

THE NEW SPONSOR STATES: QUEBEC & SCOTLAND, 1990-2017

THE NEW SPONSOR STATES: ECONOMIC NATIONALISM & VENTURE
CAPITAL IN QUEBEC AND SCOTLAND, 1990-2017

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Lay abstract

This thesis investigates the impacts of political ideas on economic policymaking. More specifically, it is a study into the effects of Québécois and Scottish nationalisms on regional policies in the sector of corporate finance, and subsector of venture capital. The question it was devised to answer is as follows: why is it that Quebec and Scotland developed particularly dynamic regional venture capital ecosystems, in which the state (through public investment funds) or state-backed investors (such as hybrid or tax-advantaged funds) play a leading role as compared with other Canadian or British regions? Through an in-depth process-tracing effort aimed at the uncovering of rationales underpinning major policy initiatives in this sector since 1990 and beyond, this thesis shows that minority nationalism contributed to the development of such ecosystems in key ways, notably by inducing perceived imperatives and preferences for policy autonomy, policy asymmetry, and state intervention.

Abstract

Given the importance that entrepreneurship and start-up businesses operating in technology-intensive sectors (biotechnologies, life sciences, renewable energy, artificial intelligence, information & communication technologies, software, etc.) have come to play as part of the processes of economic development and jobs creation, the access of such entrepreneurs and businesses to appropriate levels of corporate finance has become a major focus of policymakers in recent decades. Yet, this gave way to a wide variety of policy models across nation-states and even *within* nation-states, as levels of government and market actors adapted to those new challenges by refining or transforming pre-existing policies and institutions as well as by crafting new policy tools to address specific needs or interests. This thesis investigates the roots of such policy diversity *within* countries, offering in-depth accounts of the evolution of Quebec's and Scotland's policy strategies in the sector of development capital and sub-sector of venture capital since 1990.

As compared to other regions' or provinces' in the United Kingdom (such as South East England) or Canada (such as Ontario), Quebec and Scottish *regional* venture capital ecosystems rely on a high degree of state intervention, either direct (through public investment funds) or indirect (through government-backed, hybrid or tax-advantaged funds). Hence the description of these two regions as "sponsor states," heavily involved in the strategic backing of innovative businesses. Whereas most of the literature on venture capital has focused on *economic* variables to explain variations in such public sector involvement across polities however, this thesis seeks to explain policy divergence in Quebec and Scotland through a *political* and *ideological* lens. Its main argument is that the development of the venture capital ecosystems in these regions was underpinned by *Québécois and Scottish nationalisms*, which induced perceived imperatives and ideological preferences for policy autonomy, policy divergence, and state intervention.

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Table of Contents

Graphs, tables and figures.....	x
Acronyms and abbreviations.....	xiii
Declaration of academic achievement.....	xvi
Chapter One: Introduction.....	1
1.1. General contributions.....	3
1.1.1. Minority nationalism & policy asymmetry.....	3
1.1.2. Comparative political economy.....	12
1.1.3. Economic nationalism.....	25
1.2. Epistemology, methodology, & summary.....	37
1.2.1. Scope and case selection.....	37
1.2.2. Discursive institutionalism & process tracing.....	41
1.2.3. Summary & outline of the thesis.....	45
Chapter Two: Theoretical and historical overviews.....	47
2.1. Development capital and VC.....	49
2.1.1. Explaining public sector involvement.....	54
2.1.2. The “market gap” argument.....	55
2.1.3. The “counter-cyclical” argument.....	57
2.1.4. The “spatial” argument.....	58
2.1.5. The “positive externalities” argument.....	59
2.1.6. The “leveraging effect” argument.....	60
2.1.7. The “political” explanations.....	61
2.1.8. Remarks.....	62
2.2. Public sector involvement in Quebec, 1960s-1990s.....	64
2.2.1. The Société générale de financement.....	65
2.2.2. The Caisse de dépôt et placement du Québec.....	68
2.2.3. The Société de développement industriel.....	72

2.2.4. The Fonds de solidarité des travailleurs du Québec.....	76
2.2.5. Remarks.....	80
2.3. Public sector involvement in Scotland, 1960s-1990s.....	82
2.3.1. The Highlands & Islands Development Board.....	84
2.3.2. The Scottish Development Agency.....	91
2.3.3. The “Scottish model” and Thatcherism.....	96
2.3.4. Remarks.....	101
Chapter Three: Quebec, 1990-2003.....	103
3.1. The Bourassa II and Johnson administrations (1989-1994).....	106
3.1.1. The Sociétés régionales d’investissement.....	107
3.1.2. The Fonds de développement technologique.....	109
3.1.3. The counter-cyclical budgets.....	112
3.1.4. Clusters & LSIFs: Quebec vs. Ontario.....	118
3.2. The Parizeau and Bouchard governments (1994-1998).....	123
3.2.1. The “Plan Paillé,” the SISQ, and the FACSN.....	124
3.2.2. The FRS and CLD.....	129
3.2.3. “Objectif emploi” and Investissement Québec.....	134
3.3. The Bouchard and Landry governments (1998-2003).....	141
3.3.1. The budgets of continuity.....	142
3.3.2. Capital régional et coopératif Desjardins and La Financière du Québec.....	146
3.4. Concluding remarks.....	150
Chapter Four: Scotland, 1990-2003.....	154
4.1. Strategic policymaking in pre-devolution Scotland (1990-1997).....	157
4.1.1. The Enterprise and New Towns (Scotland) Act 1990.....	158
4.1.2. The Business Birth Rate Strategy.....	164
4.1.3. LINC Scotland, the Scottish Equity Partnership, and Technology Ventures.....	169
4.2. The “statecraft phase” (1997-2003).....	176

4.2.1. Devolution and economic development.....	177
4.2.2. Strategic policymaking in a VC bubble.....	184
4.3. Concluding remarks.....	195
Chapter Five: Quebec, 2003-2017.....	199
5.1. The first Charest administration (2003-2007).....	203
5.1.1. The “U-curve”.....	204
5.1.2. IQ’s reform.....	209
5.1.3. The “Rapport Brunet”.....	212
5.2. The second and third Charest administrations (2007-2012).....	219
5.2.1. Development strategies and the Anges Québec network.....	220
5.2.2. Specialized funds, Teralys, CCPME, and the FIRA.....	223
5.2.3. The new IQ, the FRQ, and Anges Québec Capital.....	228
5.3. The Marois (2012-2014) and Couillard (2014-2017) governments.....	234
5.3.1. The BDÉQ.....	236
5.3.2. The recapitalization of AQC and Teralys.....	240
5.3.3. Strategic partnerships.....	245
5.4. Concluding remarks.....	250
Chapter Six: Scotland, 2003-2017.....	254
6.1. The second SLP-SLD administration (2003-2007).....	258
6.1.1. The Scottish Co-Investment Fund.....	260
6.1.2. The Scottish Seed Fund and the Scottish Venture Fund.....	267
6.2. The first SNP government (2007-2011).....	274
6.2.1. The “statecraft phase,” part II (2007-2009).....	276
6.2.2. The crisis and the investment phase (2009-2011).....	280
6.3. The second and third SNP governments (2011-2017).....	287
6.3.1. REIF and the Scottish Life Sciences Fund.....	289
6.3.2. The Scottish Business Development Bank.....	295
6.4. Concluding remarks.....	300

Chapter Seven: Conclusions & Discussion.....	304
7.1. Summary and findings.....	306
7.1.1. General overview.....	306
7.1.2. Evaluation of findings.....	313
7.2. Final remarks: contributions and avenues for further research.....	330
7.2.1. So what?.....	331
7.2.2. Now what?.....	335
Bibliography.....	343
Appendix I: list of interviews.....	394

Graphs, tables and figures

Figure 1. VoC and state activism.....	16
Figure 2. Quebec’s development capital ecosystem (2016).....	22
Figure 3. Scotland’s development capital ecosystem (2016).....	23
Table 1. Economic weight, share of VC deals and public involvement in VC: Scotland, South East England, Quebec, and Ontario (2000-2001).....	52
Graph 1. Evolution of Quebec’s VC industry I (1990-2003).....	105
Graph 2. Provincial government’s R&D spending, Quebec vs. Ontario (1990-2003)....	111
Graph 3. Evolution of Quebec’s VC industry II (1992-2003).....	116
Graph 4. Contributions of the <i>Innovatech</i> network (1998-2003).....	138
Graph 5. Contributions of IQ (1998-2003).....	140
Graph 6. VC raised and available for investment, Quebec (1994-2003).....	151
Table 2. Summary of major government initiatives, Quebec (1990-2003).....	153
Graph 7. Public spending on economic development and R&D, Scotland vs. UK (1998-2007).....	155
Figure 4. SE/LECs Strategic Planning Organizational Chart (1991-1992).....	162
Graph 8. Contributions of SE & HIE (1991-1998).....	168
Graph 9. VC investees per 1000 registered businesses, Scotland vs. UK (1994-1999)...	171
Graph 10. Share of VC investees in UK total, Scotland (1993-1998).....	172
Graph 11. Government-backed R&D as % of GDP, Scotland vs, RoUK (1999-2006)...	175
Table 3. Reserved & devolved powers, <i>Scotland Act 1998</i>	179
Graph 12. Share of VC/private equity investees in UK total vs. Share of registered businesses in UK total, Scotland & South East England (1998-2004).....	185
Graph 13. VC/private equity investees per 1000 registered businesses, (1998-2004)....	186
Graph 14. Private VC/private equity investments in Scotland (1990-2004).....	187
Graph 15. Total number of early-stage VC investments in Scotland (2000-2004).....	188
Graph 16. Total value of early-stage VC investments in Scotland (2000-2004).....	189
Graph 17. Share of hybrid investments as % of total early-stage VC deals in Scotland (2000-2004).....	190

Graph 18. Contributions of SE/HIE (1991-2004).....	196
Table 4. Summary of major government initiatives, Scotland (1990-2003).....	197
Graph 19. Evolution of Quebec’s VC industry III (2003-2015).....	200
Graph 20. New VC raised and share of new VC raised, Quebec (2003-2015).....	202
Graph 21. Share of LSIF/tax-advantaged investments in total VC investments, Quebec vs. Canada (1999-2013).....	207
Graph 22. Share of independent private investments in total VC investments, Quebec vs. Canada (1999-2013).....	218
Graph 23. Share of foreign investments in total VC investments, Quebec vs. Canada (1999-2014).....	218
Graph 24. Provincial government’s R&D spending, Quebec vs. Ontario (2003-2013)...	221
Graph 25. Contributions of the SGF (2003-2010).....	230
Graph 26. Contributions of IQ/FDE (2007-2016).....	232
Graph 27. Evolution of Quebec’s VC industry (IV), (2007-2015).....	243
Graph 28. Contributions of the FSTQ and CDPQ, (2007-2015).....	249
Graph 29. Evolution of Quebec’s private equity industry (2009-2015).....	249
Table 5. Summary of major government initiatives, Quebec (2003-2016).....	252
Graph 30. Private VC/equity investments in Scotland (2000-2015).....	255
Graph 31. Public spending on economic development and R&D, Scotland vs. UK (2003-2016).....	257
Graph 32. Government-backed VC deals as % of total deals, Scotland (2003-2008)....	259
Graph 33. Private VC/equity investees per 1000 registered businesses, Scotland vs. UK (2000-2007).....	261
Graph 34. Government-backed R&D as % of GDP, Scotland vs. RoUK (2000-2015)...	264
Graphs 35 & 36. Contributions of the SCIF (2003-2007).....	266
Figure 5. Scottish Executive / Scottish Enterprise organizational flowchart (2006).....	271
Graphs 37 & 38. Contributions of the SSF and SVF (2006-2010).....	273
Graph 39. Contributions of SE/HIE (2002-2011).....	278
Graph 40. Budget spending on “Third Sector and Social Economy,” Scotland (2002-2011).....	282

Graph 41. Contributions of the Scottish Investment Bank (2009-2016).....	286
Graph 42. Public spending on renewable energy, Scotland (2002-2015).....	288
Graph 43. Contributions of SE/HIE (2010-2016).....	288
Graphs 44 & 45. SIB investments by sector in % and in £ millions (2010-2016).....	292
Graph 46. Government-backed VC investments, Scotland (2009-2015).....	299
Graph 47. Private VC/equity invested per 1000 registered businesses, Scotland vs. UK (2003-2015).....	301
Graph 48. Total number and value of early-stage VC deals, Scotland (2003-2015).....	301
Table 6. Summary of major government initiatives, Scotland (2003-2016).....	303
Graph 49. Provincial government's R&D spending, Quebec vs. Ontario (1990-2013)...	317
Graph 50. Public spending on economic development and R&D, Scotland vs. UK (1998- 2016).....	317
Graph 51. Government-backed VC investments as % of Quebec's (1990-2016).....	318
Graph 52. Government-backed VC investments as % of Scotland's (2000-2015).....	319
Table 7. Flagship policies, sponsoring style and nationalizing mechanisms, Quebec & Scotland (1990s-2000s).....	326
Graph 53. Evolution of Catalonia's VC industry (2010-2015).....	337
Graph 54. Institut Català de Finances' total venture capital commitments (2005- 2015).....	337
Table 8. International representation networks, Quebec, Scotland & Catalonia (2017).....	340

Acronyms and abbreviations

AQC (Ange Québec Capital)	FACSN (FondAction CSN)
AQVIR (Agence québécoise de valorisation industrielle de la recherche)	FDÉ (Fonds du développement économique)
BBB (British Business Bank)	FDQ (La Financière du Québec)
BES (Business Expansion Scheme)	FDT (Fonds de développement technologique)
BDÉQ (Banque de développement économique du Québec)	FEDS (Framework for Economic Development in Scotland)
BG (Business Gateway)	FIER (Fonds d'intervention économique régionale)
BGF (Business Growth Fund)	FIRA (Fonds d'Investissement pour la relève agricole)
CBI Scotland (Confederation of British Industry – Scotland)	FLI (Fonds locaux d'investissement)
CCPME (Capital-Croissance PME)	FMQ (Fonds manufacturier québécois)
CDPQ (Caisse de dépôt et placement du Québec)	FQDI (Fonds québécois de développement industriel)
CIS (Created in Scotland)	FRQ (Fonds Relève Québec)
CLD (Centres locaux de développement)	FRS (Fonds régionaux de solidarité)
CMEs (Coordinated Market Economies)	FSTQ (Fonds de solidarité FTQ)
CRCD (Capital régional et coopératif Desjardins)	FTQ (Fédération des travailleurs du Québec)
CRÉ (Conférences régionales des élus)	GDP (Gross Domestic Product)
CSFCE (Cabinet Secretary for Finance, Constitution & Economy)	GEM (Global Entrepreneurship Monitor)
CSN (Centrale des syndicats nationaux)	GVA (Gross Value Added)
CUFTA (Canada-US Free Trade Agreement)	HIDB (Highlands and Islands Development Board)
ELLD (Enterprise and Lifelong Learning Department)	HIE (Highlands and Islands Enterprise)
ERDF (European Regional Development Fund)	ICF (Institut Català de Finances)
FA (La Financière agricole)	ICT (Information & Communication Technologies)

IGM (Innovatech Grand Montréal)	MP (Member of Parliament)
INNQ (Innovation Québec)	MRC (Municipalité régionale de comté)
IPOs (Initial Public Offerings)	MRST (Ministère de la Recherche, de la Science et de la Technologie)
IQ (Investissement Québec)	NAFTA (North-American Free Trade Agreement)
IQCA (Innovatech Québec et Chaudière-Appalaches)	NDP (New Democratic Party)
ITIs (Intermediary Technology Institutes)	NEB (National Enterprise Board)
LECs (Local Enterprise Companies)	NRIF (National Renewables Infrastructure Fund)
LGS (Loan Guarantee Scheme)	PASI (Programme d'appui stratégique à l'investissement)
LINC (Local Investment Networking Company)	PQ (Parti Québécois)
LMEs (Liberal Market Economies)	PLQ (Parti Libéral du Québec)
LSIFs (Labor-sponsored investment funds)	R&D (Research & Development)
MDEIE (Ministère du Développement économique, de l'Innovation et des Exportations)	RÉAQ (Régime d'épargne-actions du Québec)
MEDE (Ministère d'État au Développement économique)	REIF (Renewable Energy Investment Fund)
MEIE (Ministère de l'Économie, de l'Innovation et des Exportations)	RoC (Rest of Canada)
MESI (Ministère de l'Économie, de la Science et de l'Innovation)	SBDB (Scottish Business Development Bank)
MIC (Ministère de l'Industrie et du Commerce)	SCC (Scottish Constitutional Convention)
MICT (Ministère de l'Industrie, du Commerce et de la Technologie)	SCIF (Scottish Co-investment Fund)
MICST (Ministère de l'Industrie, du Commerce, de la Science et de la Technologie)	SCDI (Scottish Council for Development and Industry)
MNA (Member of the National Assembly)	SCEA (Scottish Council of Economic Advisors)
	SDA (Scottish Development Agency)
	SDI (Société de développement industriel)

SE (Scottish Enterprise)	SODEC (Société de développement des entreprises culturelles)
SEP (Scottish Equity Partnership)	SODEQ (Sociétés d'investissement dans l'entreprise québécoise)
SEU (Scotland Europa)	SOLIDE (Sociétés locales d'investissement dans le développement de l'emploi)
SFE (Scottish Financial Enterprise)	SOSS (Secretary of State for Scotland)
SGF (Société générale de financement)	SPEQ (Sociétés de placement dans l'entreprise québécoise)
SGS (Scottish Growth Scheme)	SPF (Sector Partnership Fund)
SIB (Scottish Investment Bank)	SRI (Sociétés régionales d'investissement)
SID (Société d'investissement Desjardins)	SSF (Scottish Seed Fund)
SIF (Scottish Investment Fund)	SSS (A Smart, Successful Scotland, 2004)
SIGM (Société Innovatech du Grand Montréal)	STF (Scottish Technology Fund)
SIQCA (Société Innovatech Québec & Chaudière-Appalaches)	STUC (Scottish Trades Union Congress)
SIRR (Société Innovatech Régions-Ressources)	SVF (Scottish Venture Fund)
SISQ (Société Innovatech du Sud du Québec)	TCFI (Teralys Capital Fonds d'innovation)
SLD (Scottish Liberal Democrats)	UK (United Kingdom)
SLF (Scottish Loan Fund)	US (United States)
SLP (Scottish Labour Party)	VC (Venture Capital)
SLSF (Scottish Life Sciences Fund)	VCs (Private venture capital firms)
SMBs (Small and Medium Businesses)	VoC (Varieties of Capitalism)
SMEs (State-influenced Market Economies)	VRQ (Valorisation Recherche Québec)
SNP (Scottish National Party)	
SO (Scottish Office)	

Declaration of Academic Achievement

I hereby certify that I am the sole author of this thesis, which has never been submitted to another institution. This thesis does not infringe upon any existing copyright, and any material used other than my own is properly referenced. This is the complete version of my thesis, as approved by the review committee.

CHAPTER ONE

INTRODUCTION

At the foundation of this thesis lies a crucial assumption: ideologies and collective identities affect many aspects and all sectors of policymaking in various and important respects even though the precise ways their effects unfold are difficult to establish empirically. The main objective of this thesis is to overcome this difficulty, and to investigate the tangible effects a specific set of ideas – i.e. nationalism – has had and still has on a particular policy sector within the larger field of economic development, that of *development capital* (with a specific focus on *venture capital*). By focusing on this policy sector and by pursuing “deep knowledge” of a limited and chronologically circumscribed set of case studies – Scotland and Quebec over the last thirty years – we are determined to go “from whether to how” (Mehta 2011) with regards to the effects of nationalism on economic policymaking.

Our main challenge is to demonstrate how it is linked not only to the elaboration and implementation stages of particular policy decisions, but also to the structures and functioning of evolving institutional “ecosystems” in these regions: small and medium businesses’ (SMBs) funding chains and the intermingled networks of governmental, institutional, non-profit and private support to entrepreneurs, on which we focus, are cases in point. So doing, we are dealing with different institutions, organizations and actors at the

upstream and downstream of industrial policies and strategies: from economic ministries and government officials to venture capitalism, private investment funds and business owners. Our ontological grounding however, best summarized by Béland and Cox (2011b: 9), remains constant:

Ideas are the foundation of institutions. As ideas give rise to people's actions and as those actions form routines, the results are social institutions. The ideas then are enshrined in the institutions. As people interact with institutions, the founding ideas are reproduced. Through repeated interaction with institutions, people are confronted again and again with the founding ideas. This confrontation can serve to reinforce and reproduce these ideas.

It is for the sake of transparency that ontological foundations must first be established, but being clear about what we think the social world and, within it, the specific world of economic policymaking are made of also helps elaborating research strategies. After all, “ontology is the starting point of all research, after which one's epistemological and methodological positions logically follow” (Grix 2002: 177). Ontology is indeed at the heart of any researcher's interests, questions, and hypotheses about a given problem, and a fortiori of any *qualitative* research design (Maxwell 2005).

This thesis thus builds on a *constructivist* ontological standpoint: we contend that social and political actors' ideas can have crucial effects on economic policymaking, and that such effects often provide crucial explanations for the elaboration and adoption of specific policies in precise contexts. Our challenge is to establish if, and how, minority nationalism had such effects in Quebec and Scotland since 1990. Thereby, this thesis makes contributions to many different fields of study. This first chapter provides an overview of those contributions.

1.1. General contributions: minority nationalism, public policy, & political economy

1.1.1. Minority nationalism & policy asymmetry

The vitality of nationalist movements in regions such as Quebec and Scotland sustained constant academic interest for “minority nationalism” as well as for the development trajectories of “national minorities” and/or “small nations” over the last three decades (Boucher & Thériault 2005; Cardinal & Papillon 2011). Those movements and trajectories, highlighting issues relating to the political and economic *autonomy* of such nations, have been objects of puzzlement for political scientists, not least because their vigour seems to have been coextensive with a “changing international order” characterized by increasing *interdependence* (Keating & McGarry 2001). Studying secessionism in Quebec and Scotland, Holitscher and Suter (1999) famously referred to this as “the paradox of economic globalization and political fragmentation.” The reflex of a majority of scholars has therefore been to seek an explanation for the relative strength of minority nationalism in this context of increasing integration.

Remarkably, a widely shared explanation has attained “paradigmatic” status since the mid-1990s. Drawing in good part from various but related works in economic geography, economic sociology, and political economy, the argument runs as follows: international trade liberalization, both by weakening nation-states’ capacities for (macro)economic intervention and by providing wider market opportunities to regional or local economies, conferred new (micro)economic responsibilities and tools to subnational governments, thereby lessening the economic uncertainties associated with enhanced

autonomy or secession, as promoted by nationalist movements (Alesina & Spolaore 1997; Amin & Tomaney 1995; Drover & Leung 2001; Guibernau, 1999; Hamilton, 2004; Hechter 2000; Kacowicz 1999; Keating & Loughlin, 1997; Krugman 1995; MacLeod 2001; Meadwell & Martin 1996, Paquin, 2001; Porter 1994, 1998; Trigilia 1991). Contemporary minority nationalism has thus been widely perceived as deriving from the changing scales of economic development, most importantly below nation-states' control, a phenomenon political scientist Michael Keating (1997, 1997b, 2001b) conceptualized as a “rescaling” of political economy along regional lines.

This explanation has often been applied to the specific cases of Quebec and Scotland. It has been opposed, for instance, to arguments depicting Scottish nationalism since the late 1970s as a defensive reaction against Thatcherism and state retrenchment. In fact, the economic reforms imposed in the United Kingdom (UK) by the Thatcher and Major administrations up to 1997, combined with further economic integration in Europe, offered Scotland new and politically significant opportunities for autonomous economic development (Paquin 2002; Rioux 2012b). Gagnon and Montcalm (1992) also developed an early version of this thesis to explain the rapid rise of economic nationalism and state intervention in Quebec between the 1960s and 1980s, arguing it responded to structural westward shifts in the North-American economy and thus to a corresponding need for Quebec (and especially for the emerging Francophone business class) to break its dependence upon Anglo-Canadian and American capital markets.

Although economic explanations for minority nationalism have gained saliency however, minority nationalism has rarely been used, in turn, to explain specific economic

policy choices and trajectories among subnational jurisdictions. Two trends can be distinguished, indeed, in the literature on minority nationalism: a majority of authors has sought to explain the phenomenon and thus to approach it as an *explanandum*, while a relatively important minority has, more recently, tried to use it instead as an independent variable, as an *explanans*. Yet, despite growing interest for constructivist approaches in policy analysis (Béland & Cox 2011) or comparative political economy (Blyth 1997), and notwithstanding existing literature on “economic nationalism in a globalizing world” (Helleiner & Pickel 2005), even fewer scholars have tried to link minority nationalism and *economic* policymaking in particular.

One important reason why minority nationalism is rarely used to explain economic policy choices is that “economic nationalism” has almost always been and to a large extent still is conflated with protectionism (Boulangier, 2006). Therefore, because governments of subnational jurisdictions rarely control traditional protectionist tools (most tariff and non-tariff barriers, for instance), and because nationalist parties such as the Parti Québécois (PQ) or Scottish National Party (SNP) mostly embraced trade liberalization since the late 1980s, it has been assumed that minority nationalism and economic policymaking now relate very indirectly, if at all. Yet, this gap in the literature on minority nationalism’s policy effects contrasts with both the economic rhetoric of parties such as the PQ or SNP and the programs, strategies, and specific policy choices of governments in regions such as Scotland and Quebec.

Accordingly, a central objective of this thesis is to evaluate the extent to which the economic content of minority nationalism is not merely rhetorical but has had and still has

concrete policy effects. In other words, we intend to put the aforementioned paradigm on its head: if the resurgence of minority nationalism has been caused in good part by the changing scales of economic development over the last thirty years or so, then it is reasonable to think it also had, by itself, some causal effects on economic policymaking at the regional level. The main contribution of this thesis, thus, is to identify the precise impacts minority nationalism had, since 1990 and beyond, on economic development strategies and policies in Scotland and Quebec. This effort is not completely innovative however: although economic policymaking in particular has been overlooked by recent literature on minority nationalism, previous work has been done, as described below, on its impacts in other policy fields.

Without revisiting the numerous definitions and theories of nationalism (Breuilly 1994; Smith 1995; Calhoun 1998; Beiner 1999; Roger 2001; Dieckhoff & Jaffrelot 2006), the next section of this chapter delves into our conception of “economic nationalism.” For now, suffice it to say that although there are probably as many definitions of nationalism as there are “types” of nationalism, all variants revolve around the same ideological principle, famously summarized by Gellner (1999): that political and national “units” should be as congruent as possible. The different meanings attached to the “national unit” – i.e. the diverse definitions of the “nation” – as well as the various forms political power, unity, and autonomy can take explain, in turn, the polymorphism distinguishing nationalism as an ideology and cultural phenomenon. What we refer to, henceforth, as “minority nationalism” therefore comes down to collective commitments *to* and demands *for*

significant policy self-determination, carried by national communities forming demographic minorities within sovereign nation-states.

Minority nationalism is sometimes referred to as “substate” nationalism, because “in articulating and accentuating the distinctiveness of nations within the state, and in making claims on behalf of national minorities, substate nationalism implicitly competes with the dominant nation-building project of the center. In so doing, it challenges the state’s claim to represent a united people, going to the heart of its claims to legitimacy” (McEwen 2006: 47). For the sake of clarity, the concept of *minority nationalism* will be preferred because Scotland and Quebec already enjoy degrees of governmental autonomy which could be said to amount to a status of (non-sovereign) “statehood.” Yet, Quebec and Scottish nationalisms do challenge, in many ways, Canadian and British states’ claims to represent a united people, and do articulate competing “nation-&-state-building” projects, notably through policy asymmetry.

In “multinational democracies” (Gagnon & Tully 2001) such as Canada and the UK, policy asymmetry can take different forms. First, it can refer to *policy divergence*, where one part of the country – Quebec in Canada, or Scotland in the UK – pursues policy objectives and thus implements policies that are relatively distinct from those prevalent in most other regions of the country. It can also point, secondly, to *policy autonomy*, where policy objectives and policies remain relatively similar countrywide but where those objectives and policies, for various reasons, are pursued through autonomous institutions and to a greater extent by one region of the country while other regions collaborate closely or remain, on their own, less active.

These two forms of asymmetry are not mutually exclusive. As we will show, Scottish and Québécois nationalisms can help explain the advent and persistence of both policy divergence and autonomy in economic development, which is a shared responsibility between the federal and provincial governments in Canada, and between the central and devolved administrations in the UK. Besides, many authors from different epistemological backgrounds already established that minority nationalism can lead to asymmetry – through divergence and/or autonomy – in other policy areas. Best known among them are Béland and Lecours (2004, 2005, 2006, 2007, 2008), who developed an extensive literature on the different impacts minority nationalism has on social policy “decentralization” in regions such as Quebec, Scotland, Flanders, and Wallonia.

In their book on the subject, Béland and Lecours develop arguments about what they call the “nationalism-social policy nexus,” among which is the assertion that “it is intrinsic to the nature of contemporary (sub-state) nationalism that it puts forward claims about the existence of a national unit of solidarity where co-nationals have a special obligation to each other’s welfare, [...] viewed as being best fulfilled by having control over social policy” (2008: 26). Their main contribution, in this regard, was to show how different regimes’ institutional arrangements provide nationalists with distinct opportunities to push for social policy asymmetry at various points in time.

This is best demonstrated by their comparison of welfare policy decentralization in Quebec and Flanders (2005b, 2006b, 2007). In the first case, nationalist demands resulted in various asymmetries because Canadian federalism provided Quebec jurisdiction over social matters before the development of welfare began to accelerate in the 1960s and

1970s, but also because the lack of provincial representation at the federal level and the strength of provincial legislatures allowed bilateral negotiations between Quebec and Ottawa to supersede other provinces' principled opposition to policy asymmetry. By contrast, Flemish nationalists' drive for policy asymmetry from the 1970s onward, notably on social security matters, encountered serious obstacles because of Belgium's centralized system and because of the institutionalization of consensus-based procedures and regional vetoes after the federalization of 1993.

Case studies have also been conducted regarding minority nationalism's impacts in various policy sectors. McEwen (2002; 2006) showed that Scottish nationalism fed the rejection of welfare retrenchment in the UK during the 1980s and 1990s, leading to policy divergence after devolution on matters such as long-term home care for the elderly. Law and Mooney (2012) also argued that growing economic and social policy asymmetry between Scotland and the rest of the UK (RoUK) since the late 1990s resulted in good part from the influence of the SNP's "nationalist framing" of Scottish policymaking. Arnott and Ozga (2010: 96), relatedly, argued that this nationalist framing resulted in "a move away from referencing England as a comparator nation" on education policy, leading to divergence on the issue of university tuition fees.

A relatively abundant literature also exists on the relationships between minority nationalism and the conduct of international relations and diplomacy by "regions" (Aldecoa & Keating 2013; Lachapelle & Paquin 2005). As early as 1977, Paul Painchaud described the rapid intensification of Quebec's paradiplomacy as the natural extension of an internal

“modernization” and “state-building” process fueled by nationalism. Three decades later, Paquin (2004) popularized the concept of “*paradiplomatie identitaire*” to describe the dynamic international activities of Quebec, Catalonia, and Flanders. Paquin argued such activities mainly stem from a desire for the external recognition and legitimation of these regions’ nation-&-state-building initiatives, hence his other concept of “*nationalisme de projection*.”

In the specific case of Quebec, a number of authors investigated the impact of nationalism on governmental, partisan, and public attitudes toward continental free trade since the late 1980s. Rocher (1994, 2003) argued that government support – of both Liberal and PQ administrations – for free-trade was informed by “neo-nationalist” ideas and strategies rather than “neoliberal” ones (1994: 479). Such a support aimed to reduce the Francophone business class’ reliance on interprovincial trade and would entail, as a counterpart, the maintenance and even the intensification of government involvement in the development of sectoral “competitive advantages.” Martin (1997) followed a similar logic when he argued that, unlike for Ontario, structural or class-based variables could not explain this support which, as an instance of “free-trade nationalism,” was aimed at the pursuit of provincial autonomy through economic internationalization.

Scottish nationalism is also said to have had important effects on political attitudes toward international trade and continental integration since the 1980s, impacting British institutional arrangements regarding Scotland’s international prerogatives (Balke 2005; Dmitrieva 2008; Henderson 2001; Mitchell 1997; Robbins 1998; Trench 2004). Smith

(2010) showed how the SNP began to pressure for enhanced Scottish influence in EU affairs as soon as it formed a minority government in 2007, notably through the publication of its “Action Plan on European Engagement” and “International Framework” (Scotland 2008a; 2008b). In fact, the promotion of Scotland’s interests at the European level and elsewhere had already been a central aspect of the SLP-SLD coalition’s economic strategies since 1999 (Imrie 2006). Moreover, it is worth noting that the SNP only switched from “Euroscepticism” to “Euroenthusiasm” in the late 1980s, when it became clear that trade liberalization and European integration provided new opportunities to push for autonomy within the UK, or even for a secession followed by EU membership (Tarditi 2010).

This thesis thus builds on a quite extensive literature on minority nationalism and policymaking, but one that still suffers from important blind spots when it comes to the specific field of economic development. In what follows, we bridge the gaps that exist in the literature between minority nationalism, policy analysis, and political economy. By trying to understand how nationalism impacts economic policymaking, we draw lessons as to what those impacts mean in terms of government involvement in the organization of corporate funding chains and investment ecosystems in Quebec and Scotland. So far however, much of literature in comparative political economy has shown a tendency either to focus solely on nation-states, to overlook the organizational influence of governments, or both¹. The next section explains why, and how, this thesis offers an alternative approach.

¹ For this literature and for notable exceptions, see: Hobson & Ramesh (2002); Garrett (1998b); Giddens (2000); Gilpin (2001); Mann (1997); McBride & Williams (2001); Rodrik (1998); Skogstad (2000); Swank (1998); Vogel (1996); and Woods (2000).

1.1.2. Comparative political economy

The propinquity between nationalism and protectionism is not as straightforward as it used to be, least of all in the case of regions such as Quebec and Scotland. Already in the 1980s, nationalists in Quebec, Scotland and other regions became well aware that trade liberalization would not only provide access to wider markets but perhaps most importantly new state-building opportunities, relating to the responsibilities it would impart regional governments in terms of public support for businesses in emerging sectors. These new (micro)economic responsibilities, purportedly best fulfilled at regional and local scales, would indeed offer renewed prospects for state-&-nation-building projects, as they called for new forms of supply-side state intervention and for policy asymmetry – through divergence or at least through autonomy – in economic development (Keating & Loughlin 1997; Keating, Loughlin & Deschouwer 2003).

Since the mid-1990s, many authors demonstrated that international trade and financial liberalization have been compatible with the persistence of institutional and policy diversity among nation-states. Regulationists (Boyer & Drache 1996), institutionalists (Chang 2003; Weiss 1998, 2003) and constructivists (Helleiner 1994), often in collaboration (Berger & Dore 1996; Crouch & Streeck 1997), all argued that nation-states adapted to the “changing international order” in different ways, based on distinct institutional and regulatory legacies, the structure of their economies, the prevailing ideologies of their elites, the dynamics of domestic partisan politics (Garrett 1998) or even, simply, their citizens’ “everyday agency” (Hobson & Seabrooke 2007). This is not to say

that economic institutions and policymaking, at the domestic level, were unaffected by globalization but that states reformed such institutions and policies (sometimes by adopting new ones) in order to adapt and, hopefully, benefit from it.

Academic focus on industrial policy, for instance, underpinned the emergence of a specific literature around the concept of the “competition state” during the 1980s and 1990s. This literature pointed to the fact that governments of advanced industrial nations, in the face of trade liberalization, turned away from macroeconomic policies aimed at shielding strategic sectors and businesses from international competitors, but adopted instead various microeconomic, supply-side policies aimed at providing those clusters and businesses “competitive advantages” over foreign rivals (Cerny 1997; Jessop 2002). In many countries – and in many regions such as Quebec and Scotland² – policymakers turned to theories *about* and blueprints *for* the development of competitive advantages through territorialized “industrial clusters,” as elaborated most notably by American economist Michael E. Porter (1994, 1998).

This widespread shift toward the “competitive” paradigm among developed market economies was also deeply influenced by “export-led growth” theories (Palley 2011), which replaced domestic “demand-led growth” and protectionist “import-substitution” principles from the late 1970s onwards. The central tenets of the competition state’s export-led growth strategies can be said to rest on two main objectives: a) attracting and retaining

² We shall come back to this specific point below. For Quebec, see Graefe (2000; 2003; 2005) and Quebec (1993). For Scotland, see Taylor & Raines (2001), Learmonth *et al.* (2003), and Scottish Enterprise (1992).

foreign direct investments (FDI) in order to foster growth and provide new jobs with “imported” capital; and b) facilitating the “internationalization” of domestic businesses through exports, outward FDI and overseas expansions, in order to free corporate revenues and profits from the domestic market’s limited demand.

As it became clear that the most “innovative” businesses – often young and growing SMBs or “*gazelles*” – by creating new products and thus new markets, would be important engines of economic growth, states also started to pursue industrial reconversion, notably through increased R&D and venture capital (VC) spending, toward high value-added, “high-tech” sectors most susceptible of engendering competitive exporters. This has often been referred to, in turn, as the paradigm of “innovation-led growth,” one that blended nicely with theories about the competitive advantages of industrial clustering. Indeed, “studying firm behavior and competition has led to a ‘systems of innovation’ view of policy where what matters is understanding the way in which firms of different types are embedded in a system at sectoral, regional and national levels. In this system view, it is not the quantity of R&D that matters, but how it is distributed throughout an economy, often reflective of the crucial role of the State” (Mazzucato 2014: 35).

If most scholars interested in variants of the “competition state,” however, have studied and compared nation-states, industrial policymaking at the “subnational” or “regional” level also attracted renewed attention because of the purportedly territorialized and localized nature of competitive advantages, systems of innovation, and clustering. There is a substantial literature on the way Scottish economic development strategies,

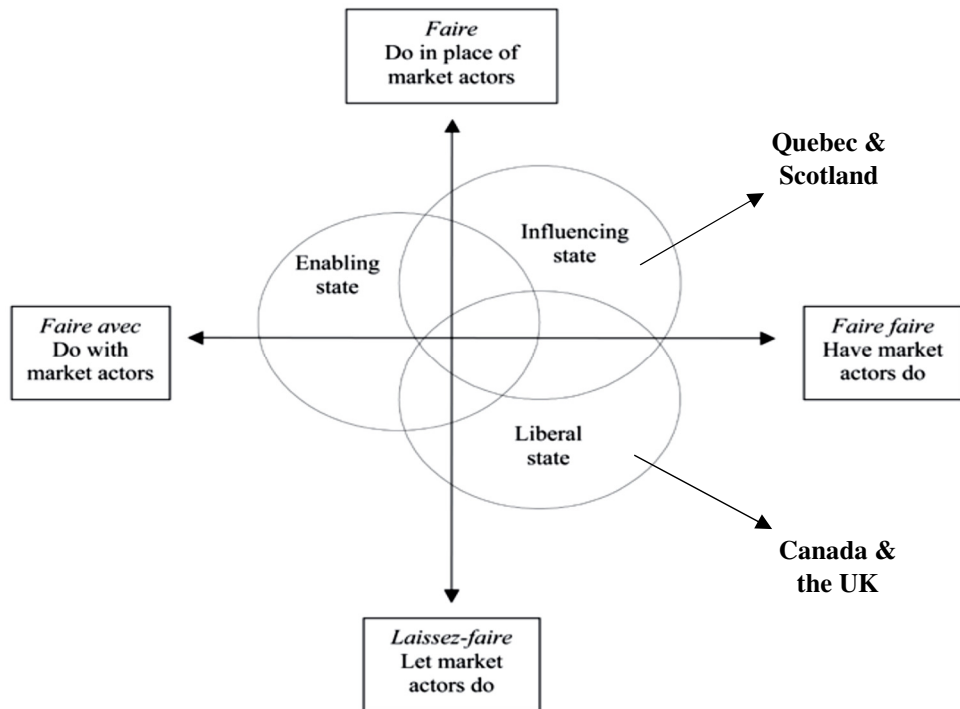
policies, and institutions were devised and diverged from English ones since devolution and even before (Coyle et al. 2005; Devine et al. 2005; Hood et al. 2002). After her mandate (2000-2002) as Minister for Enterprise in the Scottish Executive for instance, Wendy Alexander wrote a lengthy account of the ways her government (the first SLP-SLD coalition) drew lessons from the 1990s' Irish "low-road to competitiveness" – based on corporate tax cuts – and tried to devise a "high-road" based on investment, clustering, professional training, and the "building of a new national consensus" (2003: 53).

Despite a relatively widespread convergence toward clustering, innovation-led growth and export-led growth, diversity in "competition state" models thus persists when it comes to industrial strategies, economic institutions, and the role of government. The mid-to-late 1990s' "first wave" literature on "globalization and the state" – very much focused on the "varieties of state capacity" (Weiss 1998: 194) – progressively gave way, in the early 2000s, to a blossoming "second-wave" literature on the "varieties of capitalism" (VoC), equally interested in comparing nation-states but focusing instead on industrial relations and labor market specificities: corporate governance and financing, firm-firm coordination and/or competition, industrial relations, wage bargaining mechanisms, professional training systems, and the "institutional complementarities" allowing for the organization of those spheres of national political economy into coherent and "competitive" systems (Hall & Soskice 2001; Hall & Gingerich 2009).

The "firm-centered" typology first developed by Hall & Soskice (2001), distinguishing "liberal" and "coordinated" market economies (LMEs/CMEs) based on the

level of firm-firm and firm-labor coordination allowed by national institutions, became the gold standard on which many scholars have built to offer new comparisons, alternative approaches, and additional typologies. Among them were those who argued the VoC perspective could be enriched in three ways: Schmidt (2003, 2007, 2009, 2012), firstly, claimed it could benefit from renewed attention to government involvement and policymaking as crucial driving forces behind economic organization. She thus suggested a third idealtype, the “state-influenced market economy” (SME), to cover regimes that fit within neither the LME nor CME categories, and in which state involvement can be protean, strategic, and most often remains sector-specific (2009: 522).

Figure 1. VoC and state activism³



³ Taken from Schmidt (2009: 526). Quebec/Scotland & Canada/UK are our additions.

As shown in Figure 1, Schmidt (2009) illustrated her argument about VoC and government involvement in economic affairs by classifying LMEs, CMEs, and SMEs along axes measuring the extent to which governments substitute themselves to “market actors” – mainly businesses, labor unions, and financial institutions. Despite empirical overlapping between the three idealtypes, states in CMEs can be said to be mainly “enabling,” as they tend to coordinate very closely with market actors on numerous policy matters (hence “*faire avec*”). This has been typical of corporatist and social-democratic systems such as Germany or the Scandinavian countries. In LMEs such as Canada or the UK, in turn, the state will rarely substitute itself to market actors, and generally prefers establishing conditions conducive to market competition (hence “*laissez-faire*”) rather than coordination. In SMEs, finally, the state can be portrayed as “influencing,” since it often intervenes directly in the market (hence “*faire*”) – through state corporations or public agencies – or pushes market actors in strategic directions through various incentives (hence “*faire faire*”) of which hybrid co-investment schemes are good illustrations. According to Schmidt, this is typical of a country like France.

The second and third ways in which the VoC perspective was enriched was by exploring variety in economic organization below the nation-state level but also across industrial and/or policy sectors, i.e. to account for the “regional” and “sectoral” varieties of capitalism. This has included the analysis of cross-sectoral variations within particular CMEs or LMEs, but also that of cross-sectoral convergence between CMEs and LMEs, or cross-sectoral diversity between different CMEs or LMEs. This approach has often been applied to the comparison of specific regions, clusters, and even localities within nation-

states⁴. Crouch *et al.* (2009) for instance, compared the dynamics of economic organization in German, Swedish, Hungarian, and English regions, but also across production sectors such as furniture manufacturing, the auto industry, biopharmaceuticals and the film industry. Case studies were conducted this way, such as Rafiqui's (2010) on Sweden's local furniture industry clusters.

In fact, to get a clear picture of government involvement in any polity's economic development but perhaps most importantly to get a better grasp of the main influences affecting policy choices and institutional continuity or change, concentrating on specific policy sectors and even subsectors is particularly useful. This is especially true when focusing on regions such as Quebec or Scotland, given their government's policies and strategies will tend to be sector-specific because of the limited degrees of autonomy they have over economic development. Moreover, if the idea is to investigate *how* and *why* such regions' policies and institutional arrangements diverge from their respective country's, jurisdiction over the concerned policy sectors must at least be shared between central and regional governments. This explains our thesis' focus on a very specific policy sector within the larger field of economic development.

The inspiration for the choice of our sector came from the work of Linda Weiss (2005), who established a shortlist of those sectors where, even in a liberalized international trade environment, state involvement can remain highly strategic (“strategic activism”) and policy diversity significant. Reminiscent of the literature on “competition states,” Weiss

⁴ See Herman (2016).

mainly identified sectors conducive to export-&-innovation-led growth and policies primarily designed for high-potential young SMBs, among which was that of “innovation & investment support” (2005: 728). This is the policy sector this thesis covers, with a specific focus on the subsector of venture capital – long-term, high-risk equity investments in private (non-quoted) startups. These sector and subsector, indeed, provide opportunities for regions such as Quebec and Scotland to promote the birth and expansion of indigenous businesses in strategic sectors, and thus to turn the enhancement of their economy’s “competitiveness” into state-&-nation-building initiatives.

Through policy asymmetry and government activism in the sector of development capital/VC since 1990, Quebec and Scotland moved toward the SME model while remaining part of Canadian and British LMEs. With a mix of *faire*, *faire faire* and *faire avec*, Quebec and Scotland have been pushing market actors in strategic directions, strengthening funding chains and high-tech clusters via the multiplication of public funds, tax-advantaged funds, hybrid co-investment funds and limited partnerships. An introductory glance at the two regions’ models as of 2017⁵ indeed portends similarities, but most importantly the uncharacteristic extent and advanced institutionalization of public intervention for subnational units. Within the two regions’ development capital “ecosystems” (Figures 2 & 3) – including VC, private equity, mezzanine finance, equity loans, loans, loan guarantees, and grants – government involvement is key, as it both

⁵ Federal funds and institutions in Quebec as well as UK-wide funds and institutions in Scotland have been deliberately excluded in order to provide a better perspective on the specifically “regional” development capital ecosystem in each case.

complements funding chains in strategic sectors and incentivizes market actors to invest in such sectors.

Quebec and Scotland still diverge in two important respects. Since the 1980s, first, Quebec supported the development of labor-sponsored investment funds (LSIFs) – the *Fonds de solidarité FTQ* (FSTQ) and the *FondAction CSN* (FACSN) – as well as that of a tax-advantaged fund investing in regional businesses and co-ops, *Capital régional et coopératif Desjardins* (CRCD). This model distinguishes Quebec from the RoC (a patent case of policy divergence), but is almost completely absent in Scotland. Secondly, the central role of angel syndicates in Scotland’s VC market differentiates it from Quebec (and from England), where angels still mostly invest on an individual basis – even if through the centralized *Anges Québec* network – and represent a relatively small share of the VC market.

These differences are noteworthy, but less significant than the two models’ general convergence in the massive use of hybrid funds (mostly public-private, public-angel, or public-institutional co-investment) and limited partnerships (capitalization of private funds by the public sector), designed to leverage and steer private investment in strategic sectors with public money. Aside from the fact that both Quebec and Scottish governments continue to invest directly in SMBs through public funds and investors – mostly *Investissement Québec* (IQ) and the *Caisse de dépôt et placement* (CDPQ) in Quebec, and mainly SE and its Scottish Investment Bank (SIB) in Scotland –, they have indeed increasingly resorted to the use of hybrids and limited partnerships since the late 1990s.

Established in 2009, Quebec's *Teralys Capital*, a privately managed “fund of funds” sponsoring specialized VCs but financed almost entirely by the CDPQ, FSTQ and IQ, is a perfect example of this strategy.

The Scottish Co-investment Fund created in 2003 is another, for which private partners (most often angels and angel syndicates) take the lead in finding opportunities and making investments that can then be matched by the SIB. Given central governments in Canada and the UK, although to a much lesser extent relative to their means, also adopted this approach – notably through the British Business Bank in the UK and through BDC Capital in Canada –, what is of interest in this case is not only policy divergence but most importantly **1)** the comparatively early development of such funds in Quebec and Scotland, and **2)** policy autonomy, i.e. the peculiar extent to which, compared to other subnational jurisdictions in Canada or the UK, these regions' governments act on their own.

The extent of their government's intervention in the sectors of development capital and VC, we argue, shows that Quebec and Scotland have been moving toward the SME model. The focus on these sectors, indeed, allows for a better understanding of the ways Quebec and Scottish governments influence market actors⁶. One major argument of this thesis is that in the area of corporate financing, both Quebec and Scotland can be described as autonomous “sponsor states,” given the significant influence of their public sector.

⁶ Following Schmidt (2007), we argue the influence of governments on economic institutions is worth “bringing back” into the study of VoC as a separate analytical category. That is notably because the specific forms state action and influence take (i.e. *faire* and *faire faire*) “affect the whole logic of interaction of business, labor and state” (2007: 2). In the cases of Quebec and Scotland, policy asymmetry and the autonomous “sponsoring” roles governments have embraced indeed influenced those interactions in distinctive ways over the last decades.

Figure 2. Quebec’s development capital ecosystem (2016)

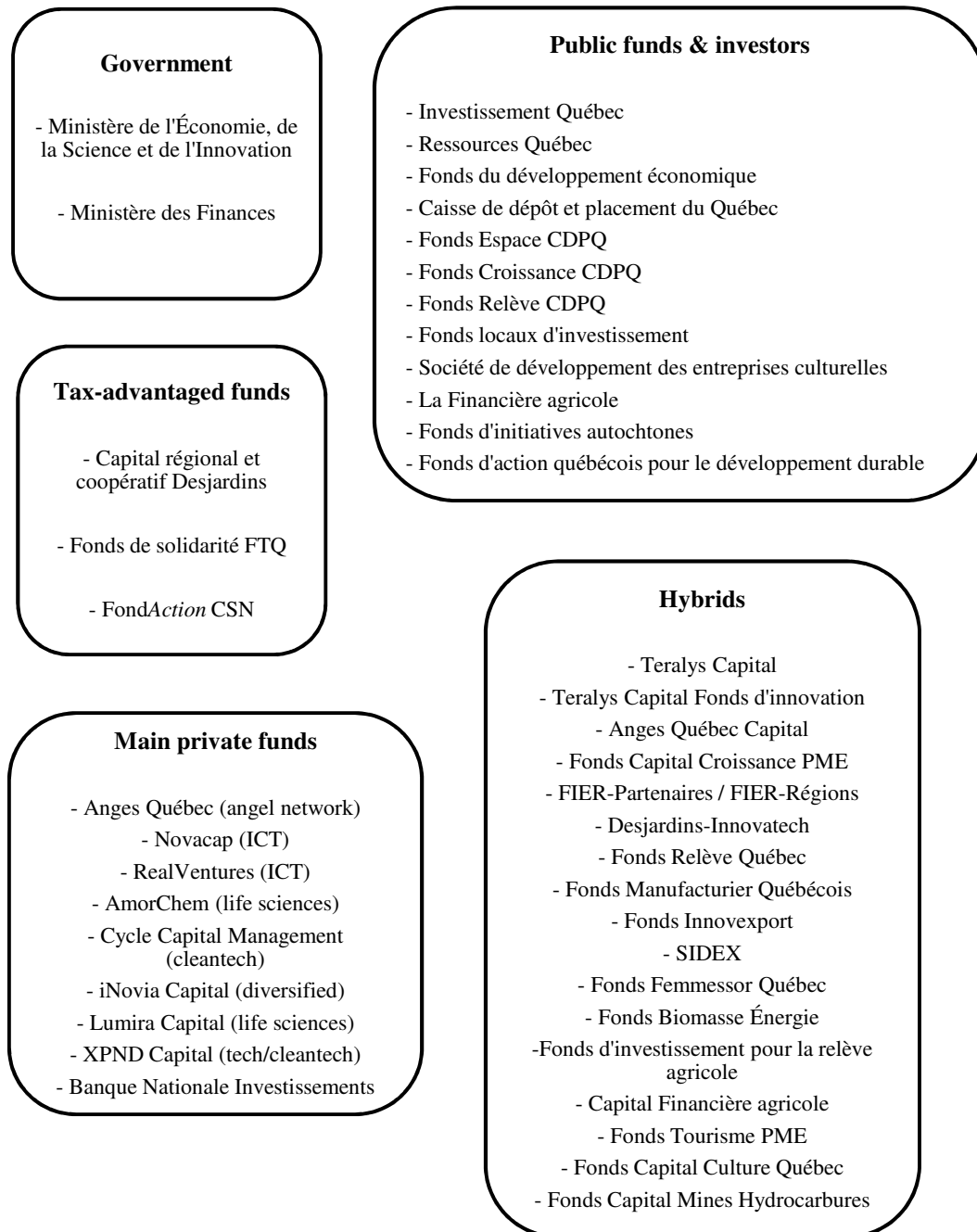
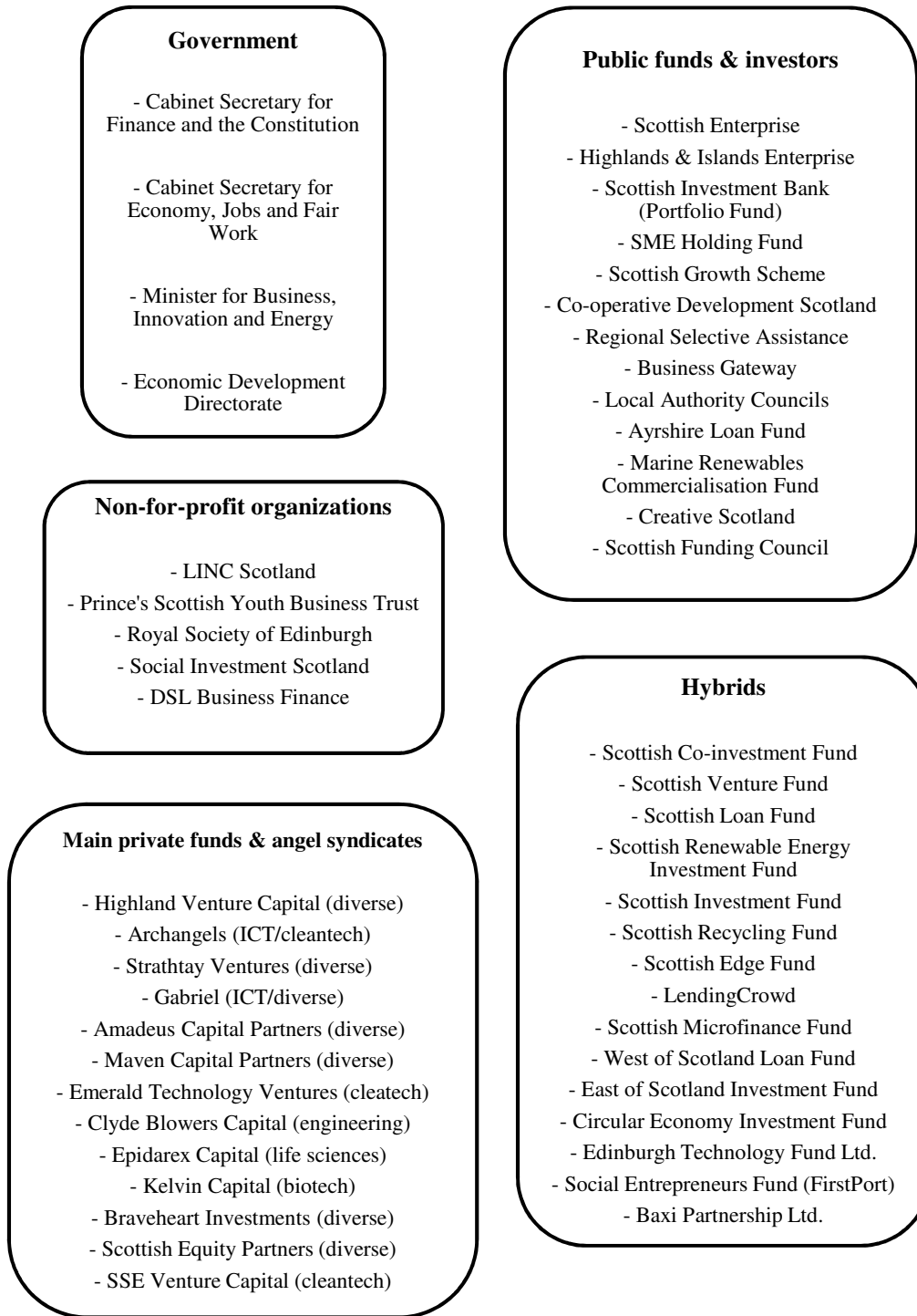


Figure 3. Scotland’s development capital ecosystem (2016)



Through policy asymmetry, the strategic role of Quebec and Scottish governments since the 1990s consists in “sponsoring” domestic SMBs in order to develop and sustain internationally competitive clusters. In our sectors of interest, in particular, such public sponsorship consists in:

- a) *allocating significant quantities of public resources to the development of start-ups, early-stage businesses, and high-growth companies or “gazelles,” either through direct investments or via co-investment funds and limited partnerships with institutional and private funds;*
- b) *assisting businesses in locating the appropriate funding chains and securing the appropriate funding opportunities throughout their growth stages;*
- c) *supporting the establishment of and collaborating with private/non-for-profit organizations promoting sectoral coordination in corporate funding and the attraction of foreign investors.*

Other jurisdictions in Canada and the UK – as well as central governments – also engage in such activities to varying degrees, but the magnitude of public involvement in Quebec and Scotland remains, proportionately, much greater. A number of general arguments can thus be articulated. **Firstly**, in various institutional contexts and policy fields, minority nationalism generally fosters policy asymmetry because of the opportunities it entails in terms of state-and-nation-building. **Secondly**, the effects of minority nationalism on economic policymaking are understudied compared to other policy areas, and that gap contrasts with both widely accepted theses about the economic causes of minority nationalism and the economic rhetoric of nationalist movements in regions such as Quebec or Scotland. **Thirdly**, the policy effects of minority nationalism as well as policy asymmetries themselves can be best studied by focusing on specific policy sectors. **Fourthly**, in the sector of development capital and VC since the 1990s, Quebec and

Scotland developed their own “sponsor states,” thereby drifting away from Canadian and British LMEs and toward the SME variant. The next sections, finally, delve into our *fifth* argument, explaining why we expect Québécois and Scottish nationalisms to provide a crucial explanation for policy autonomy and divergence in this sector.

