

Science Policy Nuts & Bolts: *The Case of Charities and Foundations*

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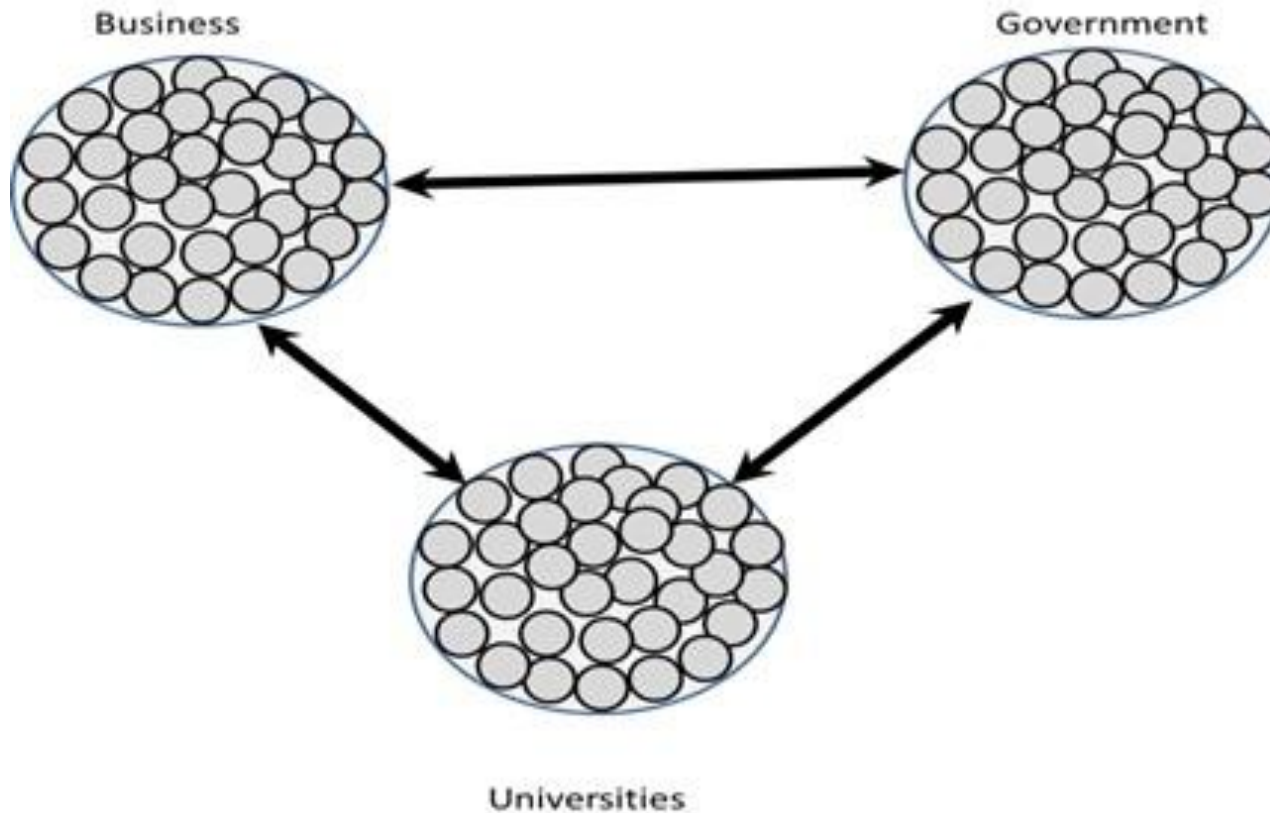
The Background

- This is a presentation in the unknowns – there are more qs than answers.
- However, it is important because the majority of Canadians directly vote for research with money.
- A considerable emphasis of current innovation policy is aimed at increasing university research commercialisation.
- This is built on a number of presumptions.
- What do you think these are:

My list

- Essentially all non-business funding of research is from government – therefore the universities can package the results and sell them.
- Questions of the division of data results are immaterial.
- The best outcome is a commercial one.
- In the academic literature it has been developed as the triple helix.

