

Public entrepreneurs in Canada

Matt Wilder[†]

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Abstract

‘Entrepreneurial states’ have elicited considerable attention as governments attempt to navigate technological transitions. While the policy literature identifies ‘public entrepreneurs’ as causal agents responsible for state-sponsored innovation, the concept has been criticized for its lack of descriptive precision and explanatory power. This paper advances a parsimonious theory of public entrepreneurship that includes one constant and one variable: all public entrepreneurs use government levers to pursue innovation, but they do so in varying institutional environments. Using process tracing, spatial modelling and game theory, the paper investigates three Canadian cases of public entrepreneurship related to transportation, green energy and agricultural biotechnology. Although dearth of veto players in Canada’s political system translates to comparative institutional advantage to pursue radically-innovative ideas, successful innovation may be undermined by excessive risk-taking and counter-mobilization by policy outsiders. Optimal policy design entails inclusive measures at the subsystem level that grant stakeholders voting rights to amend policy during implementation.

Keywords: causal agents; comparative institutional advantage; entrepreneurial states; innovation; process tracing; public entrepreneurs

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[†] Postdoctoral Fellow, University of Toronto. Email: matt.wilder@mail.utoronto.ca.

1 Introduction

Contrary to the ethos of *laissez faire*, it is now well accepted that many social and technological problems warrant policy responses from government (*The Economist* 2022a; 2022b). In this spirit, there has been an abundance of recent public policy work on the bioeconomy, eco-welfare states and just transitions (Dietz et al. 2018; Gough 2016; Swilling 2020). These developments, and the concomitant need for good policy and sound institutional design, have prompted scholars to think seriously about the inner workings of ‘entrepreneurial states’ (Mazzucato 2022).

Yet, theory surrounding causal agents responsible for state-sponsored innovation remains vague. While several perspectives on public, political and policy entrepreneurs have been articulated since the 1960s, this literature has recently been criticized for failing to produce a clear theory of the causal agent (Cairney 2018; Capano & Galanti 2021). Major challenges stem from the fuzziness of state-society boundaries and ambiguity regarding what separates private from public activity (Scharpf 1997; Jessop 2016). Although ‘governance’ offers a conceptual solution, it does so by embracing ambiguity; governance, on its own, does little to address the issues that have thwarted a theory of the public entrepreneur.

This paper solves the problem by advancing a relational, multi-disciplinary perspective on entrepreneurship whereby different types of entrepreneurship are treated as subsets within a general theory of entrepreneurship. Such an approach permits the elaboration of a parsimonious theory of public entrepreneurship that retains relationships to private and political entrepreneurship necessary for applications to contemporary governance. Two entrepreneurial roles are identified: mobilization of collective action and coordination of goods and services provision. The theory of public entrepreneurship includes one constant and one variable: all public entrepreneurs use government levers to pursue innovation, but the institutions that constrain and enable them vary.

The second part of the paper uses process tracing to apply the theory to three Canadian cases of public entrepreneurship related to transportation, green energy and agricultural biotechnology. The cases exemplify how public entrepreneurs effectuate state-sponsored innovation in critical and controversial areas regarding industrial restructuring, climate change mitigation and food security. Contrary to perspectives that predict ‘centripetal’ convergence on policy preferences in society, the main finding is that relative dearth of veto players in Canada’s political system translates to comparative institutional advantage to pursue radically-innovative ideas. However, successful innovation is often undermined by excessive risk-taking and cost-shifting. These tendencies lead government to support some bad ideas and otherwise prompt unproductive counter-mobilization by policy opponents. The scheme is wasteful. An alternative is therefore proposed that preserves Canada’s comparative institutional advantage while curbing associated pathologies by bestowing stakeholders at the

subsystem level with voting rights to amend policy during implementation. This arrangement is arguably superior to electoral reform and is arguably the only means of adhering to the principles of inclusivity and just transitions in a liberal context.

2 Entrepreneurship as a relational process

Although the literature is variegated, most everyone agrees that entrepreneurs are the causal agents responsible for innovation. Yet, the literature on policy entrepreneurs has recently been critiqued for equating too many outcomes to serendipity and for not focusing sufficiently on process (Cairney 2018; Capano & Galanti 2021). Consistent with broader trends in social science, the solution is to add precision to our theories by advancing explicit and testable behavioural hypotheses (Checkel & Bennett 2015). To that end, it has been argued that policy studies ought to engage more thoroughly with political economy (John 2018). The theory to follow constitutes such an attempt, which reconciles popular perspectives on entrepreneurship with the political economy literature on strategic relational contracting (Jessop 2016; Williamson 1985).

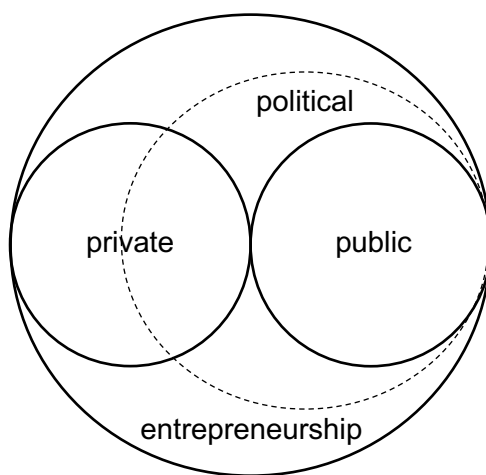


Figure 1: Public, private and political entrepreneurship

Given the porousness of the state in contemporary governance, the literature does not define public entrepreneurs solely as politicians or bureaucrats. Rather public entrepreneurs are often private actors with connections to government (Kingdon 1984: 129). The characteristics that distinguish private, public and political entrepreneurship were first articulated by Buchanan and Tullock in the *Calculus of Consent*, which compared unilateral action, voluntary association and government activity (1962: 47–57). From Buchanan and Tullock’s perspective, all human action that is not unilateral qualifies as political, as shown in Figure 1. Substantively, unilateral action includes spot market

transactions as well as simple and complete contracts (Scharpf 1997: 126–27). Incomplete contracts and private sector hierarchies (e.g., firms) exist in the intersection between political and private spheres (Williamson 1985). All activity involving levers of formal government, whether performed on the part of public sector or private sector actors, exists in the intersection between political and public spheres (Jessop 2016).

Subsequently, a wave of interest in political entrepreneurship followed the publication of Mancur Olson’s *Logic of Collective Action* (1965). Against Olson’s thesis that many opportunities for collective action will be hindered by the free-rider problem, Wagner (1966) argued that a great deal of collective action occurs because political entrepreneurs are motivated to seize private benefits from leading social movements. In a word, demand exists for leadership. Salisbury (1969) added that benefits need not be material but may also be solidary, purposive or expressive. Frohlich, Oppenheimer and Young (1971) formalized these ideas by writing utility functions for entrepreneurial leaders and their followers, simplified versions of which are given in Equations 1 and 2.

$$u_e(l_e) = u_e(x)p_e(x) + \sum_{f=1}^n t_f(e) + b_e - c(x_e) \quad (1)$$

$$u_f(l_e) = u_f(x)p_f(x) + g_f(e)c(x_e) + b_f - t_f(e) \quad (2)$$

Notationally, $u_e(l_e)$ is the utility the political entrepreneur expects to receive from leading; $u_f(l_e)$ is the utility individual followers f expect to obtain from following a leader; $u_i(x)$ is the individual utility derived from the provision of collective goods x , which is multiplied by the individual’s estimated probability p_i that collective goods will be supplied; $t_f(e)$ represents transfers from followers to the entrepreneur; $c(x_e)$ represents costs related to the supply of collective goods x ; $g_f(e)$ represents the share of contracts awarded to followers by the entrepreneur regarding the supply of x ; and b_i represents non-material benefits (cf. Frohlich, Oppenheimer & Young 1971: 44). Notice that costs in the follower’s utility function are benefits in the entrepreneur’s and vice versa. This is because, in voluntary collective action, costs must be internalized by the group in question.