1.1.3. Economic nationalism

As the writing of this thesis began, an important contribution to the literature on regional and sectoral VoC was published by a Canadian scholar, as University of Toronto’s Rodney Haddow (2015) compared, *inter alia*, economic development policies in Quebec and Ontario since 1990. Noting that, regardless of partisan cycles, levels of government intervention and public spending in this policy field remained greater in Quebec, Haddow argued that while Ontario can be classified as a LME along with Canada, Quebec diverges as much from Ontario and the “rest of Canada” (RoC) as European CMEs diverge from LMEs (2015: 265-271). Therefore, Quebec was described as a “hybrid” VoC (2015: 45), lying between coordinative and market-oriented models. Most importantly however, Haddow explicitly rejects the notion that Québécois nationalism continues to have direct impacts on economic policymaking and, thus, on this persisting divergence.

Recognizing that Québécois nationalism was a crucial motive behind state intervention in economic development from the 1960s to the 1990s, Haddow’s argument is that since the 1990s nationalism has, at best, *indirect* effects on economic policymaking. Indeed, nationalism is said to *have had* direct impacts on the mutually reinforcing “institutional mechanisms” that *now* distinguish Quebec from Ontario and explain higher

levels of intervention in economic development. Drawing from the VoC literature, Haddow (2015: 26-30) focuses on three such mechanisms: **a)** the more “collaborative” and “concerted” intermediation of socioeconomic interests in Quebec, stemming in good part from higher unionization levels; **b)** a “multidimensional” party system, with a relatively low polarization on economic issues between major players (PQ and PLQ); and **c)** a comparatively strong and centralized state bureaucracy.

Our approach differs both epistemologically and conceptually, as we contend nationalism can still exert, in different institutional settings, direct effects on economic policymaking. The epistemological aspect is crucial: since minority nationalism – in Quebec, Scotland, or elsewhere – is an ideational variable, its direct effects on policymaking can only be investigated by focusing on “legislative intent” and the meanings actors involved in the implementation of policy give to their activities. To do so, a detailed qualitative analysis of particular policy sectors and choices must be performed. Because Haddow considers, however, that nationalism is a “non-outcome oriented public sentiment” (2015: 15), he adopts a mostly institutional and statistical perspective, studying policymaking in the field of “economic development” at large. Studied against such a generic policy field, the effects of nationalism can only appear indirect; but if the same analysis had been dedicated solely to the VC industry, for instance, perhaps Haddow would have found nationalism to be more “outcome-oriented.”

This is where conceptual considerations become important. Haddow employs a very limitative definition of Quebec’s economic nationalism – “fostering a Francophone

business class” (2015: 165) – which allows him to argue that “the original nationalist impetus [is] now disputed and secondary” (2015: 165), and which confirms his hypothesis that “policies will not be discussed and formulated mainly in relation to explicit province-level ‘national’ objectives” (2015: 61). Yet, even this type of economic nationalism isn’t that secondary: in fact, it remains a very central motivation of public intervention, as attested by the growing importance paid to business succession in Quebec through the investment activities of government-backed funds such as the *Fonds Relève Québec* (FRQ), the *Fonds d’Investissement pour la relève agricole* (FIRA), and CRCD. There is even an argument to be made Quebec’s development capital ecosystem as a whole is structured in a way that favors local, Francophone investors and entrepreneurs, even though this is not explicitly stated as the objective.

CRCD, for instance, developed a specialization in using equity investments for purposes of business succession. Not only does CRCD contribute to both the FRQ and FIRA, but business succession is a very important aspect of its own investment activities. Gérald St-Aubin, VP for Strategic Investments & Partnerships at CRCD, explains how this generally works (personal interview):

Autre activité qu’on peut faire et qu’un fonds privé aura beaucoup de difficulté à faire : on a acheté plusieurs sociétés. Je vais t’en donner une en exemple, qui est à Thetford Mines : Industries X. 300 employés, belle société qui pourrait et qui sera en croissance. Le propriétaire, Monsieur X., a dans les 75 ans environ. Il veut vendre et a été approché par plusieurs compétiteurs américains. Mais lui, il vient de Thetford Mines. Il est né là-bas, il a fondé sa société dans son garage, il a grandi avec ses employés. Alors vendre sa société et mettre plusieurs millions dans ses poches, si ces gens-là ont de fortes chances de perdre leur emploi dans le futur, il ne veut pas ça. Nous, ce qu’on fait, c’est qu’on achète la société à 100%. On s’entend avec Monsieur X. : on lui fait une offre, qui est probablement inférieure à ce qu’un stratégique pourrait offrir, mais qui comporte d’autres avantages. Dans Industries X, le management en place était très fort. Alors on fait la transaction avec le management en place, puis en plus on va impliquer les employés dans notre transaction : on regroupe les employés soit sous la forme d’une coopérative de travailleurs actionnaires, soit sous celle d’un régime de participation à l’actionariat qui est avantageux pour les employés. Notre

objectif dans le temps, dans 10-15 ans ou un petit peu plus selon la croissance de la société, est de retransférer la propriété au management et aux employés. Un coup que la société appartient à ses employés, elle est enracinée dans sa région. Plus personne ne sera capable de la délocaliser. Et si tu la délocalise, tu vas enrichir 300 personnes de la région.

Most importantly, Haddow's definition is overly restrictive and brings us back to the old nationalism/protectionism amalgam. Economic nationalism, instead, is synchronically and diachronically polymorphous. Quebec nationalists and policymakers do not use the language they did in the 1960s and 1970s because the "Francophone business class" is now well established and has different needs. This doesn't mean economic nationalism no longer exists; it has simply taken new forms, and has been adapted to those needs. The objectives pursued through economic nationalism can thus evolve, just as they can be plural at any given time. When Quebec and Scottish governments, for strategic purposes, dedicate great amounts of public resources to the development of their aerospace or food & drink industry, they certainly do so with "national objectives" in mind. Economic nationalism isn't necessarily and only about favoring an ethnolinguistic group over others, but also about using political tools and public resources with the aim of benefiting strategic, regionally-based industrial clusters and domestic supply-chains.

This thesis embraces a more generous view of what economic nationalism entails. Our contention is that its meaning should not be restricted to protectionism, the ethnic division of labor, or a mere "non-outcome oriented public sentiment." Instead, we adopt the perspective developed by Helleiner & Pickel, for whom "economic nationalism should be understood simultaneously as political action in a specific historical context, rather than as economic doctrine in a universal context of ideas" (2005: 8). Therefore, we share their approach of economic nationalism as *ideology, policy, political action, and structure* (2005:

12). Investigating economic nationalism as both *ideology* and *policy*, first, allows for a better understanding of the way economic policies, even if not protectionist or ethnically-biased, can be devised based on nationalist arguments and/or regional-level “national objectives.” When the SNP government, for instance, justifies the establishment of a state-owned *Scottish Business Development Bank* (SBDB) to try and mitigate the fact that “Scotland has a lower proportion of medium-sized enterprises than other independent European countries such as Germany, Austria, Finland and Sweden” (Scotland 2015: 44), it merges nationalist *ideology* and *policy*.

If the basic tenet of nationalism as an ideology is that *political* and *national* “units” should be congruent (Gellner 1983), then at the core of economic nationalism is the idea that *economic* and *national* units should also be as congruent as possible. In the case of minority nationalism, this involves some level of policy asymmetry, both in order to gain policy autonomy and to craft regionally-specific economic strategies based on what are perceived to be “national” interests. This is where economic nationalism, in subnational contexts, also becomes *political action*: when the Canadian government, for example, unilaterally decided to eliminate the federal tax credit allocated to LSIFs⁷, a model differentiating Quebec’s investment ecosystem from the RoC’s, Quebec’s government was forced to act given, notably, the major discontent this decision stirred in the VC industry. Jack Chadirdjian, CEO of *Réseau Capital*, Quebec’s peak VC and private equity association, describes it (personal interview):

⁷ From 15% in 2014 to 0% in 2017 (Canada 2013: 207-209). The federal tax credit was re-established at 15% in 2016 and for subsequent years by the new Liberal government, elected in October 2015.

La déception de l'ensemble de l'industrie, y compris évidemment du FSTQ et du FACSQ, concerne le manque de compréhension du gouvernement par rapport à notre écosystème. Simplement parce que ce système n'a pas fonctionné ailleurs au Canada, cela ne veut pas dire que ça n'a pas fonctionné au Québec. Cela fonctionne au Québec. Est-ce que tout est parfait ? Non, il y a des ajustements à faire. Mais de là à éliminer le crédit d'impôt complètement...La grande déception au sein de l'industrie, ça aura vraiment été l'indifférence du gouvernement fédéral face aux nombreuses interventions de nos membres lui disant qu'il est en train de tuer quelque chose qui fonctionne.

In Quebec's 2015-16 budget, therefore, the annual cap on the issuance of shares was lifted for both the FSTQ and the FACSQ, the CRCD was allowed to issue an additional \$150 million in shares for 2015, the provincial tax credit applicable to FACSQ shares was increased from 15% to 20%, and all three funds were asked to increase their annual investments in Quebec SMBs by 5%. That process, as explained in Chapter 5, was a clear instance of economic nationalism, in the form of political action, state intervention, and the upholding of policy divergence.

Economic nationalism, finally, can operate as a *structure* or more precisely as an *institution*. What is meant here is that economic nationalism can be approached as a set of economic ideas that become “institutionalized” and, as such, central to *national identity*. Indeed, Quebec and Scottish nationalisms comprise sets of economic ideas relating to **a**) shared narratives about the distinct history, challenges and traditions of economic development in these regions; **b**) perceptions of particular economic or commercial interests; and **c**) widely shared and organizationally embedded – i.e. “institutionalized” – wisdom about the necessity of government intervention in economic development. Such sets of ideas can be deemed “institutionalized” when acquiring meanings central to collective identity, thereby producing “lock-in effects” leading to *path dependency* and the reproduction of economic policy “traditions” or “paradigms” (Hay 2011: 68-69). In other words, economic nationalism is also about the institutionalization, through policy and

organizational embeddedness, of sets of ideas that amount to a collective “economic identity.”

When “institutionalized,” i.e. embodied in established economic policies and organizations, such ideas and “economic identity” can indeed turn into “normative frames” (Surel 2000) or “policy paradigms” (Hall 1993), producing lock-in effects which make it very difficult for policymakers to implement significant changes in economic strategies, policies, and organizational “ecosystems.” This is what is meant when referring to economic nationalism as a form of *path dependency*. That can help explain, for instance, continuity in Scotland’s interventionist strategies and the preservation of long-standing Scottish organizations – such as SE’s predecessor, the Scottish Development Agency (SDA) – in the face of the radical policy changes that took place in the UK under Thatcherism. According to a long-time SDA/SE senior official, “one of the definitions of Scotland is that it’s been through traumas in structures and changes in policy, U-turns on policy right and left of centre, but that the kind of wide scale cutting back of economic development as it came to other parts of the UK and many other parts of Europe hasn’t really affected Scotland. So the ‘Scottish model’ still got remnants of traditional regional economic development models going back in history.”⁸

This can therefore help explain relative continuity in economic policy and organization across partisan cycles. When a certain set of economic policy paradigms define national identity, it becomes politically hazardous for governments of various

⁸ Brian McVey, Director of Strategy at Scottish Enterprise. Personal interview, Edinburgh, September 5th 2014.

economic tendencies to implement fundamental changes. That is in part why, even though the PLQ has long been promoting an agenda focused on public retrenchment in economic affairs – what the first Charest administration (2003-2007) called “state reengineering” (Rouillard et al. 2008) – the economic roles of public corporations such as IQ or the CDPQ have in fact been multiplied and complexified, rather than privatized (Rioux 2012). Before 2003, the PLQ even imposed, on occasions, economic nationalism on PQ governments. When the latter created IQ in 1998 for instance, its key goal was to centralize the public prospection of foreign investments (Québec, 1998). However, since IQ would also incorporate the pre-existing *Société de développement industriel* (SDI), which had the more general mandate to “promote Quebec’s economic development,” the Liberal opposition insisted on amending the IQ Bill in order to integrate this larger mandate (Québec, 1998b), and this amendment allowed IQ to play a much larger role in economic development since.

To summarize, economic nationalism can thus be conceptualized as being, simultaneously, an *ideology*, a set of *policies*, a basis for *political action*, and an *institution*. In regional contexts such as in Quebec or Scotland, its ideological core relates to policy asymmetry: it rests on the belief that the Québécois and Scottish nations can be best served if their government pursues, to a reasonable extent, regionally-specific economic objectives through either policy divergence or autonomy. As political action, economic nationalism highlights the co-extensiveness of identity politics and economic policymaking. Hence the widely shared opinion, in Quebec and Scotland, that the regional government has a duty to prioritize and uphold regional interests even if that entails a deepening of policy asymmetry

with the rest of the country⁹. As an institution, finally, economic nationalism points to the economic “content” of national identity, and to path dependencies induced by the embeddedness of that content – a certain set of economic ideas – into concrete policy legacies, government strategies, and executive organizations.

Most interesting for our purposes is to determine *how* economic nationalism translates into concrete policies. In most of the recent literature on economic nationalism¹⁰, authors generally agree with Helleiner that “economic nationalism can be associated with very diverse economic policies,” and that “the goal of research should be to explore the diverse and complex influences that nationalism and national identities have on economic policy and processes” (2005: 225). The policy effects of economic nationalism are thus context-specific. This is perhaps particularly evident when considering *minority* nationalism, and therefore the only way to study those “diverse and complex influences” is to focus on a small number of cases and, as argued above, on a small number of policy sectors in order to gain deep knowledge. Yet, nationalism can still have similar impacts across different institutional settings and cases. This is well exemplified, we argue, by Quebec and Scottish states’ activism in development capital.

Minority nationalism, we argue, offers a crucial explanation for the level of policy asymmetry and government involvement characterizing Quebec and Scottish “models” in

⁹ See Henderson (2007), Lachapelle & Gagné (2003), Lachapelle (2000), Curtice (1999) and Surridge & McCrone (1999).

¹⁰ See Abdelal 2001; Baughn & Yaprak 1996; Boulanger 2002, 2006; Campbell & Hall 2009; Crane 1998, 1999; D’Costa 2012; Fougner 2006; Greenfeld 1995, 2003; Herrera 2005; Kangas 2013; Levi-Faur 1997a, 1997b; Nagy 2014; Nakano 2004; Nayar 1997; Pickel 2006; Rioux 2012; and Shulman 2000.

this sector. It is nationalism that drove these regions to extend and/or refine that involvement since the 1990s, because nationalism commands that regional businesses and sectors, for strategic as well as nation-&-state-building purposes, be “sponsored” in order to achieve growth and competitiveness. Quebec and Scottish nationalisms have had as an effect to promote policy autonomy *and* policy divergence through public involvement, leading to similar policy outcomes even though Quebec and Scotland have been evolving in different institutional, political, and economic contexts. Where LMEs such as Canada, the UK, and other wealthy regions in these countries – Ontario and South East England, for instance – generally favor national-level collaboration, market mechanisms, and private sector engagement, nationalism has impelled Quebec and Scottish governments to influence, leverage, and steer such mechanisms and engagement on their own, in the name of regional-level “national” objectives.

In making that argument, this thesis is not far removed from existing literature on small states’ industrial strategies. As early as 1985, Peter J. Katzenstein showed that, protectionism being an unviable option for small European economies – Austria, Belgium, Denmark, Netherlands, Norway, Sweden, Switzerland – in the face of international competition, their governments had to devise policies and institutions “compensating” for commercial openness and the rise of innovation-led growth. In the realm of industrial policy, government compensation notably took the form of higher levels of business subsidization and support for strategic sectors (1985: 48). From a subnational perspective, this can be observed in Quebec and Scotland, when compared with Ontario or the RoUK. Public spending on economic development for instance – including direct transfers to

businesses – remained, as a proportion of GDP, as much as three times greater in Quebec and Scotland than in Ontario and the RoUK since the 1990s, including in the years following the 2008 financial crisis¹¹. This shows how much more influential Quebec and Scottish governments can be in economic affairs.

One reproach made to Katzenstein’s (1985) demonstration, interestingly, was that he overlooked cultural factors in explaining small states’ need for government “compensation.” Taking Denmark as an example, Campbell and Hall (2009: 553) argued, indeed, that the conjunction of this country’s “perception of [economic] vulnerability” *and* its relatively homogeneous “cultural composition” contributed to the strengthening of nationalism as an “ideology of social partnership” favoring state activism in economic affairs. Similarly, we argue that in subnational contexts such as in Quebec or Scotland, economic nationalism takes the following forms:

- a)** *perceived needs for policy asymmetry and strategic planning;*
- b)** *political imperatives to uphold such asymmetry and strategies;*
- c)** *forms of path dependency – ideational and institutional – underpinning those political imperatives;*
- d)** *a tendency for governments of different economic inclinations to intervene, based on those prevailing ideas and institutions.*

This perspective is reminiscent of the core principles – protectionism excluded – generally associated with “economic nationalism” as a school of thought since the contributions of Friedrich List and Alexander Hamilton. Those principles were highlighted,

¹¹ For Quebec/Ontario, see CANSIM 3850001. For Scotland/RoUK, see *Government Expenditure and Revenue Scotland* (GERS).

for instance, by Levi-Faur (1997) in its comparison of List's [1841] economic nationalism with that of a contemporary such as Robert B. Reich (1992). Basically, they amount to a recognition of the state's crucial roles in the definition, upholding and coordination of "national" economic interests in the context of trade liberalization, and to an appeal for their fulfillment via strategic government intervention in the form of a mix of *faire, faire avec*, and *faire faire*. One could also invoke the analogous contribution of contemporary development economists such as Mazzucato (2014), who argues that the fulfillment of such roles can take the form of an "entrepreneurial" public sector, supporting as well as leading innovation.

The main challenge, again, is to show *how* economic nationalism impacts concrete policy choices in precise policy sectors. From our perspective, economic nationalism affects policymaking through ideological, political, and institutional mechanisms. In the Scottish and Quebec contexts, such mechanisms led to both policy asymmetry and persisting government activism in the sector of development capital and VC. That is in part because this sector offered opportunities for "nation-building," through multiple forms of sponsorship for indigenous businesses and strategic industrial sectors, as well as for "state-building," through the establishment of various public organizations and funds. The next section specifies the epistemological as well as methodological grounds on which we base our investigation of such mechanisms.

1.2. Epistemology, methodology, & summary

1.2.1. Scope & case selection

To describe how we proceed, it is useful to clarify our aims in terms of causal argumentation and generalizability. This thesis, first, is intended as a descriptive/interpretive rather than evaluative/prescriptive endeavor: in other words, apart from punctual exceptions, no assessment of the merits and performance of government intervention is attempted. Second is the question of generalizability, or “external validity.” The relationships we unveil between minority nationalism and government involvement in the sector of development capital/VC could perhaps also be found in other regions where nationalism or “autonomist regionalism” (Keating 1997c: 24) is present – one could think, for instance, of Wales, Flanders, the Basque Country, Catalonia, or Bavaria. They could also be found, as indicated by the aforementioned literature, in other policy sectors. However, given the external validity of our arguments is not substantiated, this thesis is mostly useful in generating interpretive hypotheses *about* and methods to assess *for* the effects of minority nationalism on economic policymaking.

Following Arend Lijphart’s famous typology, this thesis’ contribution could thus be classified as lying between *interpretation* – “generalization applied to a specific case with the aim of throwing light on the case rather than of improving the generalization” – and *hypothesis-generation* – “starting out with a more or less vague notion of possible hypotheses, and attempt to formulate definite hypotheses to be tested subsequently among a larger number of cases” (1971: 692). As Lijphart recognized, “hypothesis-generating”

and, we might add, “interpretative” case studies “may be particularly valuable if the case selected for analysis provides [...] a sort of ‘crucial experiment’ in which certain variables of interest happen to be present in a certain way” (1971: 692).

An argument can be made to this effect when it comes to Quebec and Scotland, which explains part of the decision to focus on these regions. Unlike Belgian, Spanish, or German regions, both Scotland and Quebec evolve as part of typical LMEs. Therefore, these two cases allow for the “interpretation” of minority nationalism’s impacts on policy autonomy and government activism, but also for the “generation” of specific hypotheses about its relationships to policy *divergence*. Indeed, we hypothesize that, acting as autonomous “sponsor states,” Quebec and Scotland have been moving toward the SME model while remaining part of Canadian and British LMEs. The same could not be said of regions already evolving in SMEs or CMEs, and in this sense, Scotland and Quebec provide a sort of “crucial experiment” when it comes to minority nationalism’s policy effects.

This brings us to the issue of case selection. Beyond this opportunity for a “crucial experiment,” the main reasons why this thesis focuses on Scotland and Quebec come down to methodological imperatives. These two cases serve our purposes best by allowing us to isolate minority nationalism, and thereby to circumscribe its economic effects. That is because Scotland and Quebec diverge on a large number of other variables that could explain convergence in economic policymaking. In choosing these two cases, we adopt Przeworski and Teune’s (1970) “most different systems design” which, based on the idea that “differences cannot explain similarities” (Anckar 2008: 390), consists in selecting cases for which the outcomes of interest, i.e. the dependent variables, converge whereas

most independent variables diverge. In both Quebec and Scotland, government involvement in development capital and VC is significant and highly institutionalized, but most of the background independent variables which could potentially help explain this similar outcome diverge.

To simplify the demonstration, one refer to the three main variables used by Haddow (2015) to explain divergence between Quebec and Ontario: collaborative interest mediation (driven by union density); a multidimensional party system with low polarization on economic issues; and a strong and centralized bureaucracy. For each of these indicators, differences between Quebec and Scotland are often evenly, if not more significant than between Quebec and the RoC, or Scotland and the RoUK. This is the case when it comes to union density, for instance, which stood at around 40% in Quebec for 2013, against 28% in Ontario for a difference of 12%. Again for 2013, the same rates were of 32% in Scotland and 24% in England, for a difference of 8%. Therefore, the divergence in union density between Quebec and Scotland (8%) is as great as the divergence between Scotland and England, and similar to that between Quebec and Ontario. Moreover, while union density remained relatively stable in Quebec since the mid-1990s, with a drop of around 2% since 1997, it receded significantly in Scotland, by 7% between 1995 and 2013 (Québec 2014; UK 2014).

As for party systems, two comments are in order. First, if it is true that Quebec and Scottish systems are multidimensional, with major parties positioned on both economic-distributive and constitutional issues, in Quebec all 125 MNAs are elected on a “first-past-the-post” (FPTP) basis whereas the 129 Scottish MPs are elected on the basis of a mixed-

proportional “additional member system” which allows citizens to vote in both their constituency and, choosing from party lists, their region. Whereas Quebec’s system (shared by Ontario) is known to favor majority governments and virtual bipartism, the Scottish system was adopted precisely to favor coalition governments and foster the growth of smaller parties. As a result, from 1999 to 2011, Scotland was governed in turn by a SLP-SLD coalition (1999-2007) and by a SNP minority (2007-2011).

State bureaucracy, finally, would be the weakest explanation for a convergence of Scotland and Quebec toward the SME model. Invoking higher levels of public spending to *explain* greater government involvement in economic development is partly tautological, except perhaps from a path dependency perspective. In turn, if public sector employment as a proportion of total employment is similarly higher in Quebec (21.8%) and Scotland (21%) than in Ontario (18.7%) or England (17%)¹², the gaps are relatively narrow. Most importantly, from the 1707 parliamentary union with England to the reestablishment of a Scottish parliament in 1999, Scotland did not even have a government of its own but only enjoyed limited administrative autonomy through the Scottish Office, a department of the UK government. Since the devolution of 1998-99 moreover, Scotland still lacks much of the very large fiscal and economic autonomy Quebec enjoys as part of the Canadian federation (Keating 2010).

Finally, differences in economic profiles are also worth mentioning: while Quebec’s economy is sensibly larger than Scotland’s, with a Scottish GDP¹³ of around \$230 billion

¹² UK (2015) and CANSIM 2820089.

¹³ Including a geographical share of offshore oil & gas production.

CAD for 2012 against \$328 billion CAD for Quebec, sectoral dissimilarities are notable as well. Also in 2012 for instance, SMBs were responsible for around 75% of total Scottish international exports, against only 50% of Quebec's (Québec 2013; Scotland 2014). Yet, SMBs accounted for around 43% of total employment in Scotland for 2014, while the same proportion reaching approximately 50% in Quebec¹⁴. Such dissimilarities make convergence in financial support to SMBs all the more puzzling, if and only if economic nationalism is overlooked. Our case selection strategy allows us, instead, to isolate it.

1.2.2. Discursive institutionalism & process tracing

Given the ideational nature of our independent variable and the logical foundations of our hypotheses regarding its effects on policymaking, an *interpretive* epistemological approach is warranted. However, given the effects we also expect minority nationalism to have on the institutionalization of economic intervention, a hybrid approach, both ideational and institutional, is adopted. More specifically, we draw from Vivien Schmidt's (2008, 2010, 2011) "discursive institutionalism" (DI) in order to uncover minority nationalism's institutional and policy effects. In short, DI is an epistemological approach merging ideational (mostly discourse) analysis with institutionalism – the "historical" and "sociological" variants in particular (Hall & Taylor 1996). Thus, DI "encompasses not only the substantive content of ideas but also the interactive processes by which ideas are conveyed" (Schmidt 2008: 305). Consistent with this approach and with our perspective, it can be argued that economic nationalism constitutes a set of ideas which "attach values to

¹⁴ Fully comparable statistics are not available, as SMBs are defined as comprising 0-249 employees in Scotland while a 0-299 range is used in Canada. See Scotland (2014c) and CANSIM 2810042.

political action and serve to legitimate the policies in a program” (Schmidt 2008: 307), in addition to “limiting the range of alternatives that elites are likely to perceive as acceptable and legitimate to the public” (Campbell 1998: 385).

As such an institutionalized set of ideas, economic nationalism is notably mediated through discourses, whose content and influence both depends *on* and contributes *to* the shape of existing organizations and policies. Through discourse analysis, it is thus possible to uncover the role of ideas in either policy continuity or change. This ability to explain both continuity and change may be the “value-added” of DI over other approaches, because “institutions in DI, rather than serving as external structures for rule-following, are simultaneously structures and constructs internal to the agents themselves. Agents’ background ideational abilities enable them to act in any given meaning context to create and maintain institutions while their foreground discursive abilities enable them to communicate critically about those institutions and so to change or maintain them” (Schmidt 2008: 322). But most importantly, perhaps, the DI approach allows us to explain policy asymmetry at the regional level. In other words, we intend to unveil the role of nationalist ideas and discourses in the autonomous institutionalization of government intervention.

Such an epistemological approach has already been used to study nationalism’s impacts on economic policymaking. One of the best examples is Tore Fougner’s (2006) work on Norway’s maritime policy since the mid-1990s, which showed how national identity – notably the depiction of Norwegians as a “maritime” nation – fostered government intervention in the organization, promotion and subsidization of the shipping

clusters around the coasts of Oslo and Bergen. Similar analyses were also applied to Quebec and Scotland. Rioux (2012) suggested that economic nationalism in Quebec led to both ideational and institutional path dependency, and therefore to a relative safeguarding of major state corporations' economic responsibilities under the PLQ government between 2003 and 2012. In Scotland's case, Bond et al. (2003) uncovered processes through which economic development agencies such as *Scottish Enterprise* (SE), *Highlands & Islands Enterprise* (HIE) or the *Scottish Development Agency* (SDA) and *Highlands & Islands Development Board* (HIDB) before them mobilised nationalist symbols and rhetoric to promote specific policy choices and to build on notions of *competitive advantage*, “branding” Scotland as an entrepreneurial nation.

As previous works showed, discourse analysis and policy analysis should be conducted, insofar as possible, simultaneously. The idea is to try and uncover the political rationales and strategies justifying specific policies or the activities of public organizations, and to evaluate whether or not nationalism is a significant part of such rationales and strategies. We also assess, at times, for the way economic programs, decisions and discourses which depart from what we identify as nationalist “frames” engender negative reactions and/or institutional deadlocks. In the case of policy and discourse analysis, and in addition to academic books, articles, conferences and working papers, sources thus include but are not limited to: electoral platforms and political programs; budget speeches and budgets; archives of parliamentary debates and parliamentary commissions; legislative bills and legislations; annual reports and publications from economic ministries; reports of special committees on economic development; annual reports and publications from state

agencies and public or government-backed investment funds; as well as newspaper archives and opinion polls.

From a methodological standpoint, finally, this thesis is modelled on Charles Tilly's (1995, 2001, 2008) "prospective" process tracing strategy. As mentioned, we consider economic nationalism to have causal effects on policymaking through three main types of "mechanisms:" ideological, political, and institutional. It is via such mechanisms¹⁵ that nationalism sustained a general "episode" of persisting and in some cases deepening institutional disjunction, through policy asymmetry, between Quebec and the RoC or Scotland and the RoUK. Starting from the early 1990s, we break this episode into particular "processes" – elections, parliamentary debates, consultations and commissions, drafting of bills, adoption of new laws, launch of new economic strategies and budgets, establishment of new organizations or agencies, publication of annual reports, economic downturns and crises, etc. – on which the impacts of our causal mechanisms are assessed *prospectively* rather than *retrospectively*. This way, we are able to uncover if, why, and how nationalism has caused these two regions to move further down particular policy trajectories while alternative paths were available.

Prospective process tracing is highly compatible with the specific methods we use in order to identify nationalism's policy effects. Apart from discourse and policy analysis, we use statistics – through the scanning of regional economic indicators, budgets, and annual reports on capital investment – in order to establish our case regarding the relative

¹⁵ These could thus be described, following Pickel (2006), as "nationalizing mechanisms."

importance and the evolution of government intervention in the two regions. In addition, an important part of our work consisted in conducting in-depth elite interviews, for which non-randomized samples were used since “when sampling interviewees in a process-tracing study, the ultimate goal is to reduce randomness as much as possible” (Tansey 2007: 765). A mix of “purposive” and “snowball” techniques were used and allowed us to handpick interviewees whom we expected to be the most informative. They were, for the most part, current administrators and representatives of aforementioned public agencies and funds, but also government officials. A list of interviews can be found in the appendix.

1.2.3. Summary & outline of the thesis

At this point, a review of our main hypotheses is in order. Four hypotheses form the framework against which this thesis’ findings can be evaluated:

Hypothesis 1: *Minority nationalism affects economic policymaking just as it affects other policy sectors. The causal influence of nationalism on economic development can be established through the use of DI and prospective process tracing approaches, having been mediated through ideological, political and institutional “causal mechanisms.”*

Hypothesis 2: *In Quebec and Scotland since the 1990s, nationalism favored policy asymmetry (involving both autonomy and divergence) and greater government intervention (compared with neighboring regions in Canada and the UK) in economic development, thereby fostering the emergence of autonomous “sponsor states” in these two regions.*

Hypothesis 3: *The effects of nationalism on the sponsoring activities of Quebec and Scottish governments are manifest in the specific sector of development capital and subsector of venture capital, where they offer crucial explanatory complements to classic economic justifications for state intervention.*

Hypothesis 4: *Given the mixed ideational-institutional nature of economic nationalism, we expect its effects to be constant since 1990, giving way to both ideational and institutional path-dependency. Therefore, the development of regional “sponsor states” in Quebec and Scotland – through policy asymmetry and state activism – will have persisted regardless of the alternation between secessionist (PQ, SNP) and non-secessionist (SLP-SLD, PLQ) governments.*

What we are looking for is evidence linking specific VC policies, organizations and strategies to past ones or to political rationales presenting regionally-based “national” traditions, needs and interests as distinct and thus requiring policy asymmetry. If such evidence can be found in the legislative intent of policymakers as well as in the discourse and activities of concerned actors, and if it can be established that such policy choices involved autonomy and/or divergence as well as higher public involvement, then a plausible case will have been made with regards to hypotheses 1, 2, and 3. In turn, a differentiated analysis of secessionist and non-secessionist parties’ platforms, programs, budgets, bills, economic strategies and policies will allow us to verify our fourth hypothesis. In this case, we expect the PLQ and SLP-SLD to be a little less prone than the PQ or SNP to use public resources, centralize activities and favor policy asymmetry, but if our hypothesis is correct, this should not have had a significant impact on the general episode of institutional disjunction ongoing since the 1990s.

In the next chapter, a more precise focus on our policy sector is offered. The existing literature on state intervention in the sector of VC is weighed against the historical development of this industry in Quebec and Scotland. The objective is to establish the extent to which common economic explanations for government involvement apply, and the extent to which minority nationalism can offer a better explanatory potential. In the field of VC, many arguments have been used to explain cross-national divergence in the use of public resources: gaps in funding chains, information asymmetries, the cyclical nature of VC, geographical imbalances, etc. In all cases, we contend such explanations are, by themselves, unsatisfactory when it comes to Quebec and Scotland.

Chapters 3 to 6, in turn, are devoted to process tracing. In chapters 3 (Quebec) and 4 (Scotland), we assess for economic nationalism's impacts from the early-1990s to the early-2000s. Each of these chapters is structured in a synchronic fashion, divided in sections covering particular governments. The third chapter divides Quebec's case in four sections, covering periods corresponding to the Bourassa/Johnson (1989-1994), Parizeau/Bouchard (1994-1998), and Bouchard/Landry (1998-2003) governments. Chapter four is structured the same way, focusing on Scotland from the years preceding parliamentary devolution (1990-1997) to the end of the first SLP-SLD mandate (1999-2003). Chapters five and six follow this model: in Quebec's case (Chapter 5), the Charest I (2003-2007), Charest II (2008-2012), Marois (2012-2014) and Couillard (2014-2017) administrations are investigated; in Scotland's case (Chapter 6), the McConnell (2003-2007), Salmond (2007-2011), Salmond II (2011-2014) and Sturgeon (2014-2017) governments are covered.

CHAPTER TWO

THEORETICAL AND HISTORICAL OVERVIEWS: EXPLAINING PUBLIC INVOLVEMENT IN VENTURE CAPITAL

The fact that VC has almost exclusively been studied from economic and financial perspectives is reflective of the way most social scientists, and scholars of nationalism among them, neglected some of the specifics of economic policymaking. Even when it

comes to government intervention, it is nearly impossible to acquire adequate knowledge of the VC sector without reference to specialized journals such as *Venture Capital*, *Small Business Economics*, the *Journal of Business Venturing*, *Economic Development Quarterly*, or the *Journal of Corporate Finance*. The most notable exceptions are studies in economic geography, found in journals such as *Regional Studies* or the *Journal of Urban Economics*. In this chapter, we attempt to bridge this gap and to clarify how our thesis adds to existing knowledge. First, we provide a general overview of the most common explanations for government involvement in VC. We then evaluate their empirical validity in the cases of Quebec and Scotland, in light of the historical development of state intervention in this sector. This allows for the elaboration of specific arguments regarding the roles and influence of minority nationalism, as compared with economic rationales having typically been regarded as the most crucial.

As a matter of clarification, it should be noted the focus of this thesis is specifically put on regional institutions and policies, so as to provide deep and detailed knowledge of their underpinnings. Therefore however, our approach partially obscures one aspect of minority nationalism's impacts on economic policymaking, namely that of regional governments' adaptation to central governments' policy initiatives. While our arguments regarding the "perceived needs" for policy asymmetry in Quebec and Scotland partly derive from it, this thesis won't engage in detailed accounts of the way central governments' VC policies might ignore or neglect the particular needs of regional economies and cause imbalances conducive to regional governments' intervention. It could be said, thus, that our approach probably even underreports the effects of minority nationalism, to which

intergovernmental relationships and the interdependencies between levels of policymaking in multinational states certainly contribute.

2.1. Development capital & VC

In October 2015, Quebec’s government (PLQ majority) announced that its *Fonds du développement économique* (FDÉ) – co-managed with IQ – would invest the equivalent of \$US one billion for a 49.5% equity stake in a new limited partnership with Bombardier Aéronautique, a subsidiary of Bombardier Inc. responsible for the new *CSeries* jet aircrafts. This decision was taken after it became clear that Bombardier’s cashflow was insufficient and the *CSeries* might be jeopardized¹⁶. Apart from the sheer size of this direct public investment, by far the largest in Quebec’s history¹⁷ (CDPQ excluded), most interesting about this decision were its *strategic* implications. Indeed, it is not unreasonable to examine this particular investment from a VC perspective. After all, the entire investment was dedicated to a specific venture, the *CSeries*, which despite existing orders had not yet completed the certification and commercialization stages. Whether from a VC or development capital perspective however, this intervention wasn’t intended to mitigate a “market failure,” because an established, publicly traded company failing to secure sufficient liquidity for a flagship project is part of the game. What this investment was all about, instead, comes down to two things: first, a political imperative not to stand idly as a leading company from the “Québec Inc.” was experiencing a potentially damaging

¹⁶ Web: <http://goo.gl/u0NhuC> (11/01/2015).

¹⁷ Web: <http://affaires.lapresse.ca/economie/transports/201510/30/01-4915539-investissement-dans-bombardier-un-geste-sans-precedent.php> (11/01/2015).

downturn; and second, a strategic interest in safeguarding the aerospace cluster, Quebec's chief export industry and, by far, main R&D hub (Aéro Montréal 2012).

The justifications for this investment were revealing in these regards: on the one hand, Economy Minister Jacques Daoust (MEIE) evoked “*une occasion unique de s’associer à une entreprise emblématique du génie québécois;*” on the other, the PQ leader argued the government should have invested as much to acquire, instead, shares in Bombardier Inc.¹⁸ Both, however, recognized an intervention was, in some form, inevitable. As for the strategic imperative, Quebec's Premier claimed the aerospace cluster was as important for Quebec as the car industry for Ontario¹⁹, referring to the very numerous businesses (including many SMBs) constitutive of this cluster. This is why, in return for this investment, Bombardier had to commit to maintaining all of the activities related to the *CSeries* in Quebec until 2036.

This intervention exemplifies the way governments such as Quebec's engage in equity investments for political reasons and with regional-level, “national objectives” in mind. This thesis' core arguments are that **a)** Quebec's and Scotland's commonly do so for such reasons; **b)** that this can be understood as an economic manifestation of minority nationalism; and **c)** that it necessarily leads to and sustains policy asymmetry. Most of the literature regarding state involvement in private equity and VC, however, focuses instead

¹⁸ Web: <http://www.ledevoir.com/economie/actualites-economiques/453958/bombardier-quebec-deploie-un-parachute-d-un-milliard> (11/02/2015) ; http://www.assnat.qc.ca/fr/travaux-parlementaires/assemblee-nationale/41-1/journal-debats/20151029/157223.html#_Toc433981619 (11/02/2015).

¹⁹ Web: http://www.assnat.qc.ca/fr/travaux-parlementaires/assemblee-nationale/41-1/journal-debats/20151029/157223.html#_Toc433981621 (11/02/2015).

on the economic rationales for such involvement. When political justifications are taken into account, it most often is in order to highlight their ill-advised character and the inefficiencies they engender. Therefore, common justifications for government intervention found in the literature remain, by themselves, unsatisfactory in the specific cases of Quebec and Scotland.

By 2000, Scotland accounted for around 8% of the UK's population, and 7% of registered private businesses in the country. Yet, it was attracting up to 15% of the total number of VC investments in the UK, second only to South East England/London attracting 45%. Scotland, moreover, was by far the UK's leading region in terms of the proportion of private businesses receiving VC investments, at between 1.05‰ and 1.25‰ against only 0.56‰ for the RoUK²⁰. Scotland's VC "location quotient" thus stood at least at 1.53 in 2000, way ahead of any other UK region²¹. This leading position, most interestingly, had a lot to do with the fact the public sector was present, in one form or another (direct, co-investments, limited partnerships), in 50% of investments made in Scotland against less than 20% in South East England. This proportion kept increasing, furthermore, and reached at least 70% on average (against less than 35% in South East England) between 2000 and

²⁰ These figures were compiled by the British Venture Capital Association (BVCA 2001) based on information provided by its members. SE and most business angel syndicates in Scotland are not BVCA members. Therefore, BVCA figures significantly underestimate the size of the VC industry in Scotland. According to Don & Harrison (2006) it can be estimated that the region then had by far the largest proportion, among UK regions, of private businesses receiving VC investments, at ≈1.26‰. Scotland was therefore attracting between 12%-15% of the UK's VC deals.

²¹ Scotland's percentage share of the UK's total number of VC investments, divided by Scotland's percentage share of the UK's registered private businesses (Mason & Harrison 2002: 436).

the 2008 financial crisis, when it peaked to almost 100% (Mason & Pierrakis 2013: 1166-1167; see Graph 32).

Quebec was also in a leading position at the turn of the century. By 2000, it accounted for 49% of the total number of VC investments in Canada, way ahead of every other province, including Ontario (31%)²². At the time, Quebec’s venture capital industry could raise capital equivalent to 1.3% of the province’s GDP in a year, a proportion superior to most developed countries, and the quantity of venture capital available per head in Quebec was more than three times larger than the RoC’s (Carpentier and Suret 2005b: 9-10).

Table 1. Regional economic weight, share of VC deals and public involvement in VC at the turn of the century²³

2000-2001	% of UK GVA / Canadian GDP	% of VC deals ²⁴ in UK / Canada (≈)	Public sector presence in VC (≈)
Scotland	8%	15%	50% ²⁵
South East Eng.	14.5%	20%	20%
Quebec	24%	49%	55% ²⁶
Ontario	39%	31%	30%

²² Macdonalds & Associates Limited (2001).

²³ Sources for Quebec & Ontario: CANSIM 3840038, Macdonalds & Associates (2001), Québec (2003), Suret (2004). For Scotland and South East England: BVCA (2001), Don & Harrison (2006), Mason & Harrison (2002), Mason & Pierrakis (2013), United Kingdom (2013).

²⁴ By number.

²⁵ By number.

²⁶ By value.

This would have been inconceivable without the contribution of Quebec’s public, tax-advantaged, and labour-sponsored funds. In 2000, more than 55% of the total amount of VC invested in Quebec came from the tax-advantaged *Investissement Desjardins*²⁷, LSIFs, institutional funds such as the CDPQ, or government funds such as IQ and the *Société générale de financement* (SGF)²⁸. It was later estimated the public sector was contributing, in one form or another, for between 70% (Québec 2003b) and 90% (Suret 2004) of all VC invested in Quebec in the early 2000s.

How did Quebec and Scotland get there? In order for this asymmetry to be explained, the sources of public investments in the two regions must be identified and the reasons for their involvement clarified. A review of the literature on VC, both theoretical and empirical, allowed the identification of five classic explanations for public sector involvement: **1)** the existence of “gaps” in SMBs’ funding chains; **2)** the use of public resources as “counter-cyclical” tools; **3)** the need to mitigate for the geographic concentration of VC investments; **4)** the “positive externalities” flowing from VC investments; and **5)** the “leveraging” effects of public investments. The next sections evaluate their merits against the historical evolution of Quebec and Scottish VC ecosystems.

²⁷ *Investissement Desjardins* became CRCD in 2001.

²⁸ Macdonalds & Associates Limited, op.cit.

2.1.1. Explaining public sector involvement

If one was to date the advent of major policy interest for start-up businesses and their funding needs, the mid-to-late 1970s would be most accurate. Oil shocks, stagflation crises, plant closures, production “rationalizing” or offshoring, technological developments and shifts toward the services sector were all part of the picture, and by the late 1970s economists such as David L. Birch (1979) started arguing that SMBs, rather than large corporations, had been for some time and in the foreseeable future would be the prime job creators. Although arguments such as Birch’s were later criticized on various grounds (Neumark et al. 2011), it is fair to say SMBs henceforth became a central focus of economic policymaking. This led to a diversity of approaches however, as there are many ways to support SMBs and boost “business birth rates,” one of which is to make sure sufficient funding is available.

Yet, given that start-ups lack established credit histories or significant cash flows, debt financing can prove problematic and banks reluctant to lend. This problem is particularly acute for those start-ups and SMBs operating in high-technology sectors, where risks and “information asymmetries” – i.e. the gaps between businesses’ knowledge of their product’s value and possible lenders’ understanding of it – are greatest. VC, a particular type of private equity, is a form of investment tailor-made for this kind of business. Douglas J. Cumming (2012: 1), one of the world’s foremost academic experts on VC, defines it this way:

VC refers to investments provided to early-stage, innovative, and high-growth start-up companies. Typically VC investments are seed-stage investments whereby financing is provided to research, assess, and develop an initial concept before a business has reached the start-up phase. Also,

depending on perspective, VC investments are start-up investments (financing provided to companies for product development and initial marketing) [...]; other early-stage investments (financing to companies that have completed the product development stage and require further funds to initiate commercial manufacturing and sales) [...]; and expansion-stage investments [...] used to finance increased production capacity, market or product development, and/or to provide additional working capital.

Historically, the VC industry accompanied and fueled policy shifts toward “innovation-led growth,” from the 1970s onward. VC “booms” took place in the late 1960s/early 1970s, early 1980s, and late 1990s (Gompers *et al.* 2008: 2). Various players engage in this investment sector: individuals related (“love money”) or unrelated (“crowdfunding”) to the investee; high net-worth individuals (business angels and angel groups); corporations; “institutional” investors such as pension funds, sovereign wealth funds, banks or credit unions; private investment funds; and governments or their agencies. In most countries, including Canada and the UK, institutions, corporations and VCs are by far the most significant investors, with governments playing a supporting role. In Scotland and Quebec however, the public sector (including public and/or tax-advantaged “institutional” investors) is particularly active, playing a very central and strategic role. It is this thesis’ objective to understand why that is.

2.1.2. The “market gap” argument

Public sector involvement in VC has been explained in various ways. Cumming (2007) has been among those arguing governments mostly intervene when and where clear gaps exist in businesses’ funding chains, due to private sector players’ lack of interest²⁹. Such gaps typically open where the potential upside of small VC investments (under

²⁹ See also Eisinger (1991), Harrison & Mason (2000), Karsai (2004), and Klonowski (2012).

\$100,000 for instance) in seed or very early-stage businesses is largely nullified by the risks, administrative costs, or long-term perspective associated with such investments. “Second equity gaps” can also appear in the \$100,000 to \$5 million range, where SMBs seek follow-on funding for production or commercialization purposes: in this case, relevant investment sizes can be too large for most business angels, but still too small for many VCs. For entrepreneurs however, small investments can make a very large difference, and therefore the lack of profitability perceived by private sector investors can be said to amount to a “market failure,” leading to lower rates of business creation or survival.

The market failure argument has been the most widely used, in VC literature, to explain or justify government intervention. Such intervention can take many forms, the most well-known of which are tax incentives, direct investments, co-investment with private or institutional players, and limited partnerships with (i.e. sponsoring of) VCs through publicly-backed “funds of funds.” As market gaps typically open for small, seed or early stage investments however, another form of public involvement typically associated with this argument developed over the last twenty years and consists in promoting and supporting investments from business angels (Lerner 1998). Angels tend to invest smaller amounts at earlier development stages, and to adopt a more “hands-on” approach to their investments, working directly with investee companies to improve management, ensure profitability, and secure follow-on funding opportunities (Harrison & Mason 2000b; Mason & Harrison 1997).

2.1.3. The “counter-cyclical” argument

Gaps in SMBs’ funding chains are not only related to issues of perceived profitability however, but also to macroeconomic variables largely out of the control of entrepreneurs, investors or even governments. Notably, recessions and economic crises tend to have a direct and negative impact on VC investing and bank lending, especially in high-risk, high-cost, high-tech sectors and at seed or very early stages of business development (Block *et al.* 2012: 48). Two examples of such impacts were provided by the 2008 financial crisis and the 2000 “dot-com bust:” in each case, VCs absorbed significant blows both in terms of fundraising and returns on previous investments, therefore becoming more risk averse and moving up to larger investments in well-established businesses or traditional sectors (Block *et al.* 2012: 42-43). Economic crises and recessions can thus lead to both a drying up of available VC and a deepening of the aforementioned equity gaps.

For these reasons, the argument has been made that governments have, should, and will intervene in the VC market to mitigate for gaps created during economic downturns, but also to build permanent or quasi-permanent pools of capital which can be used as counter-cyclical tools. Duruflé noted that “co-investment funds have been chosen by several jurisdictions (Australia, France, Germany, Israel, New-Zealand, Ontario) as the best contra-cyclical investment tool to be used in stimulus packages to deal with the [2008] economic and financial crisis” (2010: 15). Gai *et al.* found the same phenomenon to apply at the level of local jurisdictions: “along with actions coordinated on a national level to sustain publicly quoted banks’ capital, local authorities too can play a key role offering on

the spot assistance in response to the needs of SMEs” (2010: 300). Focusing on Europe, some researchers even concluded that mere slow growth can drive public involvement: “governments supply more funds to the VC industry when GDP growth is low and when long term interest rates are low, both macroeconomic indicators of the overall economic climate” (Manigart & Beuselinck 2001: 12).

2.1.4. The “spatial” argument

A third argument, closely related to the first two, is often evoked: following important contributions in economic geography, the fact became well-known that VC – both investments and investors – tends to concentrate in specific regions, where large cities, important industrial clusters, or well-developed financial hubs are present³⁰. However, in addition to factors relating to investment opportunities (demand side), spatial concentration of VC activity also stems from investors’ own preferences for proximal deals (supply side). This tendency has been referred to in turn as the “one hour rule” (Wray 2012), or as VC investors’ “home bias” (Jeng & Wells 2000) and inclination for “proximity capital” (Crevoisier 1997). Indeed,

while high returns are the general overall driving goal of the venture capital investment process, explicitly geographical factors, such as the [VC] institution’s network of offices and informants, the need to control for uncertainty by limiting the area of activity, the need for spatial proximity in monitoring, the existence of cognitive spatial biases in the guiding investment philosophy and the effects of changing taxation regulations, are as important influences on investment outcomes as the ‘real’ patterns of opportunities and rates of return (Thompson 1989: 73).

Another key motive for governments to intervene in the VC sector is thus to counteract such centripetal forces, so as to fill funding gaps experienced by businesses outside VC

³⁰ See Martinez-Sanchez (1992); Florida & Smith (1993); Murray (1998); Harrison & Mason 2000; Sorensen & Stuart (2001); Chen *et al.* (2010); Cumming & Dai (2010, 2012); Li (2012); Samila (2012).

hubs and to stimulate local development by spreading VC to remote or lagging regions. Similarly, governments can intervene to strengthen traditional activities in such regions and promote, via the generated spillovers, diversification and the advent of new, geographically concentrated industries. This version of the spatial argument has notably been championed by Porter: “the presence of an established cluster signals the presence of some favorable determinants of competitive advantage, raising the odds that governmental investments will bear fruit [...] The best regional policy identifies cores of industry strength and builds on them, to encourage geographically concentrated clusters. One industry creates sophisticated demand or inputs for others” (1998: 656-657).

2.1.5. The “positive externalities” argument

Speaking of “spillovers,” the argument is also frequently made that governments should intervene in the VC sector to stimulate activities – notably R&D – generating greater benefits for the society as a whole than for any particular investor. Porter has, again, been among the proponents of this rationale: “stimulating improvements in science and technology is a widely acknowledged role of government. R&D cannot be left solely to firms because the benefits to the national economy exceed those to individual firms due to spillovers” (1998: 631). What has also been referred to as the “virtuous circle,” “positive externalities,” or “social returns” argument thus justifies public intervention when and where private actors have little incentive to invest in costly undertakings promising very slight or no short-term yields, but which potentially have significant upsides from a macroeconomic or societal perspective. Renewable energy is the best example of an

industry where governments have been called to “start the wheel” (Duruflé 2010: 14), as outlays for private investors can often be prohibitive but positive externalities sizable.

This “social returns” argument has been particularly well established by VC expert Josh Lerner. Focusing on the United States, Lerner (1999, 2002) demonstrated that one of the central objectives of the government-led “Small Business Innovation Research” program³¹ offering VC to start-ups and SMBs is to stimulate marketable R&D generating positive externalities. In a book that sparked important debates in VC literature³², Lerner notably distinguished “positive externalities,” referring to intra and inter-industry distribution of VC investments’ benefits (2009: 68), from “knowledge spillovers,” pointing to the larger, social benefits of R&D (2009: 72). Both effects, in his opinion, are justifiable aims for public intervention. Other researchers recently showed, finally, that public funding of R&D – corporate or academic – is very closely related to VC availability and effectiveness: where a VC ecosystem is lacking, lower levels of firm founding and patenting will emerge from R&D, and vice versa (Samila & Sorensen 2010: 1349). Hence, governments can have an interest in financing either R&D, VC, or both.

2.1.6. The “leveraging effect” argument

This raises the related issue of public/private interaction, which is at the core of another largely acknowledged purpose of state intervention. The argument is often made, especially since the late 1990s that public VC in one form or another can serve as a “priming

³¹ Launched by the federal government in 1983, the SBIR program is still in operation.

³² See Tabarrok (2010); Lerner (2010); Cumming (2011, 2011b); Da Rin *et al.* (2011).

pump” for private VC. Public VC “leverages” private VC, first, because it can have a “certifying effect” which raises private investors’ attention toward particular businesses or sectors, attesting of the government’s trust *in* and focus *on* those (Lerner 2009; Lerner & Watson 2008). This “stamp of approval” argument, also referred to as the “demonstration effect” or “signaling mechanism,” has been widely used to explain the recent multiplication of hybrid co-investment schemes³³. The other reason why governments can stimulate private or institutional VC is obviously that co-investment initiatives split risks and costs. In the case of hybrid funds, this can be done through “profit distribution and compensation structures” maximizing private partners’ returns (Jaaskelainen *et al.* 2007), or through “downward protections” minimizing their losses (Karsai, 2004: 7).

2.1.7. The “political” explanations

Very few authors, finally, have provided political explanations for public involvement in VC. Peter Eisinger, for one, revisited the issue through the lens of performance appraisal, noting that macroeconomic indicators don’t tell us much about the true objectives of state intervention (1991: 73):

High returns and the percentage of blockbuster firms that emerge from the portfolio are not the relevant gauges for the public sector. Indeed, it is best to think of state VC programs as devices affecting the fortunes of workers and businesses in economic ‘microclimates’: individual firms and the modest business networks of which they are part, local labor markets, particular neighborhoods, and specific communities are all small enough to feel the impact of a modest infusion of patient equity. Local employment gains, tallies of small firm birth and business expansions in local market areas, and the generation of revenues sufficient for program self-maintenance are the reasonable indicators of success.

³³ See Murray (1998); Aernoudt (1999); McGlue (2002); Powell *et al.* (2002); Gilson (2003); Leleux & Surlémont (2003); Carpentier & Suret (2005b); Duruflé (2010); Samila & Sorensen (2011); Bonini (2012).

In a series of articles (1994, 1996, 1998), economic sociologists Kevin T. Leicht and J. Craig Jenkins also compared public intervention in VC across the US between the 1970s and 1990s, trying to uncover why some states – Massachusetts and California, most notably – got involved in this sector on a larger scale. Their finding was that “the main forces behind investments in these [VC] programs are inner-circle business elites, professionalized legislatures, and a class compromise rooted in peak bargaining and capital/labor political representation” (Jenkins & Leicht 1996: 318). To this neocorporatist explanation for public intervention in VC were also added secondary variables such as “structural pressures from deindustrialization, fiscal dependence on corporate taxes and declining federal revenues” (Leicht & Jenkins 1998: 1339). In short, their arguments depicted policymakers as *reacting* and *responding* to “external” economic, political, and bureaucratic pressures; ideology, in the sense of a genuine *preference* of policymakers for strategic state intervention, was not part of the equation.

2.1.8. Remarks

To what extent did such arguments apply to our cases up to the 1990s? As we show in the next two sections, the answer is only to a limited extent. That is not to say they did not apply at all; in fact, many of them actually confirm the “influencing” role of governments, either substituting themselves to private actors (*faire*) or pushing them in directions they might not have taken otherwise (*faire faire & faire avec*). What distinguished Quebec and Scottish governments’ influence from others’ in Canada or the UK, however, were its early manifestation, magnitude, permanent character, and

autonomous (i.e. specifically regional) unfolding. By themselves, the main economic rationales provided in the VC literature cannot account for such policy asymmetry.