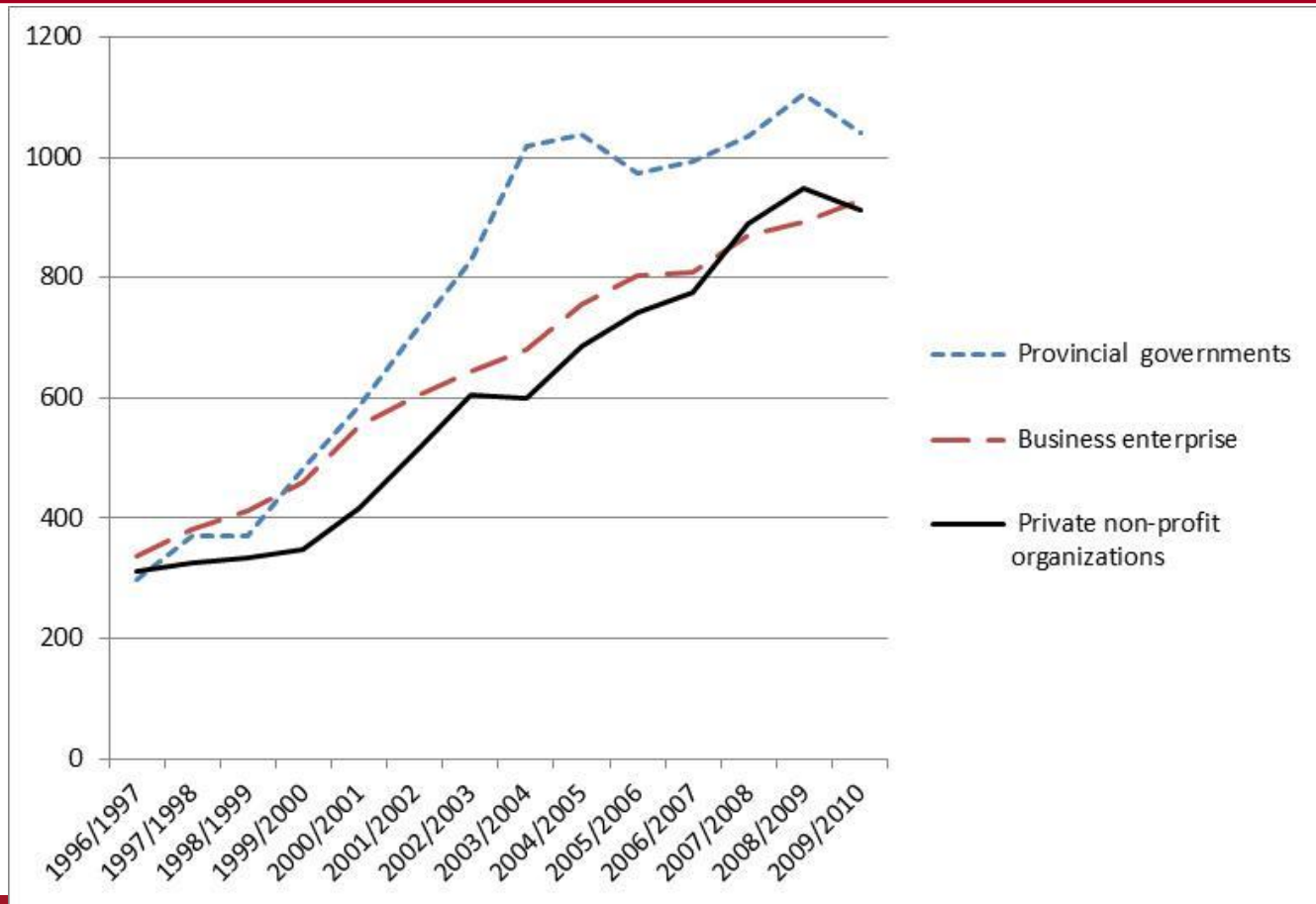
The Triple Helix – the public is nowhere



So how much do charities contribute to university research?

- But many Canadians donate some money to *research* charities.
- In relation to business funding of university research do you think charities are:
 - 1/10
 - 1/3
 - 1/2

The Answer



Charities Funding Research

- Private Non-Profits fund more research than business in Canadian universities.
- Have you ever even heard this before?
- The Statistics Canada data on the funding system are fairly sparse but from the Australian data we know that 89% of the PNP (private non-profit) funding is for human health research.

OECD Data

	1981	1990	2000	2007	2008	2009	2010
Canada Business	4.08	4.98	9.55	8.54	8.55	8.54	
Canada PNP	6.63	6.13	7.22	8.74	8.73	8.73	
Denmark Business	0.67	1.57	2.03	2.13		4.44	
Denmark PNP	1.58	4.60	4.75	10.88		7.72	
Italy Business	2.69	2.38		1.35	1.13	1.03	
Italy PNP				1.08	1.10	1.50	
Netherlands B	0.26	0.87	7.03	7.47			
Netherlands PNP	2.34	2.19	7.69	9.00			
New Zealand B		4.60		3.11			
New Zealand PNP		6.09		3.42			
Sweden Business	2.28			4.92		4.47	
Sweden PNP	3.55			9.20		9.40	
UK Business	2.80	7.58	7.10	4.54	4.60	4.60	4.60
UK PNP	4.92	9.56	16.39	13.50	13.93	13.93	13.93
USA Business	4.43	6.88	7.08	5.61	5.68		
USA PNP	6.53	7.37	7.58	7.55	7.87		

Science Policy

- Science policy – a more restricted set of policies and programmes of the fuller set of science, technology and innovation policy.
- Science policy
 - Funding levels
 - Funding directions – internal funding (environment Canada etc) vs external funding (Genome Canada, SSHRC, NSERC, CIHR) – representing the government’s priorities vs incentive perf measures
 - Funding structures
 - ❖ Councils (numbers and types)
 - ❖ Jurisdictions (Genome Canada is outside of Gov’t)

Charities Science Policy

- Important qs
 - How do charities determine their science policy and funding decisions?
 - What is the balance between basic and applied research (blue sky v quality of life for example)?
 - How do they leverage the system?
 - How do they commercialise the results?