Public entrepreneurship, by contrast, entails cost externalization that may drastically alter expected utilities, as all of the cost terms in Equations 1 and 2 may be financed out of the public purse instead of privately (Buchanan & Tullock 1962: 47–8). Substantively, public entrepreneurs avoid having to cover costs out of their personal returns, and often obtain additional transfers at the public’s expense. Moreover, contracts to suppliers may be financed entirely by the public without any cost to public entrepreneurs. Publicly-financed contracts, along with the fact that followers are alleviated of direct financing obligations, explain why society frequently opts for public provision of goods and services that do not strictly qualify as public goods.

Yet, public provision is not ubiquitous. This is because public entrepreneurship requires the approval of political veto players, a subject to which the literature on agenda-setting is dedicated (Walker 1974). In *Agendas, Alternatives and Public Policies*, John Kingdon (1984) popularized a descriptive account of how policy entrepreneurs influence government agendas, which was later integrated with the formal agenda-setting literature by Baumgartner and Jones (1993) and Schneider, Teske and Mintrom (1995). Following Riker (1986), the entrepreneurial causal mechanism involves rhetoric and persuasion, operationalized as the introduction of alternative dimensions of choice in spatial models. Formally, entrepreneurs attempt to establish ‘winsets’: areas of agreement in Euclidean space preferred by veto players to the status quo policy (Fiorina & Shepsle 1989; Tsebelis 2002). Subsequent literature further specified the elements that comprise the causal mechanism, namely psychology surrounding issue framing, group identification and narratives (B. Jones 2001; M. Jones, Shanahan & McBeth 2014).

Based on the preceding discussion, it may be said that all entrepreneurs attempt to establish winsets between veto players, whereby veto players are conceived as actors who possess assets, resources or authority required to change the status quo. In cases of non-political private entrepreneurship, veto players may be financiers or market actors with assets required by entrepreneurs and with whom spot contracts may be struck. In instances of political private entrepreneurship, veto players also include followers as discussed above in the context of Equation 2. In cases of public entrepreneurship, veto players consist of governmental actors whose agreement is required to externalize costs that permit the plans of public entrepreneurs to be put into action.

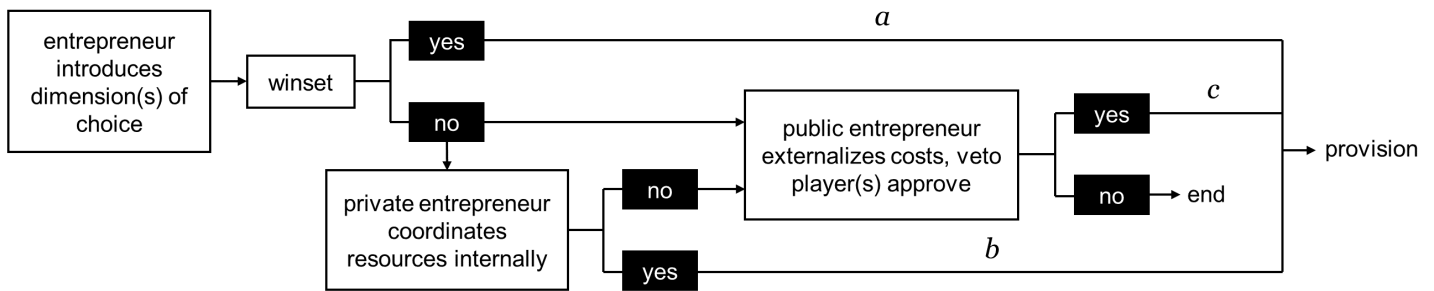


Figure 2: Hypothesized process of mobilization

Figure 2 portrays a ‘directed acyclic graph’ of the hypothesized causal process surrounding resource mobilization, which applies to both agenda-setting at the macropolitical level (i.e., executives and legislatures) and the subsystemic level of day-to-day management (cf. Baumgartner & Jones 1993; Checkel & Bennett 2015). As seen in the leftmost box, the process begins when an entrepreneur introduces a dimension of choice. If a winset immediately exists, the process spontaneously proceeds along path *a* to the

provision of goods or services without any additional work on the part of the entrepreneur. In such cases, entrepreneurship is limited to the introduction of a new idea. If a winset does not immediately exist, a private entrepreneur may attempt to coordinate resources internally among followers, per the discussion as leadership above. If successful, the process proceeds along path *b* to the provision of goods or services. If unsuccessful, a public entrepreneur may attempt to externalize costs with the approval of political veto players. If successful, the process proceeds via path *c* to provision. If unsuccessful, the process terminates. Again, while both public and private entrepreneurs may mobilize resources in order to provide goods and services, public entrepreneurship is defined by the use of government levers to externalize costs, which may be monetary costs or non-monetary externalities that require government approval to impose (e.g., environmental effluents).

Yet, as noted by Fiorina and Shepsle (1989), mobilization is but one of two primary functions served by political entrepreneurs; political entrepreneurs may also coordinate collective action. The subject is home to an expansive literature that employs game theory to predict cooperation and defection across a wide range of contexts involving co-production and principal-agent relationships (Hardin 1982; Klein, Crawford & Alchian 1978; Marwell & Oliver 1993; Ostrom 2005). Following Grossman and Hart's (1986) famous formulation, the two entrepreneurial functions may be integrated as a two-stage game, whereby expected utilities during a contracting period are calculated based on foresight to a sub-game in which goods or services are provided. Consistent with the agenda-setting literature, I have called the first stage 'mobilization,' the hypothesized causal process surrounding which is graphed in Figure 2. I will call the second stage 'provision,' which corresponds with policy implementation and the hypothesized causal process portrayed in Figure 3.

Game form is a function of asset characteristics of the players, which determine bargaining strategies over the distribution of benefits and burdens. In mobilization games, scope conditions of the collective good dictate the game form, as different combinations of resources produce collective goods of varying value. Assuming distribution tracks relative contribution, neutral scope conditions correspond with chicken games, economies of scope with pure coordination, and diseconomies of scope with battle games (cf. Scharpf 1997). Player strategies may be predicted based on relative bargaining power, which is conventionally considered a function of opportunity cost — i.e., expected return from other possible activities (Klein, Crawford & Alchian 1978).

In provision sub-games, the game form is a function of whether contributions from owners of specific assets are required to produce the good or service. If contributions are specific, the game form is assurance (also known as stag hunt), as the good or service cannot be produced without contributions from all players. If contributions are non-specific, the game form is prisoner's dilemma, as incentive and opportunity to free-ride follow from the fact that the good or service may be produced without contributions from all players (Hardin 1982; 167–72).