Yet, it could be argued the aforementioned arguments often take the form of post-hoc rationalizations or even of evaluative and prescriptive tools; most cases, therefore, would fully conform to neither of such arguments when studied inductively and in detail, although it could probably be demonstrated that policymakers did bear them in mind. It should be reiterated, thus, that what this thesis seeks to explain in the particular cases of Quebec and Scotland is not public intervention *per se*, present to various degrees in most if not every country, but more precisely *policy asymmetry*, of which the greater extent of such intervention as compared with the RoC and RoUK is one manifestation. In other words, the main point is not to say that economic rationales for state involvement apply only imperfectly to our cases – as they would in most other cases – but that alternative arguments are needed to explain *policy asymmetry* and the greater *scale* of public intervention in Quebec and Scotland.

Jenkins and Leicht’s political take, besides, more or less brings us back to a perspective similar to Haddow’s (2015), in that it subordinates *ideological preferences* for public intervention in VC to *institutional mechanisms* resting on variables – namely the size of state bureaucracies, unionization levels, and concerted interest mediation – which cannot help explain, or only to a limited extent, convergence toward high public involvement in the specific cases of Quebec and Scotland, where many of these variables have been diverging. As for the “structural” pressures they contend favor public

intervention, their impacts are already taken into consideration by economic accounts such as the counter-cyclical argument in the case of declining fiscal revenues, or the spatial and externalities arguments in that of deindustrialization. It is our contention, therefore, that an alternative approach is needed to better understand, from an inductive perspective, the legislative intent behind the establishment of public organizations involved in VC, the ideas that informed it, and how the actual investment activities of such organizations align with government strategies beyond market imperatives.

2.2. Public sector involvement in Quebec, 1960s-1990s

That state intervention from Quebec's "Quiet Revolution" to the 1990s carried sociopolitical as well as economic objectives has been well-established (Bourque 2000). That was especially true in the sectors of corporate finance and VC, where the nationalist content of such objectives was most transparent and where local, Francophone entrepreneurs were favored and supported to subvert the ethnic division of labor that had kept them heavily dependent on Anglo-Canadian capital (Smith 1994). Language-based preferential policies, in the realm of SMB financing, were implemented in a context where, up to the late 1960s, Francophones represented more than 80% of Quebec's population but owned less than a quarter of manufacturing businesses and managed around 25% of the province's financial institutions, mostly Desjardins credit unions (Fraser 1987: 85). From the 1960s to the 1990s, state intervention was notably aimed at the establishment of a Francophone development capital ecosystem, specifically linked and devoted to Francophone-led businesses and industries (Bélanger & Lévesque 1994). Although

development strategies evolved, the policy objectives and public tools put in place for their implementation never underwent fundamental changes over this whole period, notwithstanding partisan cycles (Bourque 1995; 1999; 2000).

This last point raises the issue of the progressive transformation of Quebec's "industrial structure," which can be said to have been, beyond linguistic considerations, the overarching objective of government activism up to the 1990s (Fournier 1979, 1987; Tremblay 1979; Tremblay & Van Schendel 2004: 76-81). In this case, four main goals can be distinguished: **a)** the replacement of interprovincial trade by competitive international exports; **b)** the reduction of foreign ownership in primary industries; **c)** the reorganization of Quebec's manufacturing sector through technological improvement and the merger of small family businesses; and **d)** a move away from traditional manufacturing and toward new, high-value added clusters. Such a multifaceted, structural transformation required both long-term strategic planning, as evidenced by major ministerial policy statements like the epochal *Bâtir le Québec* (Québec 1979), and significant intervention by the state, through the establishment of organizations such as the SGF, CDPQ, SDI, and FSTQ.

2.2.1. The Société générale de financement

Created by Quebec's Liberals in 1962, the SGF was the province's first state corporation devoted to economic development and provided a clear indication of the way this government intended to intervene in business financing. The justifications given for this new fund, as well as the Act incorporating the SGF, offer no indication that economic rationales for state involvement in VC were central to its establishment. In the 1962-63

budget speech, justifying the government's \$75 million investment in the SGF despite a large deficit, PM Jean Lesage argued Quebec simply had, henceforth, to take the lead in economic policy (Québec 1962: 6):

Nous vivons à une époque où, dans notre pays comme ailleurs, les juridictions régionales ont à accomplir un rôle bien précis en matière de politique économique [...] Nous sommes prêts à accepter ce rôle difficile; mais encore faut-il qu'on nous laisse la possibilité de l'exercer; plus exactement, je devrais dire: encore faut-il que nous prenions les moyens de l'exercer.

This plea for policy autonomy was directly linked to the launch of the SGF, for the new government considered passive economic policy to have diverted Québécois' savings and profited "foreign" interests in the past: "*l'ancien gouvernement a laissé le champ libre à des intérêts privés, canadiens ou étrangers, et au gouvernement fédéral, de telle sorte qu'on est venu chercher nos épargnes disponibles pour s'en servir à des fins qui souvent ne nous profitaient pas*" (Québec 1962: 36). Beyond business financing in the form of VC and private equity, a key mandate of the SGF would be to channel those savings toward Francophone companies, thereby increasing local ownership. This is why, from its inception to its reform in 1972, the SGF was structured as a hybrid fund, half of whose shares were owned by the government and the other half, mostly, by Desjardins credit unions (Bourque 2000: 43). The 1962 Act incorporating the SGF defined its two core mandates as such (Québec 1962b: 233-234):

The objects of the company shall be: a) to stimulate and promote the formation and development of industrial undertakings and, accessorially, of commercial undertakings in the province so as to broaden the basis of its economic structure, accelerate the growth thereof and contribute to full employment; b) to induce the people of Quebec to participate in the development of such undertakings by investing a part of their savings therein.

This "first" SGF (1962-1972) was thus born out of conscious efforts to boost funding for Francophone businesses and to lay the foundations of an indigenous capital ecosystem built around a coordination between the state and the Desjardins movement. This can be

extrapolated based on Desjardins' participation in the capitalization of the SGF, but also on the basis of **a)** Desjardins' very active financial support, throughout the 1960s and 1970s, of Francophone businesses facing takeover threats from Anglo-Canadian or American interests; **b)** the setting up of Quebec's first institutional VC fund, the *Société d'investissement Desjardins* (SID), through special legislation (Québec 1971); and **c)** the very pivotal role the SID played throughout the 1970s and 1980s, investing in local businesses and sponsoring VCs alongside, notably, the SGF (Bourdeau et al. 1994; Lévesque et al. 1996, 1997).

In its early years, the SGF operated as an industrial holding, launching new companies and acquiring majority shares in ailing Francophone businesses facing bankruptcy or takeover. The role of the SGF as an investment fund really took off in the 1970s, after the government bought back Desjardins' shares – in the wake of the establishment of the SID – and new responsibilities were imparted to the henceforth fully public corporation. The SGF then took the role of an investment bank, supporting industrial clusters or creating new ones by increasing medium businesses' cashflow and funding mergers to generate larger Francophone companies (Fournier 1979). Operating under the umbrella of the *Ministère de l'industrie et du commerce* (MIC) since 1975 (Bourque 2000: 51), the SGF kept playing this role throughout the 1980s, regrouping expansion-stage SMBs and funding large companies in strategic supply chains and sectors (Fournier 1987: 24). On the MIC's lead – MIC representatives, often deputy ministers, sat on the SGF board – the SGF officially adopted this sectoral investment approach from the mid-1980s onward,

preparing the table for the consolidation and concertation roles it would play in the cluster strategy of the early 1990s (Bourque 2000: 95, 143-144).

To summarize, an argument could be made the SGF was thus intended to address “gaps” in Francophone SMBs’ funding chains, by engaging public resources to “leverage” private investments from, notably, Desjardins shareholders. While these two arguments did apply however, they would not allow for a complete grasp of the strategic and “national” objectives behind its advent and activities. The intent behind the establishment of the SGF can be brought back, instead, to three core motives: a perceived need for the provincial government to take the lead in economic policy, in order to foster financial autonomy; the attendant objective to increase Francophone ownership in key industrial sectors by channeling Québécois’ savings toward local businesses; the strategic aim to establish an indigenous development capital ecosystem capable of allocating, through coordinated action, large sums of money to fund the expansion of existing SMBs and build medium-to-large, internationally competitive Francophone companies.

2.2.2. The Caisse de dépôt et placement du Québec

The inception of the CDPQ in 1965, just as for the SGF, emanated from a need for policy asymmetry aimed at the strategic channeling of Québécois’ savings (Québec 1965: 1). As is well known, it was established – by partial emulation of France’s *Caisse des dépôts et consignations* – to manage and invest the assets of the new *Régime de rentes du Québec*, a public pension plan put in place in the wake of Quebec’s opting out of the Canada Pension Plan (Rioux 2014: 59). While the CDPQ was crafted as a fiduciary, it was also intended to

act as a powerful institutional investor, including in VC. This was PM Lesage's core argument (Québec 1965: 2):

Les intérêts des Québécois ne s'arrêtent pas, après tout, à la sécurité des sommes qu'ils mettront de côté pour assurer leur retraite. Des fonds aussi considérables doivent être canalisés dans le sens du développement accéléré des secteurs public et privé, de façon à ce que les objectifs économiques et sociaux du Québec puissent être atteints rapidement et avec la plus grande efficacité possible. En somme, la Caisse ne doit pas seulement être envisagée comme un fonds de placement au même titre que tous les autres, mais comme un instrument de croissance, un levier plus puissant que tous ceux qu'on a eus dans cette province jusqu'à maintenant.

The role the French *Caisse des dépôts et consignations* had come to play in the realm of development capital was, as a matter of fact, one of the aspects the Lesage government liked the most about this model (Pelletier 2009: 28). In his 1965 speech on the advent of the CDPQ, Quebec's Premier specified that the government's industrial strategies and the CDPQ's investment activities would have to be "coordinated" and "synchronized," notably via the latter's Board of Directors (Québec 1965: 4-5). Both the CDPQ's President and all of its Board members were to be nominated by the Premier, and the first Board included the Deputy Minister of Finance, Hydro-Québec's finance director, and a SGF Board member (Pelletier 2009: 33).

As an investor the CDPQ was to coordinate not only with government policies, but also with other major players such as Desjardins and the SGF. In fact, it was specifically mandated to support and complement SGF initiatives and as such, the CDPQ was allowed to allocate up to 30% of its assets to equity investments, including up to 7% in seed and early stage VC (Québec 1965: 17-19). As, until the 1980s, very few Francophone businesses were listed on the Montreal or Toronto stock exchanges, private equity quickly became a vital tool through which the CDPQ got involved in economic development. From

1967 to 1977, equity represented between 10% and 20% of the CDPQ's total placements (Brooks & Tanguay 1985: 108). As planned moreover, private equity investments were often done alongside the SGF and/or Desjardins, as the CDPQ shared their objectives to solidify Francophone businesses' funding chains and support their expansions, mergers, or IPOs (Pelletier 2009: 62). The nationalist impetus behind CDPQ investment activities also extended to large, pan-Canadian or American companies: in such cases, the objective was to extend Francophone presence in key industries and businesses, through Board nominations (Fournier 1979: 32).

From the mid-1970s onward, CDPQ activities in private equity and VC accelerated, in part as a counter-cyclical reaction to the economic downturn following the 1973 "oil shock." Smaller deals multiplied³⁴ and the CDPQ, in addition to its \$10 million investment in the SID, started sponsoring private VCs – such as *Placements Innocan* (1973-74) and *Novacap* (1980-81) – through partnerships with the SGF and other banking institutions (Pelletier 2009). That said, the CDPQ continued to be present and aggressive in large, expansion-stage deals in strategic sectors, as shown by participations taken in Vidéotron (ICT), Gaz Métropolitain, (energy), Domtar (pulp & paper), Canam Manac (steel products) and Noranda (mining) between 1979 and 1982, again in a context of economic contraction. Outside of Quebec therefore, the sheer size of the CDPQ investment portfolio, its coordination with the government's industrial policies, the SGF, and the SDI, as well as its

³⁴ Notably, after 1975, through very active participation in the *Sociétés d'investissement dans l'entreprise québécoise* (SODEQ) and the PQ government's new *Régime d'épargne-actions du Québec* (RÉAQ), offering tax incentives for the channelling of Québécois' savings into local SMBs' equity. On the SODEQ, RÉAQ and RÉAQ-D (specifically focused on development-stage SMBs), see: Suret (1990, 1993), Suret & Cormier (1997), Carpentier & Suret (2005, 2005b), and Godbout et al. (2005).

strategic interest in expanding Francophone presence in large corporations were increasingly disturbing.

When, in late 1982, the Canadian Pacific railway company feared a concerted takeover by the CDPQ (Pelletier 2009: 117), the federal government threatened, with Bill S-31, to limit provincial participation in any pan-Canadian transportation company to 10% of voting shares (Brooks & Tanguay 1985; Tupper 1983). At the core of this threat was the fear that the CDPQ was an instrument of the nationalist PQ government, although most of Quebec's business class' firm rejection of S-31 revealed broad support for the CDPQ's activities. Serge Saucier for instance, Chairman of Montreal's Chamber of Commerce, argued: "we agree that the concentration of economic power in government hands is wrong. However, the absence of French-Canadians in real decision-making is worse. Of the two evils, we choose the lesser of the *Caisse*" (cited in Tupper 1983: 24). Ultimately, Bill S-31 was abandoned, not least because worries regarding the PQ/CDPQ relationship were ill-advised and rested on an erroneous conception of Quebec's economic nationalism (Brooks & Tanguay 1985: 118).

Far from restricting the CDPQ's role in economic development and VC, the PLQ government elected in 1985 actually oversaw the CDPQ-led consolidation of Quebec's development capital ecosystem, through increased and institutionalized coordination with the SGF, SDI, SID, *Banque Nationale* and FSTQ (Pelletier 2009: 154-156). This coordination took many forms. First, a more streamlined process for investee businesses, where the CDPQ was able to offer not only financial assistance but also technical and

managerial counselling to help SMBs navigate through Quebec's funding chains. Second, from 1988 onward and with direct financial support from the government, the setting up of the *Sociétés régionales d'investissement* (SRI), regional VC funds specialized in early-stage financing and capitalized by the CDPQ, SID, *Banque Nationale* and FSTQ. Finally, alongside other public, institutional, and private investors, the capitalization of new hybrid VC funds such as Capitech (1990) and TechnoCap (1993), operating in the ICT sector (Bourque 2000; Pelletier 2009).

All things considered, it would be difficult to apply any of the classic economic rationales for public involvement in VC to the CDPQ. By the 1990s, the CDPQ was already investing significant amounts of VC in pretty much all deal sizes and stages, in a wide range of industries across and even outside of Quebec. Similarly, its counter-cyclical activities of the mid-1970s and early-1980s took place by default rather than design, although Quebec's government was well aware, from the onset, the CDPQ would come to play such a role as the province's largest pool of development capital. As with the SGF, the CDPQ was born out of a political preference for policy asymmetry, and intended to channel Francophones' savings in order to increase their control of key industries and businesses. Doing so, it played a central role in consolidating the development capital ecosystem in Quebec, a strategic objective of successive governments up to the 1990s.

2.2.3. The Société de développement industriel

A third state corporation devoted to economic development was established in 1971 as a complement to the SGF and CDPQ: to a certain extent, the SDI was intended to fill

gaps for early-stage SMBs, offering loans or equity deals as minor as \$100,000. Both the Act incorporating the SDI and the debates that preceded it confirm, however, it was given much broader mandates and would function as a financial arm of the MIC. First, it should be noted the SDI stemmed from a perceived need for policy divergence: as then Minister of Industry Gérard D. Lévesque explained, its focus on loans and equity was intended as a way to compete with Ontario, which had established its own program of industrial subsidies in the 1960s, and to complement federal programs already offering grants and tax-credits for regional development purposes (Québec 1971b: 892).

Distinguishing the SDI from the SGF and CDPQ, Minister Lévesque imparted it three main responsibilities: **a)** creating new jobs, especially in the services sector, through support for start-up businesses; **b)** promoting the advent of new production technologies and high value-added products to help transform Quebec's industrial structure; and **c)** encouraging entrepreneurial initiatives in peripheral regions (Québec 1971b: 889-890). In reality however, from its inception the SDI was used by the MIC as a financial tool to support any development project deemed relevant. As per its incorporating Act, the SDI would have to "carry out any mandate entrusted to it by the Government to promote a project of major economic importance for Quebec by granting the assistance defined by the Government" (Québec 1971c). Besides, the public sector was well represented at the SDI, with MIC, CDPQ and other government representatives sitting on its Board.

As for its centrifugal roles, Fournier (1979: 61) highlighted the fact that throughout the 1970s, 80% of SDI's loans and investments were still made in Montreal and Quebec

City, where most of the investment opportunities could be found. The nationalist inclinations of the SDI, on the other hand, were obvious. SDI support to SMBs expanded rapidly under the PQ government: from 1976 to 1979, the number of businesses receiving financial help skyrocketed from less than 170 to over 420 (Tremblay 1979: 8). Rodrigue Tremblay, then head of the MIC, explained (1979: 3): “*le rôle que joue chez nous la SDI nous rappelle quotidiennement et ce, dans chaque dossier que l’on fait progresser, combien notre développement industriel découle de notre propre initiative*”. After 1975, financial support for larger businesses, including foreign-owned companies, was also granted in coordination with the SGF and CDPQ given strict conditions favoring local and especially Francophone SMBs: purchase of raw materials, equipment, and services from local suppliers, R&D spending quotas, and the inclusion of a given percentage of Francophones among executives and board members (Fournier 1979: 55-63).

Following a major policy statement by the PQ government establishing a four-year (1982-1986) industrial strategy based on the development of new clusters in electronics and biotechnology (Fortin 1985), SDI activities were partly reoriented toward R&D financing and support to high-technology sectors (Bourque 2000: 61). This shift confirms, at least partially, the “positive externalities” argument regarding state intervention in VC: in addition to the existing SDI program supporting investments in “modern technology” manufacturing businesses, the PQ’s strategy led to the creation of a new SDI-led initiative, the *Programme d’aide aux activités de recherche et d’innovation*, financing up to 90% of businesses’ R&D spending via interest-free loans repayable through royalties on commercialized innovations (Fortin 1985: 30). This focus on high-tech, high-growth

businesses sharpened under the Liberals after 1985, as the increase in ministerial “mandates” and the SDI’s new self-financing requirements pushed it further toward equity loans (Bourque 2000: 92-93). Targeted investment strategies also multiplied in the late 1980s under the lead of Gérald Tremblay, head of the SDI from 1986 to 1989. Increased authority was granted to sectoral portfolios, thereby adapting the SDI to the requirements of Tremblay’s³⁵ clustering policies in the early 1990s.

What was true, in sum, in 1971 was also true by the early 1990s: the SDI had always been a semi-autonomous investor and a financial tool Quebec’s MIC/MICT³⁶ used to carry out government strategies. Even though the SDI partially corresponded some of the classic explanations for public involvement in VC – namely the first equity gap, spatial concentration of VC, and positive externalities arguments – the way it was crafted and the extent of its activities did not. Instead, the SDI’s focus on loans and equity was imposed to further policy divergence from federal initiatives, and its investment niche was defined, at least in the beginning, so as to complement the activities of the SGF and CDPQ. A substantial majority of its investments were always made in Montreal and Quebec City, and some of those were made in large, established companies. For many of its large-size investments, moreover, and especially in the case of foreign-owned companies, the SDI collaborated with both the SGF and CDPQ as its overarching goals were, as for the latter two, to both increase Francophone presence in large businesses and maximize those businesses’ reliance on indigenous supply-chains.

³⁵ By then head of Quebec’s MICT (1989-1994).

³⁶ The MIC became the *Ministère de l’industrie, du commerce et de la technologie* (MICT) in 1988.

2.2.4. The Fonds de solidarité des travailleurs du Québec

The establishment of the FSTQ in 1983, in turn, seemingly confirmed explanations for state involvement present in the VC literature. First, the FSTQ was founded in the wake of the early 1980s' economic downturn and declining corporate tax revenues³⁷. It was at least partially crafted, thus, with a counter-cyclical intent. Secondly, the FSTQ would seem to confirm Leicht and Jenkins' (1996) perspective, as it emanated in part from the “peak bargaining” event of April 1982, the “Quebec Economic Summit” (Tanguay 1980, 1990), where the *Fédération des travailleurs du Québec* (FTQ) suggested the setting up of such a VC fund. Part of the FTQ's rationale for such a fund, underpinned by full employment objectives, was however itself rooted in a nationalist and interventionist perspective: already in 1981, the FTQ's President had been arguing in favor of the “nationalization [of private pension plans] and the channeling of savings” towards Quebec's SMBs and farms (Morin 2012: 90).

Moreover, if it is true that the fund's origins lay in the severe 1982 recession (Morin 2012: 91), one has to bear in mind that the economic downturn, in Quebec, was aggravated by the 1980 referendum on secession and, thus, had a political and ethnolinguistic complexion: between 1976 when the PQ took power, and 1985 when it lost it, 100,000 Anglophones and a hundred corporate headquarters left the province, mainly for Ontario (Fraser 1987: 103). There is no doubt the PQ government, by backing the establishment of

³⁷ Between 1981 and 1982 for instance, provincial revenues stemming from corporate income taxes dropped by 25% in Canada (CANSIM 1810001).

a VC fund sponsored by the FTQ, aimed to compensate for what was perceived as a partly *political* unwillingness of large (mostly Anglophone-owned) financial institutions to invest *in* or lend *to* Francophone SMBs. There was, in other words, a perceived *political funding gap* the FSTQ was intended to address. Invoking the example of a medium-sized manufacturing business from Bedford, the PQ’s sponsor of the FSTQ Bill, Robert Dean, remarked (Québec 1983: 2713):

tous les amis du Parti libéral d’en face, tous les grands financiers du monde de la rue Saint-Jacques ne trouvent pas de capitaux de risque pour aider l’entreprise des travailleurs d’Exeltor et leurs employeurs qui cherchent des investisseurs [...] Cette entreprise risque de tomber en faillite si elle ne trouve pas des capitaux de risque parce qu’elle est sous-capitalisée comme bon nombre d’entreprises québécoises.

Legislative debates surrounding the establishment of the FSTQ indeed revealed a lot about the motivations of the PQ government, just as Liberal concerns indicated a commitment to the perpetuation of the “Quebec model.” In the first case, from the government’s perspective, three key drives were expressed (Québec 1983: 2690-2691):

- a)** a need for policy asymmetry, Quebec being perceived as hardest hit by the recession because of its industrial structure and of federal monetary policies;
- b)** a continuing resolve to channel Québécois’ savings toward their own industries and businesses, FSTQ shares being eligible to substantial tax-credits when used as part of registered savings plans (in addition to credits applicable to the buying of the shares themselves);
- c)** a strategic imperative to coordinate, as much as possible, FSTQ investments with the government’s sectoral industrial objectives.

It should be noted that the MIC not only subsidized the setting up of the FSTQ, but also provided it free access to in-house industrial research services, “to better prepare the fund’s investment decisions” (Québec 1983: 2692). To these three main government goals were added, from the FTQ’s perspective, the equally important objectives of jobs creation

and safeguarding, the improvement of working conditions in investee businesses, the respect of French as the language of work, and the financial education of workers. In the case of the Liberal opposition, in turn, and beyond an overarching anxiety regarding the absence of guarantees inherent to VC investments, three main points were raised:

d) the place of the FSTQ in Quebec’s investment ecosystem and the complementarity of its activities with those of existing public funds (Québec 1983: 2699, 2710);

e) the clarification of the 60/40 rule, suggesting the words “at least” should be added to the disposition forcing the FSTQ to invest, on average, 60% of its assets as VC in eligible SMBs each year (Québec 1983b: 6850);

f) the broadening of the definition of “eligible” SMBs in which the FSTQ would have to invest this 60% each year, so as to include the rare businesses maintaining their headquarter and a large part of their activities in Quebec but, for whatever reason, having the majority of their employees working outside the province (Québec 1983b: 6847-6848).

Although this last request was denied, the 60/40 rule was modified and the words “at least” were indeed added to the incorporating Act (Québec 1983c). To make sure it would play its role as Quebec’s largest “private” VC fund, the Act made clear the FSTQ had to invest, each year, at least 60% of its net assets from the preceding fiscal year in “eligible enterprises,” defined as businesses with assets of under \$25 million and a net equity under \$10 million, the majority of whose employees, moreover, were “resident in Quebec” (Québec 1983c; Suret 1990: 246).

This last rule would differentiate the FSTQ from other LSIFs later established in Canada, and in Ontario in particular³⁸. Most importantly, Ontario only required “at least

³⁸ A very large number of LSIFs were introduced in Ontario during the 1990s. By 2001, 29 were incorporated (Cumming & MacIntosh 2006: 580) and by 2005, a whopping 69 (Cumming 2007: 3). By 2015 however, almost all of Ontario’s LSIFs had been either closed or acquired by pan-Canadian investment funds, after the provincial tax credits were phased out in 2011. See also Ayayi (2004).

50% of salaries/wages [to be] paid to employees from a place of employment in Ontario,” or that province to be the “working place” of a majority of eligible businesses’ employees (Osborne & Sandler 1998: 573). Another crucial divergence consisted in the mandatory holding period imposed on LSIF shareholders in Quebec (Osborne & Sandler 1998: 572): in Ontario, as in the case of federal LSIFs, shareholders had to keep their shares for a minimum of eight years; in Quebec, they had to hold on to those shares until they reached retirement age (65 years old).

This rule was introduced not only to ensure the FSTQ would serve its purpose as a savings vehicle, but also to allow it to provide “patient” VC, by extending the duration of deals, planning later exits, and convincing co-investment partners to do the same. This is an aspect of the FSTQ’s role Quebec’s Minister of Finance, Jacques Parizeau, insisted on at the time (Québec 1983b: 6826). Thanks to such provisions, as desired by both the PQ and PLQ, and unlike other provinces’ LSIFs, the FSTQ quickly became one of the centerpieces of Quebec’s development capital and VC ecosystem. Between 1983 and 1994, the FSTQ leveraged three dollars from private or institutional sources for every dollar it invested in Quebec businesses, and \$4.50 for every dollar it invested in other funds such as the SRI, *Capitech* (ICT), *BioCapital* (biotechnologies), *AéroCapital* (aerospace), *EnviroCapital* (green engineering), or *TechnoCap* (Bourdeau et al. 1994; Canada 1995: 33).

There is an argument to be made, in short, that the FSTQ would not have been established were it not for the relatively close relationship between the PQ government and the FTQ in the late 1970s and early 1980s. But although, at least at the time of its advent,

the FSTQ was intended as a counter-cyclical tool, the need for a LSIF would probably never have emerged without a widespread belief in **a)** the existence of a *political* funding gap relating to the PQ's nationalist inclinations, and **b)** the necessity of public intervention and policy divergence to mitigate this gap. More generally, the mandates and guidelines imposed on the FSTQ in return for government sponsorship extended far beyond the mitigation of market failures, and instead were consistent with strategic, long-term objectives shared by successive governments since the early 1960s: the channeling of Québécois' savings into local businesses; jobs creation and safeguarding through support for both ailing and start-up companies; the provision of "patient" VC subordinating high returns to development objectives; and the consolidation of an indigenous investment ecosystem capable of buttressing the government's industrial strategies.

2.2.5. Remarks

From the 1960s to the 1990s, Quebec evolved from one of Canada's smallest VC markets to, by far, the largest. In no more than fifteen years, from 1980 to 1995, Quebec's share of the Canadian VC market jumped from less than 10% to over 40% (Lévesque et al. 1996: 1). Moreover, while the early 1990s' economic downturn resulted in the contraction of VC supply everywhere else in Canada, the growth of the VC market in Quebec did not flinch (Canada 1995: 50): in 1993, Quebec reaped 52% of Canadian VC investments by value, against only 29% for Ontario. Moreover, around 60% of all VC investments in Quebec were made by public or tax-advantaged funds, against more or less 30% in Ontario (Canada 1995: 52).

Public initiatives such as the SGF, CDPQ, SDI, and FSTQ were thus central to the development of Quebec’s VC ecosystem. Common explanations for public involvement in VC, moreover, all applied in some way and at some point: the “market gaps” and “leveraging” arguments to the SGF and SDI, and the “neocorporatist” and “counter-cyclical” arguments to the FSTQ and CDPQ for instance. These cannot, however, explain by themselves the very active and dominant role the public sector came to play. Quebec’s government, at the turn of the 1990s, was now present in all deal stages, deal sizes, and industry sectors. It can thus be argued, instead, that the fundamental motivations of policymakers for the 1960-1990 period were linked to economic nationalism:

i) perceived needs for asymmetry in economic/industrial policy;

ii) long-term, regional-level strategic objectives aiming to transform Quebec’s industrial structure and support the advent of new, competitive and high value-added clusters (including the VC cluster itself);

iii) attempts to maximize the channeling of Francophones’ savings toward local SMBs and entrepreneurs, and to increase Francophone presence in major businesses and key industrial sectors;

iv) political imperatives to intervene based on those needs and objectives, i.e. to build a coordinated, provincial investment ecosystem facilitating the implementation of Quebec’s industrial strategies;

v) both an ideological and a “path-dependent” preference for the perpetuation and refinement of the “Quebec model” of active public involvement, as seen notably in the relative continuity that characterized the Liberal period from 1985 to 1994.

The perceived needs for asymmetry that were at the heart of state involvement in VC during these three decades led, in turn, to both autonomy and divergence. For that reason, a distinct “Quebec model” was indeed formed and institutionalized by the early

1990s. In their 1994 “profile of Quebec’s VC industry,” Bourdeau et al. described it as such (1994: 24-25):

À la fois partenaires et concurrentes, ces institutions sont au cœur d’un modèle de développement économique du Québec, un modèle de capitalisme à mi-chemin entre le modèle néo-américain et le modèle allemand : un modèle reposant sur un choix de société où institutions financières, sociétés parapubliques, syndicats et entreprises jouent un rôle moteur et concerté pour favoriser le développement économique.

2.3. Public sector involvement in Scotland, 1960s-1990s

Throughout the 1960s, Scotland was in a similar situation, economically and relative to England, as Quebec in Canada. Scotland’s economy was becoming increasingly peripheral due to its relative backwardness, the decline of heavy manufacturing clusters organized around the shipbuilding industry, and the increasing concentration of financial capital in London. By 1961, whereas 85% of employed males in England were engaged in “non-agricultural occupations,” the same proportion in Scotland was only of 57% (Hechter 1999: 141). From this disparity and for historical and cultural reasons not unlike those prevalent in Quebec at the time followed expanding foreign ownership of large businesses and new industrial sectors, such as electronics or oil and gas (Moore & Rhodes 1974; Devine et al. 2005). Scotland’s precarious economic position was therefore central to the mounting nationalist pressures for policy asymmetry emerging from the early 1960s onward (Hechter 1999: 302).

Comparing this drive for economic policy asymmetry with Quebec’s can be hazardous, as Scotland did not have a government of its own before the late 1990s’ devolution. Still, many organizations specifically devoted to Scotland already existed at the

turn of the 1960s. First and foremost, the Scottish Office³⁹ (SO) was a department of the UK Government responsible for Scottish affairs which managed the implementation of British policy in Scotland, crafted “Scottish” policies in certain domains, and “lobbied” Scottish MPs, the central government and other departments for policy initiatives or additional resources (Keating 2010: 21). Another major organization present at the time was the Scottish Council for Development and Industry (SCDI), a non-for-profit networking association bringing together businesses, private sector groups, unions, local authorities, public institutions, universities, and civil society representatives to lobby and advise policymakers on Scotland’s economic development. Both the SO and the SCDI would be key proponents, during the 1960s and 1970s, of policy asymmetry.

One early manifestation of this perceived need for asymmetry came with the publication of the “Toothill Report” in 1961, commissioned by the SCDI with SO’s support. This report of the “Committee of Inquiry into the Scottish Economy” identified Scotland’s main problems as being its slow growth compared with England’s, and its lower levels of firm formation in “new industries,” concentrating in South East England (SCDI 1961: 183-185). Central to its recommendations was the establishment of “an economic unit to advise on the general measures needed to ensure the health and growth of the economy, on the implications for Scotland of national economic policies, on the broad issues of investment policy, [and] on the economic implications of the programmes of

³⁹ For a detailed account of the Scottish Office’s history since 1885, see Torrance (2006).

public investment” (SCDI 1961: 191). By 1962, a new “Scottish Development Department” had been created based on this recommendation, and put under SO responsibility.

The argument has been made the Toothill Report transformed Scotland’s economic development strategies: “in particular, it stated that policy should not aim to prop up inefficient or dying industries. It called for a widening and strengthening of the country’s industrial structure through the development of science-based industries, the newer capital goods industries and engineering-based consumers’ industries” (Peden 2005: 252). Under the impulse of the SCDI, SO, Scottish Development Department, and Labour administration in London, massive new public investments flowed into Scotland for such purposes from the mid-1960s onward: whereas public spending in Scotland was already 12% higher than the British average in 1960-1961, this gap reached 27% in 1972-1973 (Parry 1983: 100), following a 900% increase between 1964 and 1972 (Devine 2008: 148). By 1975, Scottish public expenditures devoted to “industry & employment” were 107% higher than the British average (Parry 1983: 104). This can be explained, in good part, by the establishment and investment activities of economic development agencies such as the HIDB and SDA.

2.3.1. The Highlands & Islands Development Board

The creation of the HIDB in 1965, following the adoption of the “Highlands & Islands Development (Scotland) Act” by the UK Parliament, was a clear illustration that policy asymmetry was perceived as a necessity by Scottish representatives and SO officials. Secretary of State for Scotland (SOSS) William Ross, head of the SO, remarked (Hansard

1965: n.p.): “it has become obvious to everyone who studies the problem that after all the commissions, reports and surveys, [...] what really has been needed is an authority with executive powers to deal comprehensively with the problems; not to deal one at a time, but comprehensively. For this reason we have decided to establish the Highland Development Board.” The advent of the HIDB also had a lot to do with the UK’s 1964 elections, which saw the British Labour Party return to power and, most interestingly in the case of Scotland, important gains in the Highlands for the strongly devolutionist Liberal Party.

In their 1964 election Manifesto, Liberals advocated “the decentralisation of power and wealth from London” and the advent of a Scottish Parliament, “so that Scottish domestic affairs receive the informed attention which Westminster cannot provide” (British Liberal Party 1964: n.p.). This vote in favor of a devolutionist party didn’t go unnoticed, notably thanks to the fact that close to 50% of Scottish voters also supported the Labour Party, promoting “regional economic planning” and the establishment of “regional planning boards” in Scotland, Wales and Northern Ireland (British Labour Party 1964). As the SOSS put it, “for 200 years the Highlander has been the man on Scotland’s conscience, and for this reason alone the progress of the [Highlands Development] Bill will be followed in our country with great attention and, perhaps, a degree of impatience” (Hansard 1965: n.p.).

As pointed out during debates on this Bill, local authorities – hitherto responsible for business support – in the Scottish Highlands had come out in favor of the HIDB (Hansard 1965). They knew such an agency would bring more resources to the Highlands,

and the figures themselves are quite telling: although public expenditure by the SO in the Scottish Highlands had already almost tripled between 1955 (£13 million) and 1965 (£33 million)⁴⁰, the advent of the HIDB had a noticeable impact in that by the end of the 1960s, the proportion of government spending in Scotland dedicated to the Highlands (10%) rose to double the region's demographic weight (Newlands 2005: 170). The Scottish Highlands thus started reaping an increasing proportion of the rapidly rising industrial expenditures in Scotland, which had grown by more than 300% – 100 per cent more than the British average – between 1966 and 1969 (Parry 1983: 101).

The 1965 Act establishing the HIDB, in turn, tells a lot about the main objectives it was intended to pursue. First, it is important to acknowledge how much influence the SOSS, and by extension the SO, would retain over the HIDB and its activities. The Chairman and deputy-Chairman of the HIDB would be appointed by the SOSS, as would all the other Board members (UK 1965: 2). Interestingly, two renowned Scottish devolutionists were first appointed: the Chairman, Robert Grieve, had been the SO's Chief Planning Officer for Scotland since 1960 and would later be an influential member of the *Campaign for a Scottish Assembly* (CSA) in the late 1980s; its deputy-Chairman, John M. Rollo, was an entrepreneur and founder of Oban-based *Rollo Industries*, who would also advocate in favor of a Scottish Parliament for most of his life. The fact that HIDB leaders were named by the SOSS, thus, not only allowed close coordination with the SO but, from the onset, the appointment of managers dedicated to policy asymmetry.

⁴⁰ Hansard (1965 : n.p.).

Besides, the SOSS and SO retained the power to “give the Board directions of a general character as to the exercise and performance of their functions, and the Board shall give effect to any such directions” (UK 1965: 2). Moreover, the HIDB had to submit to SOSS’ approval the main strategies and activities it intended to pursue (UK 1965: 3). In other words, the HIDB became the financial and executive arm of the SO for this part of Scotland. Asymmetry in development policy for the Highlands was thereby secured, and the main players involved in this domain – commercial banks and private funds, local authorities, unions, universities, businesses, etc. – had to coordinate, henceforth, as much with the HIDB as with central government departments (Hughes 1982: 1059).

The HIDB was set up with a very large economic development remit, including research and advisory tasks, urban regeneration, environmental preservation, transport, tourism, the acquisition of land or industrial buildings, and the launch of new businesses (Hughes 1980). All of this with “the general function of preparing, concerting, promoting, assisting and undertaking measures for the economic and social development of the Highlands and Islands” (UK 1965: 1). To execute such tasks, the HIDB was given the power to issue loans and grants, as well as to invest in private equity. As J.T. Hughes (1980: 2), ex-Head of the HIDB’s Policy and Research Division, put it,

the Board’s activities have been described as a “merchant bank with a social purpose.” As compared with other regions of the UK the Board is a means of injecting capital into businesses in an underdeveloped area on more favourable terms and over a much wider spread of industries [...] Board projects are also intended to create development in areas where the normal business risk is so great that, even with Board assistance, private enterprise would not be expected to operate.

At the time, no other regional agency in the UK administered financial assistance programmes. The HIDB was thus a pioneer and constituted a clear instance of policy

divergence. Although financial assistance was one of many HIDB functions moreover, it quickly monopolized most of its budget. In its first year of operations, the HIDB spent close to £840,000 in grants, loans and equity – notably in small businesses and start-ups (HIDB 1967: 14) – and leveraged close to £850,000 in corresponding private investments, a testament to the fact that the HIDB contributed, early on, to the advent of an investment ecosystem in the Highlands (HIDB 1967: 12). This was, in fact, a clearly expressed objective of the HIDB, as mentioned in its first annual report: “we are planning to seek a meeting with the general managers of the joint stock banks so that our combined efforts to promote development in the Highlands and Islands can reinforce one another” (HIDB 1967: 12).

Over the next five years, more than £9 million were spent by the HIDB, leveraging £11 million in private investments. An argument could be made the HIDB was thus set up with the intention of propping up private investment in the Highlands, confirming the “leveraging effect” argument. There is some truth to this, but the argument only applies to a limited extent. Although HIDB investments definitely had leveraging effects, it should be remembered that the HIDB was intended to invest where, “*even with Board assistance*, private enterprise would not be expected to operate.” Clause 6 of the 1965 Act thus purposely allowed the HIDB to take over existing businesses or to create new ones in the absence of private capital (UK 1965: 4). The point could also be raised that the HIDB was set up as a centrifugal tool, to counter the concentration of development capital and VC in Scotland’s “Central Belt.” This was partly true, given the peripheral position – geographic, economic, and cultural – of the Scottish Highlands. Upon further analysis however, it

appears the strategies pursued by the HIDB contradicted, on another level, the “spatial” argument.

Although the HIDB considered financial assistance requests from any industrial sector and any region of the Scottish Highlands, a specific strategy, the “Moray Firth Development” scheme, was adopted from the onset and consisted in generating industrial “growth points” along an arc following the Moray Firth, from the cities of Nairn and Elgin in the South-East to Tain in the North-West, by way of Inverness (HIDB 1967: 16). Therefore, the HIDB would contribute to the geographical concentration of investments around three specific cities within the Scottish Highlands (HIDB 1975: 109): between 1965 and 1975, a third of all grants, loans and equity investments were made in Inverness county, with another 40 per cent being shared between the Dingwall (Ross-shire county) and Inveraray regions (Argyll county). The most convincing explanations for the establishment of the HIDB, as confirmed by its activities up to the 1980s, are thus that of perceived needs for policy asymmetry and the building of an investment ecosystem specific to the Scottish Highlands, based on the idea that economic development in the region had to be managed locally (Danson et al. 1990).

By the mid-1970s, despite declining private investments due to the 1973 oil shock, the HIDB was allocating, yearly, £5 million in grants, loans, and equity, a fivefold increase since 1966 (HIDB 1975: 33). Moreover, despite the advent of large-scale oil extraction in the Scottish parts of the North Sea in 1974, few investments were made in this sector as most of the HIDB’s funding was still directed at indigenous SMBs and start-ups, with industrial diversification in mind (HIDB 1975: 33). From 1973 onward, the HIDB

concentrated on developing the emerging ICT and electronics clusters in the Highlands, funding small ventures to strengthen American and Japanese plants' supply chains (HIDB 1975: 38-45; Peden 2005: 260). The HIDB's Finance Division had also, by then, been reinforced with a "Management Services" section helping investee businesses find follow-on funding from other sources within Scotland, another indication of the fact that strengthening funding chains and underpinning a local investment ecosystem were central mandates.

In sum, the HIDB was both a vector of policy autonomy, as the financial arm of the SO for the Highlands, and an example of policy divergence, as no other regional agency in the UK had ever been granted direct investment responsibilities. Although it was crafted in part as a centrifugal tool aiming to underplay the Highlands' peripheral position, both the intent behind its establishment and the scope of its activities extended far beyond this. The most crucial role the HIDB was intended to play was to palliate for the private sector's incapacity to generate the advent of an investment ecosystem strong enough to underpin economic diversification in the region, to increase Scottish ownership in key industrial sectors, and to facilitate entrepreneurship without generating too much indebtedness. Those were all long-standing challenges which became central parts of the SO's development strategy for the region. The HIDB was born out of the perceived necessity of public intervention and policy asymmetry in order to face such challenges.

2.3.2. The Scottish Development Agency

Just as the HIDB confirmed that economic development and policy asymmetry were by then perceived as coextensive, the establishment of the SDA in 1975 took place against the background of mounting nationalism in Scotland. Indeed, “SDA is a case study of the influence of political circumstances on a significant institution. SDA in part was an outgrowth of the concern by the established political parties about the electoral support for the SNP and the demands for political separation of Scotland or for increased devolution in the UK” (Rich 1983: 272). In spite of the slight victory, in the UK’s October 1974 election, of a Labour Party which had by then promised parliamentary devolution for Scotland and Wales (British Labour Party 1974), mounting nationalist pressure and increasing demands for economic decentralisation emanated from Scotland with the SNP reaping an historic 30% of the regional vote. Combined with the rising unemployment and hyperinflation (27% in 1975) plaguing Scotland, the SNP’s performance clearly transpired in the debates surrounding the adoption of the SDA Bill, during the summer of 1975.

In the House of Commons, SOSS William Ross remarked: “the SDA marks the creation of a uniquely Scottish approach to industrial development in Scotland [...] A more direct approach is needed if we are to transform and modernise the structure of Scotland’s older industries and help home-based Scottish industry to develop” (Hansard 1975: n.p.). Apart from the Conservatives, depicting the advent of the SDA as “creeping nationalisation,” most of the deliberations between Labour, SNP, and Liberal MPs actually concerned how much power, budget and, especially, autonomy the SDA should have.

Particularly interesting were the SNP's concerns that the SDA would be subordinated to the new National Enterprise Board (NEB), a similar body with comparable functions established at the UK level. On this issue also, the importance of policy asymmetry as a guiding principle was reiterated: "the agency will in no sense be a creature of the NEB. It will be responsible to me as Secretary of State [...] It will have its own funds and take its own decisions. These will be decisions about Scotland taken in Scotland" (Hansard 1975, n.p.).

In fact, a division of labour developed between the NEB, operating on a national scale, and the SDA in Scotland. The "SDA proposed an aggressive policy of industrial development that would absorb a large proportion of the budget – initially 40% and later at least one third – in loans and equity for small and medium-size industrial firms, while the NEB was responsible for handling the public ownership of major companies such as British Leyland and Rolls-Royce" (Rich 1983: 278). In other words, the NEB would act as an industrial holding while the SDA would mainly operate as a public VC fund, supporting indigenous start-ups and SMBs. One early indication of the key roles the SDA would play in the sponsoring of Scottish SMBs was that the SDA Bill – and the Act that followed in November 1975 – provided the agency would absorb the pre-existing *Small Industries Council for the Rural Areas of Scotland* (SICRAS), which until then had managed a portfolio dedicated to SMBs of small Scottish towns (UK 1975: 15; Hood 2000: 317).

Like the HIDB, the SDA was established with a large economic remit: "furthering economic development; the provision, maintenance or safeguarding of employment; the

promotion of industrial efficiency and international competitiveness; and furthering the improvement of the environment” (UK 1975: 2). The prime function assigned to the SDA, however, was that of “providing or assisting in the provision of finance to persons carrying on or intending to carry on industrial undertakings,” to which was added the ability for the SDA to launch or acquire businesses, with or without private partners (UK 1975: 2). The SOSS and SO also retained a lot of influence over the SDA and its investment activities: the SOSS would get to nominate the Chairman, deputy-Chairman, and Chief Executive, and was entitled to give the SDA “directions of general or specific character as to the exercise of [its] functions” (UK 1975: 2-4). Around the time the SDA was created, besides, the executive responsibility for “selective industrial assistance,” i.e. for the allocation of grants, loans, and equity investments to Scottish businesses was transferred from the UK’s Department of Industry to the SOSS (Hansard 1975; UK 1975: 5), making the latter, in effect, Scotland’s “industrial Minister” (Fairley & Lloyd 1995: 58).

If the investment performance of the SDA during the late 1970s proved mediocre, the provision of financial assistance to Scottish SMBs nonetheless became its main activity. High returns were simply not the primary goal and there were, in fact, three main rationales behind the granting of investment functions to the SDA. The first was the expansion and consolidation of a development capital/VC ecosystem in Scotland, as “in spite of its sophistication in many other regards, the Scottish financial sector⁴¹ was historically slow in giving birth to institutions specialising in either development or venture capital” (Hood

⁴¹ See also Clay & Cowling (1996), Bailey & De Propriis (2001), Lee (2005), Deakins et al. (2010), Mason (2010), and North et al. (2010).

2000: 315). This objective was expressed by the SDA's first Chief Executive, for whom coordination with Scottish banks and "other financial institutions" was a priority: "short-term borrowings are in general well provided for, chiefly by the clearing banks, and it is equity, risk-taking capital in the broadest interpretation of the term, that is the main area of need, and on which the Agency should concentrate" (Robertson 1978: 24).

In his review of the SDA's first year, Robertson highlighted the other two main objectives of the agency. The first, as was the case in Quebec around the same time, was the long-term transformation of Scotland's industrial structure, i.e. the transition away from traditional manufacturing and toward technology-intensive industries: "Scotland has some vigorous and efficient firms in technologically advanced industry but relative to the UK as a whole, it has a disproportionate share of older industries, some of which are in static and some in declining markets. So we need to improve the balance, and increase the proportion of modern, often science-based, industries" (1978: 23). Industrial diversification through electronics and financial services had been underway since the early 1960s, but had taken place mostly thanks to foreign investment (Rich 1983). Therefore, the third main objective of the SDA was to "encourage the further development of indigenous industry and an increase in the proportion of Scottish-based companies" (Robertson 1978: 23).

From 1977 onward, the SDA was assigned responsibility for the Glasgow Eastern Area Renewal (GEAR) project, aimed at the regeneration of Glasgow through, notably, investment in infrastructure and local businesses (Wannop 1984). Geographically circumscribed "area projects" quickly became a central part of the SDA's activities, with

additional projects launched, between 1979 and 1982, in Clydebank, Motherwell, and Dundee (Gulliver 1984). The SDA also began concentrating on investment in “growth sectors,” and particularly in the electronics cluster concentrating in Scotland’s Central Belt from Glasgow in the East to Dundee in the North-West, later referred to as “Silicon Glen.” This mix of sector-based and area-based investment had no counterpart elsewhere in the UK at the time and was characterised as “the closest British equivalent to comprehensive industrial planning on the French or Japanese model” (Rich 1983: 283). By the time the Thatcher administration was installed in 1979, thus, Scotland was already engaged not only on a path of policy autonomy but, also, of policy divergence.

The SDA’s status as a public sector agency allowed it to use its investment activities to pursue regional-level, “national” development objectives: not only did the sponsoring of indigenous start-ups and SMBs contribute to increase Scottish ownership in high value-added industries, but it also helped strengthen the local supply chains of large businesses and the funding chains of smaller ones, thereby facilitating the commercialization of “Scottish” innovations (Rich 1983: 283-284). Sponsoring included financial support but also an active technical and managerial assistance still uncommon in the UK, through the involvement of SDA officials in investee companies. Such involvement contributed to the deepening of policy divergence between Scotland and England. On the one hand, the SDA was aiming, through selective industrial strategies, at the advent of a new “Scottish” business class, therefore focusing on SMBs’ viability and performance. On the other hand, with England lacking a regional development agency such as the SDA but already possessing well-established English businesses in key sectors, the focus was rather put, up

to the early 1980s, on medium-to-large businesses and on employment targets (Moore & Booth 1986).

The SDA, in short, was devised based on a model very similar to the HIDB's. Although investment activities were part of a larger economic mandate, they became its main focus and monopolized the largest part of its budget early on. The political context surrounding the SDA's advent was also similar, with election results attesting to a serious resurgence of nationalist sentiments in Scotland. This context helps explain why the SO introduced the SDA Bill very quickly after the general election, and why it insisted on the SDA operating independently of the NEB, insuring "decisions about Scotland would be taken in Scotland." As for the HIDB, therefore, the SDA cannot be reduced to common economic rationales for public involvement in VC. Strategic policy intents, in SDA's case, were straightforward and plainly expressed by both the SOSS and SDA executives. They consisted in **a)** accelerating and consolidating, alongside the HIDB, the development of an investment ecosystem in Scotland; **b)** supporting the SO's efforts to transform and modernize Scotland's industrial structure; and **c)** increasing Scottish ownership in new industries' supply and value chains.

2.3.3. The "Scottish model" and Thatcherism

Outside of Scotland, notwithstanding the limited VC activities of the NEB (Rothwell 1984), the 1970s in the UK were characterized as a "policy-off" decade in terms of support to start-ups and SMBs (Greene et al. 2004: 1208). This changed after 1979, with the Thatcher Conservatives' new focus on supply side initiatives and entrepreneurship

(Riddell 1989; Kavanagh 1990; Gamble 1994; Stewart 2009). This deepened policy divergence between Scotland and the RoUK, as most UK-wide initiatives took the form of tax incentives rather than development capital. Four main programmes aimed at entrepreneurship and business financing were introduced at the UK level in the early 1980s: the “enterprise zones” in 1980, the “Loan Guarantee Scheme” (LGS) in 1981, the “Enterprise Allowance Scheme” (EAS) in 1982, and the “Business Expansion Scheme” (BES) in 1983. In all four cases, the government’s intent clearly was to “maximise the numbers of people starting a business on the grounds that this would directly reduce unemployment” (Greene et al. 2004: 1209).

The enterprise zones “experiment” reflected the ideological shift operated under Thatcher and mainly consisted in the establishment of geographically circumscribed areas – mostly in disadvantaged regions – where businesses were allowed to set up and operate free of capital, property, and income taxes (Stewart 2009: 56). Three of those were launched in Scotland in the early 1980s (Clydebank in 1981, Invergordon and Tayside in 1983) and another one in 1989 (Inverclyde). Although the zones were relatively successful in boosting business birth rates, it should be noted that the Clydebank and Tayside (Dundee) zones were both situated in active SDA area projects, while the Invergordon zone was established in an area already covered by the HIDB’s “growth points” strategy. “The enterprise zone experiment in Scotland benefited, therefore, from a certain degree of local momentum and indeed from a massive injection of public sector investment” (Danson & Lloyd 1992: 213).

The three other UK-wide initiatives, the LGS, EAS, and BES all quickly revealed out of touch with Scotland's needs, reinforcing the perceived necessity of policy asymmetry. Through the LGS, the British government would back 80% of the value of bank loans (up to £75,000) made to start-ups and SMBs (Stewart 2009: 57). The LGS had one central objective: "to encourage banks' shift away from asset-based lending toward a more involved customer-client relationship based on mutually beneficial information exchanges" (Cowling 1997: 6). Yet, unlike in England, Scottish SMBs' access to bank loans wasn't much of a problem at the time (Robertson 1978: 24). In fact, throughout the 1980s Scottish banks proved better prepared than England's to lend to start-ups, and "Scottish bank customers were significantly less likely to be required to provide collateral to borrow against" (Clay & Cowling 1996: 118). Therefore, between 1981 and 1994 Scottish businesses received only around 5% of all LGS-backed loans issued in the UK, against 34% for South East England (Cowling 1997: 11).

The EAS, in turn, was set up to boost entrepreneurship levels among the unemployed, by granting £40 per week in additional unemployment benefits to individuals setting up a business. To be eligible, however, participants had to contribute at least £1000 on their own, in effect paying for the first twenty-five weeks of the scheme (Greene et al. 2004: 1209). The BES, for its part, was set up to increase equity investments by British citizens, entitled to tax credits – and after 1986, untaxed capital gains – when investing in unquoted businesses either directly or through specialized investment funds (Harrison & Mason 1989: 149). Although the BES was relatively successful in providing English start-ups additional VC investments, its problem in Scotland was the same as the EAS'. Namely,

Scotland had, for most of the 1980s, one of the worst rates of new firm formation in the UK mainly because it had “low levels of wealth as proxied by home ownership, a socioeconomic structure under-represented in education and in managerial and professional skills, and a plant structure which to some extent militated against workers gaining experience of small firms” (Ashcroft et al. 1991: 404).

In other words, Scots simply didn't have enough money and entrepreneurial knowledge or experience to reap the benefits of initiatives such as the EAS and BES. As a result, both programs simply reinforced, as did the LGS, the imbalances favoring English, and especially southeastern SMBs (Ashcroft 1988). This was particularly evident in the case of the BES, as Scotland's share of investments (by value) always remained much lower than its demographic or economic weight in the UK and never stopped declining. In 1983-84, Scotland reaped under 5% of BES investments, against 40% for South East England; by 1985-86 Scotland's share had dropped to only 1.6% while South East England's had skyrocketed to 72% (Mason & Harrison 1989: 40).

An important complementary explanation for the limited success of UK-wide initiatives in Scotland was that, by the early 1980s, the HIDB and SDA were already the centerpieces of the Scottish investment ecosystem, thereby overshadowing new initiatives in the eyes of entrepreneurs and private investors. By 1983, the SDA could boast a 3.5 leverage ratio, generating over £3 million in private investments for every £1 million of its own (Gulliver 1984: 330). Similarly, by the mid-1980s the HIDB was investing over £20 million per year in loans, grants and equity, leveraging close to £60 million in private

investments (HIDB 1986: 4). The Thatcher administration was thus forced to recognize the importance and the success of policy divergence in Scotland, as public involvement in economic development was already producing the leveraging effects the LGS and BES aimed at. But while institutional path dependency – in this case, the central roles played by the SDA, HIDB, and SO in Scotland – certainly had a lot to do with the persistence of policy asymmetry, ideational and political variables also played significant roles throughout the 1980s.

Organizations such as the Scottish Trades Union Congress (STUC), SCDI, HIDB, SDA, and SO all played a part, from 1979 onward, in pressuring the Thatcher administration so that the role of government in Scotland's investment ecosystem be safeguarded. By 1980, "despite the anti-interventionist and one nation rhetoric, Scottish Office ministers were well aware of the need to fight Scotland's corner at Whitehall [and] Scotland continued to be marketed as a separate entity" (Barber 1982: 180). By 1981, the SDA's new Chairman, Robin Duthie, was denouncing the Conservatives' ignorance of the Scottish economic situation and the SO was pushing for the SDA to remain the key VC fund in Scotland (Barber 1982: 170; Stewart 2009: 57). As a result, although SDA resources were reduced after 1979 – from £800 million quinquennial budgets under Labour to £500 million under the Tories –, the agency's role was actually further refocused toward business financing, and a specialised VC division, *Scottish Development Finance* (SDF), was added to the SDA structure in 1982.

The advent of SDF signaled a shift in the SDA's approach which brought it closer to the contemporary "Scottish model," based on hybrid co-investment. An SDF "advisory board" was set up to include entrepreneurs and private sector VC specialists, and the SDA proved ever more active, henceforth, in collaborating with VCs and financial institutions. As ex-SDA official Neil Hood later remarked, "in large measure due to strong and effective leadership throughout the 1980s, and against a background of a dominant *laissez faire* philosophy under Margaret Thatcher as PM, the SDA had managed to evolve into the (almost) acceptable face of economic development interventionism in Scotland" (2000: 322). Thanks to the work of the HIDB and SDA, but also in good part by dint of the SO's lobbying efforts, public expenditure on "industry & employment" in Scotland was allowed to increase at a much faster pace than in the RoUK under Thatcher: between 1979 and 1985 for instance, by a planned 65% against 16% for England (Parry 1983: 118).

