed as supporting the earliest and most perilous stages of the genesis and growth of new technology based firms. I have also been involved in the development of policy-based initiatives for the funding of high tech firms in a number of countries both within and outside the European Union.

I am presently an invited member of the *Small Business Investment Task Force* of the UK government which advises the Small Business Service. Particularly, I have been a member of the four person sub-group that helped design and implement the Regional Venture Capital Fund programme and which started in England in 2002.

With my colleague, Dr. Markku Maula of Helsinki University of Technology, I was the invited assessor of the Finnish government's Industry Investment Fund. We completed our review of this government financed, venture capital fund (which also contained a fund of funds activity) in December 2002.

What I have sought to do, it to signal some of the issues that governments have to identify and address in both conceiving and implementing early stage, equity investment activities that employ public funds.

G.C.M.
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TWELVE MEDITATIONS ON THE ROLE OF GOVERNMENT IN FINANCING INNOVATION VIA PUBLIC EARLY-STAGE VENTURE CAPITAL SUPPORT INSTRUMENTS

1. *Government Innovation & Finance policy makers fit into two camps. They either believe in Charles Darwin or the Book of Genesis. In reality, most prefer the Creation Story*
 - a. The world may have been created in six days, establishing a VC Industry takes a little longer. Policy needs to reflect this.
 - b. Venture Capital is a great instrument so long as you appreciate that it will be completely irrelevant for in excess of 95% of all new firms
 - c. VC funds have to be ruthlessly meritocratic, i.e. international in scope
 - d. VC is not an instrument for general SME support
 - e. VC requires a sophisticated market support structure
 - f. VC requires an efficient market for corporate control
 - g. Conducive fiscal and legal requires are a precondition for an effective VC industry

2. *Attempting to create a vigorous Venture Capital Industry is about as far as most “Old Europeans” will currently go in saying that they admire America*
 - a. ‘Path Dependency’ matters – Europe is not America and has to create its own appropriate policy solutions
 - b. California and Massachusetts are not typical America
 - c. Sustained deal making requires economic scale and economic growth
 - d. Who are the exemplars for small countries –Israel, Finland, Sweden, Singapore?

3. *If you believe that all men are born equal – don’t become a venture capitalist. Socialists make lousy venture capitalists*
 - a. Many US incentives are based on the high personal cost of failure and the acceptance of extremes of social advantage and deprivation
 - b. Labour mobility is a critical asset
 - c. All too often entrepreneurial risk is not adequately rewarded in Europe

4. ***Market failure is what happens when you don't give me money. A rational, objective and rigorous economic analysis is what has happened when I don't give you money.***
- Market failure is extremely difficult to demonstrate in practice
 - Despite the negligible evidence for its occurrence, virtually every public VC support scheme is based on the assumption of its existence
 - Market failure is often better seen as demand side failure
 - 'Investment ready' programmes are frequently notable by their absence or ineffectiveness
5. ***Governments have as much chance of being effective 'direct' venture capitalists as England has of winning the 2004 world cup***
- Government should not attempt to second guess markets by 'picking winners'
 - Bureaucracies should not engage in speculative activities
 - By governments, I also include universities
 - Governments should be principles, and commercial VC firms their agents
6. ***The ideal venture capitalist has razor sharp teeth, can smell blood at three kilometres, has a paranoid/psychotic need to achieve lucrative deals, reveres capital gain above all things – and likes flower arranging***
- Policy makers should understand the nature of the beast
 - Venture capitalists have very clear and demanding interests
 - In order to recruit good VCs, incentives need to be aligned
 - Don't expect a VC to work against his/her commercial interests
 - The market for skilled investors is very competitive
7. ***Ventures capitalists think that seed capital is very important – so long as they don't have to do it***
- There is no such thing as a fat seed capitalist
 - The time requirements and the small scale of investment activity makes it very difficult to reward effort or success
 - Early stage venture funds will try and metamorphose into later stage venture funds unless constrained
 - If constrained, the VC fund managers will likely leave

8. *Kleiner Perkins, Atlas Venture, Apax and Technologie Holdings require their investors to wait ten years for full returns – Governments will prefer to give you one year*

- a. Publicly supported venture funds face huge pressures for success
- b. Time scales invariably have political implications
- c. Success to a government sponsor may have little relevance to effective investor actions

9. *Specialist users of advanced technological products and services rarely insist that the technology they purchase was conceived designed and manufactured in a nomadic community of two hundred persons on the north side of a fjord some five hundred miles from the nearest Starbucks*

- a. Regional economic policy is extremely important
- b. Regional policy is often social policy
- c. It should not be confused with an Innovation Policy
- d. There are no socially determined shadow prices in the evaluation of technology projects

10. *I know we originally envisaged an early-stage technology fund but with a little money and patience this could once again be a first class furniture factory*

- a. All politicians believe that programme objectives are elastic
- b. Innovation policy and industry restructuring are different goals requiring different instruments
- c. Venture funds are not refuges for battered firms or industries
- d. Employment growth or protection is not a measure of VC performance
- e. VCs don't care if the Government has an election in six months
- f. VCs also don't care that the biggest labour union are major investors in the fund

11. Downside guarantee funds do just that – they guarantee that there will be a downside

- a. When advising fund managers, I am with the women from Sparta who advised their men folk – *succeed or come back on your shields!*
- b. Guarantee schemes introduce enormous ‘moral hazards’
- c. Anything that reduces the pain of a bad investment decision also reduces the value of due diligence and the benefits of learning
- d. Private venture capitalist acting as agents for government should only be rewarded for success (after ensuring exception costs are covered).

12. The good thing about evaluating seed and incubator funds on the cost of capital (IRR) to the government is that it is unambivalent, clear and simple. The bad thing is that such a method of evaluation is completely nonsensical.

- a. Performance evaluations of early-stage public VC funds should accommodate economic and social benefits
- b. Externalities are likely to be critically important
- c. The accumulation of experience in the investment and scientific communities should be a clearly recognised goal
- d. Seed funds in high technology should be evaluated as a cost of learning and infrastructure development
- e. A good seed fund may never make a risk-adjusted return on capital