Player strategies in provision sub-games may be predicted based on the production function of the good or service, the presence and efficacy of monitoring institutions or cooperative norms. Production functions represent marginal value from each contribution. With specific contributions (the assurance game), the production function is a step: there is no value until a threshold of contribution is crossed. With non-specific contributions (prisoner's dilemma), the production function is typically continuous; contribution depends on expected return from contribution, whereby incentives decline lockstep with residual claimant status (Marwell and Oliver 1993: 58–94). Simply put, incentive to contribute is a function of one's share of the profits (i.e., return on investment). In the absence of material incentives, monitoring or norms may elicit cooperation.

As conveyed by path *d* in Figure 3, cooperation toward innovation is most easily obtained when contributions are specific because actors are incentivized to contribute. Yet, as explained below, if contributions vary in terms of quality, monitoring the quality of specific contributions may be necessary, hence the dashed line from path *d* to *f*. As conveyed by path *e*, non-specific contributions may or may not be task programmable: capable of being assigned as observable and contractable tasks. If task programmability obtains, then monitoring contributions is possible. If task programmability does not obtain, then monitoring contributions is impossible. In the presence of task programmability, monitoring may punish defection and encourage cooperation in the prisoner's dilemma along path *f*. In the absence of task programmability, cooperation in the prisoner's dilemma depends on norms in order to yield innovation along path *g* (Miller & Whitford 2016: 124–33). Otherwise, innovation is thwarted by opportunism.

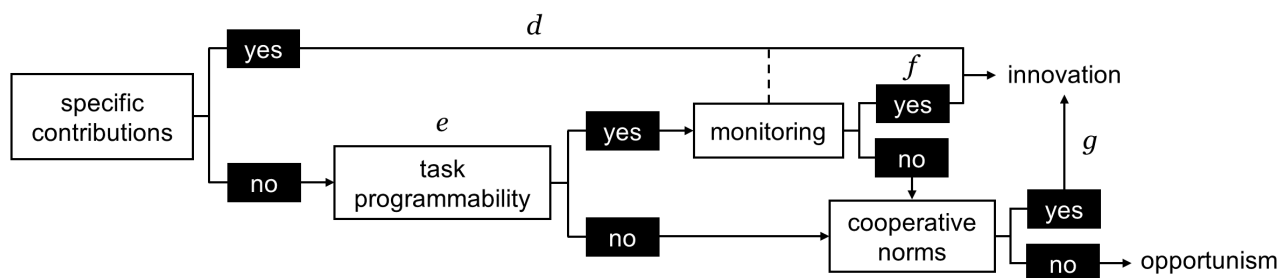


Figure 3: Hypothesized process of provision

Importantly, foresight in Grossman and Hart's two-stage game need not be based on complete information (1986: 717). During mobilization, players are not assumed to accurately predict others' future moves during provision games. Rather, players are assumed to make rough assessments of their vulnerability to exploitation when calculating expected utility (i.e., Equations 1 and 2). Public entrepreneurship overcomes

hold up problems by rendering otherwise risk-averse actors risk-tolerant by diffusing cost and risk onto society, thereby reducing individual vulnerability to losses.

Incidentally, political agenda-setting seldom produces anything resembling complete contracts. Instead, legislation and regulation often bestow authority onto subsystemic actors to work out the fine details of policy during implementation. Moreover, decisions are rarely final but rather subject to ‘mutual adaptation’ on the part of subsystemic actors in response to the actions of one another and developments in the environment (Browne & Wildavsky 1983). The implication is that bargaining over distribution of benefits and burdens is liable to occur, and reoccur, at the subsystem level after the formal decision to pursue a policy is made. Contrary to the linear process envisioned by the ‘policy cycle’ and ‘stages heuristic,’ mobilization and provision may repeat as ‘nested games’ at the subsystem level during policy implementation (Cairney 2018; cf. Tsebelis 1990).

If stable agreements are not forthcoming, incomplete contracting affects provision by neglecting to fully define roles and responsibilities. Tasks may not be fully programmed, contribution may not be conducive to monitoring, and the means by which residual value is to be distributed may remain unspecified (the ‘residual claimant’ may be unidentified). Thus, with incomplete contracts, even specific contributions become vulnerable to shirking on quality if quality is variable. Formally, payoffs in the assurance game are perverted, incentivizing shirking on the quality of contributors from agents who are not residual claimants. The prospect of defection on quality of contribution means that there may be a role for monitoring even when contributions are specific (hence the dashed line from *d* to *f* in Figure 3).

Because vertical integration partly solves the problem of incomplete contracts by bringing activities under centralized control, the literature on economic governance postulates an efficiency argument in favour of vertical integration when contracts are incomplete and investments must be made in project-specific assets (Grossman & Hart 1986; Williamson 1985). In the absence of other criteria upon which to monitor contribution under incomplete contracts, monitoring may require vertical integration. Notably, while risk associated with incomplete contracts is expected to discourage co-production on the part of private actors, public ventures may proceed in the presence of incomplete contracts if public entrepreneurs insure private partners against exploitation by shifting liability costs onto society. There is an incentive trade-off, however, which is all the more severe if private partners are not residual claimants of value created (Holmstrom 1982).

In summary, all entrepreneurs are motivated to capture rents from innovation, which may include solidary, purposive and expressive benefits. Moreover, all entrepreneurship involves creating conditions necessary to establish winsets at the intersection of veto players’ preferences. The process may be modelled as a two-stage game, whereby each stage encapsulates one of two entrepreneurial functions pertaining to mobilization of support and provision of collective goods. In instances of private

entrepreneurship, veto players are actors who possess assets required to produce innovative goods or services. In instances of public entrepreneurship, veto players' assets include the authority to make decisions on behalf of the public, thereby externalizing entrepreneurial costs onto society. Formally, cost externalization broadens the possibility space by altering utility functions of leaders and followers and expanding preference envelopes that demarcate winsets of the status quo. Extent of cost externalization is a variable function of institutions, modelled as the arrangement of veto players.

Public entrepreneurs may be government or private actors, their defining characteristic being that they use government levers to pursue innovation. During mobilization, the entrepreneurial process entails persuading political veto players via rhetoric, operationalized as dimensions of choice. During provision, the entrepreneurial process involves coordinating collective action by facilitating contracts, monitoring contribution and promoting norms. Contracting at the subsystem level may require mobilization of resources controlled by subsystemic actors, which may be modeled as a nested game that alternates between mobilization and provision. Public entrepreneurship is, however, prone to incomplete contracts, as it involves enticing actors to do what they otherwise would not by diffusing cost and risk. Consequently, while public entrepreneurship is often necessary to overcome obstacles to innovation, it invites rent-seeking and opportunism, which may be mitigated by monitoring and norms.

3 Canadian applications

The following cases demonstrate how the theory applies across a range of issue areas deemed important by students of entrepreneurial states and just transitions, namely deindustrialization, climate change mitigation and food security (Mazzucato 2022; Swilling 2020). The first case pertains to an initiative intended to simultaneously modernize transportation infrastructure and the private shipbuilding industry in British Columbia. The second case involves scientific stewardship and regulatory innovations required to develop transgenic crops in Canada. The third case features subsidized production and regulatory innovations intended to promote green energy manufacturing and carbon neutral electricity generation in Ontario.