2.3.4. Remarks

By the late 1980s, both policy autonomy and policy divergence in the sector of economic development were thus entrenched in Scotland's political culture and institutionalized, in the case of development capital and VC, through the SDA/SDF and HIDB. An indigenous investment ecosystem had by then been established in Scotland, structured around these two public agencies. One indication of that was the creation of *Scottish Financial Enterprise* (SFE) in 1986, a peak organisation representing the interests of Scotland's financial services cluster. Another was that, by the early 1990s, Scotland had become the UK's second VC market after South East England, in terms of both the total

amounts invested and the number of investee companies. Scotland had also become the UK's first VC market, by far, in terms of the proportion of its businesses receiving VC (BVCA 1999: 51-53). There can be no doubt that the work of both the SDA and HIDB played a central role in Scotland's increasingly dominant position, but the common economic rationales for public involvement in this sector were not policymakers' central motives.

As was the case in Quebec, classic economic justifications for public intervention in VC applied at some point and to some extent: particularly, the "spatial" argument to the HIDB and the "leveraging effect" and "positive externalities" rationales to the SDA/SDF. Taken either individually or as a whole, however, these cannot really help understand the core motivations of policymakers at the time of these agencies' advent or the fact that, by the turn of the 1990s and just like in Quebec, the HIDB and SDA were present in all deal stages, deal sizes, and industry sectors. It can be argued instead, based on the above account of public sector involvement, that minority nationalism played a very central role in generating:

- i) perceived needs for policy asymmetry and, especially, executive responsibility in the realm of development capital;*
- ii) long-term, regional-level strategic objectives aiming to transform/diversify Scotland's industrial structure and purposely support the advent of new, competitive high value-added clusters (including the VC cluster itself);*
- iii) attempts to increase Scottish presence and ownership in key industrial sectors and major economic centers, through financial and managerial sponsorship of start-ups and SMBs forming part of foreign companies' supply chains (particularly in the electronics sector);*

iv) political pressure, coming from economic organizations such as the SCDI and SDA/HIDB but also from SO representatives and Scottish MPs, to intervene based on those needs and objectives, i.e. to build and sustain a specifically “Scottish” investment ecosystem, more responsive to regional needs and interests;

v) ideological and institutional dynamics leading to the preservation of the “Scottish model” of active public involvement in development capital and VC, as seen in the activities of the HIDB, SDA, and SDF throughout much of the 1980s, under the free-market oriented Thatcher administration.

CHAPTER THREE

QUEBEC, 1990-2003

The fact that Quebec’s heavy government involvement in business financing, over the 1960-1990 period, both stemmed from and furthered nationalist objectives has been widely recognized including by Haddow (2015: 38-39). As economic liberalization and North-American free trade took root in the late 1980s and early-1990s however, and as much of the new Francophone business class – the “*Québec Inc.*” – embraced these transformations, an argument has been made that the sway of minority nationalism on Quebec’s economic policymaking receded significantly, while market-oriented rationales gained influence. Haddow (2015: 165), in particular, argued the following:

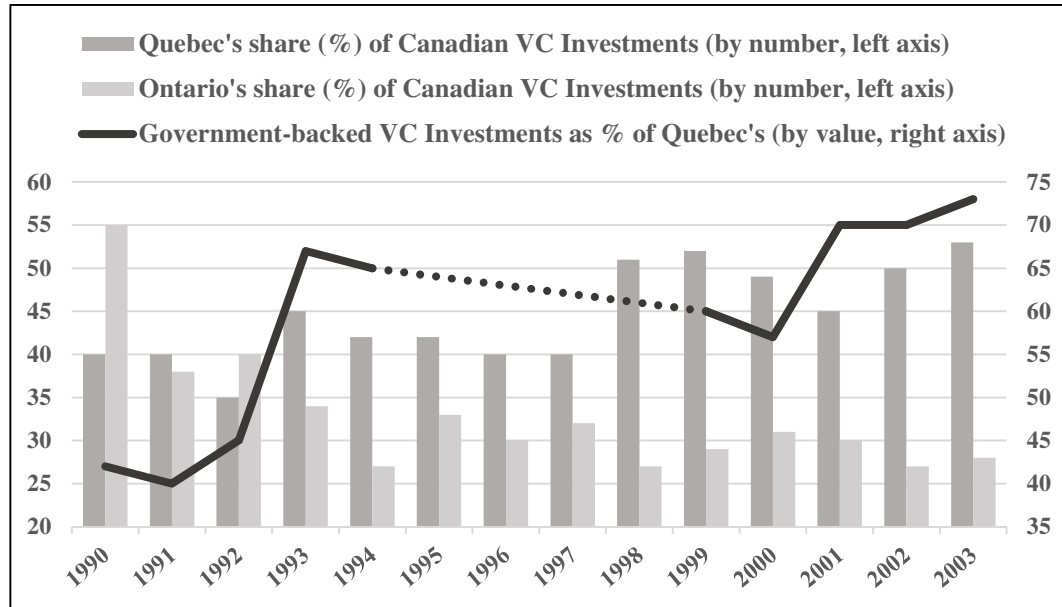
Nationalist ideas motivated economic intervention in Quebec during the 1960s and 1970s. A desire to promote francophone entrepreneurship, even in the face of uncertain short-term economic logic, justified an activist state there, just as a wish to overcome late industrialization earlier encouraged state-led growth elsewhere. But by the 1990s intervention was institutionally embedded, and its initial goal of fostering a French business class was largely fulfilled. Nationalism was now very much contested as a motivation for intervention. The PQ still sometimes justified policies in nationalist terms, but not the Liberals. By the end of our period [2010] even the former party usually

relied on economic arguments: state intervention was needed to ensure long-term economic growth. The original nationalist impetus now was disputed and secondary.

As explained in Chapter 1, such a line of argument relies on a restrictive definition of economic nationalism, one that mostly focuses on ethno-linguistic considerations. Therefore, it obscures the fact that, in particular policy sectors, the “economic arguments” used to justify public involvement from the 1990s onward were themselves underpinned by nationalist motivations which would help explain the persistence and, in some cases, the deepening of asymmetry in Quebec. As this third chapter shows, in the case of VC, numerous new government-backed initiatives were implemented from the late-1980s onward which could hardly be explained by market rationales present in very similar forms elsewhere in Canada.

In fact, Quebec’s VC industry and the role of the provincial state within it both kept progressing, in relative size, during the 1990s and early 2000s (Graph 1). While in 1990 the province reaped around 40% of Canadian yearly investments, still well below Ontario at 55%, this proportion reached over 50%, well over Ontario at 28%, by the time the PLQ came back to power in 2003. Most interestingly, the growth of Quebec’s VC industry clearly had a lot to do with a steep progression of government involvement: not only did state activism in the VC sector not culminate in the late 1980s, but it actually grew at a faster pace than Quebec’s VC industry itself during the 1990s. From around 40% in 1990, the proportion of publicly backed and/or tax-advantaged VC investments in Quebec, by value, skyrocketed to over 70% in the early 2000s while the same proportion in Ontario never surpassed around 30%.

Graph 1: Evolution of Quebec's VC industry 1990-2003⁴²



If state intervention doesn't necessarily amount to economic nationalism, and while economic necessities could also explain part of this growth in public involvement, a good indication that nationalist logics present before 1990 persisted long after can be found in Graph 1. While the recession led to a rapid increase in government involvement between 1991 and 1993, public intervention in VC never receded back to its pre-1991 level once counter-cyclical measures came to an end, at the occasion of the 1993-1994 Budget. That is because, in addition to temporary measures based on economic necessity the government created, throughout the 1990s, new public investment tools dedicated to strategic, regional-level "national" objectives which furthered policy asymmetry with the RoC.

⁴² Approximate figures. Sources: Macdonalds & Associates Limited (1990-2004). *Information on investor type for the years 1995 to 1998 unavailable.

Among such initiatives were the SRI, *Fonds de développement technologique* (FDT), *Fonds québécois de développement industriel* (FQDI), *Sociétés Innovatech*, *Sociétés locales d'investissement dans le développement de l'emploi* (SOLIDE), *Fonds régionaux de solidarité* (FRS), FACS, *Centres locaux de développement* (CLD) and their *Fonds locaux d'investissement* (FLI), IQ, *La Financière agricole* (FA), CRCD, and *La Financière du Québec* (FDQ). In the following sections, we provide a better picture of the rationales behind such intervention in Quebec, highlighting the fact that minority nationalism continued to impact those rationales through ideological, political, and institutional mechanisms.

3.1. The Bourassa II and Johnson administrations (1989-1994)

The first half of the 1990s in Quebec was the occasion of **a)** the most severe recession since the early 1980s; **b)** the coming into effect of North American free-trade, with CUFTA in 1988 and NAFTA in 1994; and **c)** the constitutional crisis following the Meech Lake (1990) and Charlottetown (1992) accords' failures, leading to the 1995 referendum on secession. This combination of events led to a mix of counter-cyclical measures, renewed emphasis on business support, and increased asymmetry. Evidence of all three tendencies can be found in successive Quebec budgets from 1989 to 1994, but also in the investment strategies of government-backed funds such as the CDPQ and FSTQ. Before delving into the specifics of this period however, a look back at measures taken in the last two years of the 1980s – i.e. before the recession – is necessary.

Two major developments took place in 1988-1989 which directly impacted subsequent policies: the establishment of the first three SRI, a collaboration between the CDPQ, FSTQ, SID, and *Banque Nationale*; and the setting up of the FDT by the MICT, in the wake of the ratification of CUFTA. Both the SRI and FDT widened policy divergence and autonomy, and in both cases perceived needs for public intervention and asymmetry were linked to strategic, regional objectives necessitating government or government-backed compensation for trade liberalization and “inadequate” federal policies. Above all, a look back at the late-1980s allows for a better understanding of the processes and mechanisms through which nationalism, government strategies and publicly-backed funds’ investment activities became as closely intertwined.

3.1.1. The Sociétés régionales d’investissement

The establishment of the first three SRI in 1988 and 1989 – *Capidem Québec*, *Capital de l’Estrie*, and *Investissements Mauricie-Bois-Francs-Drummond* – showed how well coordinated the VC ecosystem had become in Quebec by the late 1980s. The SRI were launched at the initiative of the CDPQ to increase its presence in local, early-stage SMBs and to bring Quebec’s financial institutions together, thereby helping manufacturing businesses face the challenges of continental free trade and a rising Canadian dollar (CDPQ 1989: 6). In the CDPQ’s annual report for 1988, CEO Jean Campeau explained the rationale behind the SRI (CDPQ 1989: 3):

*Dans un contexte de globalisation des marchés, où l’appui d’institutions financières de calibre à la promotion et au développement d’entreprises nationales sur les marchés étrangers devient un préalable, la Caisse joue un rôle de plus en plus fondamental pour l’enrichissement de notre collectivité [...] Plus que jamais, la condition impérative du succès sera **d’agir ensemble et d’entreprendre ensemble**.*

The CDPQ was calling for the coordination of Quebec’s VC institutions to sustain and boost entrepreneurship in some of the province’s major urban centers: Quebec City (*Capidem*), Sherbrooke (*Capital de l’Estrie*), Trois-Rivières and Drummondville (*Investissements Mauricie-Bois-Francs-Drummond*). The centrifugal argument for public intervention therefore applies only partially to this initiative, devoted to the consolidation of existing “sectors of excellence” in three chief VC hubs outside of Montreal. The “first equity gap” rationale, by contrast, was at the center of the SRI initiative as the CDPQ recognized a lack of deals under \$500,000 for start-ups and SMBs (CDPQ 1989: 16). This was only part of the motivation behind the SRI however. Were it not for its intention to extend and refine early-stage businesses’ funding chains, the CDPQ could have acted on its own given the depth of its resources (CDPQ 1989: 16). Instead, the SRI were capitalized – with around \$10 million each – in equal parts by the CDPQ (20%), FSTQ (20%), SID (20%), *Banque Nationale* (20%), and regional authorities (20%).

Not only did SGF, SDI, regional authorities and ministerial representatives sitting on the CDPQ Board play a role in the advent of this initiative, but the provincial government itself subsidized the SRI by covering part of the starting and administrative costs (Bourque 2000: 147). The SRI were perceived by Quebec’s government as an integral part of its approach to regional development, heavily oriented toward entrepreneurship and business financing (Québec 1989: 13). The SRI were thus a truly integrated initiative, bringing together the government and major players of Quebec’s investment ecosystem to pursue strategic objectives: **a)** the promotion of existing entrepreneurial centers outside of Montreal; **b)** the sponsorship of small businesses – especially small manufacturers and

exporters – in the new context of CUFTA; **e)** the widening of those businesses' funding chains through enhanced coordination between major financial institutions.

By the end of 1989, the SRI had invested close to \$5 million in regional small businesses (CDPQ 1989: 16). Over the next five years, the CDPQ and its partners capitalized seven other SRI to cover entrepreneurial hubs around strategic areas in Quebec's regions (CRISES 2000: 41). In total, close to \$100 million were devoted to the capitalization of the SRI between 1988 and 1994, a large amount when considering the small size of target investments, between \$50,000 and \$500,000. Throughout these years, the central objective remained the same: to provide Quebec's small businesses with the development capital necessary to face the new competitive challenges induced by free-trade. As the CDPQ's Chairman and Chief Executive argued in 1993 (CDPQ 1993: 4),

s'il ne fait aucun doute que la reprise de l'économie mondiale [...] aura un effet d'entraînement sur l'économie canadienne, on ne peut fonder le renforcement de notre économie sur ce seul espoir. La consolidation à long terme de l'économie du Québec dans le contexte de la mondialisation des marchés dépendra de plus en plus des initiatives stratégiques prises par les Québécois eux-mêmes.

3.1.2. The Fonds de développement technologique

This logic also animated the government's intervention in high-technology sectors and R&D. The PLQ was re-elected in 1989 based on a platform advocating significant investment in R&D, to palliate for a lack of federal investment in Quebec but also to catch-up to Ontario in terms of technological competitiveness (PLQ 1989: 22). Direct state intervention, in the context of North-American free trade, was perceived as a strategic necessity. By the late 1980s, the SDI was imparted with strategic investment mandates to sponsor high-technology companies and promote technology-intensive sectors. The SDI's investment activities were increasingly taking the form of equity loans issued on mandates

from the MICT: by 1989, and going forward, the yearly value of ministerial mandates issued to the SDI exceeded, by far, its autonomous investment activities (Bourque 2000: 92). In its “Strategic Development Plan” for 1990-1993, the SDI described its mandate as such (SDI 1990: n.p.):

prioritairement, la SDI entend devenir et être reconnue comme étant : la source principale de capital de risque pour les PME dans les secteurs d’activités à fortes retombées économiques [et] le principal bras financier du gouvernement du Québec pour négocier et accorder les aides financières requises à la réalisation de grands projets moteurs.

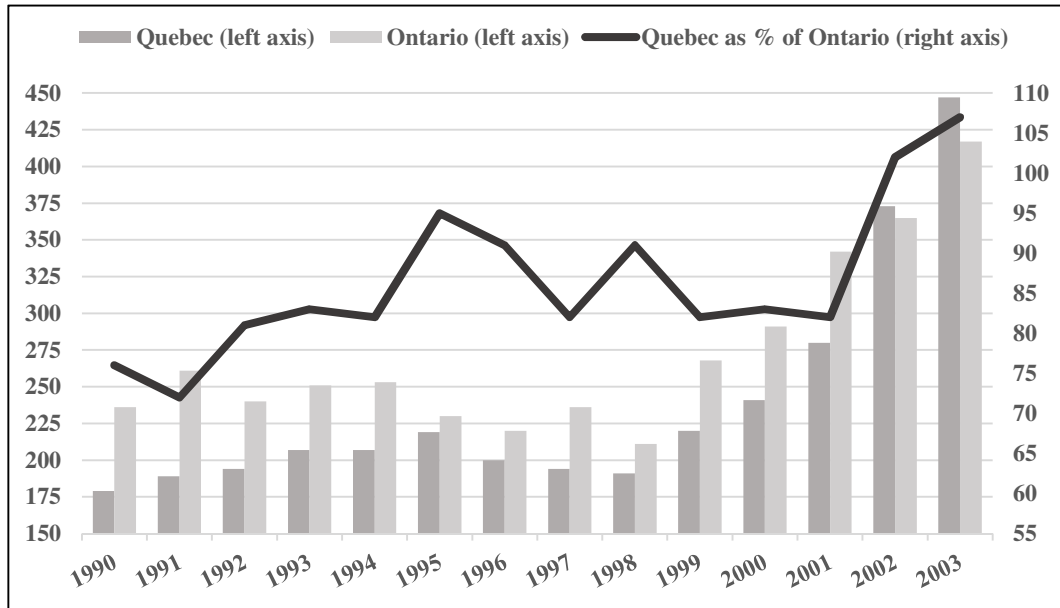
The FDT was then crafted in late 1988 to complement the SDI by focusing on medium-to-large-scale innovations, funding marketable R&D conducted in concert by industry and universities. The creation of the FDT was specifically intended to complement tax expenditures promoting R&D, as well as SDI and AQVIR⁴³ equity loan programs. Quebec’s government referred to this complementarity as an “integrated R&D strategy,” with FDT grants supplementing fiscal deductions, loans and equity investments imparted to what the government deemed to be “mobilizing R&D projects.” The FDT became part of a funding chain coordinating many players in Quebec’s investment ecosystem (Québec 1989), and there is a point to be made that Quebec’s efforts in general and the activities of the FDT in particular were intended to generate “positive externalities” that might not have been were it not for the government offsetting the high costs of R&D.

Yet, there was another side to the FDT story: while Quebec’s “integrated R&D strategy” was designed in response to CUFTA, the FDT was also crafted to meet perceived needs for policy autonomy. In its 1989 electoral platform, the PLQ (1989: 22) argued the

⁴³ Agence québécoise de valorisation industrielle de la recherche.

addition of the FDT to existing measures was necessary because the federal government was spending, by the late 1980s, almost five times more in Ontario’s R&D projects than in Quebec’s. In addition, the FDT was elaborated as a direct response to the setting up of the *Ontario Technology Fund* in 1987, capitalized with \$1B for ten years (Bourque 2000: 101; Ontario 1987). The establishment of a billion dollar public fund made a great impression on Quebec’s government: its response was the FDT, endowed with a five-year \$300 million budget (1989-1994). Although the FDT was, in absolute terms, smaller than Ontario’s tech fund, it represented a much larger injection of new funds, relatively speaking, into Quebec’s R&D.

Graph 2: Provincial government’s R&D spending, Quebec vs. Ontario 1990-2003⁴⁴
 (\$millions)



⁴⁴ Source: CANSIM 3580001

As a result, from the early 1990s onward and as Graph 2 shows, Quebec caught up to Ontario, in absolute terms, with regards to government spending in R&D. The numerous measures put in place in the 1989 budget led to noticeable yearly increases up to 1995, while Ontario stagnated. Therefore, while Quebec's government was spending between 70% and 75% of what Ontario did in R&D by the turn of the 1990s, the proportion reached 80% by 1992 and never regressed under that threshold since. By the early 2000s, Quebec's government was injecting more money in R&D, in absolute terms, than Ontario's despite a provincial GDP almost 50% smaller.

3.1.3. The counter-cyclical budgets

The 1990s in Quebec opened with an economic slump that turned into a recession by the end of 1990, negative GDP growth in 1991 (-2.5%), and slow growth for 1992 (0,3%)⁴⁵. Quebec's government devised three counter-cyclical budgets during these years, but here again, counter-cyclical measures can be distinguished from structural initiatives intended to play strategic roles beyond short-term considerations. When it comes to development capital and VC, the early-1990s budgets contained economically-driven policies crafted in response to the downturn, but also politically-driven policies adopted based on perceived needs for asymmetry and state intervention. This contrast helps understand how the effects of economic nationalism persisted under the PLQ government, up to 1994. It illustrated the institutional embeddedness of economic nationalism, with the

⁴⁵ CANSIM 3840038.

SDI and FDT having been extensively used in the early 1990s as vehicles reconciling short-term economic needs with long-term, regional-level “national” objectives.

By April 1990, the economic downturn had begun and revenues from corporate taxes, with businesses experiencing a sharp decline in profits, had started to retreat⁴⁶. Federal transfers to Quebec were also receding, dropping from a 4.3% increase in 1989-1990 to 0.3% in 1990-1991 (Québec 1990b Annexe B: 5). Furthermore, interest rates were maintained way too high for Quebec’s Minister of Finance’s liking: *“je continue de maintenir que les taux d’intérêt sont inutilement élevés, qu’ils menacent la croissance économique et qu’ils contribuent à maintenir le taux de change du dollar canadien à un niveau qui mine la capacité concurrentielle de nos entreprises”* (Québec 1990b: 22). The need for counter-cyclical strategies, in this context, heralded a range of measures designed to help businesses, and especially SMBs, uphold their cashflow and capacity to invest.

Among those were two new SDI programs, adding \$45 million to its investment budget. One was temporary and specifically introduced as a counter-cyclical tool, while the other was clearly intended to promote long-term, strategic changes in Quebec’s industrial structure. The first, with a two-year budget of \$30 million, would issue equity loans to manufacturing businesses experiencing depleting cashflows. Supported businesses would benefit from a one-year delay for the repayment of capital and interests, and the repayment would be modulated based on the businesses’ financial results. The other SDI initiative would in turn be dedicated to the consolidation of small businesses with under \$25 million

⁴⁶ Web: http://www.pum.umontreal.ca/apqc/89_90/blais/blais.htm (03/29/16).

in assets, an effort to create continentally competitive medium-to-large companies (Québec 1990b Annexe A: 9):

Dans de nombreux secteurs, les entreprises québécoises se caractérisent par leur petite taille et la multiplicité des unités de production. Comme le marché se définit de plus en plus sur une base continentale, il est devenu impératif de favoriser le regroupement d'entreprises de production afin de permettre la mise en place de firmes plus compétitives.

In this case, the main rationale wasn't counter-cyclical but strategic and aimed at the promotion of structural transformations helping Quebec SMBs compete with larger Ontarian and American companies. This new SDI program was allotted \$15 million, and investments would also take the form of equity loans covering the costs of mergers and acquisitions. While both additions to the SDI fulfilled specific economic purposes, the new business consolidation program showed state intervention not to be limited to short-term, reactive logics but also to a long-term and strategic need to adjust to CUFTA and compete with Ontario.

Substantial new public resources were, in this perspective, also directly engaged in Quebec's businesses through the FDT: \$50 million were added to its budget and were assigned to a new investment division covering green technology ventures (Québec 1990b Annexe A: 34-36). Merely a year after its inception, the FDT was being used by Quebec's government for discretionary, strategic purposes: in this case, in order to spur the emergence of technologies which could give Quebec's industries a competitive edge in a context of rising environmental concerns⁴⁷ (Québec 1990b: 15). Two initiatives were then introduced in 1991 whose justifications extended way beyond immediate economic

⁴⁷ This initiative was notably taken in the wake of the ratification of the "Montreal Protocol on Substances that Deplete the Ozone Layer", on January 1st 1989.

imperatives: the establishment of the FQDI, and the addition of yet another division to the FDT, the “R&D-PME” division.

In the case of the FQDI, the need for policy autonomy was explicitly stated and stemmed from a disengagement of the federal government from large-scale industrial development and the attraction of foreign investments (Québec 1991 Annexe A: 38). The FQDI was intended to provide financial support – mostly in the form of loans and equity loans – to “major industrial projects” involving expenses of \$10 million or more and susceptible to attract foreign investments in high-tech sectors. A first two-year budget of \$200 million was allocated to the FQDI, out of which it could fund up to 20% of admissible projects’ costs. This strategic drive for policy autonomy and state intervention also transpired from the new FDT initiative. The “R&D-PME” division was granted an initial budget of \$20 million, and was to specialize in subsidizing very high-tech, early-stage ventures and SMBs. It would also be managed by the MICT, and was thus specifically crafted to promote the advent of Quebec-based suppliers for projects covered by the FQDI.

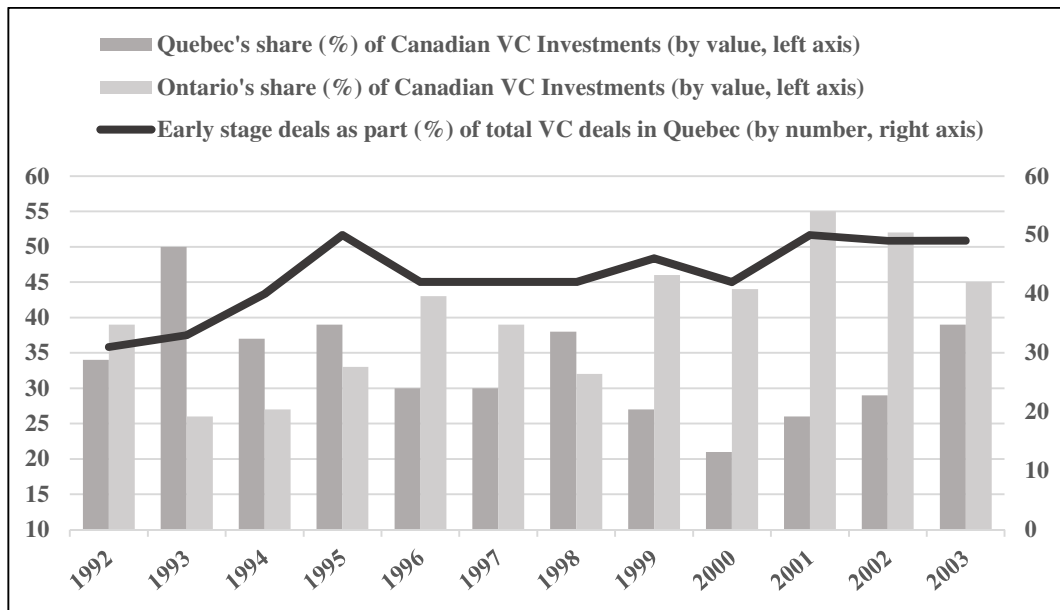
As stated in the 1991-1992 budget, projects admissible to subsidies from this new FDT branch had to be “conducive to a substantial improvement in the competitiveness of same sector businesses or other economic sectors in Quebec” (Québec 1991 Annexe A: 40). Although subsidies were limited to \$5 million, finally, nothing indicates R&D-PME was intended to fill a particular funding gap. Instead, state intervention was justified in structural, strategic terms (Québec 1991 Annexe A: 40):

La structure industrielle du Québec repose pour l’essentiel sur les PME et comporte encore trop peu d’entreprises dans les secteurs de haute technologie [...] Pour élargir la base des entreprises québécoises appartenant au secteur à haute intensité technologique, il est donc important

d'accroître le soutien gouvernemental aux activités de recherche des PME qui œuvrent dans le domaine des technologies de pointe.

These initiatives favoring early-stage high-tech ventures had concrete, durable effects on Quebec's investment ecosystem. As Graph 3 illustrates, the proportion of early-stage investments (smaller, but high-risk) as a percentage of total VC deals in Quebec increased substantially, from around 30% in 1992 to 50% in 2003. As a result, while Quebec was reaping a growing number of investments every year (see Graph 1), the average size of those deals was decreasing. By 2000, the average size of VC transactions made in Quebec was below \$2.2 million, while the same average for Ontario's investments exceeded \$7.5 million (Macdonald & Associates Limited, 2001).

Graph 3: Evolution of Quebec's VC industry II 1992-2003⁴⁸



⁴⁸ Approximate figures. Sources: Macdonalds & Associates Limited (1994-2004).

The years 1992 and 1993 were also important in terms of state involvement in early-stage VC, as two new public VC funds were created: the *Société Innovatech du Grand Montréal* (SIGM) in 1992, and the *Société Innovatech Québec & Chaudière-Appalaches* (SIQCA) in 1993. The SIGM (Bill 28) was to be the centerpiece of a plan to make of Montreal one of North America's key high-tech hubs and a locomotive for the technological modernization of Quebec's industries. Granted a five-year budget of \$300 million, the SIGM would support, through grants or equity, marketable R&D in Montreal but also complement the SDI and FDT by acting as yet another financial arm of the MICT. The President of the SIGM Board and its nine members were nominated by the government, and two of those came from the MICT. It was also made clear that SIGM's activities would take place "within the framework of governmental orientations," and that any investment greater than \$5 million required ministerial approval (Québec 1992b).

To boost its leveraging effect, the SIGM was allowed to invest with public or private sector partners. Aside from two private pension funds and three VCs however, all partners for 1993 had direct ties to the public sector: the SDI, MICT, CDPQ, FSTQ, SID, one SRI, and AéroCapital (Québec 1993b: 3855). A second Innovatech, the SIQCA, was also created almost by default in December 1993 (Bill 147), along the exact same lines but with a smaller budget of \$60 million. This was a good example of path dependency in the sense that once Montreal was given such a fund, it became politically hazardous not to grant Quebec City one (Québec 1993b: 3842). The *Groupe d'action pour l'avancement technologique et industriel de la région de Québec* and Quebec City's main chamber of commerce, for instance, lobbied for one throughout 1993 (Laplante 1993; Déry 1994) and

by 1994, similar organisations from *Estrie* (Sherbrooke) and *Montérégie* (Longueuil) added their voice, asking for their own *Innovatech*.

The establishment of the SIGM and SIQCA added to the evidence that the early-1990s by no means signaled a waning of economic nationalism. The combination of a number of factors – the advent of CUFTA, the signature of NAFTA, the failure of the Meech and Charlottetown accords, and the 1991-1992 recession – seems to have sharpened policymakers' appetite for government involvement, policy asymmetry, and the pursuit of strategic, regional-level “national” objectives. In the specific cases of the SIGM and SIQCA, the consolidation of a state-backed investment ecosystem focused on high-tech sectors and R&D was a clear underlying motive. All of these initiatives, besides, were part of a larger trend in Quebec, of which the government's “clusters strategy” and FSTQ activities would become centerpieces from 1992 onward.

3.1.4. Clusters & LSIFs: Quebec vs. Ontario

In December 1991, Quebec's MICT launched an industrial clustering strategy. Combined with other early-1990s initiatives, this new industrial policy, as Bourque remarked (2000: 131-132), represented a nationalist “renewal” of the Quebec model of economic development. Building on two decades of efforts in that direction, Quebec's clusters strategy aimed to develop competitive advantages in key industrial sectors, through the establishment and funding of “neo-corporatist” consolidation, coordination, and partnership mechanisms between same-sector businesses, unions, regional authorities, and the provincial government (Bourque 1995). There can be no doubt that this strategy had a

nationalist impetus. Not only were the policy ideas behind it cast in nationalist terms (Tremblay 1993: 4), but the strategy itself was based in part on import-substitution objectives, aimed at the advent, support, and strengthening of geographically integrated supply chains (Tremblay 1993b: 4-6):

l'une des retombées de la mise sur pied de tables de décideurs dans le cadre de la stratégie des grappes industrielles est la découverte par nos donneurs d'ordres de nombreux fournisseurs québécois capables de produire des biens et services de qualité à prix compétitifs [...] Au Québec, nous avons les compétences et la capacité pour innover et développer des produits originaux de haute qualité, qui autrement devraient être importés.

Twenty-one clusters were identified and targeted, for which the state would act as a “catalyst” to either strengthen existing synergies, or help create some (Tremblay 1991: 5). Apart from its nationalist content however, Quebec’s clusters strategy was interesting for two other reasons: first, because Ontario tried and mostly failed to replicate it at the exact same time, and second, because the provision of VC was identified from the onset as one of its crucial components.

In 1992, the Ontario government introduced its “Industrial Policy Framework,” which included sectoral clustering and networking as key objectives. The centerpiece of this policy was the “Sector Partnership Fund” (SPF), set up with a three-year \$150 million budget to promote and finance interfirm cooperation in specific sectors (Hall 1998: 208-217). Recognizing that the provision of adequate funding would be necessary, the government also tried to establish the “Ontario Development Corporation” in 1993, to be modeled after the CDPQ and funnel over \$2 billion, over five years, from public sector pension funds into Ontario businesses. Facing refusals from most pension funds however, including the biggest in OMERS and Teachers (Haddow 2015: 186), Ontario was forced to

rely on private sector partners and ended up creating the “Ontario Lead Investment Fund” in 1994, a very small \$70 million, 10-year fund of funds to which the government would contribute 40%.

In the end, the whole clustering aspect of the Industrial Policy Framework mostly failed. According to Wolfe and Gertler, “the SPF underspent its allocation in every year it existed and at the time it was terminated, in July 1995, less than half the initial allocation had been committed” (1999: 21). As Haddow noted, when the Conservatives dissolved both the Ontario Lead Investment Fund and SPF in 1995, “major Ontario business associations approved; lower taxes and freer markets were a higher priority for them” (2015: 187). In Haddow’s opinion, the failure of Ontario’s NDP to implement interventionist economic policies similar to Quebec’s can be explained by the province’s “adversarial industrial relations” and the adequate provision of capital by private funds (Haddow 2015: 187). The contrast with Quebec, however, also suggests that the absence of nationalism as an ideology producing a capacity for tripartite partnership and cooperation was perhaps a more fundamental issue, at the upstream of Ontario’s “adversarial” industrial culture.

Another illustration of that contrast was provided by a key measure the NDP government launched in 1992: the establishment of tax-advantaged LSIFs. Again, policy emulation would prove highly problematic (Osborne & Sandler 1998: 510-511). The most significant difference between Quebec and Ontario LSIF regimes was that the former was then restricted to a single union federation, the FTQ, while Ontario opened its regime to any and every union, employee association, or professional association (Ayayi 2002: 9). This allowed for “an unlimited number” of LSIFs and a very scattered and loosely

coordinated system (Osborne & Sandler 1998: 522), unsuited for the carrying out of economic strategies. It also revealed the lack of a partnership culture between the provincial government, unions, and industry. The NDP government was actually forced to allow for an unlimited number of LSIFs precisely because there was, in Ontario, no FTQ-like union willing to cooperate with the government in supporting businesses (Osborne & Sandler 1998: 523-524).

As a result, a large number of LSIFs were created primarily to access tax credits, and small unions or associations were often paid to “rent” their name to such funds. Ontario’s “rent-a-union” problem meant that LSIFs never became strategic partners with which tripartite coordination could be achieved. In Quebec by contrast, the FSTQ had long been a proponent of such an approach, as evidenced by its leadership in creating, in 1990, a “concertation table” for Quebec’s financial cluster, regrouping the FSTQ, SDI, CDPQ, and SID. For the FSTQ, *“l’objectif n’est pas seulement d’intervenir en cas de coups durs ou de garder la propriété de nos entreprises ici grâce à des noyaux d’actionnaires qui formeront des blocs de contrôle; il est aussi de planifier des opérations conjointes ayant des effets structurants sur l’économie québécoise”* (Fournier 1991: 240).

The contribution of the FSTQ to Quebec’s clustering strategy, for instance, took three main forms: **a)** a 20% participation in the SRI; **b)** the resources granted – in partnership with the CDPQ, SGF, and *Innovatechs* – to hybrid VC funds in key clusters such as forestry (*Fonds Agro-Forestier*), ICT (*Capitech & TechnoCap*), biotechnologies (*BioCapital & GeneChem*), aerospace (*AéroCapital*), environmental technologies (*EnviroCapital*), and computer software (*Logisoft*); and **c)** the network of local funds

(SOLIDE) it established in partnership with the provincial government and local authorities after 1991. Although the SOLIDE were to be focused on providing minor loans (under \$50,000) to very small businesses, they would indeed prove strategic in facilitating the implementation of Quebec's industrial policies.

First, they were established in the province's "*Municipalités régionales de comté*" (MRC), thereby organizing economic development around key localities within Quebec's regions. Second, they strengthened coordination dynamics within "local production systems" and, through their links with the SRI and FSTQ, gave local businesses access to the provincial investment ecosystem (Lévesque 2000: 16-17). Third, the SOLIDE provided, as was the case of their FSTQ sponsor, "patient capital" as well as managerial support and workplace training, thereby enriching an approach to local economic development based on long-term considerations. Fourth, the SOLIDE filled funding gaps (\$5,000 to \$50,000) and complemented the activities of Quebec's VC ecosystem by focusing on seed-stage "micro-businesses" (CRISES 2000: 43). Finally, they increased the presence of provincial investors at the local level, until then mostly served by federal funds (Lévesque et al. 1996: 31).

For these reasons, although the SOLIDE were a joint initiative of the FSTQ and MRC, Quebec's government supported them both financially and administratively. Most notably, the government granted between \$100,000 and \$150,000 to each of the province's MRC so that they could set up local funds – the *Fonds d'investissement local* (FIL) – which would work and invest alongside the SOLIDE (CRISES 2000: 43-44; Lévesque 2000: 3). The first SOLIDE was launched in April 1993, and following the government's

intervention, thirteen others were established between April 1993 and the end of 1994. This intervention also confirmed, along with the SRI, SIGM and SIQCA, a trend favoring the extension of the provincial investment ecosystem to regional and local levels. Between 1989 and 1994, 75 state-backed regional and local funds were set up (Lévesque et al. 1996: 18-22).

Although funds such as the SRI and SOLIDE played centrifugal roles however, the rationale behind government support could hardly be reduced to it: by 1996, Quebec's peripheral regions had a much better access to state-backed development capital than at any point in the past, but Montreal and Quebec City still enjoyed similar levels of public funding, thanks notably to the SIGM and SIQCA (Lévesque et al. 1996: 22-24). This was reflective of the fact that, up to 1994 the government remained committed to state intervention and policy asymmetry mainly for strategic, long-term "national" objectives such as the promotion of Quebec's supply chains and technology intensive sectors.

3.2. The Parizeau and Bouchard governments (1994-1998)

The PQ then regained power in 1994 based on an electoral platform advocating not only for Quebec's sovereignty but also for a reinforced reliance on the provincial state as a central economic actor (PQ 1994: 3). This stance was underpinned by a conviction that Quebec had long been disadvantaged by Canadian economic policies and a lack of federal investments, notably in R&D, compared to Ontario (PQ 1994: 8, 25). These two beliefs obviously warranted state intervention and policy asymmetry, as illustrated by the party's pledge to use, more systematically, institutions such as the SDI and Hydro-Québec to fund

and support high-tech ventures in coordination with provincial VCs and banks (PQ 1994: 21-22).

Although the PQ's discourse invoked departures from a Liberal government presented as market-driven and favorable to large companies (PQ 1994: 21), Haddow is right in noting that “the change in government did not result in a significant change in policy, in spite of the fact that the new PQ industry minister, Daniel Paillé, quickly announced the end of Tremblay's clusters strategy” (2015: 175). The PQ government indeed continued to rely on sectoral and peak-level concertation mechanisms, as attested by the economic “summits” of late 1995 and late 1996, the creation of a “standing committee of state corporation executives,” and the regrouping of many of those corporations under the banners of the SGF and IQ after 1998 (Bourque 2000: 190-200). Strategic policy decisions were also quickly taken which confirmed ideological and institutional continuity: the creation of a new LSIF as well as the setting up the *Société Innovatech du Sud du Québec* (SISQ) were cases in point.

3.2.1. The “Plan Paillé,” the SISQ, and the FACSN

Even before its first budget, the new PQ government launched the MICST's⁴⁹ “*Programme d'investissement en démarrage d'entreprises*,” rebranded as the “Plan Paillé” after the name of the industry Minister. The Plan Paillé consisted in a refocusing of state aid to Quebec SMBs, building on the SDI program of loan guarantees. This Plan was meant to strengthen clustering through an aggressive “*faire faire*” policy, aimed at getting

⁴⁹ *Ministère de l'industrie, du commerce, de la science et de la technologie.*

Quebec's banks more deeply involved in the funding of seed-stage and early-stage ventures perceived as the future bedrock of provincial clusters. In this sense, the Plan Paillé was consistent with the Liberal approach focusing on the advent of local supply chains in key economic sectors. The whole idea behind this Plan was for the state to sponsor young entrepreneurs, by acting as an endorser.

The strategy was simple (Québec 1997): a \$300 million budget was managed by the SDI and spent in loan guarantees for start-up businesses likely to create at least three new jobs over three years. Entrepreneurs made their own demands for loans, and banks or credit unions were responsible for the evaluation of projects. Anytime a loan of \$50,000 or less was awarded, the file was transmitted to the SDI, who guaranteed 90% of potential losses as well as the first year's interests on the loan. The MICST evaluated that the average loan would be around \$30,000; with a budget of \$300 million, the creation of 10,000 new businesses and 30,000 new jobs over three years were thus expected. In less than six months, between December 1994 and June 1995, close to \$250 million were engaged in loan guarantees for over 4,500 ventures. An additional \$100 million was then injected into the program, and guarantees were reduced to 80% of potential losses.

Given the program's popularity, the list of admissible sectors was reviewed so that by early 1997, eligible start-ups had to operate in high-value added sectors such as tourism, environmental technologies, ICT, or business services. In this sense also, the Plan Paillé clearly was a "*faire faire*" sponsoring strategy, aimed at getting private institutions to support seed-stage ventures in high-value added sectors. The Plan was devised after both the PQ and SDI consulted entrepreneurs and financial institutions in 1994, and determined

there was a funding gap for seed-stage businesses looking for \$50,000 or less (Paillé 1994). Another motivation behind this Plan however, less often mentioned, was that it would provide an alternative – both for entrepreneurs and financial institutions – to the federal “Small Business Loans” program which, since mid-1993, guaranteed 90% of eligible start-ups’ potential losses on loans of up to \$250,000. As much as it was about funding gaps and leveraging, the Plan Paillé was thus also about policy autonomy.

This Plan, moreover, was part of a larger set of complementary VC initiatives. The 1995-1996 budget introduced new programs for high-tech SMBs and R&D, notably based on the observation that Quebec was still getting only 18% of federal R&D investments in 1994, against more than 50% for Ontario (PQ 1994: 8). Notably, a five-year \$50 million “*Fonds des priorités gouvernementales en science et en technologie*” was set up to support R&D projects deemed “priorities” by the MICST (Québec 1995 Annexe A: 111). More importantly, the PQ government decided to fund a third *Innovatech*, the SISQ, covering the *Estrie* region and the entrepreneurial hubs of Sherbrooke, Magog, and Granby, where around 11% of Quebec businesses engaging in R&D were situated (Québec 1995d). The SISQ was granted a five-year \$40 million budget, and was modeled after the SIGM and SIQCA.

The SISQ was yet another example of path dependency, both ideational and institutional: not only were government-backed high-tech VC funds consistent with the PQ’s stance on state intervention, but the success of the SIGM and SIQCA had brought about mounting pressures from other such hubs – notably Sherbrooke and Gatineau/Hull – to be given their own *Innovatech*. For the same strategic reasons the PLQ invoked in 1992

and 1993, including the proximal relationships between *Innovatechs* and the MICST as well as the complementarity of their responsibilities with those of the SDI, the PQ went further and actually extended the mandates of the three *Innovatechs* to all of Quebec, adding to their focus on Montreal, Quebec City, and Sherbrooke (Québec 1995d).

Another major move made in 1995 was the creation of a second LSIF (Québec 1995: 8). This didn't come as a surprise given the PQ's long-time support of the FSTQ and its need to muster CSN support for Quebec's sovereignty (Québec 1995 b). Besides, the PQ had always been convinced of the strategic advantage provided by peak-level LSIFs, and one of Jacques Parizeau's first economic announcements as PM, in November 1994, was the uncapping of annual contributions to the FSTQ which had been fixed at \$100 million by the PLQ (Parizeau 1994). As much as the FSTQ served as a model however, both the PQ and CSN wanted this new fund to be different and to act as a complement to the FSTQ, rather than as a competitor.

The FACSNS was to specialize in the support of cooperative and/or "worker-controlled" SMBs, with the objective of extending these models to new sectors. This is why the Act establishing the FACSNS stipulated that two permanent members of its Board would be named by the Desjardins movement, to promote coordination with Quebec's largest cooperative institution (Québec 1995f). Articles 16 and 17 of the Act described this specific role of the FACSNS which, according to the government, ensured it would complement rather than duplicate the activities of the FSTQ, CDPQ, SDI and other VCs (Québec 1995b). That said, the PQ did expect Quebec to draw from the FACSNS the same advantages it did from the FSTQ. Most importantly, it was argued LSIFs promote mutual

understanding and partnership between employers and employees as well as a “sense of belonging” among Quebec workers, both crucial issues from a nationalist perspective of cross-class collaboration (Parizeau 1994; Québec 1995c).

Like the FSTQ, the FACSQ was given strict investment guidelines (Québec 1995h). It would have to invest, annually, at least 60% of its assets in eligible “Quebec businesses” having a majority of employees resident of Quebec and net assets of under \$100 million. Of this 60%, at least 40% would have to be invested in smaller businesses with under \$50 million in assets. In exchange, Quebec’s government applied a 20% tax-credit to FACSQ’s shares (in addition to the 20% federal tax-credit) and restricted subscribers from selling their shares before retirement age, to allow for the provision of “patient capital.”

This new LSIF (and the same applied to the Plan Paillé and SISQ) was a clear indication of the government’s dedication to policy divergence and the perpetuation of Quebec’s model, combining *faire* and *faire faire* strategies to reinforce the VC ecosystem and sponsor local SMBs. The rationales underpinning such policy initiatives were never limited to market imperatives, but included political preferences, strategic objectives, and path dependency dynamics. With the FACSQ, the PQ added a major player to an already robust VC ecosystem: one month after the launch of its operations in January 1996, the FACSQ had raised close to \$8 million from 5000 depositors (Beaulieu 1996: 75); by the end of 2003, it had over 50,000 subscribers and its assets exceeded \$300 million.

The very numerous initiatives taken since the late 1980s, yet, came under some criticism by 1995 after a report by Quebec’s Auditor General (Québec 1995i). Mostly

focusing on MICST programs (including the *Plan Paillé*), the Auditor denounced frequent duplication, especially in the case of small-size (\$50,000 or less) early-stage funding. Although this report didn't condemn government intervention per se, it had the effect of a wake-up call, deploring long bureaucratic delays in the granting of financial aid to businesses as well as an inadequate monitoring of results. Some of its recommendations with regards to program harmonization and tighter coordination between the MICST and regional authorities directly informed the PQ's subsequent policies, such as the establishment of the CLD and the setting-up of IQ.

3.2.2. The FRS and CLD

In its 1994 electoral platform, the PQ highlighted that Quebec had been deprived of over \$700 million out of the federal "Economic & Regional Development Agreement" of 1984 because of administrative disagreements between Ottawa and Quebec (PQ 1994: 29). Therefore, the PQ advocated a move toward policy autonomy, and more specifically a decentralization of decision-making to regional authorities themselves. This didn't mean the provincial state would retreat from regional development however, as one of the PQ's central pledges was to capitalize new "regional development funds" (PQ 1994: 30). Soon after the election the PQ government initiated discussions with the FSTQ, whose regional roots ran deep thanks to the SRI and SOLIDE. The PQ's lift of the ceiling on contributions to the FSTQ, mentioned earlier, was part of a deal in return for which the FSTQ would act as a "catalyst" and sponsor the new regional funds with some of the additional money raised (Parizeau 1994; Québec 1995: 7).

By early-1995, the government and the FSTQ had reached an agreement: sixteen FRS would be created⁵⁰, each endowed with an investment budget of over \$6 million – some of the largest would get double or triple that amount, such as the “*FRS Île de Montréal*” – for a total of \$135 million for Quebec as a whole. 90% of those resources would come from the FSTQ, and 10% from the *Banque Nationale*. The government, for its part, would contribute to the setting up and administrative costs for each FRS; this contribution amounted to a little less than \$2 million per fund over five years, for a total of over \$32 million (CRISES 2000: 40). While there is an argument to be made the FRS were crafted as centrifugal tools, every region in Quebec was involved, including existing VC hubs. There was, thus, much more to this initiative than “spatial” considerations.

The FRS stemmed from two key objectives. The first was to expand the LSIF model to Quebec’s regions. Unlike the SRI for instance, the FRS would not only provide VC and support regional development, but also ensure management and worker training, thereby promoting tripartite collaboration between regional authorities, business owners, and labour: “89% des entreprises dans lesquelles les FRS ont investi n’ont pas de syndicat. Sur ce terrain, les FRS apportent à tous les intervenants régionaux une vision différente de l’investissement [...] En prônant le partenariat et la concertation à l’échelle de l’entreprise comme de la région, les fonds laissent voir que la sphère économique ne saurait se limiter à la seule concurrence” (CRISES 2000: 42).

⁵⁰ A seventeenth was added in 1998.

The composition of the FRS' management boards attested of this: on each of them would sit representatives from the FTQ, FSTQ, *Banque Nationale*, provincial government, and regional actors including, sometimes, from the SOLIDE. This extension of the LSIF model through the FRS allowed for the recruiting of new FSTQ shareholders, as workers of investee businesses were encouraged to subscribe. It also facilitated coordination with FSTQ investment strategies at the regional level, something that had been done at the local level through the SOLIDE. FRS' investments would serve a market niche in between the SOLIDE and FSTQ, although the FRS could also invest alongside the FSTQ in bigger projects requiring regional expertise. Finally the FRS would coordinate with the FSTQ in terms of sectoral investment strategies (CRISES 2000: 32). They really were a way, in sum, for Quebec's government (and for the FSTQ) to promote regional investments but also, through the extension of the LSIF model, sectoral concertation between governments, businesses, labour, and financial institutions (Canada 1995: 60).

The second key objective behind the establishment of the FRS was to help kick-start the government's own regional development policy, launched with the publication of a White Paper in April 1997 (Québec 1997b). In this paper, the local and regional scales were distinguished, with the latter being presented as a conveyor belt between the national and local scenes, best suited for concertation and coordination purposes (Québec 1997b). The idea behind this major reform – which led to the establishment of the Ministry of Regions in late 1997 (Québec 1997c) – was to decentralize decision-making, notably in the realm of business support and entrepreneurship, while making sure decision-making and planning mechanisms remained coordinated with the strategic frameworks and policies

adopted at the “national” – i.e. provincial – level. The FRS were a good fit for such a regional policy, decentralizing additional resources and decision-making while insuring coordination, via the FSTQ, with national-level strategic objectives. The true centerpiece of the PQ’s reform however, was the establishment of the “*Centres locaux de développement*” (CLD), public business support centers engaging in development planning and capital investment.

The mandates of the CLD were **a)** to devise development plans at the local/MRC level; **b)** to act as “one-stop-shop” service centers for entrepreneurs, offering business planning assistance for start-ups, management support for development-stage SMBs, and guidance to help business owners navigate through Quebec’s funding chains; and finally **c)** to provide financial aid through grants, loans, guarantees, or equity investments. Each CLD was funded by the provincial government (around 2/3) and the MRC (1/3), and was to dedicate a significant part of its annual budget on direct financial support to businesses. Every CLD was responsible for three distinct “funding tools” targeting different clientele (Québec 2001): the “*Fonds Jeunes promoteurs*,” offering grants to entrepreneurs less than 35 years old; the “*Fonds de développement des entreprises d’économie sociale*,” subsidizing cooperative and social economy enterprises; and most importantly the “*Fonds local d’investissement*” (FLI).

The FLI was the CLD’s largest investment tool, providing loans, equity loans, guarantees and equity to early-stage, growth-stage and expansion-stage businesses. Through the FLI alone, the CLD invested over \$35 million between 1998 and 2000, leveraging more than \$385 million in investments from other sources (Québec 2001: 36).

Around 70% of FLI contributions took the form of loans or equity investments, against 30% for guarantees. The CLD and their investment funds thus quickly became major players in regional and local development: over a hundred CLD were established between 1998 and 2000, and almost 5,000 local businesses were supported as a result. The \$75 million invested by the CLD over these three years, moreover, leveraged around \$730 million from other sources, for a total of over \$800 million invested in Quebec's local economies (Québec 2001).

In addition to regional authorities and the provincial government, the CLD cooperated closely with other local actors, such as the SOLIDE, FRS, credit unions, and chambers of commerce (Québec 2001: 18-19). The FRS and the CLD were thus consistent parts of a strategic effort by the PQ government to extend Quebec's model of development, based on public involvement and multipartite concertation, to regional and local levels. This was not only about policy divergence however: the decentralisation of resources was also part of a longing for policy autonomy, as Quebec tried to replace the federal government as the main provider of funds for regional development. As specified in the 1997 White Paper (Québec 1997b: n.p.), *“un transfert massif de compétences vers les instances locales et régionales présenterait l'inconvénient, dans le contexte constitutionnel actuel, de limiter sévèrement la capacité d'intervention du gouvernement québécois sur son propre territoire face aux intrusions possibles du gouvernement fédéral.”*

With the CLD, the PQ government was able to safeguard and refine Quebec's model of development while replacing the federal government in the realm of business financing. In 1996, the latter was the main provider for 26% of regional and local investment funds

operating in Quebec, against 37% for the provincial government and FSTQ; by 2002, Quebec and the FSTQ became the leading provider of 49% of those funds, against 16% for the federal government (Lévesque et al. 2003: 12). This was the direct result of the PQ government's conscious effort to take the lead, as illustrated by the fact that two thirds of regional and local funds present in Quebec by 2000 were set up between 1995 and 1998 (Lévesque et al. 2003: 8).

3.2.3. “Objectif emploi” and Investissement Québec

This reform of regional and local development showed the PQ government's inclination for state involvement did not prevent it from reorganizing the Quebec model. The last budget of its first mandate, tabled in March 1998, was another illustration as the new economic strategy it introduced involved many important changes while remaining explicitly interventionist and nationalist. Those changes were notably informed by a report published in the nationalist review *L'Action Nationale*⁵¹ in 1996, which showed that a significant portion of Québécois' savings, notably outside of Montreal and Quebec City, was still exported rather than reinvested locally because of the peripheral position Quebec (and especially Francophone businesses) still occupied in Canadian mutual funds' portfolios.

This report, of which a second part was published in 1997⁵², made a deep impression on the PQ government and was specifically referred to in the budget (Québec 1998: 35):

⁵¹ “La déportation québécoise : les fonds mutuels”, *L'Action Nationale*, vol. LXXXVI, no. 8.

⁵² “La déportation québécoise : deuxième partie”, *L'Action Nationale*, vol. LXXXVII, no. 11-12.

Certaines recherches menées récemment de manière approfondie, dans L'Action Nationale notamment, nous ont alertés au fait qu'une partie importante de nos épargnes est gérée à l'extérieur du Québec [...] Ces diverses réflexions ont entraîné des changements d'attitude et provoqué une prise de conscience [...] Nous devons gérer au Québec une plus grande partie de nos épargnes et une plus grande partie de l'épargne des autres.

The numbers revealed by *L'Action Nationale* were alarming. Based on the 1995 annual reports of over 900 Canadian mutual funds, representing over \$145 billion in assets, the 1996 study established that only \$5.8 billion were managed by Quebec-based funds, a meagre 4% of the Canadian total, against over \$115 billion (79%) for Ontario. Quebec barely reaped 5.5% (\$7.9 billion) of Canadian funds' investment portfolios despite contributing around \$29 billion to those funds (20% of their assets). Of this \$29 billion, besides, over \$20 billion were subscribed by Francophones; in return, Francophone businesses received only \$3 billion in investments from Canadian mutual funds (2% of total assets). The situation did not improve much in 1996: studied Canadian mutual funds, managing \$240 billion in assets, only invested \$14 billion in Quebec (6%) and of the \$5.4 billion invested in Quebec's businesses by Canada's ten largest mutual funds, only 35% went to Francophone businesses and 65% to Anglophone companies.

These reports shed a disturbing light on Quebec's peripheral position, but also underlined the crucial role its public sector – and government-backed investors – had come to play, especially for Francophone businesses. Given such bleak findings, the PQ government decided to proceed to a major reorganization. As part of its 1998-1999 budget, the PQ introduced a new economic strategy, "*Objectif emploi*," which had as a central objective to surpass Canada's average annual rate of jobs creation by 2002 (Québec 1998: 14). The importance of this strategy has not always been fully recognized, despite its

historically ambitious aim to increase private investment in Quebec, in partnership with public corporations and agencies, by \$20 billion over five years. This goal, besides, was only one of the strategy's two main parts.

The second, directly informed by the reports of *L'Action Nationale*, consisted in the “Action Plan to Promote the Development of the Financial Sector” (Québec 1998c), focused on the active promotion and support of Quebec-based mutual funds. The PQ government notably decided to offer substantial tax-breaks for new Quebec-based funds established before 2000 (Québec 1998c). The most significant measure, however, wasn't taken by the government but by the CDPQ, another good example of the close coordination between public investors and the state. Following major equity investments in Quebec's financial services industry earlier that year, the CDPQ launched the “*Services financiers CDPQ*” subsidiary in September 1997, which would have as a mandate to invest in Quebec-based mutual funds and to increase by \$15 billion the pool of assets managed in the province by 2002 (CDPQ 1998: 27).