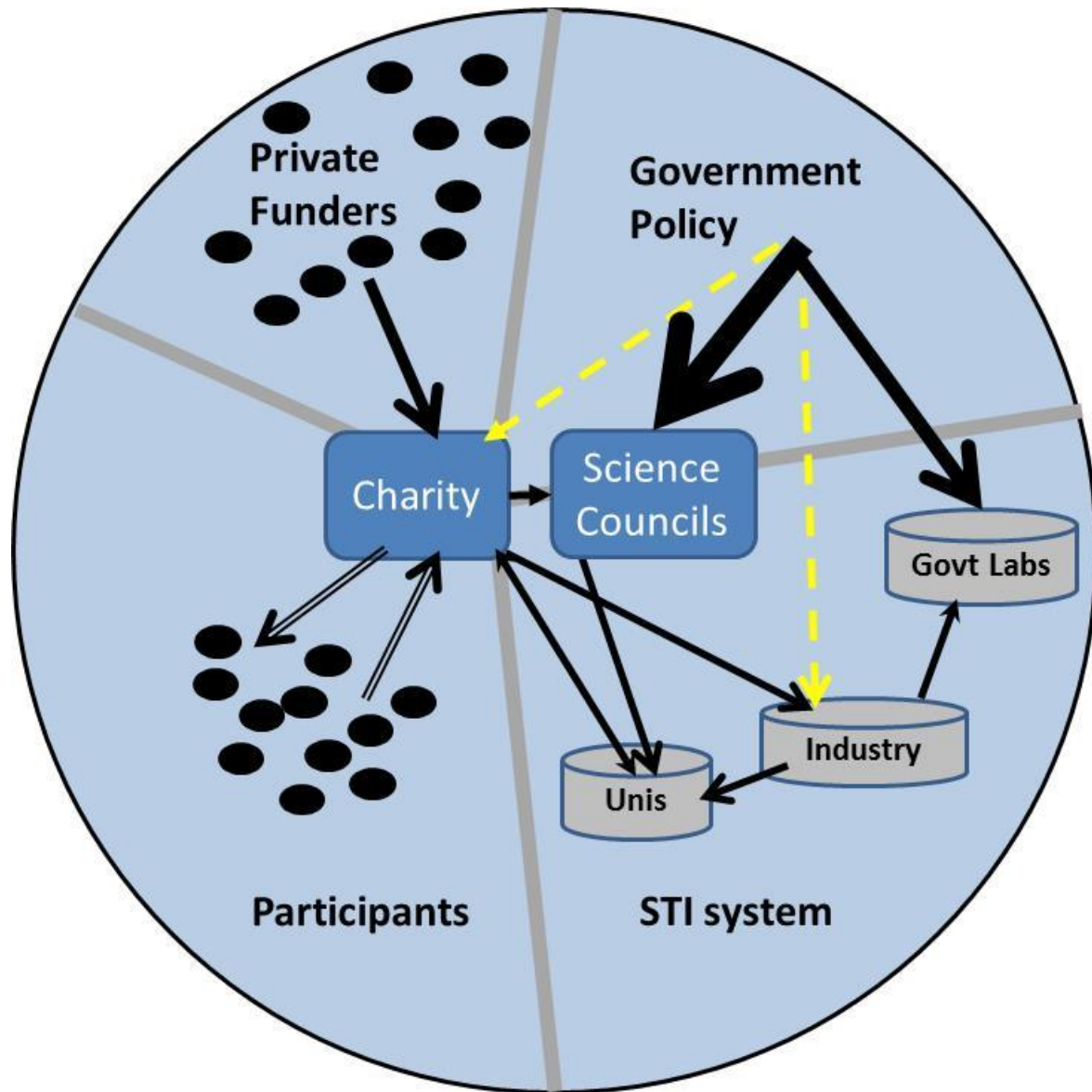
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- How do C&Fs use their research results to interact with provincial as opposed to federal agencies and, in general, how do they participate in the national system of innovation?
 - How does one (should one) distinguish between the rational use of funds for research by C&Fs (where there are clear, widespread benefits) as opposed to research in support of “niche” problems that are little consequence to society in general
 - How (and should) we distinguish between C&Fs that direct their fund-raising efforts to the general public as opposed to those that focus on a few (and presumably wealthy) patrons? How does this affect the process of research decision-making?

In a University Who Owns Knowledge?

- Given the complexity of funding in some cases – IP is more complex than it appears.

Statistics

- We do not know the structure of the funding
 - Crowdsourcing
 - Fundraising charities and foundations (where a high percentage of funds is collected annually from appeals to the public);
 - Endowed foundations (where the foundations work from an asset base initially provided by an individual(s) or by a company.
 - (industry and government are potential extras) PNPs
 - ❖ For example Genome Canada is independent of Government but funded by government so (should) it appears under government funding.



Charities access funding and potential research participants.

Governments both fund segments of the system directly and influence the funding levels of charities and industries through incentive structures.