3.1 Fast ferries in BC

The early 1990s witnessed large-scale efforts to modernize British Columbia's transportation system. Plans included significant upgrades to the ferry infrastructure operated by the provincial Crown Corporation, BC Ferries. The impetus was three-fold: most of the BC Ferries fleet was nearing age of decommission; increasing traffic between the Lower Mainland and Vancouver Island necessitated improved economies of scale to meet demand; and the domestic shipbuilding industry that had historically supplied BC

Ferries vessels was in desperate need of orders. In response, the province implemented an ill-fated program to build and deploy fast aluminum catamaran ferries (fast cats) on BC Ferries routes.

The story begins with Sam Bawlf, an entrepreneur and former Social Credit Cabinet Minister, who attempted to create a private industry for fast cats after acquiring a technology licence from the Australian shipbuilding firm, Incat (Bawlf 1991). Bawlf's hopes were dashed, however, when it became clear that the ferry market was not sufficiently large to accommodate private operators. Unsuccessful as a private entrepreneur, Bawlf approached BC Ferries and the Social Credit government of Bill Vander Zalm with a proposal to introduce fast cats to the BC fleet, but was turned down.

Having reached the terminus in Figure 2, the proposal was a dead letter pending the election of the Harcourt NDP government in 1991, which saw Bob Williams appointed Director of the Crown Corporations Secretariat. A proponent of fast cats, Williams hired Bawlf to advise on the government's Mid-Island Transportation Strategy (Bawlf 1993). In September 1993, the Crown Corporations Secretariat was brought under a new 'super-ministry,' Employment and Investment, whose minister, Glen Clark, was interested in bringing fast ferries to the province.

Wary of untried technology, BC Ferries reluctantly agreed to lease a fast cat on a trial basis in early 1994 (Morfitt 1999: 40). The compromise was unsatisfactory in Glen Clark's eyes, however, as Clark wished to use public procurement as an instrument of industrial policy to invigorate the shipbuilding industry. Accordingly, Clark authorized the Crown Corporations Secretariat to assume control of the BC Ferries Ten Year Capital Plan prior to submitting a proposal to Cabinet justifying public investment in three BC-made fast cats (BC Premier's Office 1994).

Cabinet approved the project in principle, but reinstated the BC Ferries veto at the behest of the Treasury Board, which 'required [BC Ferries] to submit specific vessel replacement/acquisition and terminal upgrade proposals to the Treasury Board' (BC Treasury Board 1994). Clark's deputy, Frank Rhodes, was then re-instated in July 1994 to his previous position as President and CEO of BC Ferries to oversee the implementation of the capital plan. At the same time, another proponent of fast ferries, former General Manager and Chief Operations Officer of Vancouver Shipyards, Tom Ward, was appointed to BC Ferries as Senior Vice President of Engineering and Construction. Ward had previously submitted analysis indicating that BC shipyards were capable of producing 100-metre, 230-car fast cats at a cost of \$70 million per vessel, which would have made the province competitive in the global fast ferry market (Gordon 1999: 45).

With amenable people in management positions at BC Ferries, the mobilization process outlined in Figure 2 was cleared via path c. Although Bawlf and Williams played entrepreneurial roles in the prologue, it was ultimately Glen Clark who obtained approval from veto players in the Harcourt Cabinet to pursue state-sponsored innovation. Yet, despite Ward's assurances that fast cats could be profitably built in the province, competitive bids from the shipbuilding industry failed to materialize, as none of the

province's shipyards was willing to assume the risk (BC Ferries 1996a). As predicted by the theory, agenda setting was cleared without complete contracts. Instead, shipbuilders agreed to the project under the condition of cost-plus contracts with few stipulations regarding delivery times or quality control (BC Ferries 1997).

As depicted in Figure 4, aluminum vessels constitute an alternative dimension of choice to steel ships. Black points represent actors' first-ranked preferences. The white point represents the BC Ferries compromise proposal to lease a vessel. While the compromise fell within a winset of the status quo, a more radical departure was possible; Clark could move the status quo closer to his first-ranked preference, either by removing BC Ferries as a veto player or by appointing people amenable to the project to management positions at BC Ferries. Having accomplished the latter, the BC Ferries preference joined the others at the north-west point in Figure 4. Although the mobilization process was thereby cleared, contracts were incomplete as shipbuilders were risk-averse. Formally, shipbuilders had low expected utility from the ships, $u_f(x)p_f(x)$ in Equation 2. In order to solicit followership on the part of the shipyards, side-payments were required in the form of cost-plus contracts, which were negotiated long after political approval was granted for the project. Thus, the value to shipbuilders was confined to contracts, $g_f(e)c(x_e)$ in Equation 2, not the market value of the product, $p_f(x)$. Shipbuilders were not residual claimants, the province was.

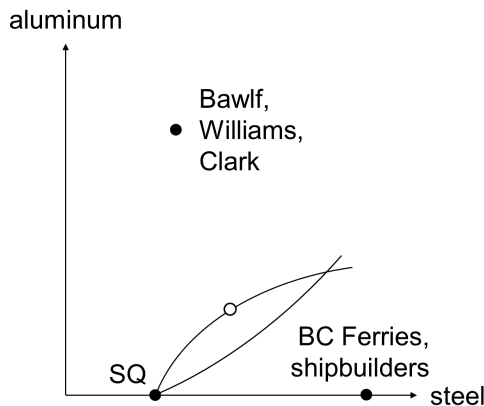


Figure 4: Actor preferences over steel and aluminum ships

Without competitive bids from industry, the Crown Corporations Secretariat took responsibility for the vessels' design and assembly. To the chagrin of proponents of Scandinavian fast cat technology, a contract was awarded to another of Tom Ward's former employers, Robert Allen Ltd., based on Australian Incat technology for which Sam Bawlf held a license (Bawlf 1991; Morfitt 1999: 60). Although 'never intended' and 'created out of necessity' according to one of the decisionmakers involved, Catamaran Ferries International (CFI) was established via Order in Council in December 1995 as a

subsidiary of BC Ferries. Its mandate included undertaking the vessels' final assembly, coordinating a consortium of private shipyards tasked with fabricating modular components, and absorbing marketing costs for the purpose of securing future orders for fast cats. However, prior to getting off the ground, the project was threatened by a Treasury Board freeze on capital spending following the May 1996 election, which narrowly returned the NDP to a second term. Incidentally, Glen Clark had become Interim Premier following Mike Harcourt's resignation the previous February, and was able to use his authority to exempt the fast ferries program from the freeze (BC Premier's Office 1996).

At CFI, an independent Board of Directors was appointed 'as an oversight mechanism,' according to interviewees, as was an external General Manager, Andy Hamilton, who had recently managed the construction of the Hibernia offshore oil project in Newfoundland. Frank Rhodes also sat on the CFI Board of Directors, while retaining his position of President and CEO of BC Ferries. Tom Ward was appointed President and CEO of CFI. To the extent that anyone assumed the role of public entrepreneur during the provision stage, it was Tom Ward.