In addition to many important investments made throughout 1998, this subsidiary partnered with the Desjardins movement in 1999 to create a new series of mutual funds, the “*Fonds Cartier*,” and between 1997 and 1999 *Services financiers CDPQ* built a portfolio of almost \$500 million in Quebec (Pelletier 2009: 253). The CDPQ's involvement, besides, was only one manifestation of its late-1990s' activism. Since 1995, the CDPQ had considerably increased its investments in Quebec, through a number of new VC and equity subsidiaries (Pelletier 2009: 214): *Accès Capital* (network of regional funds regrouping the ex-SRI), *Capital CDPQ* (specialized in small, growth-stage businesses),

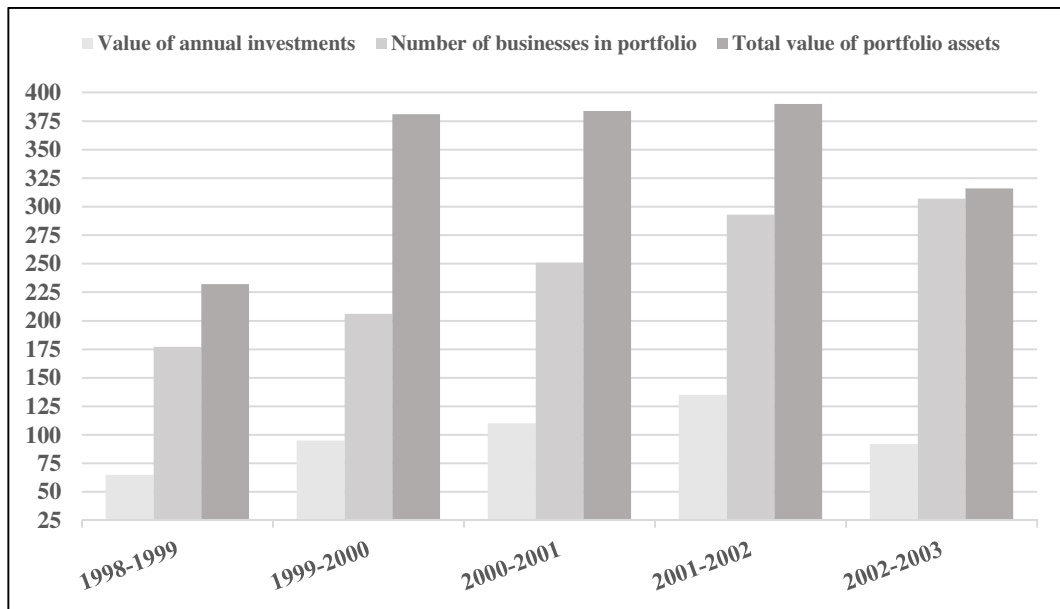
Capital d'Amérique CDPQ (focusing on medium-sized companies), *Capital Communications CDPQ* (investing in ICT), *Sofinov* (high-tech), and *T²C²* (biotechnologies, electronics, and multimedia). Together with *Services financiers CDPQ*, these funds built a portfolio of over \$6 billion and were investing over \$2.5 billion per year by 1998 (CDPQ 1999: 30-31).

This increased effort was highly consistent with the second main component of *Objectif emploi*, that of increasing private investments by using the state's leveraging power. This part of the strategy had already been launched with the introduction of the “*Fonds pour l'accroissement de l'investissement privé et la relance de l'emploi*” (FAIRE) in 1997, which had leveraged, in combination with other measures, \$3.5 billion in private investments over eighteen months (Québec 1998e: III). The overarching objective in this case was to leverage \$19 billion in private investments over five years (1998-2002), building on the strategic roles of Quebec's public corporations and agencies (Québec 1998e: 18).

In order to increase these public corporations' capacities and their coordination with government strategies, the PQ notably merged the SGF with pre-existing sectoral state holdings. This new SGF was assigned the five-year objective to generate \$10 billion in private investments and would henceforth, in partnership with the private sector, buy equity stakes in companies of ten key sectors (Québec 1998e: 24-25). Given another basic principle of *Objectif emploi*, in turn, was to “systematically promote Quebec-based technological innovations” through public sector support, outsourcing, and procurement, a new \$50 million *Société Innovatech Régions-Ressources* (SIRR) was added to the

Innovatech network to foster technological improvements in remote areas. The capital stock of the SIGM, SIQCA and SISQ was also increased by \$75 million, bringing the *Innovatech* network’s total to \$525 million (Québec 1998e: 30).

Graph 4: Contributions of the *Innovatech* network, 1998-2003 (\$millions)⁵³



The main initiative taken with regards to *Objectif emploi*’s aim to “increase private investment,” however, was the establishment of the new public development agency *Investissement Québec*, merging the SDI with the MICST’s foreign investments directorate (Québec 1998e: 45). The SDI thus ceased to exist as a separate entity, although its key program of loan guarantees was safeguarded and transferred to the IQ subsidiary *Garantie-Québec*. Aside from guarantees, two main roles were assigned to IQ: one of “coordination,” and one of “prospection” (Québec 1998e: 45-48). In the first case, IQ would act as a “one-

⁵³ Source: Québec (2003b: 45).

stop-shop” for local and foreign investors seeking government support for major investment projects, mobilizing the appropriate departments and involving other public or hybrid investors to offer administrative, managerial, or financial accompaniment.

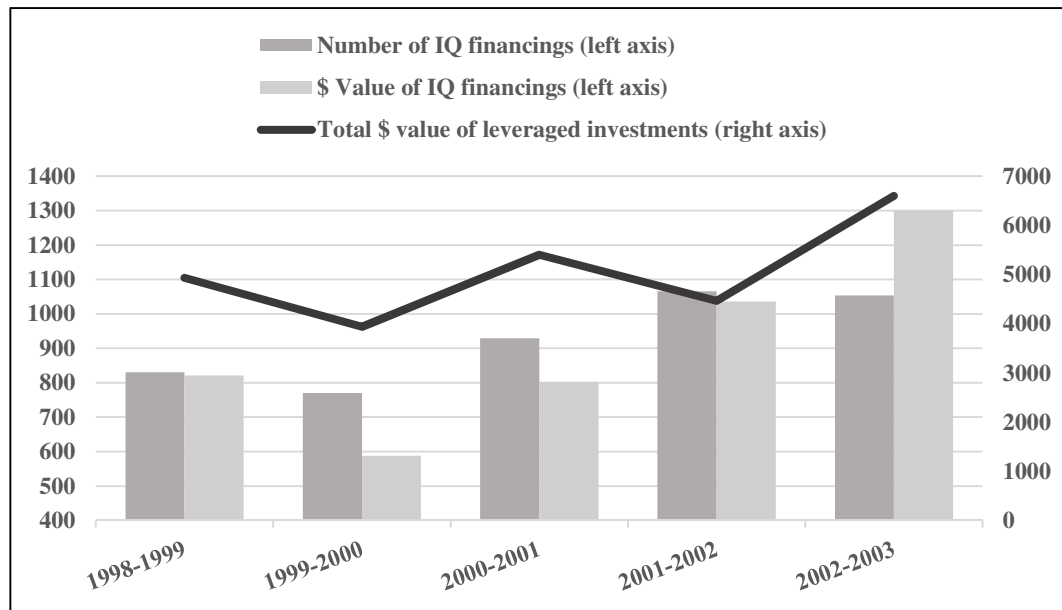
IQ would also act at the upstream level, as a “prospector” of foreign and domestic investments. It would thus actively work to “brand” Quebec as an investment destination, acting as a complement to the province’s *commercial attachés* – mostly focusing on export promotion and outward FDI⁵⁴ – by identifying and lobbying potential foreign investors. IQ would also encourage new investments domestically, offering support for businesses’ expansion or modernization projects, notably to “avoid the closing or moving of decision units outside Quebec” (Québec 1998e: 48). The case of IQ is thus particularly interesting, because it turned out to be much more than an investment prospector, promoter, or coordinator, becoming a very dynamic (equity) investor itself.

This had not really been planned at the time of *Objectif emploi* however, and it can notably be explained by a small but significant amendment to the original IQ Bill, introduced for reasons which highlighted how path dependency dynamics – both ideational and institutional – affected the reorganization of Quebec’s investment ecosystem. Although articles 27, 28 and 35 of the Bill, as introduced in May 1998, already provided that IQ would administer financial aid programs or mandates of the government and that it could invest in VCs, article 25 detailing IQ’s mission initially limited it to the *promotion* of investment in Quebec. Yet, during committee work on the Bill (Québec 1998b), Liberal

⁵⁴ David Brulotte, *Directeur au développement des affaires – Europe*, IQ. Personal interview, May 18th, 2015; Hugo T. Lacroix, *Directeur au développement des affaires – Europe*, IQ. Personal interview, May 18th, 2015.

MNA Robert Benoit pointed out that since IQ would absorb the SDI, its mandate ought to recoup SDI responsibilities, which included “economic development” and “jobs creation.” An amendment was thus passed and reframed article 25, so that when the Act was adopted in June 1998, IQ now had as its missions not only to “facilitate the growth of investment in Quebec” but also to “contribute to the economic development of Quebec and the creation of employment opportunities” (Québec 1998f).

Graph 5: Contributions of IQ 1998-2003 (\$millions)⁵⁵



This allowed IQ to play a more encompassing role than had been intended initially. As remarked in IQ’s first annual report, the agency’s mandates, notably with regards to the implementation of government strategies and the “creation of employment opportunities,” required a degree of continuity in the provision of development capital (IQ 1999: 3). By

⁵⁵ Sources: IQ (2000-2003), *Rapports annuels*.

1999, IQ had thus already built a \$1.7 billion portfolio, including over \$600 million in government “priority projects” and close to \$500 million in equity, leveraging \$5 billion in prospective investments (IQ 1999: 30; IQ 2000).

The cases of *Objectif emploi* and IQ were highly significant for a number of reasons. First, they showed there was still a perceived need to channel a larger part of Québécois savings’ toward local (and especially Francophone) businesses, a core objective of Quebec’s economic nationalism since the early 1960s. Second, their impacts on public investors such as the CDPQ, SGF, and SDI revealed a concrete effort to refine the coordination and strengthen the investment capacities of Quebec’s investment ecosystem. This signalled the importance bestowed to this ecosystem in what was, otherwise, a context of public sector retrenchment (Imbeau & Leclerc 2002; Graefe & Rioux 2017). Finally, the ambitious leveraging objectives imposed on the SGF, *Innovatechs*, and IQ denoted a strategic shift which would only deepen in the 2000s: the increased reliance on a “*faire faire*” approach of co-investment with institutional, hybrid, and private funds in government-defined priority sectors.

3.3. The Bouchard and Landry governments (1998-2003)

Five months after the Act establishing IQ was voted, general elections were held which saw the PQ returned to power as a majority government. This was Lucien Bouchard’s first election as head of the PQ, but perhaps most importantly Jean Charest’s first as head of a “new” PLQ. Not only was Charest critical of the “Quebec model” (Charest 2000; Jérôme-Forget 2000), but the party itself was now advocating, as part of its electoral

platform, for a drastic scaling down of the Quebec state (PLQ 1998). The reorganization of the SGF, as well as the establishment of IQ, were openly criticized as a costly reshuffling of “structures” to which should be substituted tax reductions and regulatory relief. The PQ used this rhetoric as an opportunity to cast the election as a black and white choice between the “Quebec model” and the Mike Harris version of Ontario, advocating for neither more nor less, but “better” intervention (PQ 1998: VII-VIII).

The PQ promoted a refinement of the *faire faire* approach combining the intensification of IQ’s prospection activities with enhanced provision of VC for SMBs (1998: 9-12). The decentralization of economic development initiated between 1996 and 1998 would also be reinforced: new resources, notably, were to be injected in the CLD and other regional/local VC funds (1998: 16). In short, the PQ offered continuity without refraining from major new initiatives, as the cases of CRCD and the FDQ would show. This second mandate would however be marked by major external shocks: the “dot.com bust” of the second part of 2000, the 9-11 attacks in 2001, and the economic downturn that followed.

3.3.1. The budgets of continuity

The year 1999 opened with a major dispute between Quebec and Canada over the “Social Union Framework Agreement” (SUFA), signed by the federal government and all other provinces in February (Gagnon 2000). The stumbling blocks concerned the recognition and modalities of the federal government’s “spending power” in areas of provincial jurisdiction (Rioux 2014: 16-17). Although this agreement mainly applied to

social policies, it also had clear implications for economic development as this “spending power” extended, historically and as part of the new agreement, to R&D (Tremblay 2000). It is thus in part against this background⁵⁶ that the new initiatives contained in Quebec’s 1999-2000 budget should be read. Two measures were taken as part of *Objectif emploi*’s new component, the plan to “accelerate research and innovation” (Québec 1999), which aimed at solidifying Quebec’s autonomy in R&D: **a**) the establishment of a new agency, *Valorisation-Recherche Québec* (VRQ), endowed with a \$100 million budget to promote and subsidize R&D valorization; and **b**) the creation of an adjoining \$75 million public investment fund, *Innovation Québec* (INNQ), put under direct responsibility of the new *Ministère de la Recherche, de la Science et de la Technologie* (MRST).

This budget was the extension of *Objectif emploi*: given its success in generating private investments, \$300 million in additional resources were injected in the strategy (Québec 1999b: 18). IQ programs were topped-up, with the FAIRE receiving \$50 million more to support major investment projects and initiate a program of exchange rate guarantees for exporting SMBs, too dependent on a “weak and volatile” dollar (Québec 1999b: 21). The main initiatives, however, were the VRQ and INNQ, centerpieces of public efforts to promote high-tech R&D in Quebec (Québec 1999: 1). *Objectif emploi*’s R&D component was directly inspired from the “national systems of innovation” approach first developed by English economist Christopher Freeman (1987). In a subnational context, this approach warranted policy asymmetry as it focused on the importance of closely knit,

⁵⁶ This led to the setting up of the “Commission on Fiscal Imbalance” by the PQ in 2001 (Québec 2002; Rioux 2014).

interconnected networks between businesses, government bodies, research institutions, and VC funds (Québec 1999: 12-13). As part of a two-year, \$400 million effort to accelerate R&D, the MRST, VRQ, and INNQ would thus intervene to ensure coordination by funding tripartite (government/businesses/universities) research partnerships and the commercialization of their fruits.

Of the INNQ's \$75 million budget, \$20 million were dedicated to government-defined "priority R&D projects" and another \$4 million to fund seed-stage ventures (Québec 1999: 49, 77). Out of the VRQ's \$100 million budget in turn, half would be spent on subsidies to support the commercialization of university research (Québec 1999: 75). While Quebec's government was creating the MRST, VRQ and INNQ, besides, established organizations were already engaging in high-tech sectors at an increasing pace: by 2000, 47% of IQ's loan guarantees were dedicated to R&D (IQ 2000: 24), and the vast majority of the SGF's VC investments were made in technology-intensive businesses, where it often partnered with the FSTQ, CDPQ, *Innovatechs*, and hybrid funds like BioCapital (SGF 2000: 19, 39-40). The CDPQ itself was investing hundreds of millions in these sectors, through subsidiaries like *Sofinov* and *T²C²*. It was also actively helping Quebec keep up with a rapidly evolving ICT sector: in 2000 for instance, the CDPQ partnered with *Québecor* and invested over \$2.2 billion to buy Vidéotron, thereby perpetuating Québécois ownership by blocking its merger with the Ontarian Rogers Communications (Pelletier 2009: 282).

The 2000-2001 budget was, in turn, that of regional development. The most important project to come out of it was the introduction of Bill 144 on *La Financière*

agricole (FA), during the summer of 2000. Merging the pre-existing “*Régie des assurances agricoles du Québec*” and “*Société de financement agricole*,” the new FA was to be a central body responsible for income stabilization regimes and programs of financial aid for agricultural projects. Quebec’s government pledged to inject massive amounts, for instance, into its loan guarantee programs: \$800 million per year for seven years, a total of \$5.6 billion to guarantee 100% of potential losses on loans issued to farmers by Desjardins credit unions (Québec 2000c). The FA was, in particular, devised to support farm succession in the face of growing indebtedness and international land speculation (Québec 2000b; L’Italien et al. 2014). Succession indeed became a central focus of the FA, but also of other government-backed investors: as discussed in Chapter 5 for instance, in order to increase its capacities FA partnered with CRCDD and the FSTQ in 2011 to create the *Fonds d’investissement pour la relève agricole* (FIRA), offering “patient capital” to new farmers.

The creation of FA highlighted two aspects of the PQ’s approach: a perceived need for state involvement to ensure appropriate access to capital, and the close relationship it intended to cultivate with Desjardins as a partner. As much as it was in continuity with the PQ’s late-1990s policies, this was also a prelude to its new regional development strategy (Québec 2001b) and to the launch of CRCDD, the province’s third tax-advantaged VC fund. While there was a centrifugal element to the PQ’s approach, as well as a willingness to fill regional funding gaps, there is thus a strong argument to be made its overarching objective still focused on insuring long-term Québécois control in regional economies. On top of efforts to secure farm ownership and succession, both the PQ’s new strategy and the investment guidelines of CRCDD would indeed place great emphasis on the development of

the cooperative sector, given the high survival rate and the “inalienable” character of its businesses.

3.3.2. Capital régional et coopératif Desjardins and La Financière du Québec

Two major measures were announced in Quebec’s 2001-2002 budget. The first was a three-year, \$800 million economic development plan targeting Quebec’s “*régions-ressources*.” The second was the crafting of a new VC fund in collaboration with Desjardins, designed to “funnel risk capital toward regions and cooperatives” (Québec 2001c: 21). The details of both projects were laid out in a policy document in which the main problems affecting development in the *régions-ressources* were listed (Québec 2001b). The lack of access to VC was identified as such, but most interesting were the reasons invoked to explain equity gaps. Acknowledging that a lot of VC had already been channeled to such regions through the SRI, FRS, SOLIDE, CLD, FACS, and *Innovatechs*, the PQ concluded *demand-side* peculiarities, rather than mere centripetal supply, caused problems.

First, there was a lack of investment opportunities given the paucity of high value-added industries in those regions and their relatively heavy reliance on the extractive sector and traditional manufacturing (Québec 2001b: 31-36). Second, there was a notable concentration of cooperative businesses – 25% of Quebec’s co-ops were situated in the *régions-ressources* – which, because of their organizational structure, are not particularly well-suited for VC investments requiring voting rights and high capital returns (Québec 2001b: 43; Bertrand 2003: 118). The PQ’s plan therefore included not only a simple

increase and decentralization of VC supply, but a deeper effort of industrial diversification and a strategy aimed at channeling VC to the cooperative sector. The creation of CRCD was a key component of this effort, and Bill 194 was thus introduced to create this fund in May 2001. As a tax-advantaged VC fund, CRCD would be allowed to raise up to \$150 million per year through the selling of shares entitling buyers to a tax-credit equal to 50% of their value, up to \$1,250 per year (Québec 2001b: 126).

In return for government-backing, CRCD investors would have to keep their shares for a minimum of seven years and CRCD itself, not unlike the FSTQ and FACS, was imposed investment guidelines reflecting the state's objectives⁵⁷. CRCD would indeed specialize in regional development and the cooperative sector: at least 60% of its assets were to be invested, each year, in admissible SMBs and, out of that 60%, 35% were to be invested either in SMBs from the *régions-ressources* and/or in Quebec-based co-ops (Québec 2001b: 127-128). Admissible SMBs would have to own under \$50 million in total assets and employ a majority of their workforce among residents of Quebec, a rule which also applied to the FSTQ and FACS. Eligible co-ops, in turn, had to have their head office in Quebec or at least half of their payroll stemming from employees of a Quebec-based establishment (Québec 2001d: 7).

The Act establishing CRCD was adopted in June and, by December 31st, CRCD had already raised upward of \$80 million from 35,000 investors (CRCD 2002: 2). The appetite

⁵⁷ According to Gérald St-Aubin, VP for Strategic Investments and Partnerships at CRCD, the provision of "patient capital" with lower expectations of return really was, as had been the case with the FSTQ and FACS, a central objective of the government in creating CRCD (personal interview).

for CRCDC shares quickly revealed strong: over its first five years in operation, CRCDC was able to build a \$650 million capital stock and an investment portfolio of over \$415 million. As early as 2003, 25% of all CRCDC investments had already been made in SMBs from the *régions-ressources* or in co-ops (Bertrand 2003: 117), and by 2006 CRCDC was investing, annually, more than \$125 million in Quebec's businesses including over \$25 million in *régions-ressources* and co-ops (CRCDC 2007: 4-7). CRCDC was thus intended as much more than just another tax-advantaged VC fund: it was intended to act, within Quebec's investment ecosystem, as a complement to other regional and local funds (Bertrand 2003: 127, 143-148; Québec 2001e, 2001f).

Most importantly, it was crafted as a powerful capitalization tool to restructure Quebec's regional economies by supporting high-tech "*créneaux d'excellence*" in accordance with government priorities (Québec 2002b: 78). CRCDC therefore quickly developed an expertise in biotechnologies, ICT, and manufacturing technologies while sponsoring and strengthening the development of a cooperative sector perceived as a comparative advantage. Following CRCDC's first year in operation, the government published a major "policy statement on the development of cooperatives" in which the strategic importance of this sector for Quebec was made explicit. Noting Quebec's cooperative sector was, by far, Canada's largest, the PQ argued this was an advantage worth securing and cultivating given **a**) the much higher survival rates of co-ops as compared with private start-ups, and **b**) the inalienable character of their ownership, shielding co-ops from foreign takeovers and insuring long-term, local rootedness (Québec 2003: 21-22).

Ambitious objectives for Quebec’s cooperative sector were thus established, including a 25% increase of investments in the sector over ten years (Québec 2003: 32). To achieve this goal, a number of initiatives were launched to boost the capitalization of cooperatives and complement CRCQ’s contribution. Among those was the establishment of a hybrid fund of funds in 2001, “*Filaction*,” in partnership with the FACSQ. Mainly dedicated to regional co-ops, *Filaction* would invest small amounts, directly or through subsidiary funds⁵⁸, in the form of loans and micro-loans, guarantees, or equity. New programs were also added to IQ in order to support co-ops and social economy businesses, and would be administered by IQ’s new subsidiary, *La Financière du Québec* (FDQ), set up in late-2001.

This new IQ subsidiary, replacing Garantie-Québec, was introduced as part of the 2002-2003 budget, released in November 2001 in reaction to the “dot.com bust” and 9-11 attacks. In addition to a small stimulus package (Québec 2001g: 26-31), the PQ government took advantage of the economic downturn to introduce new public schemes, thereby furthering the influencing role the state had come to play under its administration. The budget was accompanied by a new economic strategy, “*AGIR*,” which presented Quebec’s government as both a “facilitator” and a “partner” (Québec 2001h: 61). It was to solidify and perpetuate these two roles that the FDQ was set up to replace Garantie-Québec: noting the inefficiency of loan guarantee programs in times of financial downturn, the government wanted IQ to reconnect with *faire* and *faire avec*.

⁵⁸ Among the active funds sponsored by *Filaction* are, notably, the *Fonds Tourisme PME* and *Femmessor*.

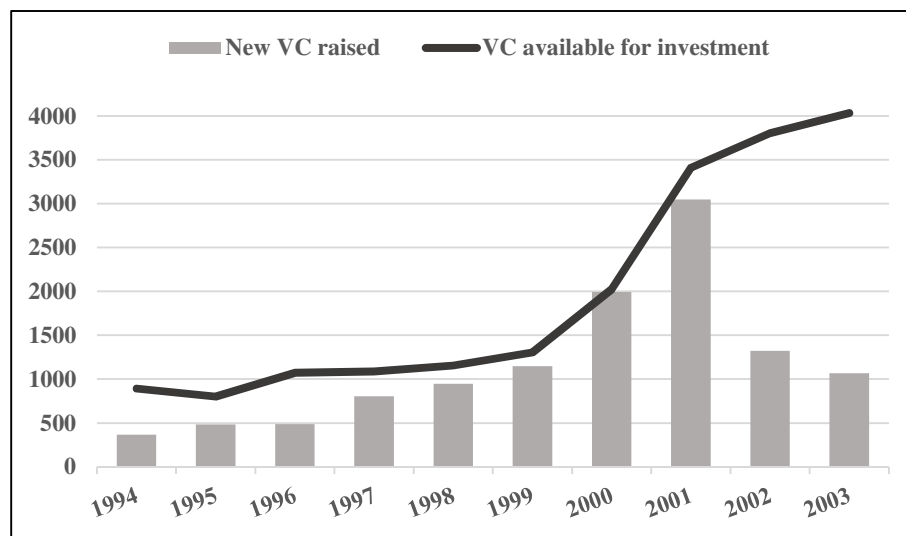
The FDQ, indeed, would continue to offer loan guarantees but would henceforth also act as a public “investment bank” for SMBs, issuing loans, equity loans, mezzanine finance, and equity investments (Québec 2001g: 28; 2001h: 13-15). The importance of the previously discussed amendment to the original IQ Bill – extending IQ’s role to economic development at large – was again revealed, as the PQ (with PLQ support) shifted IQ’s role from one of *faire faire* to a much larger mandate: “*la FDQ agira en complémentarité avec les institutions financières ou en partenariat avec ces dernières en respectant leur champ usuel d’intervention, mais aussi en récupérant l’espace que ces mêmes institutions cependant délaissent [...] C’est ainsi qu’on pourra la qualifier de banque d’affaire des PME québécoises*” (Québec 2001i : n.p.).

3.4. Concluding remarks

All in all, the 1990-2003 period in Quebec witnessed a significant intensification of state involvement in VC. While Haddow contends that “the PQ increased its extent only modestly” (2015: 175), our analysis reveals otherwise. As Graph 6 demonstrates, Quebec’s VC ecosystem grew substantially, in absolute terms: from 1997 onward, the quantity of VC raised in Quebec skyrocketed, to reach a high of over \$3 billion in 2001. The amount of VC “available for investment” followed the same pattern, with a 450% increase between 1994 and 2003. Such a drastic growth could not have happened without an even greater increase in the provision of government-backed VC. Between 1994 and 2003, numerous initiatives were taken which expanded state influence: two new *Innovatech* (SISQ, SIRR), two new tax-advantaged funds (FACSN, CRCDD), new regional funds (FRS, CLD), as well as new R&D sponsors (VRQ, INNQ) were launched, and Quebec’s main development

agency was put in place and given significant investment powers (IQ, FDQ). Accordingly, the relative value of government-led and government-backed investments – public, tax-advantaged, or hybrid – as a share VC investments kept progressing, from around 40% in the early 1990s to over 70% in the early 2000s (see Graph 1).

Graph 6: New VC raised & VC available for investment, Quebec 1994-2003 (\$millions)⁵⁹



Between 1995 and 2002, while total public resources (including tax expenditures) dedicated to business support grew by 283%, this included an impressive 1511% increase in the value of equity shares acquired by Quebec’s state corporations in the province (Québec 2002b: 81). If the PQ government was thus very active in the realm of development capital and VC, it also perpetuated a trend present under previous PLQ administrations. With initiatives such as the SRI, FDT, FQDI, *Innovatechs* and SOLIDE, Liberals had already established some of the strategic policy objectives later refined by the

⁵⁹ Source: Macdonalds & Associates Limited (1995-2004). The very sharp decline in money raised after 2001 can be explained by the economic downturn that followed the “dot.com bust” and 9-11 attacks.

PQ. If those policy objectives, moreover, included classic economic rationales for public involvement, they could not be reduced to it.

The late 1980s' initiatives were as much about the coordination of Quebec's investment ecosystem (SRI) or policy emulation (FDT) as they were about regional or sectoral funding gaps. The early 1990s' schemes, in turn, had as much to do with the strengthening of Quebec's high-tech supply chains (FQDI, SIGM) or multipartite concertation (clusters, SOLIDE) as they had with counter-cyclical imperatives or the leveraging of private investments. At some points, ideological and institutional path dependency dynamics also played central roles, as in the case of SIQCA. Although, as Haddow contends, the PQ subsequently made strides toward "encouraging more market sensitivity and decentralization" (2015: 175), this in no way signalled a waning of economic nationalism.

If shifts to regional decision-making and *faire faire* approaches did take place under the PQ, this was almost always against the background of perceived needs or political preferences for policy asymmetry: the Plan Paillé was devised as an alternative to the federal regime of loan guarantees, the FRS and CLD allowed Quebec to replace the federal government as the prime sponsor of regional funds, IQ reinforced Quebec's autonomous prospection of FDI, and the FA was designed as a tool to help secure local farm ownership and succession. The same can be said of the FACS and CRCD, moreover: while in the first case the idea was to extend Quebec's unique LSIF model, in the second the intent was to bank on Quebec's comparative advantage in the cooperative sector, and notably on the "inalienable" character of its businesses.

Table 2: Summary of major government initiatives, Quebec 1990-2003

Sponsoring style		Policy objectives
“faire faire”	“faire / faire avec”	
SRI (1988)		<i>Ecosystem / funding chains coordination; centrifugal</i>
	FDT (1988)	<i>Policy emulation; complement to SDI; “mobilizing R&D”</i>
	FQDI (1991)	<i>Policy autonomy; complement to FDT</i>
	SIGM / SIQCA (1992-93)	<i>Complement to FDT & SDI; promotion of Montreal & Quebec City; leverage</i>
	Clusters (1992)	<i>Multipartite concertation (policy divergence); import substitution (supply chains)</i>
		<i>Ecosystem regionalization; FSTQ-State coordination</i>
SOLIDE (1993)		<i>Move to “faire faire”; alternative to federal program (policy autonomy)</i>
Plan Paillé (1994)		<i>Path dependency; complement to SDI; promotion of Sherbrooke; leverage</i>
	SISQ (1995)	<i>Complement to FSTQ; extension of LSIF model (policy divergence); support to co-ops</i>
FACSN (1995)		<i>Decentralization of LSIF model (divergence); provincial control in regional development (autonomy)</i>
FRS (1995)		<i>Decentralization + Multipartite concertation; provincial control in regional development (autonomy)</i>
	CLD (1997)	<i>Local channeling of Québécois’ savings (autonomy); leverage; jobs creation</i>
Objectif Emploi (1998)		<i>Coordination of state sponsoring; renewed focus on foreign investments; leverage</i>
IQ (1998)		<i>Industrial diversification (high-tech); regional development; leverage</i>
	SIRR (1998)	<i>Reaction to SUFA (autonomy); coordination of R&D commercialisation; “national system of innovation”</i>
VRQ / INNQ (1999)		<i>Regional development (faire faire); farm succession & ownership</i>
	FA (2000)	<i>Regional development; support to cooperative sector; long-term local control (high survival rates & inalienability of co-ops)</i>
CRCO / FilAction (2001)		<i>Return to “faire” & “faire avec”; complement to existing funding chains</i>
	FDQ (2001)	

The advent of the FDQ, finally, was born out of a recognition by the PQ that a *faire faire* approach based on loan guarantees could not ensure the attainment of strategic objectives which required a recourse to the state's sponsoring roles, in the form of *faire* and *faire avec*. In short, thus, the 1990-2003 period in Quebec was clearly marked, with regards to state (and state-backed) intervention, by economic nationalism through **a) *ideological mechanisms***, as illustrated by preferences for policy asymmetry and the pursuit of regional-level “national” objectives; **b) *political mechanisms***, as exemplified by the PQ's reaction to *L'Action Nationale* reports; and **c) *institutional mechanisms*** having impacted government decisions, notably, in the cases of the *Innovatechs*, LSIFs, and IQ.

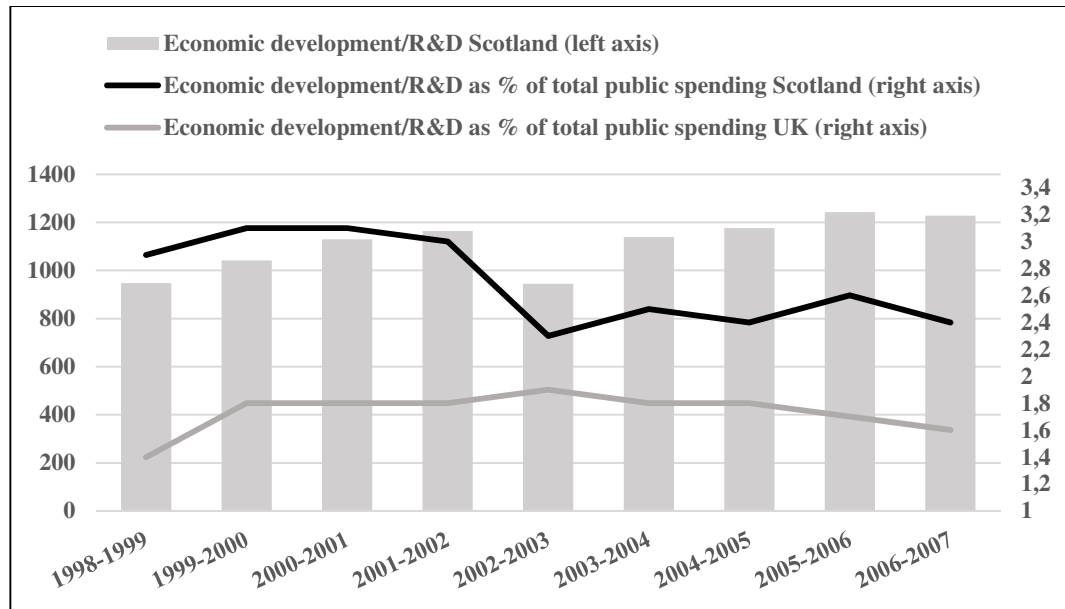
CHAPTER FOUR

SCOTLAND, 1990-2003

The period stretching from the early-1990s to the early-2000s was, in turn, a very particular one for Scotland. It saw the imposition of major reforms to the HIDB and SDA but also mounting pressures in favor of parliamentary devolution, a winning referendum on that issue and the establishment, in 1999, of the first Scottish Parliament in almost three hundred years. Because of this lack of governmental autonomy, a systematic comparison of Québécois and Scottish policymaking before 1999 would be hazardous. Yet, as this chapter demonstrates, economic nationalism did play key roles, throughout the 1990s, in the upholding of policy asymmetries developed in Scotland since the 1960s, as well as in

the maintenance of high levels of public investment in the realm of business capitalization and sponsoring. This can notably be assessed through an analysis of SE-led national initiatives such as the *Business Birth Rate Strategy*, the *Scottish Business Shop Network*, the *Small Business Loan Scheme* and *Scottish Export Assistance Scheme*, the *Scottish Equity Partnership*, the *Technology Ventures* scheme, the *Scottish Technology Fund*, and perhaps most importantly the *Local Investment Networking Company*, generally referred to as *LINC Scotland*.

Graph 7: Public spending on economic development and R&D⁶⁰, Scotland vs. UK 1998-2007 (£ millions)



As Graph 7 illustrates, economic development spending in Scotland was maintained at very high levels, relative to the UK and relative to Scotland’s economic weight, in the years

⁶⁰ “Enterprise & Economic Development” + “Science & Technology” categories as % of total public spending (including debt servicing). Sources: GERS (1999-2008).

preceding devolution. With economic development responsibilities having been devolved from the SO to the new Scottish Executive in 1998-1999, moreover, this trend persisted under successive SLP-SLD administrations after 1999. The proportion of public resources dedicated to economic development and R&D, notably, remained significantly larger in Scotland than in the RoUK. The central role the public sector kept playing in Scotland's development capital and VC ecosystem, both before and after devolution, was at the heart of this persisting asymmetry. Major initiatives taken in the wake of devolution, in that sense, represented continuity rather than novelty. Among those were the *Business Growth Fund*, LINC's *Trial Marriage Scheme* and *Investment Facilitation Grant*, SE's clustering strategy, *Scottish Equity Partners* and the *Small Business Gateway*, the *Local Economic Forums*, as well as development policies such as *Created in Scotland* and the *Framework for Economic Development in Scotland*.

In what follows, the effects Scottish nationalism has had, through such initiatives, on the institutionalization of policy asymmetry and state intervention are described. Clearly, the perceived necessity *of* and ideological preference *for* policy autonomy which drove the Scottish devolutionist movement right up to 1998 stemmed from nationalism and, perhaps, *economic* nationalism in particular. Most importantly, nationalism was a crucial motive of economic policymakers when devising and implementing the abovementioned investment tools, both before and after devolution. Brian McVey, Director of Strategy and long-time senior official at SE, probably sums it best by recalling this anecdote from pre-devolution Scotland⁶¹:

⁶¹ Personal interview, Edinburgh, September 5th 2014.

It was all always there. It was there before devolution, because the Ministers made their names by doing a good job for Scotland. We were always more aggressively competitive. I remember one of my predecessor, Chief Executive at SE, describing a meeting he had in London, where he talked about what he was trying to do to get more inward investment for Scotland and got lectured by his colleague from the Treasury, saying “that’s dangerously close to a nationalistic argument you’re making there!” And he went: “You’re damn right it is!” This guy was a nationalist with a big N. So we’ve always used that. And it’s behind the rhetoric the current government uses.

4.1. Strategic policymaking in pre-devolution Scotland (1990-1997)

As mentioned at the end of Chapter 2, the Thatcher government had no choice but to recognize, during the 1980s, the cultural and organizational rootedness of economic interventionism in Scotland. The increasingly important roles the HIDB and SDA had been playing, in the realm of business capitalization and sponsoring, since the 1970s were widely perceived, in Scotland and perhaps especially by the Scottish small business community, as both legitimate and necessary. This is precisely what Scottish journalist Maurice Smith (1992: 44) remarked at the turn of the 1990s:

For all the Brave New World talk of “hands-off” government during the previous decade, Scottish business – indeed, Scottish life – appears to have remained wedded to some kind of consensus thinking as it enters the 1990s [...] In this regard, Scottish business leaders have more in common, arguably, with their counterparts in the Irish Republic or some mainland European states, than with those in southern England [...] It has been difficult for leading Conservatives to persuade business that corporatist Labour creations such as the SDA are essentially a bad thing – interventionism, and all that – when so many enterprises have owed their creation, or their survival, in some part to the SDA.

Yet, this did not mean the UK government – and with it the SO – had given up on their attempts to empower Scotland’s private sector. By 1988, following a suggestion from influential figures of the Confederation of British Industry in Scotland (CBI Scotland), a major reform of the HIDB and SDA was initiated which, although adding to their responsibilities, was also used as an opportunity to decentralize and privatize much of their activities (Danson et al. 1990). As the next sections show however, in this new context just

as much as in the early-1980s, Scottish nationalism played key roles in ensuring continuity and the prevalence of strategic, regional-level “national” objectives.

4.1.1. The Enterprise and New Towns (Scotland) Act 1990

The idea of a reform of the HIDB and SDA struck a chord with Thatcher’s government after the general election of June 1987, when Conservatives lost half of their Scottish seats and were reduced to 24% of the popular vote in Scotland, against 42% for Labour (Smith 1992: 50). The proposition of CBI Scotland – that of a merger of training and economic development responsibilities within new HIDB/SDA structures operating through networks of local, “employer-led” agencies – allowed Thatcher’s administration to justify a reform otherwise unlikely to receive support in Scotland. On the one hand, such a reform would mitigate Scottish interventionism, but on the other it would contribute to Scotland’s policy autonomy by transferring training responsibilities from the UK’s Department of Employment to the SO and, from there, to the new HIDB and SDA. In December 1988, the SO thus published a White Paper detailing this idea and by January 1990, the *Enterprise and New Towns (Scotland) Bill* had been introduced to formalize the reform (Danson et al. 1990).

Both the SO’s White Paper and the Bill advocated for the rebranding of the HIDB and SDA as *Highlands & Islands Enterprise* (HIE) and *Scottish Enterprise* (SE), but most importantly for the establishment of autonomous “*Local Enterprise Companies*” (LECs) which, although funded by SE and HIE, would be privately-ran agencies insuring majority board representation (at least 2/3) to local businessmen. LECs, in short, were to become

local, private sector-led subcontractors for SE and HIE, themselves turned into umbrella organizations coordinating LEC networks⁶². If the White Paper, however, only advocated for the decentralization of training responsibilities to the LECs, the government's Bill went one step further by transferring the bulk of business financing and sponsoring activities to the LECs as well (Hayton & Mearns 1991: 308). This, for some, might have “heralded the start of the most radical change in Government policy toward the sponsoring of economic development in Scotland for a generation” (Hood 1990: 65). The way it was promoted, just as the way it was opposed by both Labour MPs and the SNP, was thus revealing of the dynamics at play and, particularly, of the role of Scottish nationalism.

Although the integration of training and economic development was a long-standing demand of some business organizations, the UK government saw it as a political opportunity as much as an economic necessity. This aspect of the proposed reform allowed the Tory SOSS, Malcolm Rifkind, to present it as a form of devolution toward Scotland, drawing support because of its implications in terms of policy autonomy (Hansard 1990: n.p.):

I shall explain why the Government and a wide spectrum of Scottish opinion believe that to be highly desirable. The first and most obvious reason—and one that industry has pointed to—is the desirability of a single door for industry with regard to business support and training [...] The second main ingredient is the transfer of responsibility for training from Sheffield to Edinburgh and from the Department of Employment to the SO [...] That is of great significance. In addition, it is a Scottish solution to meet Scottish needs.

As mentioned however, the Bill also provided for the transfer of most business financing roles from SE/HIE to the LECs. The SOSS, in this case, invoked policy divergence as

⁶² When the reform took effect, in April 1991, twenty-three LECs had been formed: thirteen in SE's network and ten under HIE's network.

justification (Hansard 1990: n.p.): “essentially, we have been influenced by the needs of the Scottish economy and our perception of what would be most appropriate and relevant to the Scottish requirement. The role of enterprise companies will be far wider than those of TECs⁶³ in England, which will be restricted to training. In Scotland, enterprise companies will also have the significant role of business support and development.”

While Thatcher’s government used the language of policy asymmetry to justify the reform, SNP and Labour MPs from Scotland rejected the Bill for very similar reasons. Nationalists argued that without enhanced policy asymmetry in the UK, the proposed reform would be at best inconsequential. The leader of the SNP, referring to an interview given on this matter by the well-known Scottish venture capitalist David Murray, remarked (Hansard 1990: n.p.):

far from replying that he believed the SE proposals would lead to some great Scottish economic renaissance, Mr. Murray expressed regret about the erosion of indigenous ownership in the Scottish economy, and pointed to the damage done to Scotland's economic prospects by penal interest rates that are designed not for Scottish economic conditions, but for the overheated economy of the south-east of England. Until we have a real economic policy that provides a genuine Scottish solution to Scottish needs, the SE proposals will be at best irrelevant and at worst damaging.

Labour MPs, in turn, worried that the LECs would give local businessmen excessive economic influence (Hansard 1990). Both Nationalists and Labour MPs, most significantly, pointed out that national coordination over economic policy would be jeopardized: “even more damagingly, the establishment of SE and the LECs will destroy the strategic, Scotland-wide analysis of economic development, leaving a dangerous vacuum at the

⁶³ The English (and Welsh) *Training and Enterprise Councils* (TECs) were established in 1990.

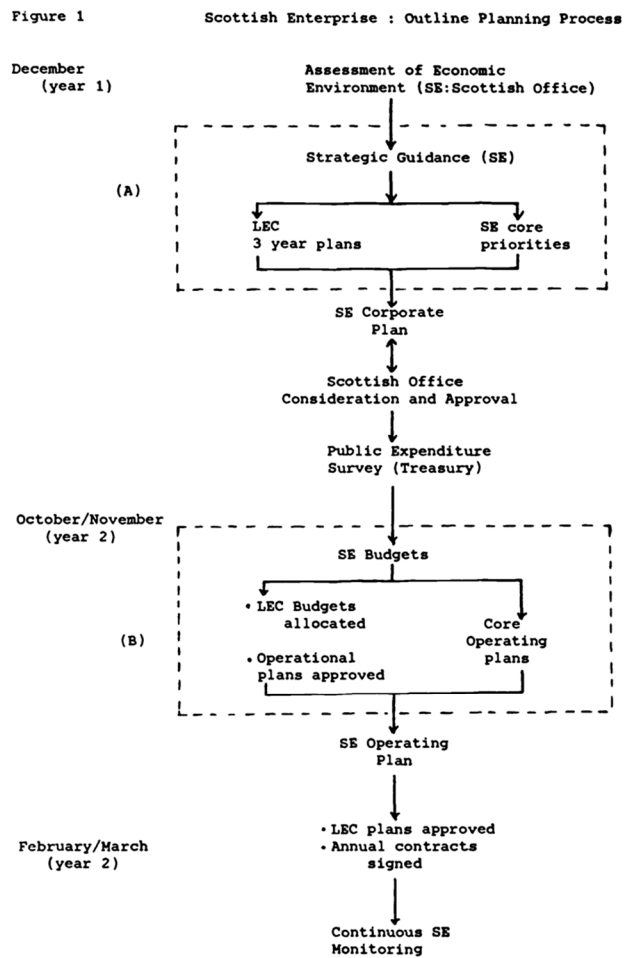
centre. The central role that the SDA has carried out successfully will also be lost” (Hansard 1990: n.p.).

It is worth noting that, although the Labour Party was also generally opposed to the establishment of TECs in England and Wales, this opposition mainly stemmed from a distrust of private sector leadership and raised little concerns for strategic economic development capacities (Hansard 1989). Besides, the Labour Party actually later embraced the TECs (Lourie 1997: 16-18). In Scotland, however, between the time the Bill was adopted in June 1990 and the commencement of SE/HIE operations in April 1991, it became clear that most of the concerns expressed by the SNP were shared not only by part of Scotland’s small business community (Smith 1992: 55) and local authorities (Danson et al. 1990), but most importantly by SE and HIE officials themselves, who saw it as their duty to safeguard a capacity for national coordination and strategic planning. This capacity was widely recognized as a major characteristic of Scotland’s economic development model, one that the LECs were perceived as jeopardizing (Danson et al. 1990: 189).

The LECs were to be responsible for the provision of financial assistance to businesses, a policy sector both the HIDB and SDA had used extensively to steer the private sector and, more generally, the Scottish economy in strategic directions. Immediately after the Act establishing SE and HIE was passed, thus, internal transition taskforces started working on the elaboration of a system insuring, via the process of budget allocation, efficient coordination between LECs’ operations and SE/HIE strategic priorities (see Figure 4). Among such “priorities,” as adopted by SE’s Board in 1990, was to improve

access to capital for technology-intensive SMBs, so as to “reflect the inherited priorities of the SDA” (Hood 1991: 75).

Figure 4. Scottish Enterprise/LECs Strategic Planning Organizational Chart, 1991-1992⁶⁴



⁶⁴ Taken from Hood (1991: 72).

Neil Hood, a senior manager at the SDA, one of the leaders of the transition team in 1990, and later Director of SDF and SE's deputy-Chairman, painted a clear picture of this necessity to ensure policy continuity (1990: 66):

Local focus can be blended with national strategy and effective impact at the national level. That this is achieved from the outset is absolutely fundamental. Every endeavor has been made to ensure that the business planning process currently under way within SE and the LECs starts on that footing. But it will need much resolve on the part of all parties, not least through Government's support of the Board of SE to ensure that it remains in synchronisation. The strategy of SE as a network of bodies interrelated by contract has to be driven by overall Scottish interests, not by other imperatives [...] Substantial, and often heroic, efforts have been made over recent months within many LEC areas to ensure that all these parties remain on reasonably common ground. It is to be hoped that such unity is developed and sustained.

When referring to economic nationalism as a “set of institutionalized economic ideas” and as “perceived imperatives” or “ideological preferences” for continuity, policy asymmetry, and strategic intervention, this is precisely what is meant. In the case of the transition from the SDA to SE, such ideas, perceptions, and preferences were mobilized both at a political level, through Scottish MPs, and at the executive level, through senior officials at SE/HIE.

What applied to SE also applied, besides, to HIE, where “national” initiatives coordinating and framing LEC operations were quickly implemented: one can think, for instance, of the *Business Start-up Scheme*, of *Investor in People*, of the *Strategy for Enterprise Development*, and of the promotion of the Gaelic language as a development tool, all instigated between 1990 and 1995 (HIDB 1990; HIE 1993, 1996; Lloyd & Black 1993). As SE's *Business Birth Rate Strategy* was also about to demonstrate, efforts made in the early 1990s in order to safeguard institutional capacities for coordination and strategic intervention indeed allowed for the advent of major, structuring policy initiatives.

4.1.2. The Business Birth Rate Strategy

As illustrated in Chapter 2, most of the business financing efforts of the SDA and HIDB during the 1970s and 1980s had been geared toward an increase of Scottish presence and ownership in key industrial sectors and major economic centers, with a specific focus on local SMBs. Among the concerns regarding SE and HIE was that of a potential shift in policy focus, operated through the LECs, toward medium-to-large businesses. This concern was quickly appeased, however, as the composition of the preliminary LEC Boards – the “*Steering Groups*” formed in 1991 – showed a balanced representation of SMBs and medium-to-large companies (Hayton & Mearns 1991: 311). The relatively small size of most LECs, moreover, meant that they would carry relatively little influence on their own and would be highly dependent upon national structures for funding. By 1992-1993 for instance, each LEC only accounted for between 5% and 10% of SE/HIE networks’ total budget, except for the larger ones in Glasgow (SE) and Argyll (HIE), respectively drawing 12% and 15% (Lloyd & Black 1993: 77; SE 1993: 22).

From the onset, therefore, SE and HIE retained substantial influence over the LECs as illustrated by the requirement imposed on the latter to get “national” approval for any investment exceeding £30,000 (HIE) or £250,000 (SE). Both SE and HIE safeguarded, besides, their capacity for strategic planning and policy coordination. In the early 1990s, as Scotland was barely coming out of the 1990-1991 recession, such a capacity was used to boost economic growth. The policy initiatives undertaken to that end took two main forms. First, FDI prospection by *Locate in Scotland* (LIS) – another public agency answering to SE and the SO – were intensified so as to attract new multinational corporations to Scotland.

Secondly, and most importantly, this was complemented by an overarching, national effort aimed at increasing entrepreneurial levels in Scotland, so as to promote the advent of locally-owned start-ups strengthening Scottish supply chains and endogenous clusters. This approach was first devised by SE in 1993 and resulted in a major initiative, the *Business Birth Rate Strategy* (BBRS).

The BBRS was to be a strategy spanning over ten years, and many of the organizations and funds characterizing Scotland's development capital ecosystem today were established in its wake. Following the launch of the strategy, Crawford Beveridge, then Chief Executive at SE, commented on the perceived problem it was devised to address: "for some years, perhaps decades, we in Scotland have been aware that as a nation we seem to have lost some of that entrepreneurial drive for which the Scots were once famed [...] It is apparent that we have a fundamental problem. That problem can be traced back to a simple lack of companies in Scotland" (cited in Dow & Kirk 2000: 28). The BBRS, thus, was to be much more than a simple counter-cyclical measure: it was crafted to address the long-standing problem of Scotland's over-reliance on foreign (including English) corporations. After all the efforts made during the 1970s and 1980s, this was still a major concern: by 1994, Scotland was second-to-last among UK regions for the number of registered businesses per capita, lagging the UK average by a wide margin (Dow & Kirk 2000: 31).

One of the core objectives of the BBRS, accordingly, was to catch-up to the UK's "business birth rate" average by 2000⁶⁵, through the establishment of at least 25,000 new start-ups. The unofficial objective of the BBRS, however, was in fact to catch-up to South East England/London, the UK's leading region for businesses per capita (Talbot & Reeves 1997: 26; Deakins et al. 2000: 161). According to Dr. Geoffrey Whittam⁶⁶, leading expert on Scottish business financing and VC policies, while the economic rationale behind the BBRS was to reach "normal" levels of business creation, the political rationale was to establish Scotland as one of the UK's leading regions:

It was a deliberately political strategy or, to be more polite, a 'social-economic' strategy. The problem in Scotland was that new firm formation was a lot lower than in the South East of England. Now, there's a question about the methodology that was adopted at the time, because new firm formation in Scotland wasn't really any worse than in the North of England. They chose a more successful region to try and imitate, to increase the number of new firms. So they were comparing with the best.

To attain such ambitious targets, SE established a list of six priorities: **a)** promoting an entrepreneurial culture in Scotland to increase the proportion of Scots having "entrepreneurial intentions;" **b)** "improving formal and informal support networks" for entrepreneurs; **c)** maximizing the access to corporate funding, and to VC in particular; **d)** "widening the entrepreneurial base" by sponsoring female entrepreneurs; **e)** growing the number of start-ups in the three key sectors of manufacturing, high-technology, and business services; and **f)** widening the proportion of "fast-growing new starts," i.e. of high-potential "gazelles" (Woods 2006: 1).

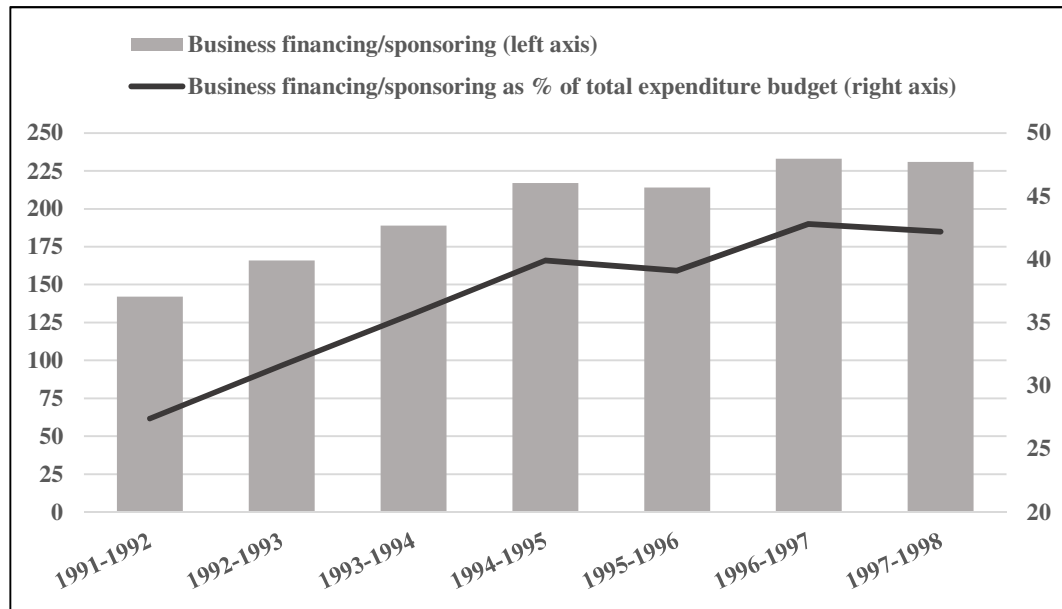
⁶⁵ For details about the methodology behind this indicator, see Dow & Kirk (2000: 29).

⁶⁶ Reader in Entrepreneurship at the *Glasgow School for Business and Society*, Glasgow Caledonian University. Personal interview, Glasgow, August 17th 2015.

The BBRS was to be the overarching framework within which multiple initiatives aimed at seed-stage and start-up stage ventures, notably implemented through the LECs, would complement each other. As a “national strategy,” therefore, the BBRS was to mobilize a wide array of actors in Scotland: “the strategy seeks to involve the business community, the media, the financial sector, the education system, and business support networks across Scotland in stimulating the encouragement of entrepreneurship and helping improve the environment for new business start-ups” (SE 1995: 15). Among the first initiatives developed in the wake of the BBRS was the £100 million *Small Business Loan Scheme*, launched in October 1994. This fund, aiming to provide Scottish start-ups and SMBs with long-term, preferential loans, was established in partnership with a number of banks to which SE would pay the interests on issued loans beyond a pre-established “interest rate cap” (SE 1995: 12). This was a good example of the coordination and concertation the BBRS was aiming to foster within Scotland’s business financing ecosystem.

As illustrated in Graph 8, the various financial tools launched as part of the BBRS from 1993 onward resulted in a significant increase of SE/HIE networks’ spending on business capitalization and sponsoring: from a total of £142 million in 1991-1992, it reached over £230 million before devolution. Interestingly, the proportion of SE/HIE resources dedicated to business capitalization and sponsoring – as opposed to the proportion dedicated to administrative costs or professional training activities – grew from 27% to 42% over the same period.

Graph 8: Contributions of SE & HIE, 1991-1998 (£millions)⁶⁷



Among other initiatives put in place under the BBRS were notably, also in 1994, the *Women Starting Businesses* campaign, a coordinated promotional effort aiming to “widen Scotland’s entrepreneurial base” to women, as well as the *Scottish Business Shop Network*, a partnership with LECs, chambers of commerce, and higher education institutions. The aim in this case was to establish forty “first-stop shops” across Scotland, offering support, information, and advice to businesses with regards to “training, patents, exporting, opportunities in Europe, franchising, marketing and finance” (SE 1995: 16). Subsidies of up to £30,000 were also made available to exporting SMBs through the *Scottish Export Assistance Scheme*, crafted in collaboration with LECs and chambers of commerce as part of SE’s 1995-2000 “Export Development Strategy” (SE 1996: 24-25).

⁶⁷ Sources: SE & HIE (1992-1998), *Annual reports and accounts*.

Aside from a few regional exceptions however (Talbot & Reeves 1997; Dow & Kirk 2000: 34; SE 1996: 19), the BBRS didn't succeed in generating the improvement in entrepreneurship levels SE was aiming for. Yet, its impacts were felt early on, in at least three ways: first, it boosted levels of public assistance – financial and managerial – to businesses; second, it triggered concertational practices and ensured “national-level” coordination between SE/HIE, LECs, Scottish banks, and chambers of commerce; finally, it gave way to the establishment of new programs and organizations around which the Scottish development capital ecosystem was built⁶⁸. Counterarguments have thus been offered to the effect that it did initiate a cultural shift in Scotland, by leading to significant increases in “entrepreneurial intentions” among Scots and by creating “stronger institutional support for business start-ups” (McVey 2000: 35). “For those who wanted to take the plunge, there was a lot more of a supportive environment than was perhaps the case previously” and, as the next section shows, nowhere was this more evident than in the sectors of development capital and VC⁶⁹.