Regarding the provision process outlined in Figure 3, contributions from private shipyards were specific, as only the largest shipyard could fabricate the lower hulls. Yet, without complete contracts, the project was vulnerable to opportunism on the part of the shipyards (BC Ferries 1997). As shown in Figure 5, when quality of contributions is variable, and when (incomplete) contracts do not assign residual claimant rights to contributors, the game is assurance only up to the step in the production function at which the good is provided. Beyond that, there is incentive to defect. Opportunism may be mitigated by either monitoring (path *f* in Figure 3) or cooperative norms (path *g*), the latter of which the project's managers apparently could not instill. Rather, the project's managers noted in early 1997 that 'protracted labour negotiations have had an adverse effect' at one of the shipyards, exacerbated by 'a lack of drive to improve shop floor efficiencies' (BC Ferries 1998; Catamaran Ferries International 1997a). Although monitoring remained an option, incomplete contracts made it difficult to specify performance requirements. After several attempts to discipline the problematic yard, it was determined that the solution was to cut the yard from the project by moving its production to the CFI assembly facility (Catamaran Ferries International 1997b). The Board opted for vertical integration: the Grossman-Hart solution to incomplete contracts. These plans were never executed, however.

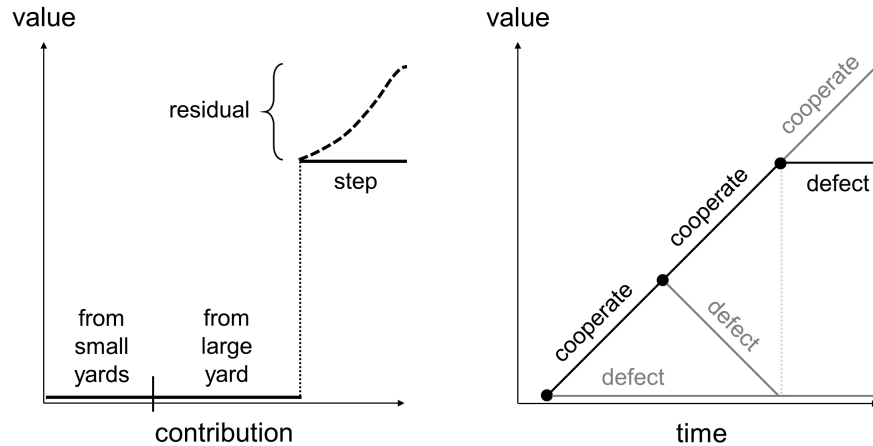


Figure 5: Assurance game without residual claimant rights

Interview sources recall that it was at this time, in April 1997, that some members of the CFI Board ‘wrote a long letter detailing concerns about the fast ferries,’ which included plans to cut the problematic shipyard from the project. Instead, the Board was asked to resign at the behest of Frank Rhodes the same day it reported its concerns about the project and plans to get it back on track. Tellingly, the idea of cutting the problem yard from the project was not broached by the new Board of Directors, which consisted entirely of BC Ferries personnel and Tom Ward who, recall, had close connections to shipbuilders.

In the end, although the ships were well-built, cost overruns and technical issues belied the success of the project, which contributed to the NDP’s loss of all but two of its legislative seats the 2001 election. The first ship was considerably overbudget, at \$119 million, which included more a million dollars in overtime billed by the problem yard (Catamaran Ferries International 1997c). As depicted in Figure 5, defection on the part of the shipyard extracted a rent from the province out of the residual value of the ship. While the second and third vessels were built at a cost of approximately \$105 million each, the price tag was far from the \$70 million estimate; too high for an internationally-competitive industry. Consequently, CFI and the three vessels were sold at salvage value.

Regarding governance, the subsystem was closed to interlopers. During the mobilization stage, preference was given to analysis conducted by Sam Bawlf and Tom Ward based on Australian fast cat technology for which Bawlf held a license. Critics of the project and proponents of Scandinavian technology were dismissed, as were whistleblowers who identified cost overruns early on (BC Ferries 1996b). The root of the problem was that supposed beneficiaries of the project, the shipbuilders, were not sufficiently incentivized to see the project succeed. As depicted in Figure 5, cost-plus contracts negotiated with the shipyards created perverse incentives for shipbuilders to extract rents from the province, diminishing the residual value of the ships and then some. Had the shipbuilders been residual claimants, they would have had collective incentive to contribute, and monitoring contribution would have been a relatively simple

matter (cf. Ostrom 2005: 265). Instead, the decision was made to dismiss the monitors — a decision which proved costly to the public and the NDP.

3.2 Transgenic crops

Canadian governments began crafting explicit ‘biotechnology policy’ in the early 1980s. From the beginning, prospects for transgenic crops were widely recognized in scientific and business circles as a means to increase yield, mitigate soil degradation and combat climate change (Canada 1981). Opponents, meanwhile, have argued that environmental and health risks associated with transgenic crops are not sufficiently understood to warrant the use of transgenic crops in the food system (Montpetit 2016). Regardless of whether transgenic crops provide net benefits to society, the novelty of the technology, associated regulatory hurdles, and federal jurisdiction over plant and product registration created a hold-up problem for industry that could only be overcome with public entrepreneurship.

The federal agenda in support of transgenic crops was set in 1981 when the federal Minister of Science and Technology, John Roberts, introduced transgenic plants as an alternative dimension of choice to conventional crops following the report of a taskforce on biotechnology (Canada 1981). As predicted by the theory, political agenda-setting did not involve precise planning. Rather, the details of the forthcoming National Biotechnology Strategy were left to the National Research Council to sort out at the subsystem level. According to a former bureaucrat who worked in the subsystem, ‘the early biotech strategy was pretty nebulous and undifferentiated... the players were thinking “this is important technology, we’re not quite sure how it is going to be used, but there are about a thousand different ways it could change the world, so we’re going to support it.”’

Initial success revolved around four plants with relatively simple genomic structures: carnations, tobacco, petunias and canola, only one of which is a food crop. Two groups were particularly interested in the potential of transgenic canola: researchers at the Southern California start-up, Calgene, and researchers at Agriculture Canada’s Ottawa labs, the latter of whom worked with visiting industrial scientists as part of the Foreign Investment Review Agency (FIRA) mandate.

The Ottawa program was headed up by Agriculture Canada scientist, Wilf Keller, who developed a method for efficiently isolating genetic traits in canola plants using pollen cultures. Keller was well-acquainted with the president of Hoechst Canada, Maurice Delage, who was interested in developing plant tolerance to Hoechst’s glufosinate herbicide. Hoechst’s headquarters in Germany had licensed a newly-discovered microbe that produced a glufosinate-detoxifying enzyme, but required a plant receptive to the microbe’s genes.

Mobilization at the subsystem level is said to have proceeded ‘with a handshake.’ Delage and Keller arranged to have Hoechst industrial scientist, Michael Oelck, join the Ottawa lab in 1986 to work with Keller on inserting Hoechst’s herbicide-resistant gene into canola germplasm owned by Agriculture Canada. The project met success in 1988, and was followed by field trials in 1990. Meanwhile, Calgene founding scientist, Maurice Moloney, developed transgenic techniques to render canola tolerant to glyphosate herbicide produced by Monsanto. This and other transgenic discoveries led to the acquisition of Calgene by Monsanto, which also pursued field trials in early 1990s.

Collective action to produce transgenic canola was simple, as contributions were specific. At Agriculture Canada, Keller and Oelck were incentivized to cooperate by the fact that each controlled assets required for success, namely canola germplasm and the glufosinate-detoxifying enzyme. At initial discovery, quality was not variable. The production function of the good was a step. The game form was assurance. Moreover, cooperation between the two scientists was undergirded by strong norms. At Calgene, the process was even simpler, akin to a spot market transaction. Maloney produced the discovery, Monsanto purchased Calgene as a means of obtaining it.

Formally, Delage introduced herbicide tolerant canola as a dimension of choice that mobilized the subsystem: there existed a winset between the preferences of veto players, Keller and Delage, the former of whom had access to government levers at Agriculture Canada. Mobilization proceeded along path c in Figure 2. A complete contract was forthcoming according to which Keller and Oelck were motivated to claim contractable shares and obtain non-material benefits: terms $g_f(e)c(x_e)$ and b_f in Equation 2. Provision proceeded along path d in Figure 3. At Calgene, private entrepreneurship proceeded along paths b and d in Figures 2 and 3, respectively. In both venues, corporate interests, personified by Delage and Moloney, were incentivized to capture future market value of the product, $u_e(x)p_e(x)$, which in Moloney’s case manifested in the sale of Calgene shares to Monsanto.

Having successfully developed transgenic herbicide-resistant canola, the next obstacle involved registering the product for commercial cultivation. Because transgenic plants were a new technology, they had no commercial value prior to registration. Moreover, owing to their novelty, it was unclear what the regulatory process for agricultural biotechnology would entail. To facilitate commercialization of discoveries in biotechnology, the Saskatchewan Progressive Conservative government under the leadership of Grant Devine established a government-subsidized but independent non-profit entity called Ag-West Biotech in 1989. Interviewees indicate that Devine, an agricultural economist familiar with Keller’s work in Ottawa, established Ag-West with the purpose of ‘raising capital for agricultural biotechnology start-ups, attracting investment in agricultural biotechnology and providing accurate information on agricultural biotechnology to the public and regulators.’

With support from Ag-West, representatives from Monsanto and Hoechst’s successor company, AgrEvo, successfully mobilized to lobby the federal government to

register herbicide-tolerant canola varieties. The process entailed introducing transgenic varieties as a dimension of choice and securing the approval of political veto players at Agriculture Canada, which at that time had jurisdiction over plant and product registration. Yet, following the approval of these first transgenic varieties, registration became more difficult, as responsibility for plant registration was transferred from Agriculture Canada to the Canadian Food Inspection Agency (CFIA). As lamented by one interviewee, ‘after that the door slammed shut, and it was very hard to get any kind of new transgenic traits approved.’

The previous point speaks to the trade-off between the inclusiveness of policymaking venues and policy entrepreneurs’ ability to effectuate major departures from the status quo (cf. Tsebelis 2002). Agriculture Canada’s loss of its ‘policy monopoly’ to CFIA corresponded with the addition of dimensions for consideration related to health and environmental risks of agricultural biotechnology (cf. Baumgartner & Jones 1993). While this jurisdictional shift may have dampened the pace of innovation, inclusiveness at the subsystem level has not undone policy in support of transgenics. On the contrary, inclusiveness at the subsystem level has arguably sustained policy in support of transgenics by preventing the politicization of transgenic crops. As documented by Montpetit (2016), proponents and opponents of biotechnology both contribute to policymaking in Canada, with antagonisms between the two groups being more apparent than real.

This is not to say that everyone is pleased with the arrangement. Industry representatives interviewed for this study criticize the ‘toxicology-based’ regulatory scheme for ‘making no sense,’ while health and environmental advocates have attempted to shift the policymaking venue to the courts as a means of having their grievances heard (Pralle 2003). Yet, when the Saskatchewan Organic Directorate filed a class action in 2003 against Monsanto and Aventis (which acquired AgrEvo in 1999) on the charge that airborne genetically-modified material contaminated organic fields, thereby rendering crops worthless as an export to organic markets, the Saskatchewan Court of Appeal dismissed the application to certify the class and the Supreme Court of Canada declined to hear it.

Although federal regulators were slower to approve the new technology than initially expected, the federal veto was more easily overcome in Canada than has proved to be the case in Europe and East Asia where political systems have more political veto points. Indeed, obstacles to the commercialization of transgenic plants in Europe are reported to have led Hoechst headquarters in Frankfurt to ‘pause on the decision’ to pursue transgenic technology in the 1980s (Saskatchewan Agriculture Development and Diversification Secretariat 1989). As stated by an industrial scientist involved in the development of transgenic canola, ‘there’s no point in being a GM [genetic-modification] company based in Germany, where you can’t even test any material in the field, let alone have an expectation to sell the product to growers.’

This case highlights the fact that public entrepreneurs are not necessarily politicians or bureaucrats but rather sometimes private actors with close connections to government. Proximity to policy levers does not however negate the fact that public entrepreneurs are ineffectual without the support of political veto players, as it is they who ultimately approve or deny cost diffusion required for public entrepreneurship. In the case of transgenic crops, externalities came in the form of financial costs involved in coordinating research, transaction costs incurred lobbying federal regulators, and environmental damages sustained by organic producers. Some of these externalities have run afoul of veto players in more representative political systems where transgenic crops are forbidden. Although some of the financial costs were internalized by industry actors, the totality of costs could not be absorbed by industry interests alone. In particular, technological and regulatory uncertainty posed hold up problems that forestalled private investment. For these reasons, public entrepreneurship with veto players' approval factors large in the story of the collective action required to bring transgenic crops to market in Canada.

3.3 Green energy in Ontario

While advocates have promoted renewable energy for decades, unpriced externalities have historically given conventional energy cost advantages that require public entrepreneurship to overcome. In 2008, the Ontario government began rolling out an aggressive policy to promote renewable energy, reified by the McGuinty Liberals' 2009 Green Energy and Green Economy Act. The policy revolved around a feed-in tariff, which offered above-market rates for electricity generated from renewable sources, conditional on a made-in-Ontario local content provision. Although the policy was the centrepiece of the government's climate strategy, it was also devised as a response to what one anonymous official called 'the prospect of the near total collapse of the automotive industry.'

Yet sources agree that, at the time local content requirements were devised, the province lacked manufacturing investment required to supply electricity producers with Ontario-made equipment. To overcome inadequate manufacturing capacity, representatives from the Ontario Ministry and Energy and Infrastructure entered secret investment negotiations in 2008 with a consortium consisting of the Korea Electric Power Operator (KEPCO) and Samsung C&T. Although the proposal originated in the Premier's Office, it was promptly assigned to Energy and Infrastructure at which point Cabinet Minister George Smitherman assumed the role of public entrepreneur. As Smitherman puts it, 'I was an economic nationalist before Trump, and I had concluded that, if we were going to make a big play in Green Energy, it needed to have an element of industrial policy' (Smitherman 2019: 137–38).