4.1.3. LINC Scotland, the Scottish Equity Partnership, and Technology Ventures

As early as 1993, in the wake of the BBRS, a new non-for-profit organization was established to act as an “introductory service” between Scottish SMBs and potential individual investors, the so-called “business angels.” This kind of service was already offered by many LECs, but no coordinated “national” effort had yet been initiated. As the

⁶⁸ *Business Gateway* for instance, a public business support organisation collaborating closely with SE and HIE, was born out of the *Business Shop Network* (O'Hare 2004).

⁶⁹ Geoffrey Whittam, personal interview.

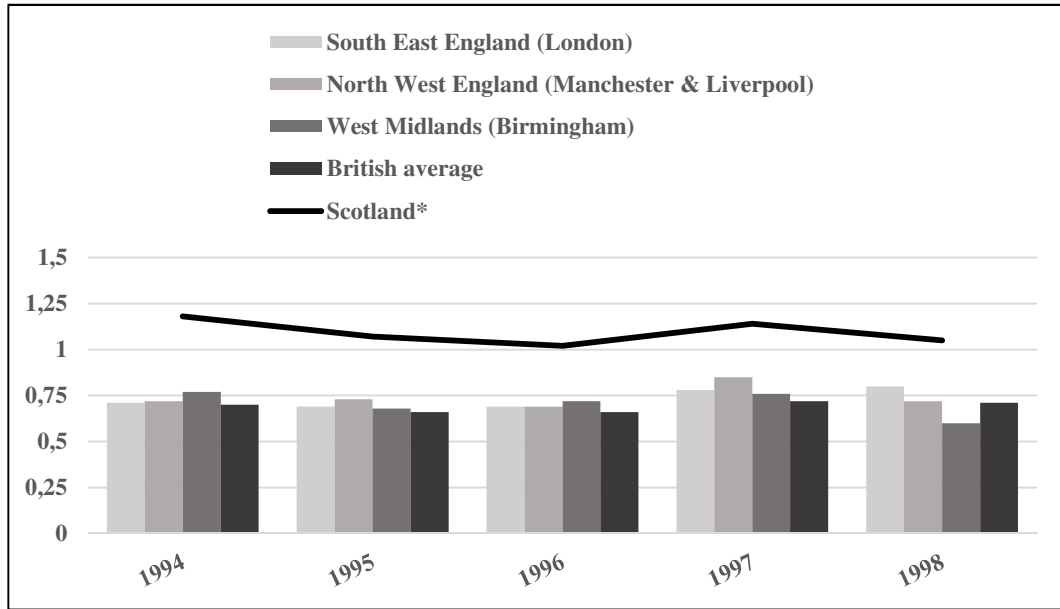
policy focus of SE and HIE shifted toward start-ups however, the need for a centralized system facilitating angel investment was increasingly recognized given angels’ “home-bias” and tendency to invest small amounts – at the time, generally inferior to £50,000 – in seed and start-up stage ventures (Mason & Harrison 1995, 1997). In partnership with the SO, SE led the charge for the establishment of LINC, a national network linking entrepreneurs and angels across Scotland. As David Grahame, then and still Executive Director at LINC, explains, his organization always enjoyed a special status⁷⁰:

We were part of the Glasgow LEC, but quickly it became obvious that to get to critical mass we had to be Scotland-wide. So we spun-out in 1993 as a Scotland-wide agency, and in those days there was, for tax purposes, a thing called “enterprise agency.” Enterprise agencies were defined as private sector, non-profits dedicated to entrepreneurial development objectives, and what this meant was that your private sponsors got tax breaks. So we were given enterprise agency status by the then SOSS, and that was hugely important.

As the only national-level, tax-advantaged angel network in the UK, LINC deepened policy asymmetry in Scotland (Mason & Harrison 1997: 114). For much of the 1990s, as Graphs 9 and 10 below illustrate, Scotland was attracting a disproportionate share of the UK’s VC and private equity deals relative to its corporate weight, and a much larger proportion of its businesses were receiving equity investments than was the case elsewhere in the UK. Yet, this success concealed the fact that, especially after the early-1990s’ recession, a large majority of the deals and most of the capital invested involved expansion-stage businesses in traditional, low-tech sectors (Murray 1994, 1995; Murray & Lott 1995). There can be no doubt, therefore, that a funding gap existed for start-ups and early-stage high-tech ventures, a gap the BBRS and LINC were intended to fill (Harrison & Mason 1996; Mason & Harrison 1995, 1997).

⁷⁰ Personal interview, Glasgow, August 17th 2015.

Graph 9: Private VC/private equity investees per 1000 registered businesses, 1994-1999 (%)⁷¹

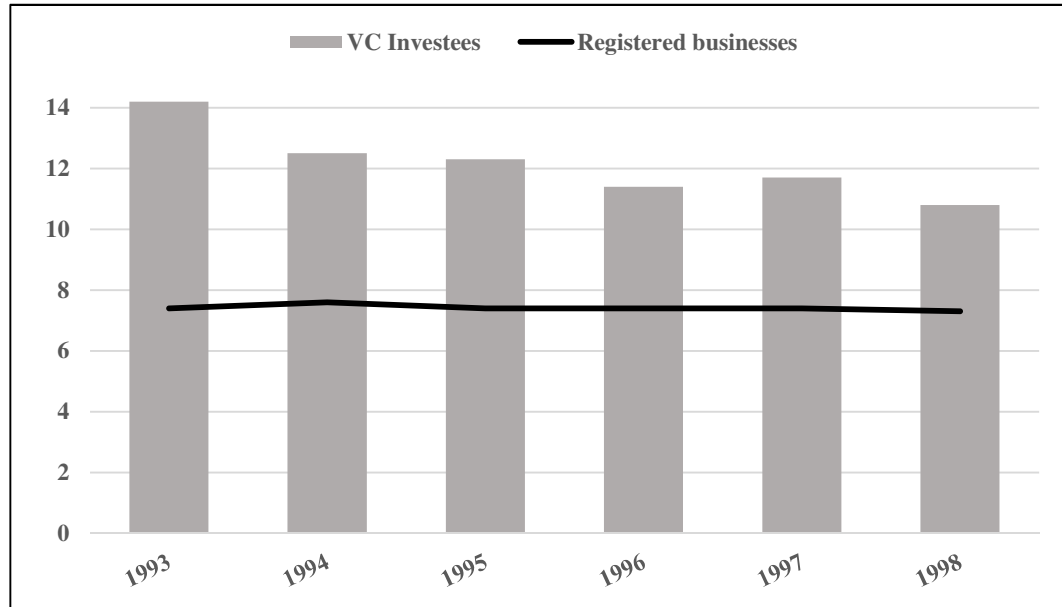


Although the advent of LINC was not, given Scotland’s enviable position within the UK’s VC industry, a centrifugal initiative, it was devised to make the most out of Scotland’s comparative advantages. As Dr. Whittam remarked (personal interview), LINC was to capitalize on Scotland’s industrial transition away from heavy manufacturing, which had already led, throughout the 1980s and in the wake of the recent Maastricht Treaty (1992-1993), to the closure or relocation of many large corporations:

A strength of Scotland comes from unintended consequences: you’ve had a domination of the economy by large multinationals, and when you’ve had that retrenchment of large multinationals going to Eastern Europe for example, because of the change in the economic structure, a lot of top executives didn’t relocate to Poland but stayed and were given big redundancy packages. I met a guy who was Head of Finance for Continental Tires in Scotland: he told me there was no way he was going to move, and there was no way he would be gardening and decorating for the rest of his life. The angels will tell us they want to give something back to Scotland.

⁷¹ Sources: BVCA (1999), *Report on Investment Activity*. *Because the figures used for this graph are based on the investment activities of BVCA members (SE and most Scottish angels/angel syndicates are not), Scotland’s quotient is significantly undervalued for the whole period.

Graph 10: Share of private VC/private equity investees in UK total vs. Share of registered businesses in UK total, Scotland 1993-1998 (%)⁷²



As a national network for business angels, LINC was crafted to harness the investment potential of a growing pool of experienced, high net-worth ex-managers most likely to invest locally. Moreover, LINC was to take advantage of Scotland’s highly coordinated, publicly-led economic development model which derived in part, as illustrated above, from nationalism. This initiative, in other words, was specific to Scotland because it would have been almost unthinkable elsewhere. As per Dr. Whittam (personal interview),

this is where the “identity” aspect comes to the fore. England is very strange, because what you’ve got there is London, and then the rest of England. If you look at some of the [angel] syndicates in England, in Yorkshire for example, they will be more “pro-Yorkshire” than pro-London. There’s a local sensibility, and that is actually replicated across England so that you don’t have the one voice LINC represents in Scotland for the angel network.

⁷² Sources: BVCA (1999), *Report on Investment Activity*. *Because the figures used for this graph are based on the investment activities of BVCA members (SE and most Scottish angels/angel syndicates are not), Scotland’s share of VC investees is significantly undervalued for the whole period.

LINC's David Grahame makes a similar point when contrasting England's trajectory with the way the angel ecosystem developed in Scotland⁷³. In the latter case, LINC was able to coordinate much of Scotland's angel activities thanks to the integrated SE/HIE networks, and to effects of scale. In England however, the angel ecosystem remained much more loosely integrated and many different networks and groups subsisted:

With SE, we have had the advantage of a single regional authority for the whole period. England has been through a series of policy changes which have been very disruptive. When we started LINC here, England was organizing around the TECs. There were 83 of them, which was really too fragmented; most of them could not achieve critical mass in terms of an angel "ecosystem." The conventional wisdom suggests a good hinterland size for angel activity is about 5 million; whether here or in Boston, it's the same. England was over 50 million people, far too big for a single national effort to work. But when you divide that into 83 authorities, it was just too fragmented.

LINC, besides, was successful from the onset: over its first full year in operation, in 1994-1995, LINC's "matching services" – linking angels and potential investee businesses – were behind £7 million in VC deals, around half the total value of angel investments in Scotland (SE 1995: 15; SE 1996: 18). By 2000, more than six-hundred individual Scottish angels had become members of the network⁷⁴. LINC was not the only BBRS effort aimed at improving access to VC however. In fact, it was part of a coordinated effort which included the establishment of at least two other funds dedicated to early-stage business financing.

One was the *Scottish Equity Partnership* (SEP) launched in 1995-1996, a £25 million hybrid VC fund equally co-capitalized by SDF and private partners. The SEP was explicitly intended to leverage private investments in order to fill funding gaps for early-stage, high-tech businesses (SE 1996: 18). Yet, it was also devised with public sector

⁷³ See also Mason & Harrison (1997: 119).

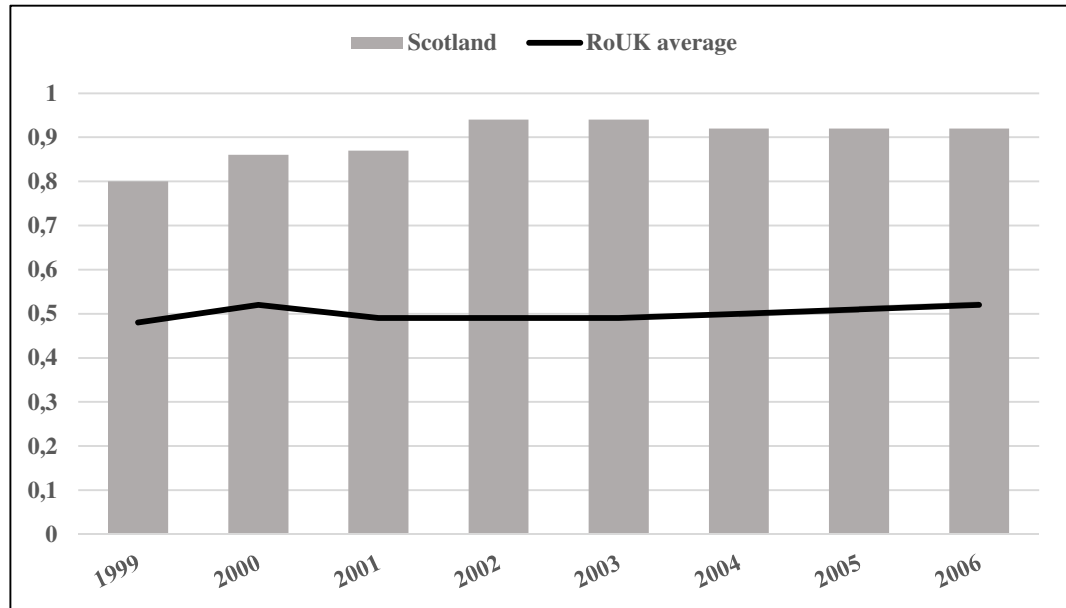
⁷⁴ David Grahame, personal interview.

considerations in mind. First, the fund was managed by SDF, from which investment initiatives would first come. Thus, “from a SE perspective, the promotion of SEP had a core economic development rationale, but it was more related to the longer term strategic goals of stimulating leading edge technology and high growth potential SMEs, than to shorter term considerations. As such, SDF as an investment management team has become more proactive in leading and developing deals in that market sector” (Hood 2000: 326). The SEP was intended, in turn, as a strategic complement to both SDF itself and LINC: with an investment range of £100,000 to £500,000 it would provide follow-on funding for LINC’s investees, but also occupy a tactical position between SDF investments rarely exceeding £200,000, and VCs’ rarely below £500,000 (Harrison & Mason 2000b; Hood 2000: 325; SE 1996: 18).

The same arguments can be made with regards to the creation of the *Scottish Technology Fund* (STF) in 1997, a hybrid VC fund specializing in high-tech university spin-outs and capitalized equally by SDF and 3i, the largest VC in the UK then. This fund was specifically put in place in order to foster the advent of innovative start-ups, and thus of new investment opportunities for LINC members, SDF, the SEP, and 3i itself (Hood 2000: 326). Like the SEP, the STF was managed from within SDF and was in fact born out of another SE scheme, *Technology Ventures*. Launched less than a year earlier in collaboration with the *Royal Society of Edinburgh*, *Technology Ventures* focused on the sponsoring of R&D and was set up “with the aim to increase the number of spin-out companies from Scottish Higher Education Institutions, to improve the level of understanding of commercialisation more generally within the academic sector, and to

increase the number of university researchers who are capable of initiating new businesses from their research” (SE 2013: 7).

Graph 11: Government-backed R&D⁷⁵ as % of GDP, Scotland vs. RoUK 1999-2006



Technology Ventures was to concentrate on the specific sector of nanotechnologies, offering grants for R&D and commercialization – more than £8 million in 1997-1998 (SE 1998: 11). This priority, in line with previous efforts to build around the “Silicon Glen” cluster, was expressed at the launch of the scheme, in December 1996⁷⁶: “Scotland is a small country and has to prioritise its R&D investments. It was suggested that nanotechnology, or microengineering, is an emerging technology of great potential which is well within the capabilities of Scotland’s science and industrial base.” In combination with *Technology Ventures*, the STF would contribute in establishing Scotland in the late

⁷⁵ R&D financed/performed by governmental and higher-education institutions. Sources: Scottish Government, *Gross Expenditures on Research and Development (GERD)*.

⁷⁶ Web: <https://www.rse.org.uk/cms/files/advice-papers/inquiry/comm/c01.pdf> (11/30/2016).

1990s as the UK's leader in the public sponsorship of R&D. By 1999, as Graph 11 shows, Scottish government-sponsored R&D was already accounting, at 0.8% of Scotland's GDP, for almost double the RoUK's average, a gap that kept increasing over the following years. This was another telling example of the way in which, even in pre-devolution Scotland, asymmetry persisted and perhaps widened in accordance with the perceived needs of the Scottish economy, thanks to SE-led strategic policymaking.

4.2. The “statecraft phase” (1997-2003)

In this sense, the late 1990's devolution process in Scotland accentuated a trend that was already well established. That is not to say it was inconsequential, however. As the Thatcher administration's reforms of the SDA and HIDB had shown, until devolution Scotland's economic development model remained vulnerable as a result of the UK's centralized political system. Although largely autonomous, SE and HIE were still answering to a SO subordinated to Westminster's governing party. While devolution was, thus, primarily about the “rescaling” of the UK's political economy, it was also underpinned by Scottish (economic) nationalism and it did open new avenues for autonomy and divergence. SE and HIE, most importantly, would henceforth answer to the Scottish Executive – to the “Enterprise and Lifelong Learning Department” (ELLD) in particular – and thus coordinate with regionally-defined priorities and strategies. Scotland's Minister for Enterprise would “provide SE with overall strategic direction, provide more detailed strategic direction in specific areas, and agree the performance measures which [would] form the foundation of assessing progress in achieving strategic objectives” (Scotland 2003: 4).

Between 1999 and 2001, a string of new initiatives were launched which had direct impacts on the activities and structures of SE and HIE: following one of the first policy decisions of the ELLD, the LECs were brought back into the agencies as fully public subsidiaries, in order to homogenize and synchronize local development efforts (Scotland 2000). In an essay published after her mandate as head of the ELLD from 2000 to 2002, Wendy Alexander (SLP) confirmed that the LECs were always perceived as “balkanising” the Scottish model, a trend against which *state-building* efforts of the first Scottish Executive were devised (2003: 10): “the Parliament has unquestionably facilitated Scottish solutions to Scottish problems and aligned Scottish spending much more closely with the wishes of the Scottish people. All this is part of our statecraft phase – the playing out of the transition from the administration of Scotland to her better governance.” As the next sections illustrate, SE and HIE, as well as business sponsoring more generally, were indeed to be at the center of the Scottish Executive’s “statecraft phase.”

4.2.1. Devolution and economic development

In 1995, a coalition of Scottish devolutionists, the *Scottish Constitutional Convention*⁷⁷ (SCC), published its final “report” in which the detailed rationale in favor of parliamentary devolution as well as the fine print of a Scottish parliament’s functions were laid out. This report, *Scotland’s Parliament Scotland’s Right* (SCC 1995), demonstrated how central economic nationalism – as relating to issues of policy asymmetry and strategic

⁷⁷ The members of the SCC, formed in 1989, included the SLP, the SLD, the STUC, the SCDI and the FSB Scotland. Although the SNP decided not to become an official member and to continue promoting Scotland’s secession from the UK rather than devolution, it still supported both devolution and most of the SCC’s positions.

state intervention – was in Scotland’s devolutionist movement. Among the three components of the SCC’s “case for change,” besides those of democratic accountability and regional autonomy, stood the issue of economic asymmetry (SCC 1995, n.p.):

The Scottish economy can be differentiated from those of other parts of the UK, both in its strengths and in its weaknesses. Scotland has a relatively large export trade, for example, but one heavily dependent on a very narrow product base: chiefly computers and whisky. It has a prestigious and successful financial sector, but again skewed toward certain types of services. It has a long-standing difficulty in creating new growth companies and lasting jobs [...] UK economic policy has, hardly surprisingly, failed to address these circumstances closely, systematically or effectively. Scotland’s Parliament, equipped with the sort of powers described in the pages that follow, will be able to do much better.

The economic advantages of devolution were not only presented from a policy standpoint but also from a *political* standpoint, as they related to government intervention (SCC 1995, n.p.):

Members of the Scottish Parliament will have the advantage of being geographically close to Scotland’s business community. This proximity will allow for better contact to be maintained between business and political decision-makers. In comparable circumstances in other areas of Europe with home-rule parliaments or Assemblies this proximity has proved of major economic benefit, allowing a broader and deeper mutual understanding of business and political conditions. The way in which the Scottish Parliament exercises its economic powers will play a major part, along with the UK government and the EU, in determining the economic health of Scotland and her people [...] Taken together these powers and obligations will create a powerful psychology of economic responsibility. It is the belief of the Convention partners that they would be used to stimulate a Scottish economic renaissance.

The opportunity for devolution finally opened in 1997 with the election of Tony Blair’s “New Labour,” which had already pledged to hold a referendum on the question. Election results in Scotland, with Blair’s Labour Party reaping 46% of the vote and the SNP 22%, hinted the opportunity would not be missed (Denver 1997). The referendum⁷⁸ was held only four months after the Labour victory, in September 1997, with all of the SCC members and the SNP advocating in favor of devolution. Three-quarters of the Scottish voters ended

⁷⁸ See Denver et al. (2000), SurrIDGE & McCrone (1999), and Taylor & Thomson (1999).

up supporting it, and the formal process was thus set in motion in December 1997, with the introduction of a *Scotland Bill* closely inspired from the SCC’s 1995 report.

Table 3: Reserved and devolved economic powers, *Scotland Act 1998*⁷⁹

<i>Reserved powers (UK Government)</i>	<i>Devolved powers (Scottish Executive)</i>
Fiscal policy Macroeconomic policy Monetary policy (Bank of England) Financial markets/Bank market Borrowing Competition policy Commercial policy Sectoral industrial policy Designation of “assisted areas” Intellectual property Research Councils Consumer protection Telecommunications Road, rail, marine, & air transport Energy (electricity, oil & gas, nuclear) Immigration	Business rates (local) Personal income tax (+/- 3%) Trade promotion (exports & FDI) Regional development grants Management of EU “Structural funds” Regional industrial policy Local planning Business advice & support SE & HIE networks Education Professional training University research Agriculture & fisheries Renewable energy Tourism Environmental policy

When asked what devolution immediately changed in Scotland, experts of business financing actually point not only to policy asymmetry, but most revealingly to sociopolitical impacts. For Dr. Geoffrey Whittam (personal interview),

The greater pride in being Scottish should not be underestimated: you’re getting more control and more power to make decisions that might impact your own country. If you think of the typical business angels, they’re basically looking for investment opportunities, so when Scotland comes much more to the fore, they become more conscious of it and engage in helping businesses in Scotland.

⁷⁹ Partly drawn from Keating (2010: 233). See also CSD (2008: 3-5).

This focus on Scotland and on this “power to make decisions” was perhaps particularly evident in the case of SE and HIE, moreover. As SE’s Brian McVey explains (personal interview),

SE as an organization wasn’t big on the radars of the SO. That was a department of the British government whereas after devolution it became something else. The political and parliamentary scrutiny was quite different, because from Westminster, SE was only one of a number of regional agencies, it was a long way away and relatively small against a lot of things scrutinized at Westminster. Suddenly, the Scottish Parliament drew loads and loads of interest into economic development and loads and loads of interest at SE. So now all of a sudden we had 128 MSPs hugely interested in this and Parliament’s Committee structures became a mechanism for that.

One of the first moves of the SLP-SLD coalition elected in May 1999⁸⁰ was indeed to launch, as early as September, a parliamentary inquiry into local economic development – i.e. into the LECs – to be led by the “Enterprise and Lifelong Learning Committee.” This eagerness to review and reform the LECs system was reminiscent of the early 1990s’ debates and demonstrated that Scottish policymakers never fully embraced this system. In fact, before this Committee could even produce its final report the Scottish Executive already concluded that “there [were] evident problems in using what was designed not to be a national delivery machine to deliver national programmes and priorities,” and “that greater central control and a more universal approach, concentrating on delivery rather than innovation, was needed” (Bennett & Fairley 2003: 7-8).

The final report, published in May 2000, confirmed the Executive’s concerns and advocated for a significant degree of centralization. The Committee concluded that there was “congestion, confusion, overlap, duplication, and competition” in Scotland’s local development ecosystem, and that this was predominantly harmful to inexperienced

⁸⁰ See Denver & MacAllister (1999), David McCrone (1999), and Surridge & McCrone (1999).

entrepreneurs and start-ups (Scotland 2000). Among the many recommendations of the report was that “the Executive should take the lead in guaranteeing that a simpler, more cohesive structure exists in Scotland for the delivery of local economic development services [...] and be prepared to penalise publicly-funded bodies who do not co-operate in this process” (Scotland 2000: Conclusion 5). To that end, it was suggested that “LECs should significantly change their character. They should change their status from private companies to public bodies; open up their boards to other non-business members; [and] increase the level of transparency in their activities” (Scotland 2000: Conclusion 13).

In 2000, the LECs were therefore reintegrated to SE and HIE structures as public subsidiaries (SE 2000). The Scottish Executive, again following Committee recommendations, also created new local bodies – not unlike Quebec’s CLD – designed to streamline business services at this level and to allow for enhanced coordination between the Executive’s strategies and local players’ activities (Bennett & Fairley 2003). The new *Local Economic Forums* were established in each of the LEC areas and were to regroup LECs themselves, local authorities, and local chambers of commerce (Scotland 2000). Not only were the SE/HIE networks re-centralized, but local development as a whole also was, through those *Forums* whose main purpose would be “the achievement of measurable outcomes established by the Executive” in terms of “new business starts, support to small businesses, key local industries, [and] skills training” (Scotland 2000: Conclusion 10).

Clearly, one of the first impacts of devolution in Scotland was to open the door for this long-desired “centralization of policy through the strengthening of SE and the reorganisation of the Local Enterprise Network” (Bennett & Fairley 2003: 17). Such

recentralization, notably induced by the perceived necessity of strategic state intervention at the heart of economic nationalism, also deepened Scotland's policy divergence from England. In good part to compensate for the devolution of economic development responsibilities to Scotland, nine "Regional Development Agencies" were established across England in 1999-2000, each endowed with a hybrid "Regional Venture Capital Fund" by 2002-2003⁸¹. As Scotland was recentralizing its public business sponsoring activities, economic development in England was decentralized, adding to the "fragmentation" already produced by the TECs system (Harding 2000: 306-307). Unlike in Scotland, business financing and VC in England were still not considered "part of a larger integrated system" (Mason & Harrison 2003: 865).

The centralization of economic development through SE/HIE networks, moreover, allowed for the launch of a second phase of the BBRS, this time crafted as a clustering approach. Although a SE initiative, it was devised and implemented in close collaboration with the Scottish Executive, from which business creation objectives emanated. As SE's Chief Executive, Crawford Beveridge, noted in 1999 (SE 1999: 7),

we look forward to working closely with the Parliament and to building on the strong sense of identity which it creates, in order to promote the changes in attitude that are the basis of sustainable prosperity. This cooperative theme is particularly important in our approach to economic development, where we believe that the clusters concept represents an imaginative way of building the modern, competitive economy we see in our network strategy.

This new approach was put in place in the context of the adoption of a first manufacturing strategy by the Scottish Executive in March 2000, *Created in Scotland* (CIS), devised in

⁸¹ These agencies and their VC funds were relatively short-lived however, and were all dissolved by 2012, in the wake of the establishment of the British Business Bank. On these agencies and funds, see UK (1999), Harding (2000), Allen (2002), Mason & Harrison (2003), Sunley et al. (2005), NESTA (2009), and Webster (2009).

concertation with the newly established *Scottish Manufacturing Steering Group*, of which SE, HIE, SFE, the SCDI, CBI Scotland, and the STUC were all members. In the context of the late-1990s' high-tech bubble, CIS aimed to strike the right balance between continued diversification toward technology-intensive industries, and sustained backing of traditional, low-tech sectors which still accounted for much of Scottish employment and, in cases such as in food & drink or oil & gas, represented comparative advantages (Scotland 2000b: 3).

Clustering, i.e. the development, with the financial and organizational support of the state (Taylor & Raines 2001: 32-33), of “inter-company alliances and partnerships” in key sectors was to be at the center of Scotland’s new manufacturing strategy (Scotland 2000b: 21, 34). It was to provide a bridge between FDI prospection efforts and the BBRS, by aiming at the development of deeper synergies between large (often foreign-owned) companies and indigenous SMBs or start-ups acting as suppliers and service providers (Botham & Downes 1999; McCrone 1999; Taylor & Raines 2001). At the heart of both CIS and the clusters strategy were ambitious business creation objectives: 40,000 new local start-ups were to be created by 2003, and a total of 100,000 by 2010 (Scotland 2000b: 29). While recognizing that the BBRS had not delivered on such objectives, the belief was that devolution – and thus policy asymmetry – would allow for the development of the necessary tools: “the Scottish Executive aims to use its devolved powers to provide assistance to business to ensure that there is a full portfolio of schemes targeted on specific Scottish problems and tailored to individual circumstances, thereby complementing UK-wide schemes with support measures that particularly reflect the Scottish circumstances” (Scotland 2000b: 23).

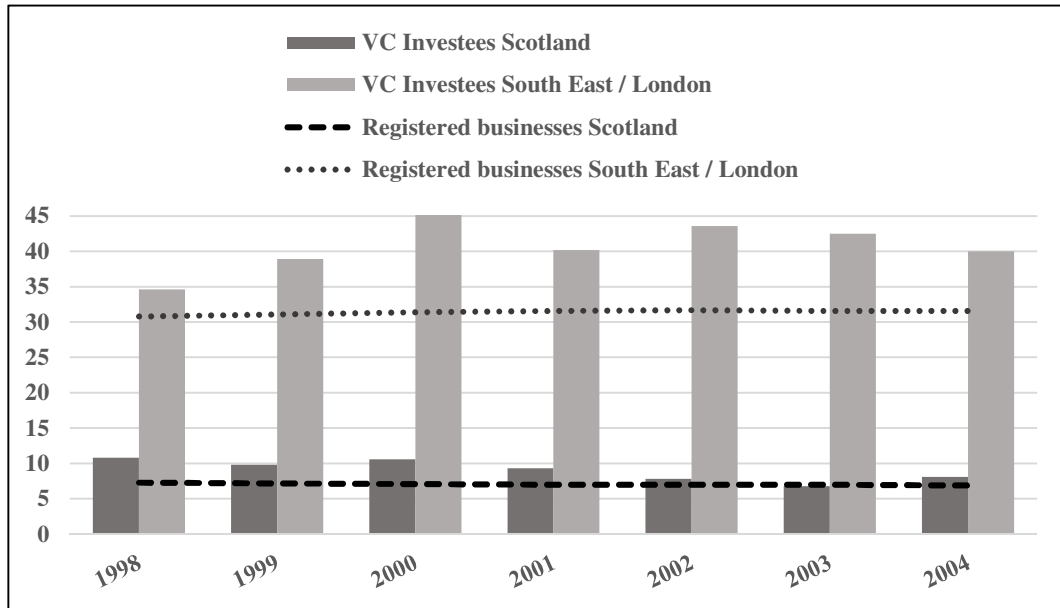
CIS and the clusters were thus *nation-and-state-building* initiatives of a newly established government “under public pressure to prove itself” and eager to use its new powers and resources to promote policy asymmetry (Taylor & Raines 2001: 28). It must be remembered, besides, that the clusters strategy was in fact more than five years in the making. The eight key clusters defined in 1998-1999 – food & drink, biotechnologies, semiconductors, oil & gas, optoelectronics, tourism, forestry, and creative industries – had in fact been identified as early as 1993 by Michael E. Porter’s consulting firm, *Monitor*, which had been commissioned by SE in the wake of the BBR’s launch (Botham & Downes 1999; Learmonth et al. 2003; Rosiello 2004). It is no surprise, accordingly, if clustering was heavily subsidized from the onset: over £360 million were earmarked for the first five years of this initiative alone (Taylor & Raines 2001: 14), which represented almost 25% of SE/HIE’s total contributions to business financing and sponsoring from 1999 to 2004 (see Graph 18). To SE funding were added, moreover, tens of millions in Scottish Executive grants and R&D support (Scotland 2000b: 28, 33, 38; Scotland 2008c), as well as new SE-led and LINC-led VC programs.

4.2.2. Strategic policymaking in a VC bubble

As mentioned earlier, the process of devolution toward Scotland took place in a very particular context, that of the late 1990s’ dot.com bubble, when VC investments were skyrocketing and increasingly targeting very early-stage, high-tech start-ups (Gompers et al. 2008). The UK was no exception to this trend, as private and institutional VC funds were much more eager to invest in early-stage technology ventures by 2000 than they were until the mid-1990s (Lockett et al. 2002). The scale of the late-1990s’ VC boom in the UK

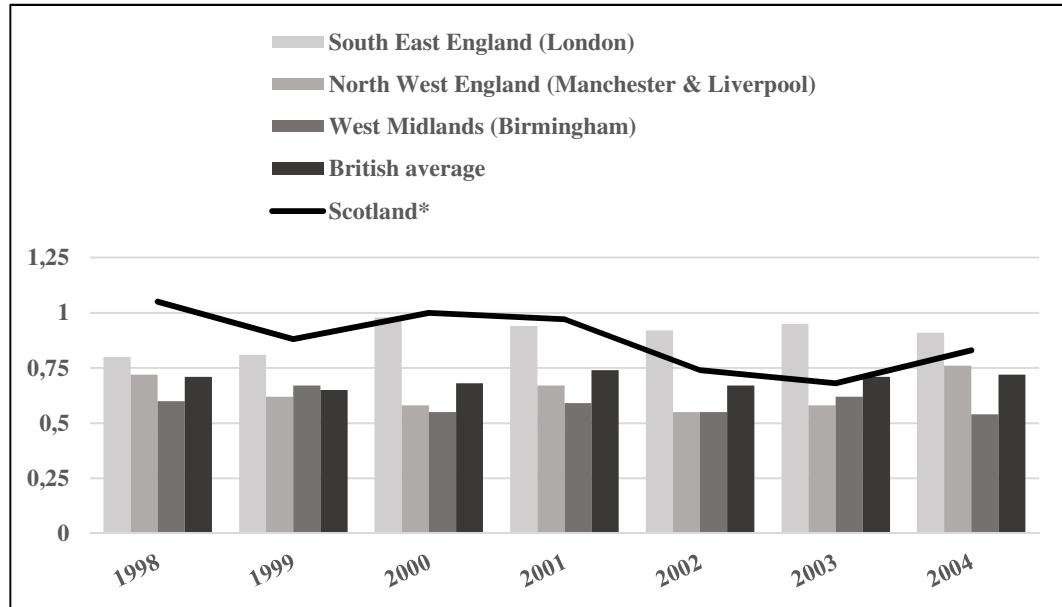
was impressive: while the entire VC industry had invested around £1 billion in 1995, it invested over £8 billion in 2000. Much of this bubble, moreover, was triggered by early-stage investments, multiplied by 575% over the same period (Mason & Harrison 2001: 663). As in most regions of the UK, Scotland’s businesses clearly benefited from this boom: private VC and equity investments made in Scotland soared from a total of £110 million in 1995 to almost £450 million in 2001 (BVCA 1999, 2004). As the graphs below indicate however, while Scottish businesses were receiving larger amounts of private VC and equity, Scotland as a whole was losing ground, in relative terms, to South East England (London).

Graph 12: Share of private VC/private equity investees in UK total vs. Share of registered businesses in UK total, Scotland & South East England 1998-2004 (%)⁸²



⁸² Sources: BVCA (1999-2005), *Reports on Investment Activity*. *Because the figures used for this graph are based on the investment activities of BVCA members (SE and most Scottish angels/angel syndicates are not), Scotland’s share of VC investees is significantly undervalued for the whole period.

Graph 13: Private VC/private equity investees per 1000 registered businesses, 1998-2004 (%)⁸³

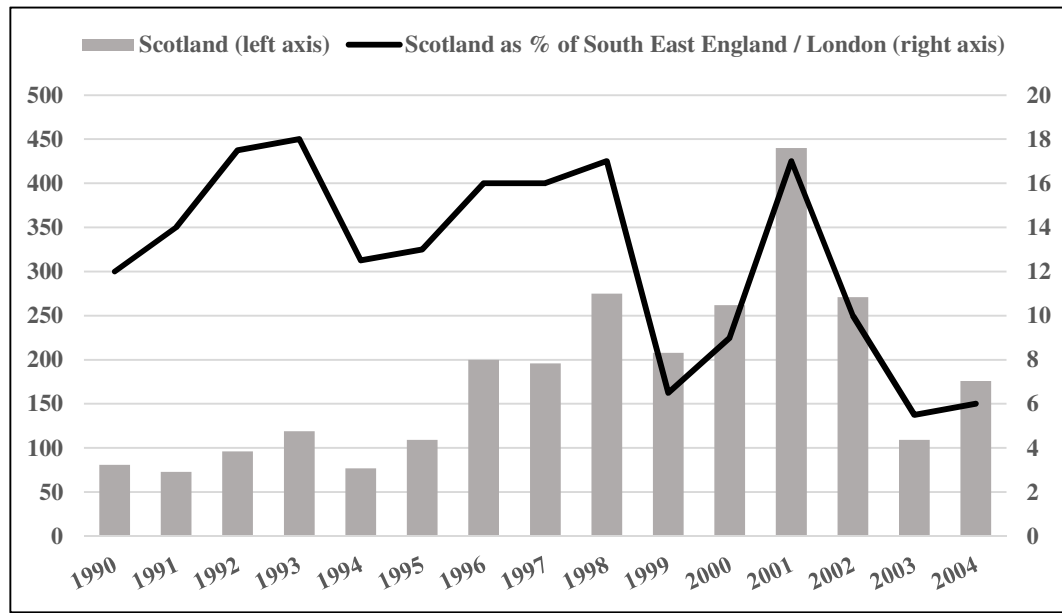


Indeed, if Scotland kept punching above its corporate weight, in terms of the share of UK investments it was receiving annually, between 1997 and 2002 – i.e. throughout the dot.com boom and bust cycle –, this share was actually steadily decreasing while South East England’s was rising (Graph 12). As amounts invested in Scotland were climbing, moreover, the proportion of Scottish businesses receiving private VC or equity investments was declining, because South East England was reaping an increasingly large share of the smaller – and thus more numerous – early stage investments in the UK (Graph 13). From 1997 to 2000, early stage VC and private equity investments in South East England rose from £67 million to £414 million, a 525% growth; over the same period, this growth was

⁸³ Sources: BVCA (1999-2005), *Reports on Investment Activity*. *Because the figures used for this graph are based on the investment activities of BVCA members (SE and most Scottish angels/angel syndicates are not), Scotland’s quotient is significantly undervalued for the whole period.

“only” of 150% in Scotland (BVCA 2004: 74). Between 1998 and 2002, accordingly, South East England increased its share of private VC and equity investments in the UK’s ICT sector by 16% (from 34% to 60%), while Scotland’s share dropped by the exact same proportion (from 20% to 4%)⁸⁴.

Graph 14: Private VC/private equity investments in Scotland (£ millions), 1990-2004⁸⁵



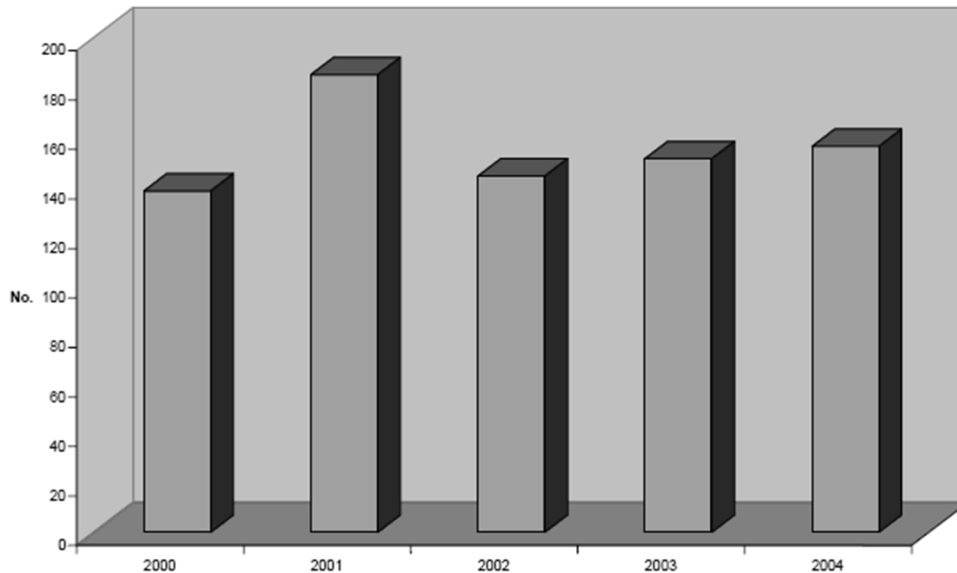
If the momentum garnered by Scotland’s VC and private equity industry since the early 1990s was thus accentuated by the dot.com bubble, it was lost during the subsequent burst (2002-2003) and, more importantly, it receded in relative importance throughout this cycle, as South East England and especially London attracted an increasing share of this industry in the UK (Graph 14). This, however, was only part of the picture as Scotland’s private VC

⁸⁴ By value: BVCA (2004: 77, 81).

⁸⁵ Source: BVCA (2005), *Report on investment activity*. *Because the figures used for this graph are based on the investment activities of BVCA members (SE and most Scottish angels/angel syndicates are not), Scotland’s share is significantly undervalued for the whole period.

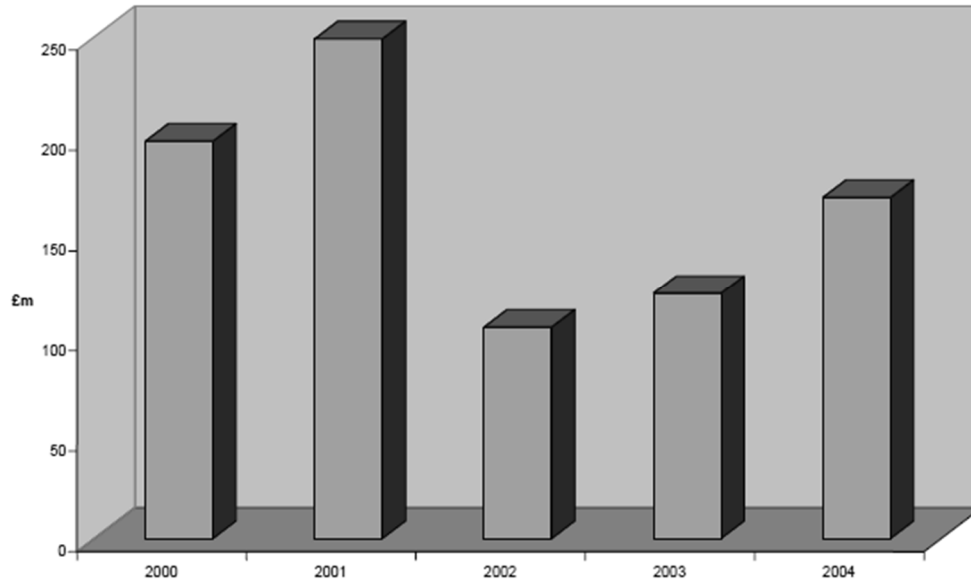
and equity industry had been increasingly complemented and supplemented, since the 1980s, by public, hybrid, and angel investment tools which, although not devised for this purpose, had as a result to support the VC ecosystem as a whole during the early-2000s downturn. According to figures compiled by SE (Don & Harrison 2006: 41), in fact, 2002 was the only year in which early-stage VC investments receded in Scotland, as annual increases in both the number of investee businesses and amounts invested were recorded in 2000, 2001, 2003, and 2004 (Graphs 15 & 16). Accounting only for private and institutional investors, thus, Scotland did lose a lot of ground relative to South East England in the late 1990s and early 2000s. By adding public, hybrid, and angel investments to the equation however, a much different picture emerges.

Graph 15: Total number of early-stage VC investments in Scotland, 2000-2004⁸⁶



⁸⁶ Including foreign, private, institutional, public, hybrid, and angel investors. Taken from Don & Harrison (2006: 41).

Graph 16: Total value of early-stage VC investments in Scotland, 2000-2004 (£ millions)⁸⁷

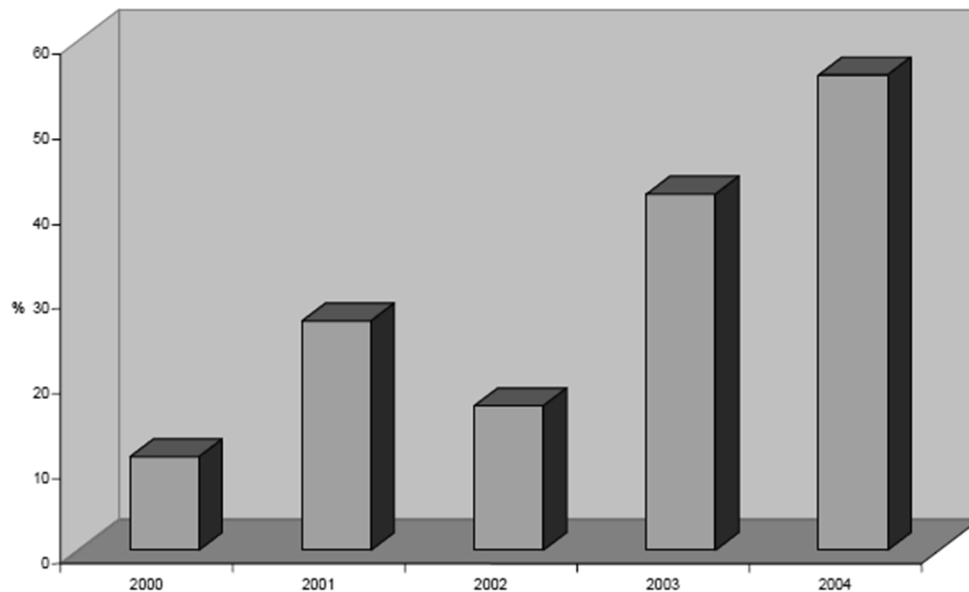


By the turn of the century, it is estimated Scotland’s public sector was involved – either directly through public funds such as SDF or indirectly through hybrid or tax-advantaged funds such as the STF – in 50% of all VC deals made in the region annually. In South East England and London, by contrast, public sector presence was estimated at around 20%. By 2004, these same proportions had reached over 70% in Scotland, and around 35% in South East England / London (Mason & Pierrakis 2013: 1167). Scotland’s public sector – mostly the Executive and SE/HIE – was moreover particularly active in early-stage funding rounds and high-tech deals, where the attraction power of London during the late 1990s and the subsequent dot.com bust lessened the relative importance of private sector VC in Scotland. While private and institutional VCs invested around £130 million in early-stage Scottish

⁸⁷ Including foreign, private, institutional, public, hybrid, and angel investors. Taken from Don & Harrison (2006: 41).

ventures between 2000 and 2004 (BVCA 2005: 74), public, hybrid, and angel investors contributed at least five times that amount; in total, thus, over £840 million in VC were actually made available to early-stage businesses over these five years (Don & Harrison 2006: 71; Graph 16).

Graph 17: Share of hybrid investments as % of total early-stage VC deals in Scotland, 2000-2004⁸⁸



Clearly, public and hybrid investment tools – angels being very common co-investors in hybrid funds – established in the late 1990s and early 2000s had a significant impact of the Scottish VC market: by 2004, hybrid investors were involved in almost 60% of all early-stage VC deals made in Scotland (Graph 17), and business angels (either LINC members or not) were providing almost a quarter of all early-stage VC, up from about a fifth in 2000 (Don & Harrison 2006: 72). These three types of investors more than made up for the

⁸⁸ By number. Taken from Don & Harrison (2006: 50).

decline of VCs' role in early-stage financing, a testament to the major importance of policy initiatives which allowed them to grow. A posteriori, an argument could thus be made such initiatives were intended to fill a funding gap, but this is only true to a certain extent. While the absolute decline in early-stage, private-sector VC really began in 2002, most of the initiatives aimed at complementing it were in fact launched between 1999 and 2001, and were thus underpinned by other, regional-level “national” objectives.

Immediately following CIS, indeed, the Scottish Executive published its first major economic policy statement, the *Framework for Economic Development in Scotland*, in which increases in the availability of VC were justified based on *faire* and *faire faire* rationales (Scotland 2000c: xxi):

In the context of the private sector, the influencing agenda [of the Executive] relates to issues in which the Government may feel it has no direct policy or expenditure role but, nonetheless, wishes to exhort and catalyse private-sector decision-makers into pursuing particular objectives [...] The Executive sees a need more systematically to promote policies and programmes through action-oriented strategic thinking.

In terms of *faire* initiatives, first, the £12 million *Business Growth Fund* (BGF), a collaboration between SE and the Executive, was devised to accelerate the attainment of business creation objectives by sponsoring start-ups. The BGF, launched in the summer of 1999, was to concentrate on “high growth potential” ventures and to complement both angel, STF, and SEP investments, by offering loans and equity in the £20,000-£100,000 range (Scotland 2000b: 28). The BGF was also complemented, besides, by the expansion and recentralization of the *Business Shop Network*, rebranded as the *Small Business Gateway*. This publicly-funded service, set up in 2000, was henceforth to coordinate with central SE and HIE structures – rather than with the LECs – and was to focus on seed-stage and start-up stage businesses needing advice, managerial support, and/or funding (O’Hare

2004). Just as LINC, for instance, provided “matching services” to angels and entrepreneurs, the *Small Business Gateway* would thus act as a direct referencing mechanism between young companies and SE/HIE. Combined with the BGF, it also revealed the renewed attention SE/HIE and the Scottish Executive intended to pay to early-stage businesses’ “investment readiness,” that is to their willingness and capacity to attract institutional, private, or angel VC investors (Mason & Harrison 2001).

By the end of the 1990s, indeed, Scottish policymakers were well aware of the fact that, in the context of the dot.com bubble, no “gap” existed, per se, in early-stage VC. A vast – and growing – quantity of private and institutional funds were available to Scottish businesses, and therefore the main reason why Scotland was losing ground relative to other regions of the UK and to South East England in particular was the lower “attractiveness” of its start-ups. For all kinds of reasons previously described, “many of the [Scottish] businesses which [did] seek VC [were] not *investment ready*. This encompasses all aspects of the business that relate to an investor’s perception of its ‘investability,’ including management team skills, the clarity with which the opportunity is defined, the business model, route to market, governance arrangements and presentation” (Mason & Harrison 2004: 163). Investment readiness indeed was a big problem in Scotland: by the turn of the century, despite the high-tech bubble, Scottish VCs sometimes had to return funds to shareholders because of a lack of viable investment opportunities, and LINC reported that its members were only able to place around 10% of their available capital for the same reason (Mason & Harrison 2002b, 2002c, 2004).

In addition to direct measures such as the BGF and *Small Business Gateway*, therefore, an important – but little known – *faire faire* program was adopted in collaboration with LINC Scotland in order to support businesses not entirely investment ready. First launched in 1998-1999 as the “*Trial Marriage Scheme*,” this program was a joint effort between LINC, the SO/Scottish Executive, and the *European Regional Development Fund* (ERDF) “created in response to evidence that there was a category of investment opportunities that investors intuitively recognised to have potential (e.g. a good idea, interesting technology, market potential) but required significant additional work to get to the point where they could attract funds” (Mason & Harrison 2004: 166). This scheme was elaborated as a response to Scotland’s relative underperformance in the context of the dot.com bubble: it was very specifically aimed at high-tech start-ups of the “Silicon Glen,” and the choice of LINC as a partner reflected this focus on local, “hands-on” investments (Mason & Harrison 2002c).

The whole idea of this scheme, indeed, was to get one or more angel(s) involved, directly, in the management of potential investee companies for months, something VCs very rarely do because of time and cost constraints. Grants of up to £10,000 were thus offered in order to pay angels working to enhance companies’ investment readiness; if, at the end of the process, the angel(s) or any other investor decided to invest in the business, the grant then had to be paid back to LINC. The scheme was relatively successful and, as a result, expanded and relaunched in late 2001 as the *Investment Facilitation Grant*. Under this revised program, maximum grants were upgraded to £15,000 and were now equity-convertible: if LINC members decided to invest in a supported company, the grant awarded

to that company could be turned into equity and LINC became a shareholder, alongside its own members. Many dozens of grants were distributed through this scheme over the first few years, thereby allowing LINC Scotland to build a small VC portfolio of its own with public money (Mason & Harrison 2004: 169-170).

Beyond investment readiness, however, policymakers knew full well that Scotland's slow pace of business creation and high business death rates remained a significant problem (Dow & Kirk 2000), hence the second phase of the BBRS, clustering strategy, and CIS. The *faire* and *faire faire* approaches mobilized through the BGF, *Small Business Gateway*, and LINC programs were thus complemented by two major *faire avec* tools directly aimed at the advent of a larger number of high-tech R&D spin-offs, and at the provision of follow-on funding for development or expansion-stage SMBs. The first was the next phase of the *Technology Ventures* scheme, launched in January 2000 as *Technology Ventures Scotland*. The main objectives and functions of the program – mainly financed by SE and the *Scottish Higher Education Funding Council* – remained intact, but were accompanied by the establishment, in late 1999, of the £30 million *Proof of Concept Fund*, a SE-led initiative funding technology licensing, university spin-offs, and seed or start-up stage high-tech ventures. Both *Technology Ventures Scotland* and its adjoining fund were set up, moreover, as part of the Scottish Executive's new "*Science Strategy for Scotland*," seeking to "increase the effective exploitation of scientific research to grow strong Scottish businesses and provide cutting edge science to meet the needs of the people of Scotland" (Scotland 2001: 22).

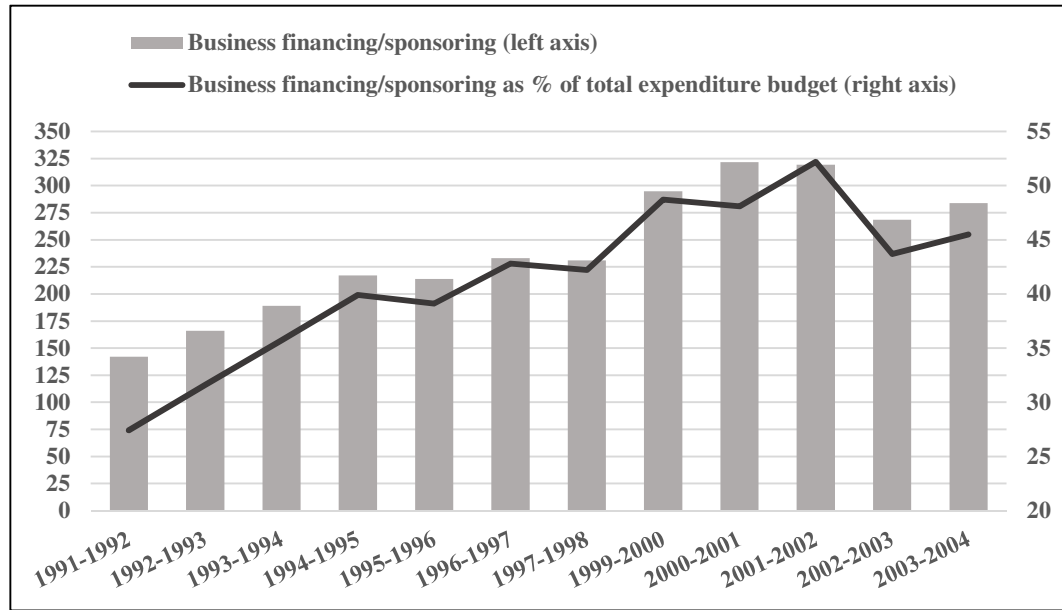
A second move, finally, was made in August 2000 to steer private investors toward the Scottish high-tech sector and provide follow-on funding to emerging SMBs. SDF, indeed, sold 25% of its SEP shares to private investors, thereby keeping a 25% chunk of the resulting, hybrid co-investment fund rebranded as *Scottish Equity Partners Ltd.* The objective of such privatization, according to SE, was to leverage “bigger funds” from private sources which would otherwise not have invested in the previous SEP, because of its public character (SE 2001: 7; Hood & Paterson 2002: 243). SE’s 25% stake, however, allowed it to keep the new fund in line with its own national strategies: it was established from the onset, for instance, that it would focus on technology-intensive, development-stage ventures and on an investment range of over £250,000 to complement public sector funds and small VCs (Hood 2000: 338-339). Most interestingly, as Chapter 6 will demonstrate, the advent of *Scottish Equity Partners* marked the development of a new trend in Scotland’s VC ecosystem: the multiplication of hybrid co-investment funds devised to complement each other and to ensure compatibility and coordination between private sector investments and public development strategies.

4.3. Concluding remarks

As the policy measures of the late-1990s and early-2000s illustrate, parliamentary devolution gave way to a dynamic “statecraft phase” during which the Scottish Executive and the SE/HIE networks coordinated closely. Under the first SLP-SLD administration, between 1999 and 2003, SE and HIE spent an average of £300 million on business sponsoring and capitalization each year, as initiatives such as the second phase of the BBRS, the BGF, *Small Business Gateway*, and *Proof of Concept Fund* were implemented.

Such initiatives monopolized, on average, close to 50% of SE/HIE total budgets during these years, up from about 40% for most of the second half of the 1990s (Graph 18).

Graph 18: Contributions of SE & HIE, 1998-2004 (£ millions)⁸⁹



Just as for the recentralization and enhanced coordination of local development through the reformed LECs and *Local Economic Forums*, these were all tools designed to provide “Scottish solutions to Scottish needs” and, so doing, to establish and enhance the “influencing role” of the new Scottish state. The advent of such a “statecraft phase” after devolution, especially in the context of a VC bubble, was not particularly surprising. What a careful analysis of the public sector’s role in business financing and VC since 1990 unveils, however, is that such dynamism represented continuity much more than a break with pre-devolution Scotland.

⁸⁹ Sources: SE & HIE (1999-2004), *Annual reports and accounts*.