The Green Energy and Green Economy Act was simultaneously an energy and economic development bill; nevertheless, the so-called ‘Samsung deal’ was initiated without input from the Ministry of Economic Development and Trade. Conflict between the ministries came to a head when Smitherman submitted the Samsung proposal to Cabinet in October 2009. Sources indicate contention was focused on three aspects of the policy: the feed-in tariff approach preferred by Energy and Infrastructure, the ‘scale of the arrangement with Samsung’ and ‘the process by which it was arrived at.’ Objections at the Cabinet level notwithstanding, the item is reported to have cleared path *c* in Figure 2 with Premier McGuinty’s support.

Smitherman left provincial politics shortly after Cabinet’s decision to proceed with what would become the Green Energy Investment Agreement (GEIA) between the Province of Ontario and the ‘Korean Consortium’ as it is called in policy documents. The terms of the agreement included above-market electricity rates consistent with those established by the Green Energy Act, preferential access to scarce transmission space, as well as ‘economic development adders’ included to incentivize the establishment of four equipment manufacturing facilities. In all, the province agreed to transfer \$10.5 billion to Samsung over twenty years on a per-kilowatt basis in exchange for 2,500 megawatts of renewable generating capacity, four manufacturing centres, and nine hundred full-time jobs (Ontario Ministry of Energy and Infrastructure 2013).

Formally, Smitherman’s expected utility from the project was a function of two terms in Equation 1. At a personal level, Smitherman was motivated by purposive benefits, b_e . As a representative of the province, Smitherman was motivated to claim residual value from the establishment of a green energy manufacturing industry, $u_e(x)p_e(x)$. Samsung, meanwhile, was motivated by the value of contracts, $g_f(e)c(x_e)$ in Equation 2, as well as future profits from equipment manufacturing, $u_f(x)p_f(x)$.

Notably, the Samsung agreement was a complete contract. However, political agenda-setting was cleared without contracts being struck with landholders whose assets were required to site generation facilities. Samsung had to mobilize followers of its own within the policy subsystem. Although Samsung representatives began surveying land owned by the autonomous government of the Six Nations of the Grand River in summer 2009, the Six Nations Elected Council broke off negotiations in January 2011 citing unfavourable terms from Samsung (Montour 2012). Outside the Six Nations territory, although the Green Energy Act stripped local governments of their power to veto power generation projects, wind tower siting was met with counter-mobilization on the part of the nuclear industry and a citizen group associated with it called Wind Concerns Ontario.

As depicted in the left panel of Figure 6, government and Samsung shared a preference for renewable energy. Landholders, meanwhile, remained recalcitrant. The right panel of Figure 6 represents preferences over distribution in a chicken bargaining

game.¹ The original terms of the GEIA, established by way of a game played between Samsung and the government, were favourable to Samsung, near point *a*. In the game played between Samsung and the Six Nations, agreement was not initially forthcoming as Samsung played a bluff strategy to which the Six Nations Elected Council would not concede. On the preceding point, interview respondents indicate it was Samsung policy to take a hard line in negotiations.

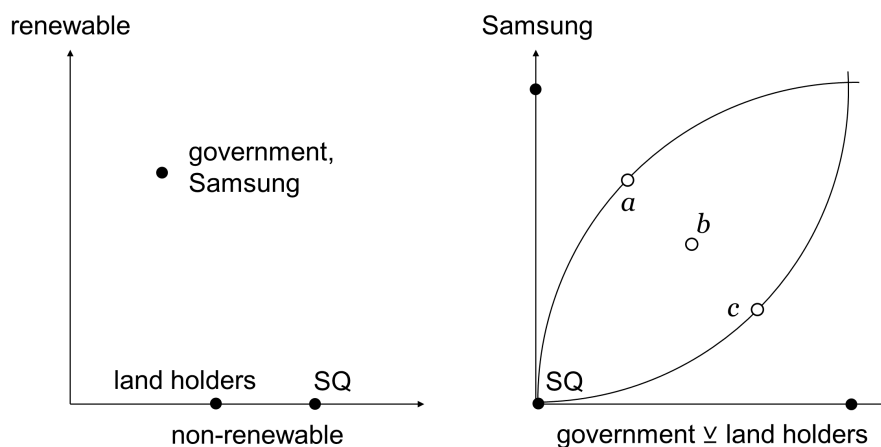


Figure 6: Actor preferences over policy and distribution

Contracts between Samsung and landholders were required for provision. Without cooperation of the Six Nations, Samsung set about siting negotiations on privately-held land. The process was delayed, however, when Wind Concerns Ontario successfully lobbied for health and environmental impact assessments. Although the assessments found no cause for halting the projects outright, an electoral calculus was made in the interim to reinstate local governments' authority to veto power generation facilities. The Haldimand County Council then issued a moratorium on industrial wind development in March 2011.

At the urging of Minister of Aboriginal Affairs, Brad Duguid, the Six Nations Elected Council resumed negotiations with Samsung in October 2011 (Montour 2012). However, the Haudenosaunee Confederacy Council, which represents the hereditary Indigenous leadership of the Six Nations, opposed the negotiations and even issued Samsung a cease and desist order in November. Nevertheless, the Six Nations Elected Council and Samsung drafted a preliminary term sheet in February 2012. Following a month-long community engagement process, which was reported to have generated 70%

¹ As mentioned in Section 2, the form of bargaining games is a function of the scope conditions of the collective good. Because land, capital and finance are equally integral to electricity generation, scope conditions are neutral and the game form is chicken. If assets were differentially integral, the collective good would exhibit diseconomies of scope and the game form would be battle. If assets were super-modular, the collective good would exhibit economies of scope and the game form would be pure coordination.

approval for wind and solar siting among residents of the Six Nations, Chief Bill Montour of the Six Nations Elected Council wrote the Haudenosaunee Confederacy Council seeking its approval of the Grand Renewable Energy Project (Six Nations Elected Council 2012). The cease and desist order against the project was lifted in May 2012.

In the second round of negotiations, the Six Nations were able to secure a bargaining distribution closer to point c in the right panel of Figure 6, thereby moving the landholder preference in the left panel northwest to join Samsung and the government. Meanwhile, Samsung negotiated over \$65 million in transfers out of the GEIA to landholders and communities outside the Six Nations to solicit their cooperation (Haldimand County 2018).

With landholders on-side and complete contracts in hand, the provision process could proceed along path d in Figure 3, as land and capital were specific contributions. However, Samsung did not end up producing generation equipment or siting capacity as intended. Rather, Samsung operated as a contractor to other firms. In that capacity, Samsung became an entrepreneurial coordinator during provision. Formally, Samsung negotiated contracts, as costs $c(x_e)$ in Equation 1, out of its residual from the GEIA, $u_e(x)p_e(x)$. Yet, the GEIA itself was scaled back in June 2013 as a consequence of effective monitoring of the terms of the agreement, which stipulated that the contract could be cancelled if initial deadlines were not met. Threatening to cancel the agreement outright, the government leveraged its bargaining position to shift the point in the right panel of Figure 6 from a position near a to a point closer to c (Ontario Ministry of Energy and Infrastructure 2013).

Although renewable energy generation was ultimately secured via path f in Figure 3, the province's industrial policy goals fell short of expectations and the Green Energy Act is no longer in force. On the former point, local content provisions in the Green Energy Act were deemed in contravention of international trade law by the World Trade Organization in 2013, which may have contributed to the premature closure of the two of the four manufacturing facilities set up under the GEIA. Regarding the repeal of the Green Energy Act, electricity prices became an electoral liability in summer 2016, when on-peak residential prices reached 18 cents per kilowatt hour. While electricity rate hikes were not solely attributable to the Green Energy Act, the Auditor General publicly criticized the government for paying premium rates to Samsung for electricity that was ultimately wasted or sold to the United States at a loss (Auditor General of Ontario 2015: 216). Although McGuinty's successor, Kathleen Wynne, responded to criticism over rate hikes by offering a 25% rate subsidy (financed from borrowing), electricity prices contributed to the Liberals' loss to the Progressive Conservatives in the 2018 election after which the Green Energy Act was promptly scrapped.

Given the checkered success of the policy, it may be asked whether different governance arrangements could have produced better results. While the policy's defenders stress that the Samsung deal was necessary to instill investor confidence following the 2008 financial crisis, critics of the policy argue that the GEIA did little but

hurt domestic industry. The latter line of reasoning is tenable in the sense that Samsung did not set up manufacturing facilities or build generating capacity, as was intended, but rather subcontracted the work to other firms while monopolizing access to the electricity grid. Indeed, the fact that Samsung could profitably subcontract its obligations under the GEIA, even after the 2013 amendments that reduced the size of residual profits, suggest that Samsung extracted considerable rents from the province.

The secretive nature of Smitherman's negotiations with Samsung meant that no input was given from domestic industry or the Ministry of Economic Development prior to the finalization of the GEIA. Although political decisions in 2009 created an exclusive subsystem in which Samsung enjoyed preferential treatment, and whereby local governments were powerless to oppose wind tower siting, the arrangement could not be sustained. Opposition was begrudgingly accommodated in the form of side payments and the reinstatement of local governments' veto power. However, the damage was already done. Exclusion of stakeholders politicized renewable energy in Ontario, which contributed to the Liberals' electoral defeat in 2018 and the repeal of the Green Energy Act the following year.

4 Discussion

The main finding gleaned from the case studies is as follows. Dearth of veto players in Canada's political system permits public entrepreneurs to pursue risky policies, the likes of which are required for radical innovation. However, Canadian institutions do not constrain policymakers to make good decisions. Consequently, public entrepreneurs in Canada are liable to pursue bad ideas. Moreover, cost externalization by public entrepreneurs in Canada tends to prompt counter-mobilization that may lead to premature policy termination. As told by a senior bureaucrat in a Canadian economic development ministry, 'promises made on the campaign trail lead [governments] to do things that often undermine objectives that they themselves seek to achieve.'

The interpretation above contrasts with perspectives that associate single-member plurality electoral systems with moderate policies, according to which policymakers have electoral incentives to gravitate 'centripetally' to the median preference on policy issues (Cox 1990). Although two of the three policies analyzed became electoral liabilities, none featured prominently in the government's mandate. Moreover, aspects of policy about which stakeholders developed strong preferences were not established until policy implementation. The evidence is thus more consistent with perspectives that emphasize 'the First Minister's prerogative' in Canada, which posit that policies with the support of first ministers (i.e., provincial Premiers and the federal Prime Minister) will proceed, while those without First Ministerial approval will be blocked (Savoie 1999). Indeed, in the fast ferries and green energy cases, resistance and oversight in Cabinet were circumvented with the First Minister's approval. Meanwhile, transgenic crops have been

approved in Canada but not in Europe where political systems feature a greater number of political veto points.

On the previous point, electoral reform is one option for curbing pathologies associated with inadequate checks and balances. The downside of electoral reform is that it would blunt Canada's comparative institutional advantage to effect major policy change by introducing political veto players who may block policy *ex ante* (Tsebelis 2002). Another option, consistent with the Westminster system of government, entails more inclusive institutions at the subsystem level. Such an arrangement would preserve Canada's comparative institutional advantage to pass radical legislation while strengthening subsystem governance, which may mitigate wasteful counter-mobilization and premature policy termination. Inclusive subsystems are arguably also the only means to accomplish normative goals related to inclusion and just transitions within a liberal context.

Empirically, the subsystem governing agricultural biotechnology is the most inclusive of the three analyzed. The fast ferries subsystem was the most exclusive. The green energy subsystem started off exclusive and became more inclusive over time as a matter of necessity. Incidentally, degree of subsystem inclusion tracks degree of policy success. Although the observation may be coincidental, the literature on economic embeddedness postulates that inclusive institutions establish legitimacy and consummate behaviour with positive economic effects (Granovetter 2005: 43). More concretely, inclusive institutions give stakeholders voice to craft optimal policy, given legislated constraints, by bestowing voting rights to influence decisions during implementation.² Of course, grievances could still be brought to the political level if consensus is not achieved in subsystems. Unlike proportional representation systems, where it is difficult to reverse policy once established, the single-member plurality system would continue to permit relatively swift policy termination (Tsebelis 2002).

5 Conclusion

Society is currently faced with major social, economic and technological problems that cannot be solved by *laissez faire* approaches to public policy. Rather, the problems with which society is confronted demand active policy measures (Dietz et al. 2018; Gough 2016; Swilling 2020). It is not surprising that enthusiasm for 'entrepreneurial states' rises and falls in lockstep with technological transitions and attendant social problems (Eisinger 1988; Mazzucato 2022). Yet, the literature lacks a clear behavioural theory of causal agents and causal mechanisms. As Mark Schneider astutely put it over thirty years

² There are many different ways subsystems may be governed. Best practice features include: a degree of arm's-length autonomy from the political executive, associationalism, linkages to the government bureaucracy, and shared-cost financing. The Canadian wine and canola industries provide examples. However, notwithstanding the transgenic plant and product registration subsystem, existing examples in the industrial policy domain tend to be dominated by industry and therefore arguably lack inclusion (cf. Montpetit 2016).

ago ‘ultimately, *states* are not entrepreneurs *individuals* are’ (1991: 639; emphasis in original). While a tremendous amount of literature has been devoted to the subject of public entrepreneurs over a sixty year period, a political economy approach is arguably needed if the objective is to arrive at a clear and explicit theory of public entrepreneurship (cf. Cairney 2018; John 2018).

This paper has sought to clarify the role played by agents responsible for state-sponsored innovation. To that end, Section 2 elaborated a relational perspective on entrepreneurship appropriate for the study of contemporary governance, according to which public entrepreneurs are defined as actors who use government levers to pursue rents from innovation. Section 3 employed process tracing to apply the theory to three Canadian cases of public entrepreneurship. Contrary to perspectives that predict ‘centripetal’ policymaking, the findings indicate that relative dearth of veto players in Canada’s political system translates to comparative institutional advantage to pursue radically-innovative ideas. However, the same institutions permit excessive risk-taking and cost-shifting that can undermine policy success. As a solution, Section 4 proposed inclusive institutions at the subsystem level as a means of strengthening governance and accommodating potential opponents. Such an arrangement is arguably superior to electoral reform, as the latter would blunt Canada’s comparative institutional advantage to legislate radical departures from the status quo. Moreover, inclusive subsystems are arguably the only means of adhering to principles of inclusion and just transitions in a liberal context.

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