Table 4: Summary of major government initiatives, Scotland 1990-2003

Sponsoring style		Policy objectives
“faire faire”	“faire / faire avec”	
LINC Scotland (1993)	SE/HIE/LECs strategic planning process (1990-1991)	<i>Coordination LECs-SE/HIE on national strategies (asymmetry/intervention); continuity with inherited priorities of the SDA</i>
	Business Birth Rate Strategy (1993)	<i>Endogenous business creation (catching up to South East); complement FDI prospecting; concertation</i>
	Small Business Loan Scheme (1994)	<i>Provision of long-term preferential loans (patient capital); coordination with banking sector</i>
	Scottish Business Shop Network (1994)	<i>Streamlining of business sponsoring services; concertation/coordination; policy emulation/autonomy</i>
		<i>National coordination of introductory services; harness/leverage local early-stage VC; divergence</i>
	Scottish Equity Partnership (1995-1996)	<i>Leverage early-stage VC; sectoral priority (high tech); complement SDF and LINC</i>
	Technology Ventures (1996)	<i>R&D sponsoring; R&D commercialization; increase university spin-offs; sectoral priority (nanotechnology)</i>
	Scottish Technology Fund (1997)	<i>Leverage private VC for R&D spin-offs (3i); provide opportunities for LINC, SDF & SEP</i>
	Reintegration of LECs to SE/HIE (1999-2000)	<i>Homogenize/Synchronize local development; policy autonomy/divergence; centralization & national coordination in service delivery</i>
	Local Economic Forums (2000-2001)	<i>Streamlining of business sponsoring services; concertation of local players; political accountability</i>
Clustering strategy / BBRs (2) / CIS (1999-2000)	<i>Diversification/continuity; sectoral supply-chain synergies; business creation; nation-&-state building</i>	
Trial Marriage Scheme & Investment Facilitation Grant (1998-2001)	Business Growth Fund (1999)	<i>Support BBRs; complement LINC/STF/SEP/private early-stage VC; investment readiness</i>
	Small Business Gateway (2000)	<i>Expansion/Centralization of Business Shop Network; early-stage business sponsoring & introductory service; investment readiness</i>
		<i>Investment readiness (hands-on sponsoring); asymmetry; mitigating Scotland's relative underperformance in dot.com bubble</i>
	Technology Ventures Scotland & Proof of Concept Fund (1999-2000)	<i>Support BBRs; R&D sponsoring/commercialization; increase university spin-offs; support Scottish Executive's science strategy</i>
	Scottish Equity Partners Ltd. (2000)	<i>Leverage private follow-on funding for high-tech SMBs; steer private investors towards sectoral priorities; coordination VCs/public sector</i>

The perceived necessity *of* and ideological preferences *for* policy asymmetry and state intervention, which characterized the late-1990s and early-2000s, already had concrete effects in 1990, as the *political* opposition to the reform of the SDA and HIDB gave way to *institutional* and *organizational* pressures for continuity and the preservation of “national-level” strategic capacities. Without a proper evaluation of the policy roles played by economic nationalism *before* devolution, therefore, one can only attain a partial understanding of the motivations behind major initiatives such as the BBRS and LINC, which had lasting impacts on the Scottish “model” and VC ecosystem.

Arguing that nationalism underpinned many of the most important and structuring business financing policies implemented in Scotland throughout the 1990s is not to say that economic rationales had no role to play: most of the initiatives launched by HIE during these years or even by SE in the early-2000s aimed to counteract the centripetal tendencies of the VC market and the concentration of VC in Edinburgh, Glasgow, or London. Similarly, from the *Small Business Loan Scheme* to *Scottish Equity Partners*, the need to leverage private and institutional investments was always present, just like the willingness to mitigate funding gaps for seed-stage or early-stage ventures through funds such as the STF and BGF. In each case, however, such rationales were complemented by political and/or strategic objectives without an accurate assessment of which the growing asymmetries between Scotland and the RoUK can hardly be explained. In this regard, as this chapter shows, Scottish devolution itself can be understood as a symptom rather than a cause.

CHAPTER FIVE

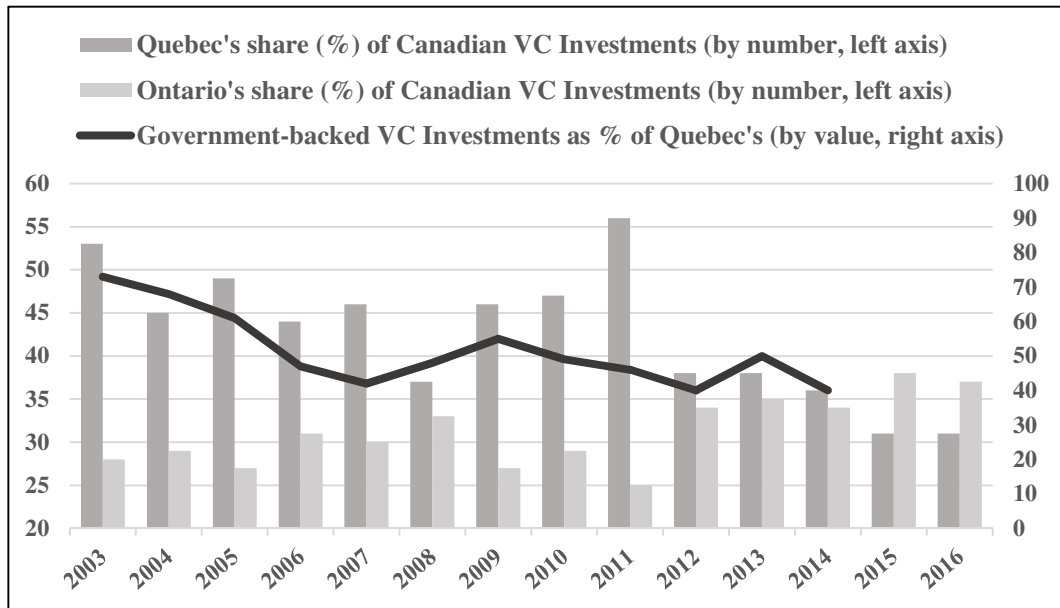
QUEBEC, 2003-2017

The end of Chapter 3 hinted that by the early 2000s, Quebec's policymakers were increasingly recognizing that the development capital ecosystem, relying as much as ever on government-backed funds, had to be complemented with investment tools combining *faire faire* and *faire avec* approaches. The high-tech bubble of the late 1990s, dot.com bust of the early 2000s, and subsequent economic downturn all drove public investment up, as policymakers looked to profit from this bubble and to support local businesses struggling to cope with the following burst. This led to significant losses for public investors such as the *Innovatech*, SGF, and CDPQ. Between 2001 and 2003, the SGF lost over \$700 million (SGF 2006: 2) while the CDPQ made negative annual returns for consecutive years (4.9% in 2001, 9.6% in 2002) and lost billions in asset devaluations (Pelletier 2009: 290-291, 362, 364). This, in addition to the election of the market-oriented PLQ in April 2003, triggered renewed interest for a shift toward *faire faire* and *faire avec*, if not "*laissez-faire*."

Such a shift indeed characterized the first PLQ mandate, so that by 2007 the value of state-backed investments as a proportion of Quebec's VC industry had receded back to 42%, down from 73% in 2003 (Graph 19). The specific way it unfolded however, as well as the fact that most of the government's direct investment tools and tax-advantaged funds were safeguarded and mobilized for the very purpose of operating this shift, all showed it

was done for strategic, regional-level “national” objectives reproducing policy asymmetry rather than the opposite. The 2003-2007 period revealed the resilience of Quebec’s model of high government involvement in development capital, a testament to the ideological and institutional path dependency dynamics constitutive of economic nationalism. From 2008 onwards, the value of state-backed investments stabilized at 47% of Quebec’s total VC investments on average, as the province continued to reap a disproportionate number of deals (Graph 19).

Graph 19: Evolution of Quebec's VC industry III, 2003-2016⁹⁰



The 2007-2009 crisis and recession, in turn, mitigated the trend away from direct government involvement, as the PLQ resorted to public and state-backed funds for counter-cyclical and strategic purposes. SGF and IQ investments resumed their upward trajectory

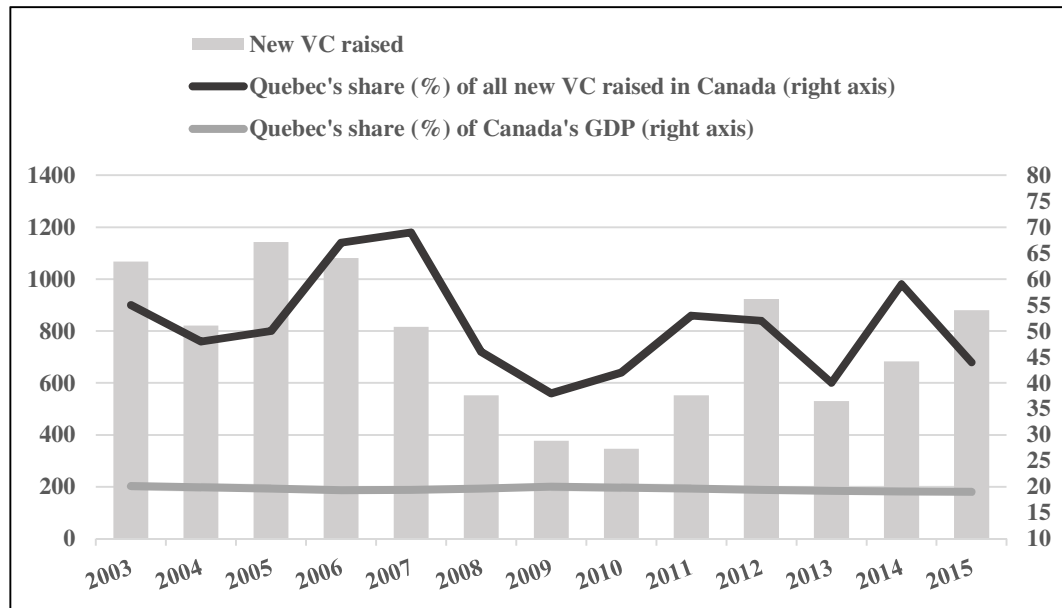
⁹⁰ Approximate figures. Sources: Macdonalds & Associates Limited (2004-2005), Thomson Financial (2006-2008), Industry Canada (2008-2015), Thomson Reuters (2009-2015), CVCA (2015-2016), Thomson Reuters (2015). *Precise information on investor type for years 2015-2016 unavailable.

after 2007, and the FSTQ and CDPQ were mobilized in 2009 to create *Teralys Capital*, a \$700 million fund of funds combining direct investments and the sponsoring of specialized VCs. As the next sections demonstrate, both the return to direct government involvement after 2007 and the safeguarding of state capacities since 2003 can be linked to ideological and political mechanisms – perceived needs or preferences for policy asymmetry and public intervention – as much as to institutional path-dependency. If a plethora of actors involved in development capital convinced Quebec’s government of the necessity of a strong state presence as early as 2004, the impact of ideological and political variables were also felt as soon as 2005, notably with the crafting of the PLQ’s economic strategy, *L’Avantage québécois* (Québec 2005).

As Graph 20 illustrates, Quebec maintained its dominant position within Canada’s VC industry, attracting between 50%-70% of all new money raised from 2003 to 2007 and over 48% on average since 2010. That was not despite, but by dint of policy initiatives taken *before* the financial crisis, such as the increased funding of the CLD/FLI, the establishment of the *Fonds d’intervention économique régionale* (FIER), the crafting of the *Programme d’appui stratégique à l’investissement* (PASI), the creation of *Actions-croissance PME* and *Relève-PME*, the partnership with CRCQ to form *Desjardins-Innovatech*, the launch of the *Fonds manufacturier québécois* (FMQ), the backing of various R&D bodies, and the broadening of CRCQ, FSTQ, and FACSQ investment guidelines. Important new measures taken after 2008 were thus in continuity rather than in break with the 2003-2007 period. Among those were the sponsoring of the *Anges Québec* network and its fund *Anges Québec Capital* (AQC), the capitalization of *Cycle Capital*,

Teralys Capital, FounderFuel Ventures, and AmorChem, the founding of Capital-croissance PME (CCPME), the creation of the FIRA and Fonds Relève Québec (FRQ), the SGF/IQ merger and the establishment of the FDÉ, the setting up of Ressources Québec and Capital Mines Hydrocarbures, as well as the launch of Teralys Capital Fonds d'innovation and the Fonds Innovexport.

Graph 20: New VC raised & share (%) of new VC raised, Quebec 2003-2015 (\$millions)⁹¹



What roles did economic nationalism play in this whole process, from the 2003-2007 shift toward co-investment funds and specialized VCs to the reaffirmation of state activism? According to Haddow, almost none given the absence of direct references to ethno-linguistic considerations and the paucity of “interventions that were more ‘political’ than ‘economic,’ that is, unlikely to be profitable or to contribute to economic development”

⁹¹ Source: Macdonalds & Associates Limited (2004-2005), Thomson Financial (2006-2008), Thomson Reuters (2009-2016), CVCA (2015-2016), CANSIM 384-0038.

(2015: 183). Yet, this perspective omits the fact that ethno-linguistic and political motivations can underpin “economic” ones, such as the mounting concern for local business succession and ownership – notably illustrated by the *Relève-PME*, *FIRA*, and *FRQ* initiatives. This chapter thus provides a different take on the evolution of Quebec’s development capital ecosystem since 2003, one that highlights how nationalism affected it through institutional, ideological and political mechanisms.

5.1. The first Charest administration (2003-2007)

It is amid growing discontent about significant losses incurred by the CDPQ, IQ, SGF, and FSTQ in the early 2000s⁹² that the PLQ won the April 2003 election on a platform advocating the curtailment of state intervention. Since the late 1990s, the PLQ had been tapping into genuine concerns with regards to the long-term sustainability of public investment activities in the absence of concomitant private investments, concerns which grew in acuteness with the 2001-2002 downturn (Suret 2004). In the 2003 election campaign, the PLQ denounced the approach of the 1990s as bureaucratic and costly, arguing Quebec’s economic success should not be measured by the number and size of state corporations but by the achievements of entrepreneurs (PLQ 2003: 4).

As the next sections demonstrate, however, the extent of transformations made to Quebec’s development capital ecosystem during the PLQ’s first mandate merely amounted to what Peter A. Hall’s famous typology characterizes as “first order” and “second order” change (1993: 278-279): the settings of existing policy instruments – i.e.

⁹² See Dufour (2003), Sansfaçon (2003), Bérubé (2003, 2004), Dutrisac (2004), and Québec (2005b).

the mandates of public corporations and agencies –, as well as the policy instruments themselves were modified to a certain extent, notably with the shift toward hybrid funds, but the “overall hierarchy of goals behind policy” has been left relatively untouched. While there were strategic policy shifts operated after 2003, no encompassing “paradigm shift” took place in Quebec despite the “windows of opportunity” opened by the 2002-2003 capital losses and the election of the PLQ. Policy asymmetry and state intervention continued to be seen as necessities to ensure the local ownership and growth of Quebec’s SMBs, with nationalism playing a major role in insuring continuity.

5.1.1. The “U-curve”

The above should not be taken to mean that the PLQ and influential actors from the private sector were not determined to reform Quebec’s approach and, in particular, increase the proportion of private and foreign investments in this ecosystem. By 2003, VCs (local or foreign) were still accounting for under 20% of the total value of deals in Quebec, against over 30% for Ontario and over 80% in the US. The dominance of government-backed funds in Quebec’s ecosystem was believed to carry unjustifiable financial risks for the state, and to distort the market by **a)** subordinating returns on investment to various other objectives, and **b)** overcrowding the early-stage niche with capital, leading to smaller deals and a limited capacity for either highly specialized, seed-stage deals or larger, follow-up rounds of investment in expansion-stage businesses (SECOR 2003).

The PLQ’s reformist agenda was thus set out as early as June 2003, in its first budget. Among major announcements were the cuts imposed to IQ’s *FAIRE* program,

whose commitments were considered too expensive. The program was phased out in 2004 only to be replaced by the new PASI, supporting slightly larger projects but endowed with similar objectives and tools: promoting major, strategic, and notably productivity-enhancing investment projects from foreign sources, by way of grants, loans, or loan guarantees (Québec 2004: 14). By 2006-2007, interestingly, the PASI was already committing larger amounts (\$387 million) than the FAIRE had been (\$309 million in 2003-2004). The year 2002-2003 was the exception, with the FAIRE's "governmental mandates" component allocating \$625 million before moving down to \$95 million in 2005-2006 under the PASI, and back up to \$165 million in 2006-2007 (IQ 2003, 2006, 2007).

This "U-curve" pattern, featuring a short-term retrenchment and a subsequent turnaround, also characterized the government's stance toward tax-advantaged funds. The 2003-2004 budget notably included a complete moratorium on tax credits applicable to the RÉAQ and SPEQ regimes until further notice (Québec 2003d: 70-71). This was a minor announcement, given only 10,000 people were using the RÉAQ and SPEQ by 2003, with a small annual cost of \$20 million for the government (Godbout et al. 2005: 10). Even so, the moratorium was ended as soon as 2005 with the introduction of a new version of the RÉAQ, *Actions-croissance PME*. Offering tax credits equivalent to 100% of the cost of shares acquired by individual investors in publicly traded SMBs with \$100 million or less in total assets (compared with \$350 million under the RÉAQ), this program was designed to promote IPOs of smaller companies and facilitate their expansion into competitive medium-sized businesses, a strategic objective of Quebec's government. The same tax credits would also apply to shares of investment funds specialized in growth-to-expansion

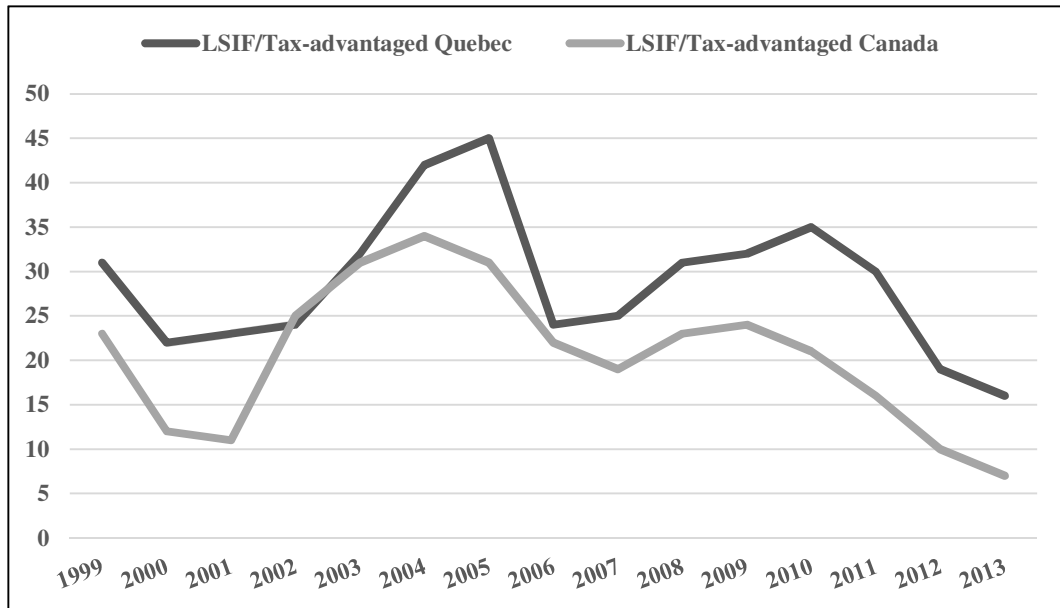
stage SMBs, bringing the total cost of this five-year program for the government at an estimated \$100 million (Québec 2005c, Section 6: 39-40).

More impactful were the changes and limits imposed on the FSTQ, FACSNI, and CRCD (Québec 2003d: 106-109). Established at \$150 million by the PQ, the maximum amount of shares issued in a single fiscal year by CRCD, on which tax credits for subscribers applied, was reduced to \$75 million for 2003-2004. The FSTQ and FACSNI, for which no such limit existed by 2003, were also respectively imposed ceilings of \$600 million and \$50 million. Yet, as much as these new restrictions were illustrative of the PLQ's intention to limit government spending on business capitalization, they were not overly disruptive: the ceiling imposed on CRCD, for instance, was temporary and relatively minor given the fact that CRCD's total share capital had already reached \$372 million by 2003, only \$78 million below the limit of \$450 million previously set for 2004 by the PQ (CRCD 2004: 3). As for the FSTQ, the \$600 million limit was not far removed from what had been levied in previous years: in 2002-2003, only \$725 million in shares had been issued (FSTQ 2007: 1).

Limitations imposed on tax-advantaged funds for 2003-2004, moreover, did not represent a long-term trend. Ceilings on the issuance of shares by the FACSNI and CRCD were quickly brought back up, to \$80 million later in 2003 and to \$150 million in 2006, respectively. Moreover, FACSNI, FSTQ, and CRCD investments all experienced notable growth throughout the PLQ's first mandate: in that order, they soared from \$144 to \$326, \$369 to \$668, and \$95 to \$470 million between 2003 and 2007, a 300% increase on average (FACSNI 2004, 2007; FSTQ 2007; CRCD 2007). The government's continued backing of

and reliance *on* LSIFs and tax-advantaged funds, besides, sharpened policy divergence in Quebec given that, by contrast, Ontario decided to phase-out its LSIF tax credits in 2005, after a complete moratorium on new registrations was imposed in 2004 (Cumming & Johan 2010; Johan et al. 2014). In an effort to support growth-to-expansion-stage businesses – as part of the strategic objective to increase the average dimension of Quebec’s SMBs –, the maximum size of companies eligible to these funds’ investments was also doubled in 2005, from \$50 million in total assets to \$100 million (Québec 2005c: 36).

Graph 21: Share (%) of LSIF/tax-advantaged investments in total annual VC investments, Quebec vs. Canada 1999-2013⁹³ (by value)



As Graph 21 demonstrates, Quebec’s VC industry thus actually grew more reliant on the FSTQ, FACSQ, and CRCD during the early years of the PLQ administration. The sharp dip of 2006, in turn, should not be interpreted as a sign of absolute regression, but as a

⁹³ Source: Macdonald & Associates Limited (2000-2005); Thomson Macdonald (2006); Thomson Financial (2007-2008); Thomson Reuters (2009-2016).

relative one directly linked to drastic increases in private and foreign VC investments that year. Besides, a significant portion of the rise in private VC investments in Quebec after 2004 was actually attributable to the sponsoring of specialized VCs by government-backed funds. As the next section shows, the FSTQ, FACSQ, and CRCD were indeed encouraged, from 2005 onwards, to invest some of their capital into hybrid, private, and foreign VC funds. By 2007, almost 10% of FSTQ investments (by value) were made through specialized VCs like Brightspark (software), Propulsion (software), MSBI (university spinoffs), Novacap (ICT/industrial), Rho (ICT), GeneChem (biotech), and Vimac (ICT) (FSTQ 2007: 24; 62-77).

The “U-curve” pattern which characterized state intervention via the FAIRE/PASI, tax-advantaged funds, and LSIFs were also apparent in the case of the CLD/FLI. In December 2003, the PLQ adopted Bill 34, transferring local development responsibilities from the CLD to the MRC and filling two-thirds of each CLD Board with local elected officials (Québec 2003e). The PQ opposition denounced Bill 34 as a regression of multipartite concertation, as it represented a shift in management philosophies from participatory decision-making to political accountability: only the MRC would henceforth coordinate with regional authorities and the provincial government, before effectively outsourcing local development activities – including business financing – to the CLD in accordance with plans devised at the provincial and regional levels (Simard & Leclerc 2008: 620-621).

Yet, if Bill 34 impacted intergovernmental coordination over economic development, the PLQ clearly indicated a key policy objective behind the merger of

regional planning and local development responsibilities within the MRC was to strengthen such coordination (Québec 2003f). Throughout the PLQ's first mandate, moreover, the CLD actually saw their budgets increase rather than the opposite. All in all, state intervention – and therefore policy asymmetry – in local development accelerated between 2004 and 2007⁹⁴, as CLD/FLI budgets rose and funds invested almost doubled compared with the 1998-2000 period (Québec 2009).

5.1.2. IQ's reform

In many ways, the evolution of Quebec's development capital ecosystem thus contrasted with the harsh evaluation the PLQ had long made of the "Quebec model." The CLD/FLI example illustrates how institutional path dependency dynamics help explain part of this contrast. Although Bill 34 allowed each MRC to designate a new local entity to act as a CLD, almost none did given there was no logical reason not to continue relying on the existing bodies, which had developed deep ties with local business communities, financial institutions, and other funds, from the SOLIDE to the FSTQ and from credit unions to CRCQ (Québec 2009: 3). Similar dynamics help explain why even significant transformations to the ecosystem after 2003 – the shift toward hybrid co-investment funds and the rise of private and foreign investments – in fact concealed overall continuity in terms of public involvement in VC. Policies devised in the wake of large consultations held

⁹⁴ In 1998-1999, the provincial government was contributing 60% of the CLD budgets; by 2007-2008, 70% (Québec 2009: 6).

in late 2003 and early 2004 by the *Commission des finances publiques* attest to that particularly well.

The first of those was held throughout September 2003, and dealt with the “orientations, activities, and management” of IQ (Québec 2003g, 2003h, 2003i). The major players who submitted briefs were IQ itself, the FSTQ (2003), FACSQ (2003), ACLDQ (2003), and Canadian Federation of Independent Business (CFIB). The PLQ advocated for two reforms of the IQ model: it should henceforth be self-funding and focus on loans and guarantees, with most of the grants allocated and managed instead by the *Ministère du Développement économique, de l’Innovation et des Exportations* (MDEIE). The PQ opposition, as well as the FSTQ, worried the self-funding requirement would force IQ to neglect economic development objectives in favor of profitability. But as Jean Houde, nominated as CEO of IQ in 2003, remarked, the government’s demand in that regard only required IQ to break even, and would hardly modify its mandate (Québec 2003g). In fact, IQ was even able to reach that objective three years earlier than requested, in 2005-2006, precisely as annual investments reached their second highest point ever, at \$1.2 billion (IQ 2006: 10).

The demand for an enhanced focus on loans and guarantees, in turn, stemmed from a strategic issue of policy autonomy, with the CFIB highlighting that many of Quebec’s banks and SMBs were contracting deals through the federal “Small Business Loans” program rather than through IQ, because of bureaucratic complexities and delays in the administration of applications (Québec 2003f). Yet, after having heard the FSTQ, ACLDQ, and IQ argue that grants had been, since 1998, one of IQ’s major strategic tools for the

attraction of foreign investments, the government decided *not* to change the existing model, leaving the prerogative for the allocation of most grants to the MDEIE but their administration to IQ. Aside from the FDQ subsidiary, administering IQ's funding programs since 2002, being merged back into the main IQ structure for cost saving purposes and to ensure better coordination between investment prospection and financial aid, not much changed: by 2006-2007, as was the case in 2003-2004, around 80% of the value of IQ financings consisted of loans, equity loans, and guarantees, against 20% for grants (IQ 2004, 2007).

The nationalist aspects of IQ's investment prospection activities, besides, should not be overlooked. As explained by IQ prospectors⁹⁵, first of all, the availability of grants (and other types of aid) through IQ allows Quebec to compete for investment projects with other jurisdictions offering various financial incentives. Second, IQ almost never gets involved in foreign companies' merger or acquisition projects, to avoid supporting setbacks in the ownership structure of Quebec's economy. However, when such mergers or acquisitions are considered done deals, IQ can get involved to make sure local jobs are safeguarded or even added to. Finally, before supporting foreign investment projects in key sectors, IQ consults with major businesses present in those sectors to ensure such projects complete their supply and value chains rather than competing with existing, local SMBs. It is thus not unreasonable to argue that the safeguarding and refinement of much of IQ's model and mandates after 2003, in spite of the critical stance the PLQ had taken since 1998,

⁹⁵ David Brulotte, Personal interview; Hugo T. Lacroix, Personal interview.

had much to do with perceived needs and preferences for state intervention and policy autonomy, as voiced notably by the FSTQ, ACLDQ, and IQ itself.

Consistent with such perceived needs and preferences was the introduction of IQ's *Relève-PME* program in 2005, as part of the government's economic development strategy, *L'Avantage québécois*. Depicting Quebec's large proportion of SMBs as a comparative advantage because of their local ownership structure discouraging offshoring, the government argued intervention was warranted to alleviate the effects of demographic aging and avoid closures or foreign takeovers by sponsoring business succession (Québec 2005: 49). By 2005-2006, through *Relève-PME*, IQ would thus allocate, yearly, around \$15 million⁹⁶ in additional loans and guarantees to finance SMB acquisitions by local – and thus predominantly francophone – interests (IQ 2006, 2007). In sum, the overall contributions of IQ remained, throughout the first PLQ mandate, relatively constant and comparable to those of the 1998-2003 period (IQ: 2004-2007). This did not prevent, however, IQ to be mobilized as a pivotal player in the government's strategic shift toward *faire faire* and *faire avec* approaches, from 2004 onward.

5.1.3. The “Rapport Brunet”

A second large-scale consultation was launched by the *Commission des finances publiques* in early 2004, after the publication of the report of the “Taskforce on the role of the Quebec state in risk capital.” Similar to the SECOR report released earlier, the “*Rapport*

⁹⁶ To this figure should be added the important contribution of the CDPQ: by 2007, the CDPQ was investing over \$50 million per year in business succession, through its *Accès Relève* program.

Brunet” concluded public VC funds were too numerous, costly, and leaving (if not creating) funding gaps at seed and expansion stages in very high-tech sectors because of an excessive focus on early-stage SMBs and a lack of specialized expertise (Québec 2003b: 5-6). Based on the overarching objective to “strike a better balance between private and public sector players” in the VC industry, where state intervention should be “targeted and complementary” rather than “preponderant,” the report made a number of specific recommendations.

Among those were to **a)** privatize the *Innovatechs* and replace them with a hybrid VC fund specializing in high technology; **b)** refocus the SGF on large scale investments of over \$20 million and limit its control of particular companies to 30% of shares; **c)** create a hybrid VC fund for seed and start-up stage ventures, in which one public dollar would be invested for each two from private sources (1:2); and **d)** constitute regionally-managed hybrid VC funds where the government would invest on a 2:1 basis with private partners (Québec 2003b: 7-9). If one had to summarize the report in a word, it would be “leverage” (Québec 2003b: 15). The report’s “leveraging argument,” however, differed from classic ones in that stimulating private and foreign investments was presented as a way to fill gaps left open by government-backed funds which are usually perceived, instead, as tools to complement private VC.

This was because the taskforce recognized both the “undeniable relevance” of state intervention, and most importantly the necessity to “adapt leveraging models to Quebec’s institutional context,” characterized by a well-developed and coordinated ecosystem heavily reliant on such intervention (Québec 2003b: 15; 51). Reactions to the report’s

somewhat ambiguous stance were particularly revealing: while the PQ opposition and some of the press perceived it as advocating massive state retrenchment⁹⁷, influential financial experts most critical of the “Quebec model” noted it would hardly scale back the government’s relative weight in the VC industry (Suret 2004: 17). Most importantly however, the very numerous briefs submitted to the *Commission*, and in particular those of *Réseau Capital* (2004) and the government’s own *Conseil de la science et de la technologie* (2004), warned that private and foreign funds were far from ready to substitute themselves to state-backed ones.

Réseau Capital, whose double mandate is to represent Quebec’s ecosystem and make sure its funding chains are as complete and efficient as possible⁹⁸, stated that to reach an objective of twelve, specialized VCs operating in Quebec by 2010, a minimum of \$350 million in yearly investments by public and tax-advantaged funds would be required (2004: 19). Accordingly, the government’s move toward *faire faire*, through the sponsoring of specialized VCs, and *faire avec*, through the establishment of hybrid co-investment funds, did not oppose private capital to state intervention but rested on the strategic objective to achieve better coordination between the two. This was confirmed by the FSTQ’s Alain Denis⁹⁹, referring to the government-backed capitalization of private and hybrid funds following the Brunet report:

le rapport Brunet était un point de départ. Brunet disait qu’il y avait un manque de cohésion et de taille. Sans cette concertation, sans cet alignement des intérêts entre les institutionnels et les gens qui étaient prêts à s’investir dans des fonds privés, on ne serait probablement jamais arrivé à quoi que ce soit de tangible.

⁹⁷ See Québec (2004b, 2004c, 2004d, 2004e), Dutrisac (2003), Bérubé (2004b), and Le Devoir (2004).

⁹⁸ Jack Chadirdjian, CEO, Réseau Capital. Personal interview, March 1st 2015, Montréal.

⁹⁹ Vice-Président principal Nouvelle économie, FSTQ. Personal interview, April 9th 2015, Montréal.

This, moreover, was clearly based on **a) institutional path dependency**, as state-backed funds were almost the only tools at the government's disposal; **b) political imperatives**, as most of the major players in Quebec's ecosystem opposed drastic state retrenchment; and **c) ideological preferences**, as public intervention was considered an efficient way to sponsor and steer highly specialized VCs toward strategic investment sectors, regions, and deal sizes.

State retrenchment, in the aftermath of the *rapport Brunet*, was thus fairly limited. One major move in that direction were modifications to the SGF's mandates, which resulted in a drop of annual investments but safeguarded existing portfolio assets despite the huge losses and devaluations of the 2002-2004 period (SGF: 2000; 2006; 2008). A second was the privatization of the SIGM in late 2004, whereas the SISQ and SIQCA were safeguarded and even granted \$10 million in additional funds for 2005. The SIRR, for its part, was transformed into a twice as large limited partnership fund, *Desjardins-Innovatech*, in which the government would hold 47% of shares and CRCDD the other 53%. *Desjardins-Innovatech* would keep its focus on Quebec's "régions ressources" and specialize in seed and start-up stage high technology ventures (CRCDD 2006: 6). The formation of such a state-backed hybrid fund opened the door for the other *Innovatechs*: in 2008 in the first case and in 2012 in the latter, the SISQ and SIQCA transferred the biggest part of their portfolio to *Desjardins Innovatech* in return for shares (SISQ 2015; SIQCA 2015).

The second major shift following the *rapport Brunet* was toward *faire avec*, as illustrated most notably by the establishment of the \$300 million FIER through an IQ subsidiary, *IQ-FIER*, in early 2005 (Québec 2009b). This new program would have three

branches, each composed of hybrid co-investment funds: the \$42 million *FIER-Soutien*, the \$78 million *FIER-Régions*, and the \$180 million *FIER-Partenaires*. Via both the *FIER-Soutien* and *FIER-Régions*, Quebec's government would invest on a 2:1 basis alongside private partners, through regional hybrid funds. The *FIER-Régions*, aimed at boosting the provision of private, locally-embedded VC, was the bigger of the two programs: by 2007, its capitalization by the government had reached over \$180 million and 28 funds – of \$10 million each on average – had been set up, for a total of \$274 million under management. Each of these funds had to make, yearly, at least 50% of its investments in its assigned region, and deals were generally limited to \$1 million (equity or quasi-equity) for up to 49% of shares in start-up stage, succession-stage, or struggling businesses (Québec 2009b).

FIER-Partenaires, in turn, was designed as a tool combining *faire avec* and *faire faire* approaches. Contributing \$90 million, Quebec's government “asked” the FSTQ (\$50 million), FACSQ (15\$ million), and CRCQ (\$25 million) to chip in and form a \$180 million hybrid fund of which \$100 million would be dedicated to direct investments in strategic, “structuring” economic development projects, and the other \$80 million to the sponsoring of foreign and specialized VCs alongside private partners, on a 1:2 basis¹⁰⁰. By early 2007, *FIER-Partenaires* had committed \$140 million through ten sectoral VCs, including *Garage Technology Ventures*, from Silicon Valley (IQ 2007: 29). This last approach was consistent with the PLQ's move toward *faire faire*, in that IQ, the CDPQ, and tax-advantaged funds were henceforth encouraged to invest a part of their capital through specialized VCs, in

¹⁰⁰ *FIER-Partenaires* really was a “creation of Quebec's government,” in that tax-advantaged funds were presented with a *fait accompli*: “*honnêtement, ce n'est pas nécessairement ce qu'on aurait priorisé. On ne l'aurait pas fait. Mais on a été poussés à le faire.*” Gérald St-Aubin, Personal interview.

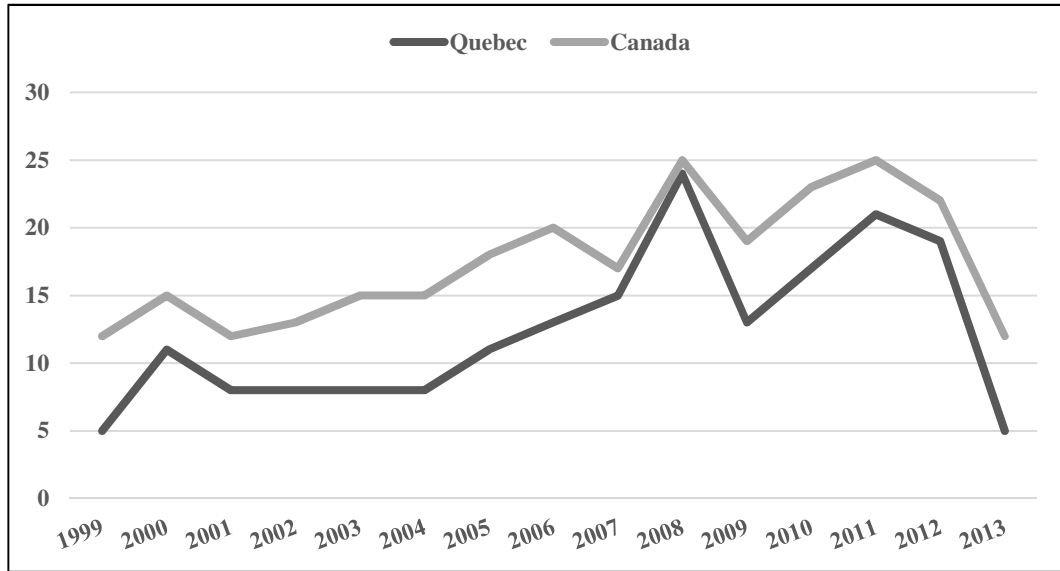
concordance with the government's sectoral priorities in aerospace, ICT, biotechnologies, and manufacturing. As confirmed by senior officials from IQ, the FSTQ, and CRCQ, this was fairly well received given that seed or start-up stage investments in such sectors required increasingly specialized expertise. It would therefore complement, rather than jeopardize, existing direct investment strategies¹⁰¹.

The CDPQ embraced this approach early on and proved very active. In 2006, it devoted \$100 million to set up the *FMQ*, a specialized fund investing, with or without private partners, in Quebec's expansion-stage manufacturing SMBs (CDPQ 2007). By 2007 moreover, the CDPQ (2008: 156-157) had committed close to \$250 million through specialized VCs such as *GoCapital* (start-ups), *iNovia* (start-ups), *AgeChem* (biotech), *CTI* (life sciences), *JLA Ventures* (ICT), *ProQuest* (biotech), and *VantagePoint* (cleantech). As for the three tax-advantaged funds, various incentives were introduced in 2006 to facilitate indirect investments. Notably, CRCQ, FACSQ, and FSTQ placements in private VCs would from then on be accounted as part of their 60% annual local investments requirement, provided those VCs invested 100% of the amounts received in eligible Quebec businesses (Québec 2006b Section 6: 26).

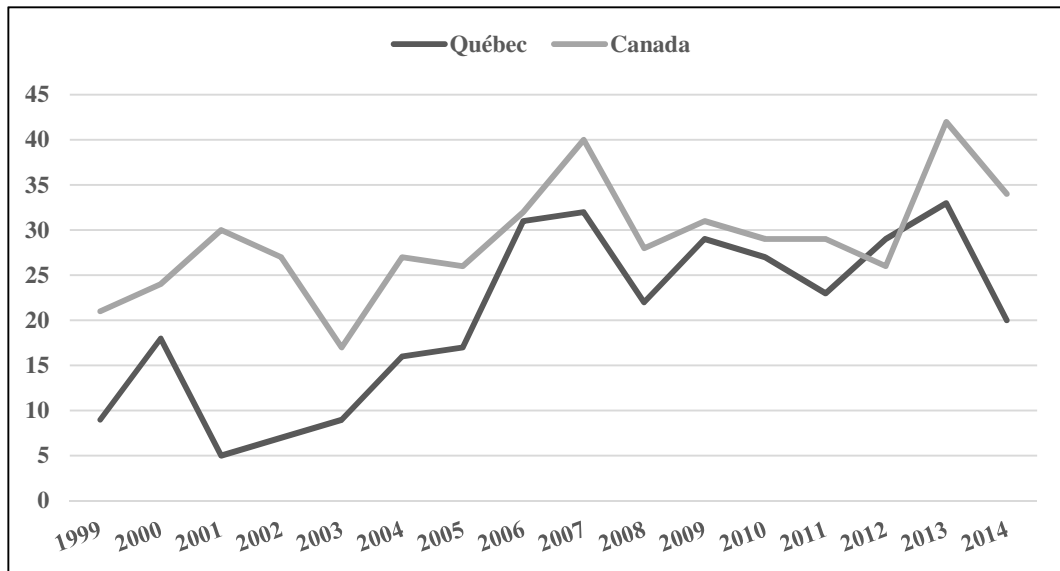
If the shift toward *faire avec* and *faire faire* resulted, throughout the PLQ's first mandate, in increased private and foreign VC investments, it should thus not be confused with state retrenchment. A better understanding of why and how this shift came about helps see past quantitative trends.

¹⁰¹ Personal interviews: André Petitclerc (IQ), Alain Denis (FSTQ), and Gérald St-Aubin (CRCQ).

Graph 22: Share (%) of “independent private” investments in total annual VC investments, Quebec vs. Canada 1999-2013¹⁰² (by value)



Graph 23: Share (%) of foreign investments in total annual VC investments, Quebec vs. Canada 1999-2014¹⁰³ (by value)



¹⁰² Source: Macdonald & Associates Limited (2000-2005); Thomson Macdonald (2006); Thomson Financial (2007-2008); Thomson Reuters (2009-2016).

¹⁰³ Source: Macdonald & Associates Limited (2000-2005); Thomson Macdonald (2006); Thomson Financial (2007-2008); Thomson Reuters (2009-2016).

As Graphs 22 and 23 illustrate, the relative importance of private and foreign investments in Quebec’s VC ecosystem increased substantially, from 2003 to 2007. Yearly private investments grew from \$49 to \$96 million, and foreign ones from \$49 to \$210 million (Macdonald & Associates 2004; Thomson Financial 2008). Considering, however, the rapid and significant development of indirect investment activities at the CDPQ, FSTQ, FACSQ, CRCD, and IQ, it is not unreasonable to argue this was – just as many had warned it would have to be – an almost entirely state-backed process, promoted for strategic reasons, rather than a market-driven phenomenon.

5.2. The second and third Charest administrations (2007-2012)

This shift toward *faire faire* and *faire avec* was then challenged by the financial crisis, recession, and long recovery process which marked the second (2007-2008) and third (2008-2012) mandates of the PLQ. Many have noted that Quebec’s government turned back to a more direct investment strategy during and after the 2008 financial crisis, with “Liberal interventionism reaching its apogee” (Haddow 2015: 179). Graph 19 illustrates this trend, showing a 13% increase in the proportion of government-backed VC between 2007 and 2009. Counter-cyclical activism would of course be a rational explanation for this development. A closer look at the initiatives taken from 2007 onwards, however, confirms many of the most important ones originated from other concerns warranting intervention and asymmetry, such as the meteoric rise of the Canadian dollar between 2006 and 2007, or from policy statements and action plans devised *before* the crisis, going back as far as 2005 in the case of the economic development strategy *L’Avantage québécois*.

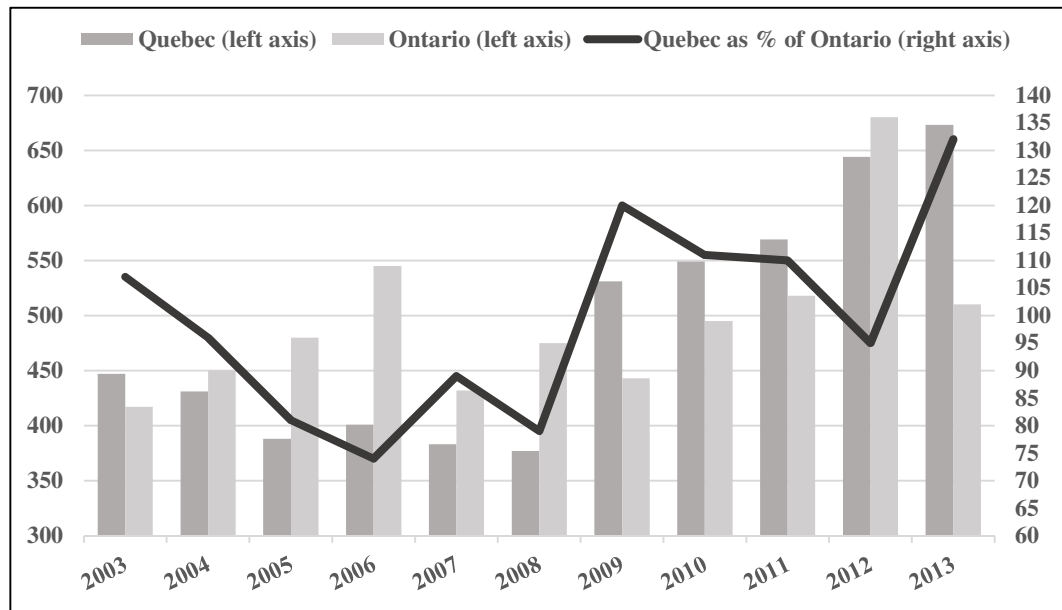
5.2.1. Development strategies and the Anges Québec network

The first budget of the second PLQ mandate was published in May 2007, months before the American “subprime” mortgages crisis began to spread. Although it was neither a “crisis” nor a “counter-cyclical” budget, it was a very important one in that it gave substance to three national strategies: the *Stratégie de développement de l’industrie aéronautique québécoise* (July 2006) and the *Stratégie québécoise de la recherche et de l’innovation* (December 2006), both part of *L’Avantage québécois* (Québec 2005), as well as the *Plan d’action en faveur du secteur manufacturier* (November 2007). The problems identified and the objectives set out in these strategies remained key motives for the launch of many initiatives after 2008, such as the capitalization of specialized VCs, government support to business “angels,” and the establishment of public or hybrid funds such as the FDÉ, FIRA, and FRQ.

L’Avantage québécois was an economic strategy devised to build on and grow Quebec’s “comparative advantages.” The high proportion of SMBs in the province’s corporate structure, as discussed, led the government to set up *Relève-PME* and *Actions-Croissance PME* in order to maintain and promote local ownership of Quebec companies. Other “comparative advantages” were also covered by this strategy, such as Quebec’s “concertation” and “clustering” tradition, its relatively high R&D spending levels, and its leadership in sectors such as aerospace, biotechnologies, ICT, and green technologies. Furthering such “advantages” and the “competitive position” of Quebec’s businesses in these sectors was a key objective, for which “the financial tools of the government and state corporations should be used” (Québec 2005: 65). Two sectoral strategies were thus

published in parallel in the second part of 2006, detailing how this should be achieved: one for the aerospace industry, which involved substantial increases in MDEIE and SGF equity investments (Québec 2006c: 30-31); and another for R&D spinoffs, which set out various funding initiatives for seed-stage ventures such as the capitalization of two \$100 million VC funds – *CTI* (life sciences) and *Go Capital* (ICT/greentechs) – in partnership with the CDPQ, FSTQ, Desjardins, and FIER-Partenaires.

Graph 24: Provincial government’s R&D spending, Quebec vs. Ontario 2003-2013¹⁰⁴ (\$millions)



The identification of a need for the capitalization of R&D spinoffs also led the government to deplore the lack of a strong base of angel investors in Quebec, noting angels were central to the success of R&D commercialization in the US (Québec 2006: 51). This led to the subsidization and setting up, as part of the 2007 manufacturing “action plan” (2007c: 24),

¹⁰⁴ Sources: CANSIM 3580001

of the centralized *Anges Québec* network in 2008, regrouping most of the province's business angels. This was a patent case of policy divergence: not only would *Anges Québec* receive over \$4 million in public subsidies between 2008 and 2015 but, in contrast with Ontario where more than a dozen regional “angel groups” operate in parallel, it was set up as a peak organization, centralizing and coordinating angel investment in Quebec. Government support to angels had a clear economic purpose: unlike most VCs, angels typically invest in high-risk, seed or start-up stage ventures, adopting a more “hands-on” approach and providing mentoring services to investees. According to the R&D and manufacturing strategies, this is exactly what was needed.

This support also had strategic purposes. Promoting angel investment is a good way to ensure private VC benefits local businesses, since angels are known to engage, because of this hands-on approach, in “proximity capital,” i.e. in ventures located relatively close to their workplace (Crevoisier 1997; Mason & Botelho 2014; Mason & Harrison 1995, 2002; Paul *et al.* 2003; Paul & Whittam 2010). As corroborated by *Anges Québec*'s President François Gilbert, the establishment of such a centralized, peak organization also made it easier for Quebec's government to ensure the coordination of angel activities with its own economic strategies¹⁰⁵. That is because business angels are also known to be good co-investment partners for VCs and institutional funds, given their specialized expertise but limited financial capabilities. This was to be demonstrated soon enough, with the

¹⁰⁵ Personal phone interview, February 10th, 2015.

government capitalizing, in 2008 and 2009, many seed-stage co-investment funds to work alongside Quebec’s angels.

5.2.2. Specialized funds, Teralys, CCPME, and the FIRA

If the 2007 manufacturing strategy presented state support to business angels as a way to help small manufacturers cope with a rapidly rising Canadian dollar (Québec 2007c: 20-24), it also made clear that Quebec had to take advantage of a strong dollar by boosting investment in capital-intensive sectors, such as green technologies. It was therefore announced that IQ would invest \$25 million in a limited partnership fund specializing in clean technologies, “to establish Quebec’s position within the new low carbon economy emerging in Europe, northeastern US, and California” (Québec 2007c: 42). Administered by *Cycle Capital Management*, this new fund – *Fonds Cycle Capital I* – reached a capitalization of \$80 million by early-2009 with contributions from the FSTQ, FACSQ, and CDPQ. The establishment of such a specialized fund also became one of the centerpieces of yet another national strategy launched as part of the 2008-2009 budget, the *Stratégie de développement de l’industrie québécoise de l’environnement et des technologies vertes*.

Along with this strategy, published in May 2008, *Cycle Capital I* would be part of a “vision” for a new, greener Quebec: “*que le Québec devienne le leader canadien de l’industrie de l’environnement et des technologies vertes et que cette industrie contribue à l’image de marque du Québec sur la scène internationale*” (Québec 2008: 13). There would be good reasons to believe such noble intentions might have been relegated to the

proverbial policy backburner with the financial crisis quickly erupting in September. But in fact, the counter-cyclical budgets tabled from 2009 onwards introduced new tools to secure the implementation of strategies adopted since 2005. In its pre-budget submission to the government in February 2009, *Réseau Capital* recommended the adoption of “structuring” measures in addition to counter-cyclical ones, so that the efforts made to refine Quebec’s VC industry and, especially, to reinforce seed and start-up stages’ financing ecosystems would not have been in vain (2009: 4-5):

Au-delà des problèmes immédiats, la crise actuelle risque donc d’annihiler le cadre mis en place par le gouvernement et les efforts consentis par l’ensemble des joueurs pour créer une industrie locale de fonds de démarrage d’entreprises technologiques [...] L’étranglement financier actuel menace (i) la survie des entreprises technologiques et celle des fonds de capital de risque technologique qui les financent, (ii) l’ancrage au Québec de l’expertise et de la richesse technologique générées par les générations successives d’entreprises technologiques financées depuis une quinzaine d’années, (iii) la capacité de valoriser au Québec les montants investis en R&D depuis des années [...] Si la chaîne s’interrompt, les talents vont se replacer, éventuellement hors du Québec.

Many counter-cyclical measures were also launched as part of the 2009-2010 budget: a billion dollars in additional investment funds were allocated to the SGF; \$1.2 billion were injected in IQ’s new “*Renfort*” program of subsidies, loans, and guarantees; a \$500 million “emergency fund” for large businesses was capitalized by the FSTQ and SGF; close to \$100 million were added to the FIER-Régions and FACSQ; and *Actions-Croissance PME* was transformed into the new “*RÉAQ II*” to help publicly-traded SMBs cope with the crisis and competition from their Ontarian counterparts (Québec 2009c: section F). Yet, even in the midst of the recession, this budget also introduced four major initiatives directly informed by strategic, regional-level “national” objectives established *before* the crisis.

Three new specialized VC funds were first set up in the form of limited partnerships between IQ, FIER-Partenaires, the FSTQ, and private investors. Each of the funds was

capitalized with around \$42 million, and had as its “exclusive mission” to fund seed-stage companies “based in Quebec” and operating in sectors previously identified as “strategic:” *FounderFuel Ventures* would concentrate on ICT, *AmorChem* on life sciences, and *Cycle-C3E Capital* on green technologies (Québec 2009c: F91). The fourth initiative, closely related to the launch of these funds, was the creation of Canada’s largest hybrid “fund of funds,” *Teralys Capital*, with the objective of capitalizing up to twenty new specialized VCs in the three abovementioned sectors. *Teralys* brought Quebec’s *faire faire* approach to a whole new level: no less than \$700 million would be put into that fund of funds by government-backed investors IQ (\$200 million), CDPQ (\$250 million), and FSTQ (\$250 million), and its managers were specifically mandated to establish formal links with *FounderFuel*, *AmorChem*, and *Cycle-C3E* “to ensure consistency and coherence within Quebec’s high tech funding chain” (Québec 2009c: F95).

The scale of such public sponsorship allowed Quebec’s government to impose clear conditions (Québec 2009c: F94): “*la capitalisation du fonds sera investie dans une proportion de 75% dans des fonds sectoriels de capital de risque québécois et canadiens lorsque ces derniers s’engageront à investir au Québec. Les investissements de ces fonds viseront les créneaux québécois d’excellence technologique présents et en devenir.*” Strategic considerations, again, clearly outstripped counter-cyclical, or even leveraging imperatives. The original intention was in fact for *Teralys* to reach an \$825 million capitalization, with an additional \$125 million coming from private partners. But even without this supplementary contribution, the government decided to go forward with a \$700 million fund because of its strategic advantages.

Teralys was launched only months after the establishment of the *Ontario Venture Capital Fund* (OVCF), a \$205 million fund of funds notably capitalized by OMERS, the Business Development Bank of Canada (BDC), and Ontario's government. There is thus no doubt that policy emulation/autonomy was also part of the rationale behind the establishment of *Teralys*, an otherwise much bigger fund. As confirmed by FSTQ and IQ officials, besides, an important underlying motive for *Teralys* was to promote concertation and complementarity between the indirect investment activities of the FSTQ, CDPQ, and IQ:

Pré-création de Teralys, tout le monde faisait à peu près n'importe quoi. Il n'y avait pas de concertation, de complémentarité. C'était chacun pour soi, puis de temps en temps on pouvait s'allier mais c'était pour des raisons plus personnelles. Ce n'était pas concerté. C'est ce manque, justement, de concertation qui a mené à la création de Teralys. On s'est dit : si on veut que le Québec se distingue, créons un regroupement qui aura les compétences pour faire les bons choix et mettons en place une stratégie qui pourrait être pérenne.¹⁰⁶

Deepening concertation and complementarity within Quebec's ecosystem became a key aim of the government coming out of the recession. The first recovery budget, in March 2010, announced the government would subsidize a "concertation table" regrouping major actors from the financial sector, dedicated to Quebec's "financial specializations" such as VC and investment capital. This initiative gave birth to *Finance Montréal*, a concertational and promotional body of which IQ, FSTQ, CRCD, FACSQ, and CDPQ representatives became prominent members. The perceived need for such enhanced concertation (and policy asymmetry) emerged from two main issues. First, the *Toronto Financial Services Alliance*, a similar body, had just launched a strategy to expand Toronto's leading role in

¹⁰⁶ Personal interviews, André Petitclerc (IQ) and Alain Denis (FSTQ). Quote from Alain Denis.

the Canadian financial sector, and Quebec's government considered a riposte was in order (Québec 2010: 194).

Secondly, it was realized Quebec's annual "business birth rate" had been declining, in relative terms, since the early 1990s while Ontario's had been growing. As a result, the proportion of Ontario's citizens being self-employed or owning a business (14.1%) was now double that of Quebec (Québec 2010: 183-184). After *Teralys* in 2009, two state-sponsored initiatives thus sprung from the 2010-2011 budget which were prime examples of concertation. The first was the establishment of a \$600 million investment fund capitalized equally by the CDPQ and CRCD: *Capital Croissance PME*. CCPME would issue loans or make equity investments of \$100,000 to over \$5 million in early-to-expansion and even succession stage SMBs (Québec 2010: 179-180). This was a mutually beneficial arrangement: while CRCD needed additional resources to expand its activities, the CDPQ needed Desjardins' deep regional roots to maximize the impacts of its investments¹⁰⁷ and Quebec's government needed this sort of involvement from institutional investors to complement its own initiatives.

The second major announcement made in the 2010 budget was the creation of the FIRA (Québec 2010: 185-187). This \$75 million fund, sponsored by the FA, CRCD, and FSTQ (\$25 million each) was put in place at the demand of the government to offset population aging in the farming industry and land grabbing by foreign speculators¹⁰⁸. This is precisely why FIRA investments were restricted to young applicants (18-39 years old)

¹⁰⁷ Gérald St-Aubin, personal interview.

¹⁰⁸ *Ibid.*

seeking either to start, expand, or buy into agricultural businesses. The FIRA would issue loans, buy equity, or even lease land to farmers and entrepreneurs, thereby extending, with the help of CRCQ and the FSTQ, activities already assumed by the FA. Like CCPME, the FIRA was a concrete example of the strategic concertation and complementarity Quebec's government was calling for. It was also the sign of a renewed interest for business succession in Quebec, a recurrent concern for a government seeking to safeguard the province's corporate ownership structure.

5.2.3. The new IQ, the FRQ, and Anges Québec Capital

The economic recovery process set in motion in 2010 also provided the background for an important institutional change brought to Quebec's ecosystem. In late October of that year, the PLQ introduced *Bill 123*, aiming to give birth to a new and improved IQ by integrating the SGF to its structure (Québec 2010b). The arguments used by the government to justify the SGF-IQ "amalgamation" once again referred to this perceived need for enhanced synergy within Quebec's business financing ecosystem. Potential economies of scale deriving from the merger were also part of the picture, but reading National Assembly debates on the subject, one realizes such was not the main motivation. The crucial motives of the government were, instead, fivefold and closely mirrored the arguments of key economic organizations having submitted briefs as part of the consultations (Québec 2010c).

First, the government argued the new IQ would provide a public "one stop shop" for Quebec businesses, an important step applauded by the *Fédération des chambres de*

commerce du Québec (FCCQ 2010). This would not only be advantageous for investees, but also for IQ itself: as per André Petitclerc, previously responsible for the ICT division at the SGF and now head of “small capitalizations and investments” at IQ, the integration of a body specialized in equity to IQ’s structure allowed for a much better coordination and streamlining of banking (loans & guarantees) and investment (VC & equity) activities¹⁰⁹. A second justification for the new IQ, relatedly, rested on the fact that it would constitute a provincial equivalent (policy autonomy) to the BDC and its subsidiary, *BDC Capital*, established in 2006. The third major argument used by the government was therefore that the new IQ would allow for improved complementarity between public, private, and institutional financial products, something the *Conseil du patronat du Québec* considered essential (CPQ 2010).

The PLQ also highlighted the fact that, through IQ’s many branches outside of Montreal, regional SMBs would now have a more direct access to equity, a very important improvement according to the CFIB (FCEI 2010). Finally, the government, the FSTQ, and the *Manufacturiers et Exportateurs du Québec* all argued the new IQ would allow for a much improved alignment between business capitalization and the state’s economic development strategies (MEQ 2010; FSTQ 2010). It was even announced that, following the merger, IQ would no longer function on the basis of particular funding programs such as the FAIRE or PASI, but adopt a sectoral approach, directly informed by governmental strategies and priorities. As stated in IQ’s 2011-2013 “strategic plan” (IQ 2011: 4),

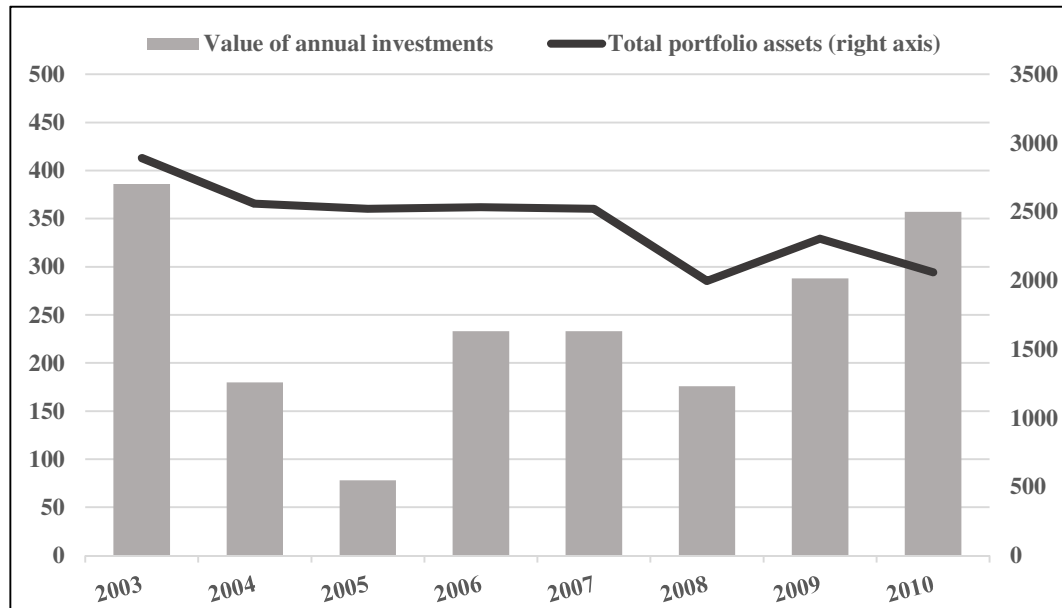
l’intervention de la Société au niveau du capital de risque sera concertée et tiendra compte des orientations des ministères à vocation économique [...] de manière à cibler les secteurs définis

¹⁰⁹ Personal interview.

comme prioritaires par le gouvernement et à y intervenir. L'action concertée des ministères et de la Société constituera une force de frappe peu commune et bénéficiera à l'économie du Québec.

The SGF-IQ merger should not, therefore, be interpreted as motivated by some sort of disdain for the SGF. Quite to the contrary, as Graph 25 shows, this initiative took place after years of increasing investments, going back to 2006. By its last year in operation, SGF annual investments had attained, at over \$350 million, some of their pre-2003 levels. It should also be noted that, throughout the process leading to the adoption of Bill 123 in December 2010, the PLQ always made clear, in response to concerns expressed by the PQ opposition, that the missions and sectoral expertise of the SGF would be safeguarded under the new IQ (Québec 2010c).

Graph 25: Contributions of the SGF 2003-2010 (\$millions)¹¹⁰



¹¹⁰ Sources: SGF (2000-2011).

It should not be interpreted, either, as a willingness to “depoliticize” the investment activities of public bodies. Instead, Bill 123 clarified the fact that IQ’s mission was not merely to act on market opportunities, but to help carry out state-defined strategies (Québec 2010b: 5-6):

The mission of the Company is to contribute to the economic development of Quebec in accordance with the economic policy of the government [...] In order to carry out its mission, the Company supports the creation and development of enterprises of all sizes through adapted financial solutions and investments, in a complementary fashion with its partners. In accordance with the mandate it is given by the government, the company conducts foreign investment prospecting and carries out strategic interventions.

The allusion to “strategic interventions” referred to the fact that IQ’s reform also gave way to the establishment of the FDÉ, a MDEIE-IQ jointly managed fund dedicated to “political calls,” i.e. to funding decisions taken by Quebec’s government¹¹¹. A policy statement released for the launch of the FDÉ gave an idea of the philosophy behind it (Québec 2011: 17-18):

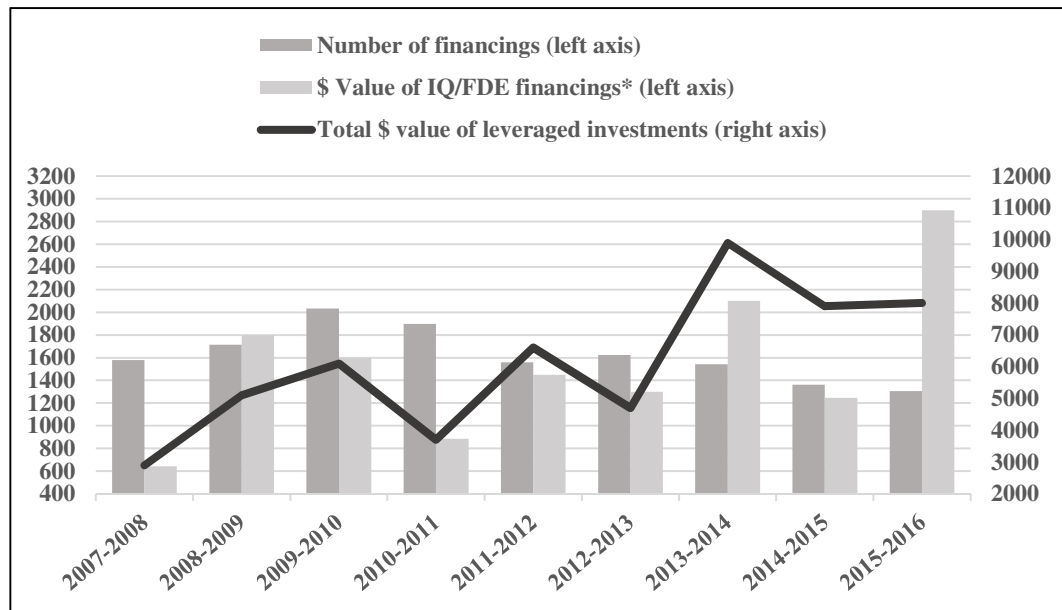
Avec la mise en place du Fonds, le gouvernement affirme son leadership en matière de développement économique, d’accompagnement des entreprises, ainsi que dans la coordination des intervenants en matière de prospection d’investissements étrangers [...] Les interventions réalisées à travers les programmes d’aide financière et autres mandats gérés dans le Fonds seront structurantes et devront générer des retombées économiques importantes pour le Québec. Toutefois le risque associé à ces interventions, généralement plus élevé que celui encouru dans le cadre des activités régulières d’IQ, sera endossé par le gouvernement. Le gouvernement assume ce risque compte tenu des impacts associés à ces projets, en termes de création d’emploi, de développement local, de création de niches d’excellence, de restructuration d’entreprise et de développement de nouveaux marchés d’exportation.

Not only did Quebec’s government establish, with this new IQ, a more complete public financing tool, aligned with its sectoral priorities and benefiting from a reinforced expertise in equity, but it also gave itself, through the FDÉ, a vehicle allowing for the extensive funding of politically-defined, economic development initiatives. Although the activities

¹¹¹ André Petitclerc, personal interview.

of the FDÉ received renewed attention, as of late, because of the 2015-2016 investment in the *CSeries* venture, the fund was actually very active from its inception. Over its first year in operation, in 2011-2012, \$365 million were invested on the sole basis of “government mandates” given to the FDÉ. Two concrete examples of such mandates are worth mentioning here: the creation of the *Fonds Relève Québec* in 2011, and that of *Anges Québec Capital* in early 2012.

Graph 26: Contributions of IQ/FDE 2007-2016 (\$millions)¹¹²



Other measures announced in the 2011-2012 budget were informed by a study on the “renewal of entrepreneurship” released by the MDEIE in October 2010 (Québec 2010e), and by subsequent consultations on a new “entrepreneurial strategy” (Québec 2011b). This gave way to an “entrepreneurial forum” in the spring of 2011 and, finally, to the publication

¹¹² Sources: IQ (2008-2015), *Rapports annuels*.

*It should be noted that these figures include occasional overlaps between IQ and FDE investments, but exclude all FIER investments.

of the *Stratégie québécoise de l'entrepreneuriat* in November (Québec 2011c). Throughout this process, key concerns were raised. Most importantly, Quebec's "entrepreneurial culture" was seen to be fading. This conclusion rested on a comparison with Ontario and the RoC, which showed Quebec still had significantly lower rates of business birth and survival, as well as a lower potential for entrepreneurial renewal because of demographic aging (Québec 2011c: 9). To face such issues, i.e. to catch-up with Ontario and the RoC, two main targets were set for 2020 (Québec 2011c: 15):

- a)** to increase the number of business owners in Quebec by 20,000 and to increase by 140,000 the number of Québécois having "entrepreneurial intentions;"
- b)** to drive up, by 7.5%, the one-year survival rate of SMBs and to reach a success rate of 75% for business transfers, measured by the three-year survival rate of transferred businesses.

The first major initiative taken in this sense was the establishment of the \$50 million FRQ, a partnership between the FDÉ (\$20 million), CRCQ, FSTQ, and FACSQ (\$10 million each). Managed by IQ, the interventions of the FRQ would take the form of preferential loans, loan guarantees, and/or equity investments and would lead to, it was hoped, between 330 and 500 successful business transfers over the next twelve years (Québec 2011b: E85-E-87). Apart from the nationalist underpinnings of this concern for business succession which, as explained earlier, mainly rested on a fear of closures and foreign acquisitions, the partnership with the three tax-advantaged funds was strategic, banking on these organizations' expertise in the cooperative sector and, in the case of CRCQ, business transfers. Not only would all FRQ investees have to be wholly-based in Quebec, but the advent of the FRQ itself reinforced, in a very significant way, policy

divergence with Ontario, where no such public or even government-backed support is offered except through the federal BDC.

The second major policy launched in the wake of Quebec’s entrepreneurial strategy was the capitalization of the \$30 million AQC in April 2012, a partnership between the FDÉ (\$20 million) and *Anges Québec* (\$10 million). This new fund was considered useful for two main reasons: first, it would maximize the angels’ capacity to provide larger investments, follow-up investments, “patient” capital, and mentoring¹¹³. The second motivation was that such a hybrid fund would “contribute to a better structuration of angel investors’ activities in Quebec” (Québec 2011b: E80). This meant the contribution of the FDÉ to AQC’s capitalization would help ensure enhanced compatibility between angels’ investments and the government’s economic priorities. That is why it was established that AQC would specialize in seed-to-early stage financing of ICT, industrial technologies, and life sciences, with each investment having to be approved by a Board where two IQ representatives would sit. The AQC thus reinforced an existing policy divergence with the RoC – the centralization and government-backing of angel investment – for strategic, regional-level “national” purposes.

5.3. The Marois (2012-2014) and Couillard (2014-2017) governments

From 2003 to 2012, the Liberal government thus mostly upheld Quebec’s model of business capitalization, mixing *faire* and *faire faire* approaches, *because* economic nationalism continued to play key ideational and institutional roles by a) producing path

¹¹³ Personal interview, François Gilbert.

dependency dynamics favoring continuity; **b**) establishing state involvement and sponsoring as the best ways to steer the private sector toward strategic directions; and **c**) highlighting the necessity of policy asymmetry in view of regional-level, “national” interests. The PLQ’s last budget confirmed this tendency with the creation of three new government-backed funds: the \$750 million *Capital Mines Hydrocarbures* (CMH), through which Quebec’s government (IQ) would acquire shares in mining and energy companies; the \$170 million *Fonds Valorisation Bois*, a partnership between IQ (\$95 million) and the FSTQ (\$75 million) mandated to promote *local* timber processing; and the \$30 million *Coop-Essor*, a partnership with CRCQ aiming to provide “*un outil de planification de la relève pour des entrepreneurs soucieux de préserver l’autonomie de leur entreprise après leur retraite*” (Québec 2012: 23).

The years 2012 to 2017 were, in turn, particularly interesting. First, the nationalist PQ regained power as a minority government which, although short-lived, introduced many important *faire* initiatives: the *Banque de développement économique du Québec* (BDÉQ) project and the “*Gazelles*” program, notably. Most revealingly, second, this period offered a mirror image of the 2003 shift between the PQ and PLQ. The latter was reinstated as a majority government in 2014, elected on an austerity platform somewhat hostile to state intervention and yet giving way to an overall continuity and even to a refinement of the Quebec model through numerous new partnerships with state-backed investors such as in *PerforME*, *AQC*, *Teralys Capital Fonds d’innovation*, and the *Fonds Innovexport*.

5.3.1. *The BDÉQ*

Despite differences in rhetoric, the PLQ actually followed, since 2014, some of the paths opened during the PQ interim. Even though most of the PQ's policies were not fully implemented, it is therefore necessary to discuss some of the most important. Its pledge to establish a BDÉQ for instance, was clearly underpinned by perceived imperatives for policy asymmetry. As initially devised, the BDÉQ was to regroup provincial *and* federal economic development tools, so as to provide a “one-stop-shop” for Quebec businesses¹¹⁴. Although references to federal programs were dropped when the process to create the BDÉQ was launched in late 2012, part of the original intention was indeed to counterbalance the BDC's influence in Quebec: by 2012, over 33% of BDC loans and around 50% of the BDC's debentures portfolio were still Quebec-based, against 28% and 27% for Ontario (BDC 2012: 96-97). Moreover, the federal government was about to launch its \$400 million “Venture Capital Action Plan” as part of the 2012 budget, inevitably increasing BDC Capital's presence in Quebec.

The BDÉQ initiative was set in motion in November 2012, as part of the economic plan introduced alongside the 2013-2014 budget. This plan unveiled the other key rationale behind the proposed development “bank:” by 2011, it was noted, Quebec was still lagging far behind Canada as a whole and slightly behind Ontario in terms of private investments, both as a percentage of GDP and per worker's head. If Canada's figures were boosted by the oil & gas sector, Ontario's lead was particularly concerning: “*le PIB par habitant au*

¹¹⁴ Web: <http://pq.org/programme/#c-4> (October 4th, 2016).

Québec est d'environ 15% inférieur à celui du Canada et de l'Ontario. Le niveau relativement faible du PIB au Québec masque ainsi un sous-investissement en termes absolus" (Québec 2013b: 4). The BDÉQ was to provide Quebec's government with a powerful leveraging tool, built on the merger of IQ and the MEIE's¹¹⁵ "front-line" financing and mentoring programs. Its financing activities – including loans, loan guarantees, debentures, VC, and equity – were to be closely "coordinated" and "synchronized" with those of existing institutions, from the CLD to commercial banks (Québec 2013b: 42).

The BDÉQ was also clearly devised as a way to centralize and streamline the government's *sponsoring* activities: it would provide "permanent consulting," business development counselling, market research, and financial planning services (Québec 2013c: 6). Bill 36 summarized the BDÉQ project as (Québec 2013d: 2):

ayant pour mission de soutenir, notamment par des interventions financières, le développement économique du Québec conformément à la politique économique du gouvernement. Il prévoit que la Banque offre des services financiers, voit à ce qu'un service-conseil d'accompagnement soit offert aux entreprises, coordonne les interventions financières des ministères et organismes à l'égard de tout projet que le gouvernement considère stratégique et élabore les stratégies de développement économique.

Clearly, the BDÉQ was to be much more than just another leveraging tool. It would have refined Quebec's "state-influenced" model by establishing ubiquitous governmental presence in the realm of business financing and accompaniment. As argued in a brief submitted during parliamentary debates on the project, "*la BDÉQ place l'État dans un*

¹¹⁵ Reorganized by then as the Ministère des Finances et de l'Économie (MFE).

interventionnisme largement augmenté, avec une approche favorisant vraisemblablement l'État entrepreneur” (MEQ 2013: 6).

The BDÉQ would have had a number of subsidiaries, including *Capital Émergence Québec*, a branch specialized in VC formed of the entire IQ portfolio plus an additional \$50 million for new investments, and perhaps most importantly *Développement économique Québec*, to manage the FDÉ, provide mentoring services, and act on governmental mandates (Québec 2013d: 12). The proposed BDÉQ had a mixed reception: on the one hand, groups like *Réseau Capital* applauded the initiative on the basis that it would establish an “*investisseur d'envergure*” which, in collaboration with the FSTQ and CDPQ, would be able to counter foreign acquisitions of Quebec’s expansion-stage businesses, favoring the local growth of strategic SMBs into medium businesses: “*la BDÉQ [pourra] jouer un rôle prépondérant pour permettre à des entreprises performantes de se développer, permettant ainsi le passage de la PME à la ME, facilitant le transfert d’entreprises et le maintien de sièges sociaux au Québec dans des situations où il y a peu de joueurs*” (2013: 4).

On the other hand, it was denounced by players like the CFIB as a *political* initiative ill-suited to the real needs of expansion-stage SMBs. The CFIB showed that a vast majority of those had never received or even sought financial aid from the state and would prefer tax cuts and fiscal incentives over the provision of development capital by the government (FCEI 2013: 7-9). Both perspectives showed the BDÉQ project was not underpinned by economic imperatives or the pressing financial needs of Quebec’s businesses as much as by strategic, regional-level “national” objectives. The context in which this initiative was promoted, throughout late 2013 and early 2014, also favors this interpretation. It should be

remembered that following Lowe's – an American hardware company – hostile takeover bid on Quebec's RONA in 2012, a heated debate on the vulnerability of Quebec's flagship companies arose. The PQ thus decided to set up, in June 2013, a *Groupe de travail sur la protection des entreprises québécoises* tasked to elaborate strategies to protect the province's headquarters.

A study published in November 2013 as part of this taskforce's consultations established that Quebec had, since 2001, developed a \$36 billion deficit in terms of the differential between foreign takeovers of Quebec businesses and foreign acquisitions by the latter (SECOR 2013: 10). In Ontario, this same deficit stood at only \$4 billion. Moreover, the proportion of business headquarters located in Quebec was, at 20% of the Canadian total, down from 24% in 2001 while Ontario's share, at 40%, was up from 36% (SECOR-KPMG 2013: 22-23). Three months later, the taskforce would highlight in its report that foreign takeovers of Quebec's businesses were responsible for significant job losses as well as for the relocation of subcontracting, production activities and part of the financial services industry outside of Quebec (Québec 2014b: 14). Among the recommendations figured an increased recourse to workers cooperatives, something Quebec's government and state-backed funds had been focusing on since the late 1990s, as well as the recapitalization of investment funds specialized in business transfer and succession (Québec 2014b: 39-44).

In parallel to the BDÉQ, the PQ launched new industrial policies in October 2013, pointing to the small size of Quebec's manufacturing businesses as an advantage in terms of local ownership, but as an impediment with regards to productivity and exports. A key

objective was to favor the advent of new, medium-sized “flagship companies” – or “*fleurons québécois*” – in seven priority sectors: aerospace, biotechnologies, biofood, renewables, creative industries, health services, and ICT (Québec 2013e: 52). Over \$100 million were to be invested, notably through the FDÉ, to help at least twenty companies in each administrative region reach a “critical mass” of over 100 employees and \$200 million in annual revenues by 2017. To this end, the new “*Gazelles*” program was devised (Québec 2013f: 30-31). As a partnership between the BDÉQ and the CLD, it was to offer sponsoring and financing services – the “*Accompagnement-conseil stratégique*” – to 300 “high-growth” and 200 “promising” SMBs over the next three years. The aim would have been to help each *gazelle* reach an average annual growth of 20% so as to build the new “*fleurons*” which were to attract, help retain, and even replace Quebec-based headquarters by expanding supply-chains and “revitalizing the [local] industrial fabric” (Québec 2014c).

5.3.2. The recapitalization of AQC and Teralys Capital Innovation

Although the Liberals returned to power in early 2014, part of this concern for Quebec’s leading role in business capitalization and the stabilization of its corporate ownership structure remained intact. This can be observed in the PLQ’s rhetoric during and after the election campaign. In its platform was a pledge to use public resources to help businesses facing hostile foreign takeover threats¹¹⁶ (PLQ 2014: 32):

notre approche a l'avantage de recourir à des fonds publics pour atteindre des objectifs de société, conformément aux objectifs de rendement optimal. C'est une approche pratique et efficace pour protéger nos sièges sociaux. Les participations acquises dans le capital-actions pour lutter contre une OPA hostile contribueraient à constituer un noyau dur d'actionnaires institutionnels québécois.

¹¹⁶ This pledge was reiterated in the 2014-2015 budget (Québec 2014d: B46).

As discussed earlier, the investment in the *CSeries* venture, realized through the FDÉ, reflected this strategic commitment to the safeguarding of vulnerable Quebec *fleurons*. This investment was thus underpinned by political imperatives, but it was also, as we'll see, essential in that both Bombardier and the *CSeries* were to become centerpieces of the next *Stratégie québécoise de l'aérospatiale* (Québec 2016b).

Most importantly, the significant level of policy continuity which characterized the 2014 shift to a PLQ government can be assessed based on concrete initiatives. Weeks after the election, the new head of the MEIE and ex-President of IQ, Jacques Daoust, argued Quebec's public funds had to refocus their interventions on equity¹¹⁷. This positioning had a direct impact on IQ which, after discussions between senior management and the government, set up a new "small capitalizations" division specializing in equity transactions of \$2 to \$5 million, supporting SMBs with \$5 to \$30 million in shares. This renewed (*faire*) approach to the capitalization of development-stage SMBs had two key objectives: to avoid foreign takeovers of high-tech companies and to fund strategic mergers and acquisitions – in collaboration with CRCQ and the FSTQ – in order to foster the advent of medium-to-large businesses, especially outside of Montreal¹¹⁸.

As for early-stage VC, *faire avec* and *faire faire* tools established by previous governments were to be further developed. First, AQC benefited from a major recapitalization effort led by the government and supported by new partners: \$65 million

¹¹⁷ Web: <http://affaires.lapresse.ca/economie/grande-entrevue/201409/23/01-4802691-jacques-daoust-moins-de-subsidies-plus-de-participations.php> (10/11/2016).

¹¹⁸ See André Petitclerc, personal interview.

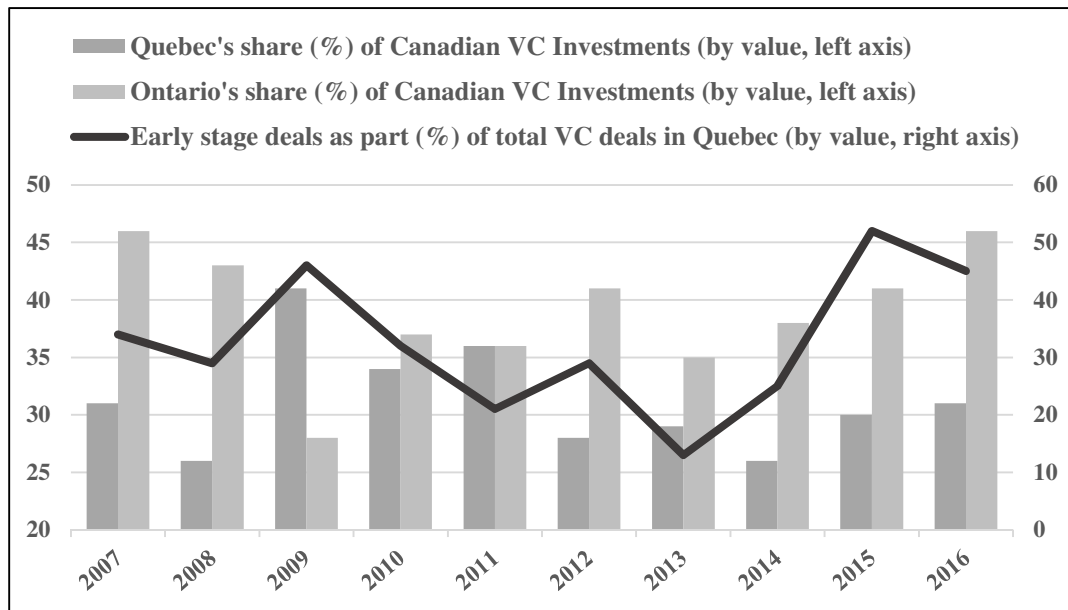
in new funds were injected in AQC in early 2015, bringing AQC's total capitalization to \$85 million – \$25 million from IQ, \$25 million from the CDPQ, and \$15 million from the FSTQ. According to François Gilbert, CEO of *Anges Québec* and AQC, the CDPQ and FSTQ were interested in becoming co-investment partners for two related reasons: they recognized AQC had already built a portfolio large enough to maximize profitability ratios, and most importantly they realized AQC was becoming a crucial part of Quebec's VC ecosystem by providing specialized expertise in seed-to-start-up stage financing, and thus follow-on investment opportunities for bigger funds. This account was further confirmed by representatives from the CRCQ and FSTQ. CRCQ's Gérald St-Aubin explains (personal interview):

On va dire à l'ange financier qui a moins de capacités: "mets le montant que tu es prêt à risquer dans cette société, puis on peut le doubler ou le tripler." On va évidemment le faire en collaboration [...] Il faut les motiver à faire grandir cette société. Plus tard, lorsqu'un investisseur américain arrive et veut injecter 15 millions \$ dans cette société en échange de telle valorisation et de l'élimination des avantages de tous les autres actionnaires, la dilution est très forte [...] Alors ce qu'on dit aux anges, c'est que quand ces étapes arrivent, on va les protéger. On a le capital pour le faire, et on va se substituer à l'offre de l'étranger.

Another major announcement made for early-stage VC in the 2014-2015 budget was the setting up of *Teralys Capital Fonds d'innovation* (TCFI), a partnership between the FSTQ (\$50 million), CDPQ (\$50 million), IQ (\$62.5million), and other players (\$162.5 million) such as the BDC, FACSQ, Desjardins, and Banque Nationale (Québec 2014d: B36). This new hybrid fund, managed by *Teralys*, would invest both directly in early-stage ventures, and indirectly through VCs. It was to specialize in three of Quebec's strategic sectors: ICT, green technologies, and most importantly life sciences, to which it would have to dedicate

between 25% and 35% of its portfolio¹¹⁹. This initiative was strategic, from the government’s perspective, for many reasons. First, a \$375 million fund of funds would have a significant impact on Quebec’s VC ecosystem: most importantly, it contributed in reinforcing the upward trend in early-stage deals, which had declined since the 2008 financial crisis because of investors’ risk aversion (Graph 27). In that regard, it was consistent with the simultaneous recapitalization of AQC.

Graph 27: Evolution of Quebec's VC industry IV, 2007-2016¹²⁰



The second strategy behind TCFI was sectoral. Namely, it would serve as a specialized financial arm of the government for the pursuit of new priorities. In the case of ICT, it would invest (alongside IQ and the CDPQ) in sector-specific VCs such as Montreal-based

¹¹⁹ Web: <http://www.fil-information.gouv.qc.ca/Pages/Article.aspx?aiguillage=ajd&idArticle=2211104045> (10/13/2016).

¹²⁰ Approximate figures. Sources: Thomson Financial (2008), Industry Canada (2008-2015), Thomson Reuters (2009-2015), CVCA (2015-2016), Thomson Reuters (2015).

iNovia and *White Star Capital*, thereby underwriting Quebec’s \$200 million “*Plan d’action en économie numérique*,” whose central objective is to increase local SMBs’ use of productivity-enhancing technologies (Québec 2016: 14; 39). In the case of life sciences, TCFI would become part of a larger strategy announced in the 2016-2017 budget. Quebec’s government was to invest more than \$100 million in this sector over the next five years, in order to maintain Montreal’s North American “leadership status” and to favor the commercialization of “Quebec discoveries” (Québec 2016b: B128-B131). To that end, an additional \$96 million was injected into TCFI so that it could sponsor VCs acting as follow-on investors for biotech and health sciences start-ups already financed, at the R&D and seed stages, by the new hybrid fund *AmorChem II* (Québec 2016b: B213-B222)¹²¹.

Two other strategic motivations behind TCFI should finally be mentioned. For one thing, perceived imperatives for policy autonomy played a major role since TCFI was set up precisely as Ontario’s *Northleaf Venture Catalyst Fund*, a hybrid fund of funds also specializing in ICT, green technologies, and life sciences, reached its full capitalization of \$300 million¹²². Like the initial *Teralys* in 2009, TCFI was established in part to safeguard Quebec’s competitive position vis-à-vis Ontario. As Quebec’s Finance minister Carlos Leitao argued when TCFI was announced, “*le Québec est un leader au pays en matière de capital de risque et de capital de développement. Avec l’annonce d’aujourd’hui, nous posons les gestes nécessaires pour maintenir cette position*”¹²³. TCFI represented another

¹²¹ Capitalized by IQ (\$20 million), the FSTQ (\$15 million), and Merck (\$15 million).

¹²² Web: http://www.ocgc.gov.on.ca/index_en.php?page=northleaf-venture-catalyst-fund (10/14/2016).

¹²³ Web: <http://www.fil-information.gouv.qc.ca/Pages/Article.aspx?aiguillage=ajd&idArticle=2211104045> (10/14/2016).

occasion for Quebec's government, besides, to establish large scale partnerships with the province's most powerful institutional investors, an approach it seemed to favor considering, as the next section shows, the numerous initiatives replicating it in 2015 and 2016.

5.3.3. Strategic partnerships

The 2015-2016 budget was published in a particular context, in March 2015. As discussed in Chapter 1, this budget introduced new policies for tax-advantaged funds in order to counterbalance the federal government's phasing out of its tax credits to LSIFs, coming into force in 2015 (Québec 2015: B78-B82). As explained, the government's decisions to **a)** eliminate ceilings for the annual issuance of FSTQ and FACSQ shares; **b)** increase this ceiling by \$150 million for CRCQ in 2015; and **c)** expand its tax credits applicable to FACSQ shares from 15% to 20% were all informed by a preference for policy asymmetry, underpinned by the pressures of Quebec's VC industry in favor of continuity. The government's choice to impose, in return, a 5% hike on all three funds' annual investment quotas in local, "admissible" SMBs tells the other side of this story.

Along with the budget, the government tabled the final report of the *Commission d'examen sur la fiscalité québécoise* established a year earlier. This Commission, mandated to evaluate the effectiveness and relevance of Quebec's tax expenditures, recommended that the three funds be imposed a 10% hike on their annual investment requirement, in order to "augment their contribution to Quebec's economic development" (Québec 2015b: 132). This further legitimized the government's decision which had been taken, in addition to

policy asymmetry concerns, based on strategic considerations. Three governmental strategies were indeed launched in 2015-2016 which would mobilize Quebec's tax-advantaged funds. The first was *PerforME* – the *Stratégie d'accélération des projets d'entreprises performantes* – which consisted in a rebranding of the PQ government's *Gazelles* program. One major difference, however, was that while *Gazelles* would mostly have given investees access to IQ or the BDÉQ, *PerforME* established a \$50 million partnership fund between IQ, the CDPQ, FSTQ, FACSQ, and CRCD.

Similar to the *Gazelles* initiative, *PerforME* would offer high-potential expansion-stage SMBs (less than 250 employees, at least \$25 million in turnover) personalized sponsoring in the form of managerial mentoring and market intelligence, as well as financial support from the most appropriate of the five partners (Québec 2015c: 10-12). The objective was to “accelerate” innovation or export projects in various sectors, in conjunction with the government's economic priorities. Also in 2015, the *Stratégie québécoise de développement de l'aluminium* was launched, whose main objective was to double the volume of aluminium processing in Quebec by 2025, notably by fostering the development of local SMBs in this sector (Québec 2015d: 9; 44-48). To reach this objective, *PerforME* services were made available to the most promising businesses, and state-backed funds like IQ and *Desjardins-Innovatech* were also put to use. In fact, *PerforME* was a central piece of state support underpinning two other development strategies: that of the “digital economy” (along with TCFI), and that of aerospace.

The 2016-2026 aerospace strategy was of particular relevance given the meaning it also bequeathed the FDÉ's historic investment in Bombardier's *CSeries*. This strategy

underlined the regional-level, “national” objectives pursued by the government through this investment: *“l’appui apporté par le gouvernement du Québec au développement de la Série C de Bombardier témoigne de la volonté du gouvernement de soutenir des projets d’investissement d’envergure, autour desquels se construiront la croissance et le développement futurs du secteur”* (Québec 2016b: 31). The *C Series* investment was to become the crown jewel of a program of support to “major projects” mobilizing an additional \$265 million over five years from the FDÉ, dedicated to the funding of overseas mergers and/or acquisitions: *“de telles acquisitions ou ces partenariats constituent souvent un moyen efficace pour une PME de s’intégrer à la chaîne d’approvisionnement mondiale. Ils devront avoir pour effet de créer et de maintenir des emplois au Québec”* (Québec 2016b: 43).

The government’s partnerships with state-backed investors, either in the case of TCFI or *PerforME*, were thus based in part on strategic considerations, aiming not only to leverage but to steer institutional and private investment toward priority sectors and projects. The PLQ’s support to LSIFs, in the face of the federal government’s phasing out of tax credits, was neither economically nor politically disinterested. As confirmed by many interviewees, good relationships between the government and tax-advantaged funds are key strategic concerns. Government representatives, notably the Ministers and deputy-Ministers of Finance and the Economy, meet with senior officials from the FSTQ and CRCD many times every year to discuss priorities, investment opportunities, and avenues for collaboration. CRCD’s Gérald St-Aubin explains (personal interview):

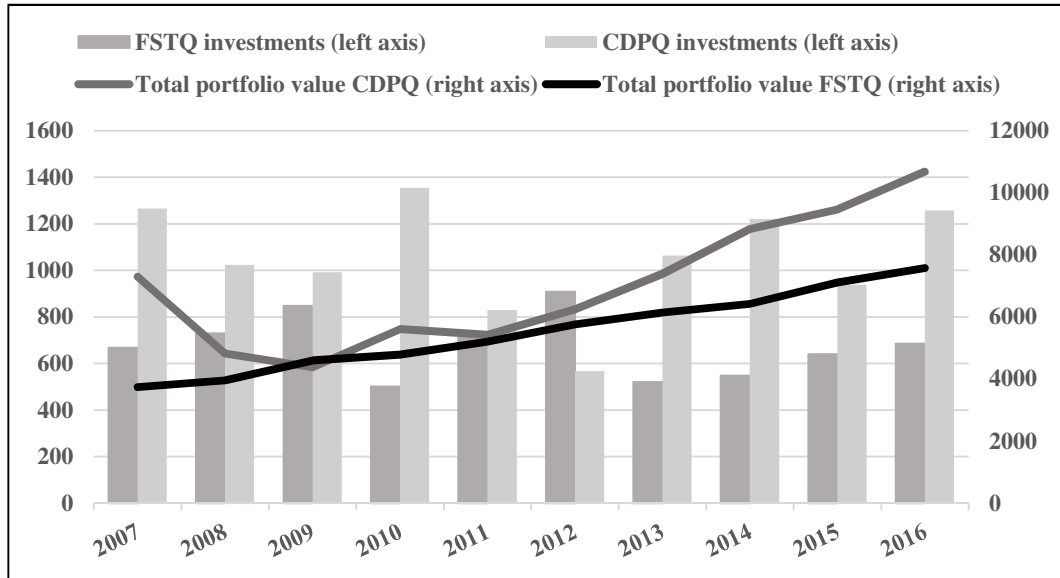
Nous, on a un pouls économique incroyable, et souvent les gouvernements vont venir nous consulter en disant: “on a pensé faire telle chose, comment cela s’appliquerait-il chez vous?” C’est beaucoup

de consultation et, à l'inverse, cela nous amène aussi souvent des opportunités car le gouvernement va dire: "je veux développer tel créneau." Alors un coup qu'on sait qu'il s'oriente vers tel ou tel aspect de l'économie du Québec, on va aussi orienter nos stratégies en fonction d'un renforcement mutuel de ces actions.

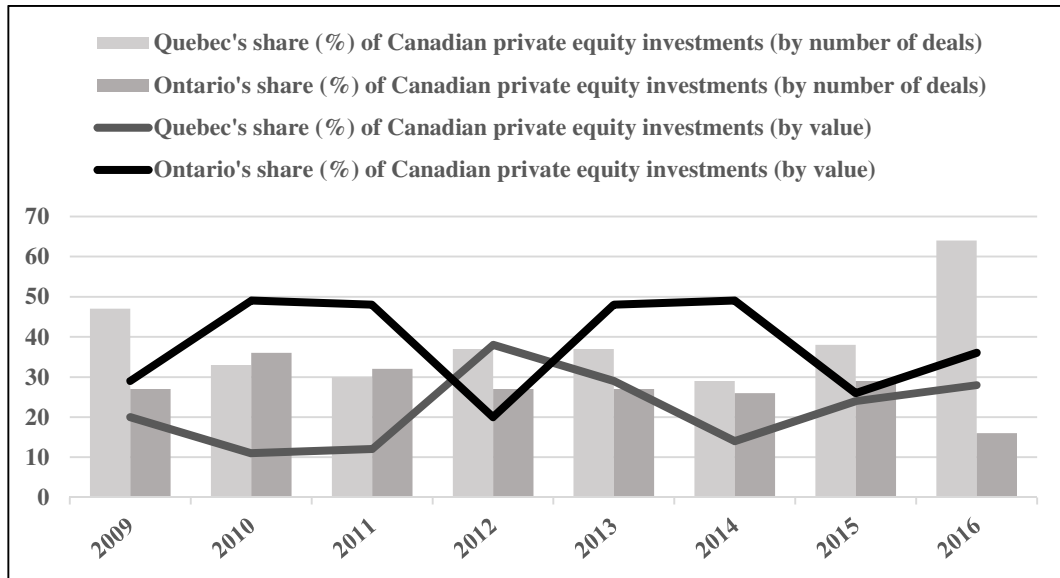
Besides, the Liberals knew they would need tax-advantaged funds for some of the major policy initiatives they were planning (Québec: 2016c: B232). Another good example of that was the “*Stratégie maritime*” announced as part of the 2015-2016 budget, which will establish “logistical poles” integrating road, railway, and maritime transport systems in strategic locations along the St-Lawrence, necessitating \$400 million in investments over five years including \$100 million from the FSTQ (Québec 2015e: 34).

As the FSTQ’s Alain Denis confirms, “*le gouvernement nous indique de façon régulière ses priorités. Là, par exemple, il impose une stratégie maritime, alors c’est certain qu’il s’attend à ce que des fonds comme le FSTQ aient des initiatives pour collaborer à ses plans. Ce n’est pas le gouvernement qui nous dit d’y aller, mais on n’est pas fous, on s’aligne sur les priorités gouvernementales*” (personal interview). In September 2016 finally, the government launched the *Fonds Innovexport*, a Quebec City-based hybrid VC fund specialized in seed and start-up stage exporting businesses. Capitalized with over \$30 million from the FDÉ, FSTQ, FACSQ, CDPQ, Quebec City, and private investors, this was yet another prime example of state-led collaboration, mobilizing multiple government-backed funds. As Graphs 28 and 29 illustrate, this approach paid real dividends: since the financial crisis, the two largest state-backed funds steadily increased their presence, with close to \$2 billion in development capital investments in Quebec, on average, each year.

Graph 28: Contributions of the FSTQ and CDPQ in Quebec, 2007-2016 (development capital, \$millions)¹²⁴



Graph 29: Evolution of Quebec's private equity industry 2009-2016¹²⁵



¹²⁴ Sources: CDPQ and FSTQ (2010-2016), *Rapports annuels*.

* Including investments in specialized VCs.

¹²⁵ Approximate figures, based on partial disclosed information. Sources: Thomson Reuters (2011, 2013, 2014), *Canada's Buyout and Private Equity Market*; CVCA (2015, 2016), *Canadian Private Equity Market Overview*.

That said, notwithstanding the government’s leadership, these funds’ capacity and willingness to support structuring economic development initiatives – as well as their commitment to policy asymmetry when and where necessary – should not be overlooked. In early 2016, after it was confirmed the federal tax credits for LSIFs would be safeguarded, the FSTQ announced it would double its investments in Quebec and put aside a \$500 million reserve to send the “signal” of “economic patriotism:” it would henceforth be ready to counter foreign takeovers of “flagship” Quebec businesses¹²⁶.

5.4. Concluding remarks

As this chapter demonstrated, a thorough analysis of Quebec’s policy initiatives since 2003 shows that, with regards to state activism in development capital and VC, the past decade-and-a-half was equally dynamic as the 1990s and early 2000s. Not only has Quebec continued to reap, since 2003, a highly disproportionate share of all new VC raised in Canada (over 50% on average), but its businesses also continued to be involved, on average, in over 40% of all VC deals made in Canada. The persistence and, to a certain extent, the intensification of the government’s sponsoring activities were responsible for this dominant position. Although, statistically, the proportion of “government-backed” VC investments in Quebec has declined and stabilized at around 45%, this is still much higher than in Ontario or the RoC and, in all likelihood, an underestimation given the

¹²⁶ Web: <http://www.ledevoir.com/economie/actualites-economiques/468945/le-fonds-ftq-veut-investir-dans-les-infrastructures-socio-economiques> (10/17/2016).

multiplication of *faire faire* and *faire avec* initiatives consisting in the capitalization of specialized VCs by public and tax-advantaged funds (see Table 5).

Moreover, VC statistics actually conceal the growth of state involvement in development capital. IQ and FDÉ financings for instance, as well as the value of investments leveraged by those, have been steadily increasing since 2003. FSTQ and CDPQ local investment portfolios, similarly, doubled in size since the financial crisis. The levels of public R&D spending are also worth mentioning: after a slow but steady decline between 2003 and 2008, major policy efforts reversed the trend so that since 2009, Quebec's government's spending on R&D is superior, in absolute terms, to the government of Ontario's. As a result, Quebec maintained a dominant position in Canada's private equity industry, consistently attracting a larger share of deals than Ontario.

The detailed accounts provided in this chapter illustrate, furthermore, that the persistence and renewal of government intervention after 2003 cannot simply be attributed to institutional path dependency or to the fact that “Quebec interventionism was now well established as the appropriate, perhaps necessary, way to promote growth there” (Haddow, 2015: 196). Even initiatives taken in the wake of the “*Rapport Brunet*,” which indeed exposed path dependency dynamics, had as much to do with *new* government priorities and strategies as with a legacy of low private sector involvement in VC. The launch of *FIER-Partenaires* in 2005, for instance, had leveraging as an objective but was also a way, for the government, to steer increasingly influential institutional investors toward politically-defined priority sectors.

Table 5: Summary of major government initiatives, Quebec 2003-2016

Sponsoring style		Policy objectives
“faire faire”	“faire / faire avec”	
Actions-croissance PME (2005)	PASI (2004)	Foreign investments prospection; productivity-enhancing projects
		Fostering IPOs; increasing the proportion of medium-sized businesses
	Relève-PME (2005)	Sponsoring of business succession/transfer; upholding of corporate ownership structure
	Desjardins-Innovatech (2005)	Avoiding privatization; upholding regional focus and specialization; recapitalization
	FIER-Soutien / FIER-Régions (2005)	Leveraging (centrifugal)
	FIER-Partenaires (2005)	Sectoral specialization; sponsoring of VCs; steering of institutional investors
Anges Québec (2008)		Centralization/Coordination (policy divergence); foster proximity capital; basis for co-investments
FounderFuel/AmorChem/ Cycle C3E/ Teralys Capital (2008-2009)	Cycle Capital I (2007)	Policy autonomy (rising Canadian dollar); sectoral strategy (green tech); local valorization/commercialization of R&D
		Leveraging; concertation in the high-tech funding chain; sectoral strategies (green tech, ICT, life sciences); policy emulation/autonomy (OVCF)
	Capital-Croissance PME (2010)	Concertation (CDPQ-CRCD); policy asymmetry (boosting business birth rates vs. Ontario)
	FIRA (2010-2011)	Business succession/transfers; policy autonomy (stifling land grabbing and speculation); concertation
	IQ-SGF merger / FDÉ (2010-2011)	Concertation; complementarity; streamlining of banking & investment activities; policy autonomy (BDC); regional access to equity expertise; sectoral strategies
Anges Québec Capital (2012)	AQC recapitalization (2015)	Business transfers/succession; policy divergence (catching up to Ontario’s business survival rates)
Teralys Capital Fonds d’innovation (2014-2015)		Reinforcing early-stage funding chain; sectoral strategies (ICT, green tech, life sciences); policy autonomy/emulation (Northleaf Venture Catalyst Fund); coordination with institutional investors
	PerforME & Fonds Innovexport (2015-2016)	Rebranding of the Gazelles; export-led innovation; coordination with institutional investors; sectoral strategies

If various economic rationales indeed became recurrent justifications for state intervention, *Relève-PME*, the FIRA, and the FRQ clearly demonstrated that economic imperatives can also be underpinned by political ones, and more precisely in these cases by apprehensions about foreign takeovers, land grabbing or speculation, and lagging business survival rates. The persistence and deepening of policy asymmetries between 2003 and 2016 therefore highlighted the influence of economic nationalism. Through institutional but also ideological and political mechanisms, nationalism continued to impact policymaking in very significant ways.

While the establishment of *Desjardins-Innovatech* and the FIER demonstrated that even privatization efforts and the reallocation of public resources were still being pursued with regional-level, “national” objectives in mind, the capitalization of *Anges Québec* as well as that of hybrid funds such as Teralys, CCPME, or TCFI clearly stemmed from perceived imperatives and preferences for policy asymmetry. Many governmental decisions, finally, proceeded from political motivations as much as from economic ones. Modifications to tax-advantaged funds’ capitalization and investment guidelines, in 2015, were a message sent to the federal government and Quebec’s development capital ecosystem, just as the historic investment in the *CSeries* venture was part of larger concerns regarding Quebec’s “*fleurons*” as much as it was of strategic necessity.

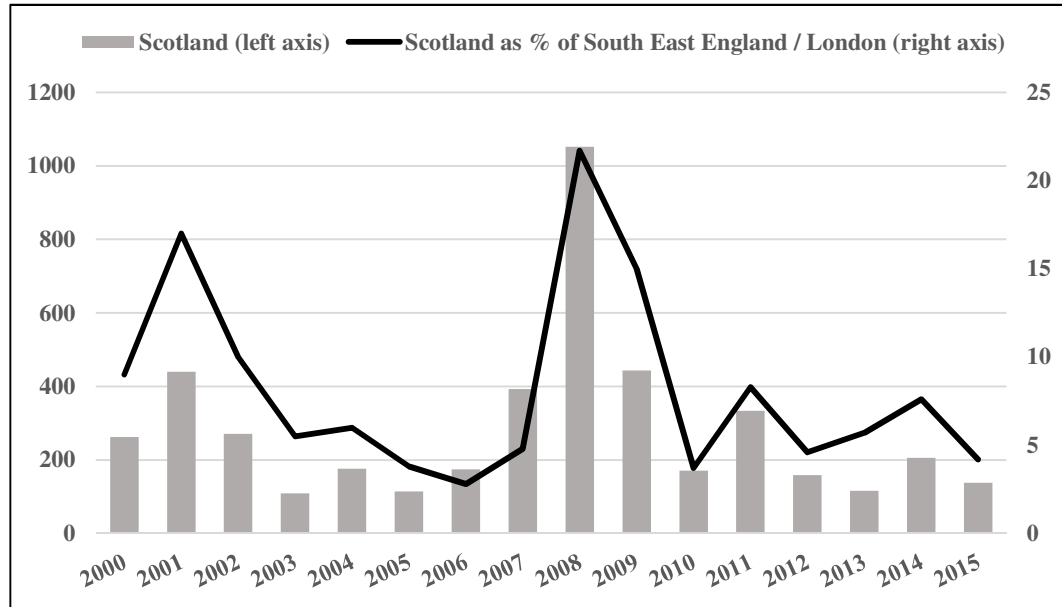
CHAPTER SIX

SCOTLAND, 2003-2017

Just like in Quebec, the last fifteen years in Scotland were characterized by a shift toward *faire faire* and *faire avec* approaches to business financing and VC, although the Scottish Government and SE/HIE continued to engage in significant direct investment activities. The end of Chapter 4 underlined that the needs to leverage private sector investments and to bridge funding gaps for seed-and-early stage ventures, arising from the reduced access to VC following the “dot.com bust,” transpired in a number of limited partnerships and co-investment funds such as *Scottish Equity Partners*. From 2003 onward, even though private VC and equity investments in Scotland seemed to resume an upward trend (Graph 30), the second SLP-SLD administration (2003-2007) moved further down that path, with the launch of new hybrid initiatives such as the *Scottish Co-investment Fund* (SCIF), *Scottish Seed Fund* (SSF), and *Scottish Venture Fund* (SVF).

It would be a mistake, however, to reduce the strategic motivations behind the establishment of such hybrid funds to leveraging and/or market failure issues. Instead, perceived imperatives and ideological preferences for policy asymmetry and state intervention – i.e. economic nationalism – permeated most of these initiatives.

Graph 30: Private VC/private equity investments in Scotland (£ millions), 2000-2015¹²⁷



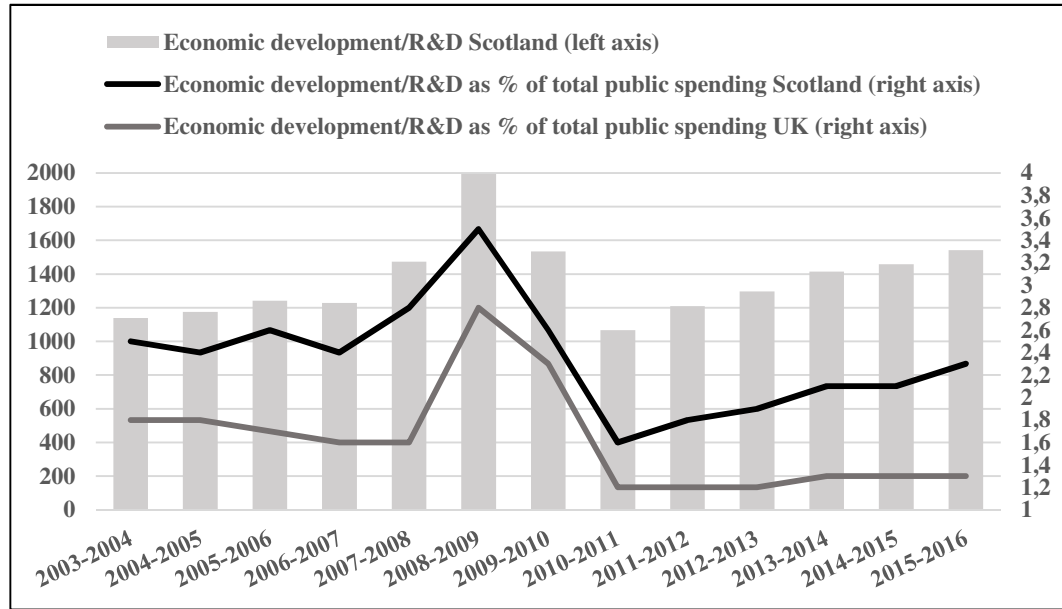
The next sections will demonstrate how the new hybrids established after 2003 were geared as much toward policy autonomy and divergence as toward funding gaps (Hayton Consulting 2008; Mason & Harrison 2010; PACEC 2012, 2013; Sunley et al. 2005). Suffice it to say for now that they were also (perhaps primarily) designed to facilitate the implementation of government strategies (Scotland 2004, 2004b, 2004c), and to complement *each other* as well as private actors. This was well illustrated when the SNP, in the wake of the 2008 financial crisis, regrouped all of these funds and created two more – the *Scottish Loan Fund* and *Renewable Energy Investment Fund* – in order to build what became a hallmark of the Scottish VC ecosystem: the *Scottish Investment Bank* (SIB).

¹²⁷ Source: BVCA (2004-2016), *Report on investment activity*. *Because the figures used for this graph are based on the investment activities of BVCA members (SE and most Scottish angels/angel syndicates are not), Scotland’s share is significantly undervalued for the whole period.

As in Quebec, this shift to *faire faire* and *faire avec* thus proved to be compatible with a general continuity in the active state involvement which already characterized the “Scottish model” since the 1970s and Scotland’s economic strategies in the 1990s. Such continuity transpired in the establishment of many new direct investment programmes by the Scottish government during this period. A good example were the *Intermediary Technology Institutes* (ITIs), a £450 million public investment programme created alongside the SCIF to increase linkages between local businesses and the R&D activities of higher education institutions, a strength of the “Scottish innovation system” (Adamek 2007; Roper et al. 2006). Another was the £70 million *National Renewables Infrastructure Fund* (NRIF) later set up to foster the advent of a Scottish cluster in offshore wind power, as part of the SNP government’s “Low Carbon Economic Strategy” (Scotland 2010c) and “Economic Recovery Plan” (Scotland 2011b).

As a result of both the formation of hybrid schemes and continuous use of direct investment, Scotland maintained high levels of public spending on economic development since 2003. As Graph 31 demonstrates, spending on economic development and R&D in Scotland kept increasing both in absolute terms and relative to overall public spending in Scotland and the UK. Except for the crisis and recession years from 2008 to 2011, the asymmetry between Scottish levels and average UK levels of spending on economic development widened considerably. While, in 2003-2004, Scotland was devoting 38% more public resources to economic development, as a proportion of its total public spending, than the UK as a whole, this discrepancy had doubled by 2015-2016, at 77%.

Graph 31: Public spending on economic development and R&D¹²⁸, Scotland vs. UK 2003-2016 (£ millions)



If the 2003-2016 period in Scotland was thus characterized, as was the case in Quebec, by some degree of “first order” and “second order” change (Hall 1993) in the way policy instruments were designed and used – notably with the multiplication of co-investment funds – such changes did not amount to paradigmatic transformations and, if anything, actually increased government influence rather than the opposite. Economic nationalism had a lot to do with this overall continuity and with the broadening asymmetry distinguishing the Scottish development capital ecosystem. This became especially evident over the last decade, as the SNP government systematically underlined the necessity of autonomy and divergence, devising policy initiatives accordingly. Lately, this took the form of ongoing consultations and groundwork toward the expansion of the SIB into a

¹²⁸ “Enterprise & Economic Development” + “Science & Technology” categories as % of total public spending (including debt servicing). Sources: GERS (2003-2016).

larger *Scottish Business Development Bank* (Michie & Wishlade 2014), precisely at a time when the new UK-wide *British Business Bank* was being established (UK 2014b).

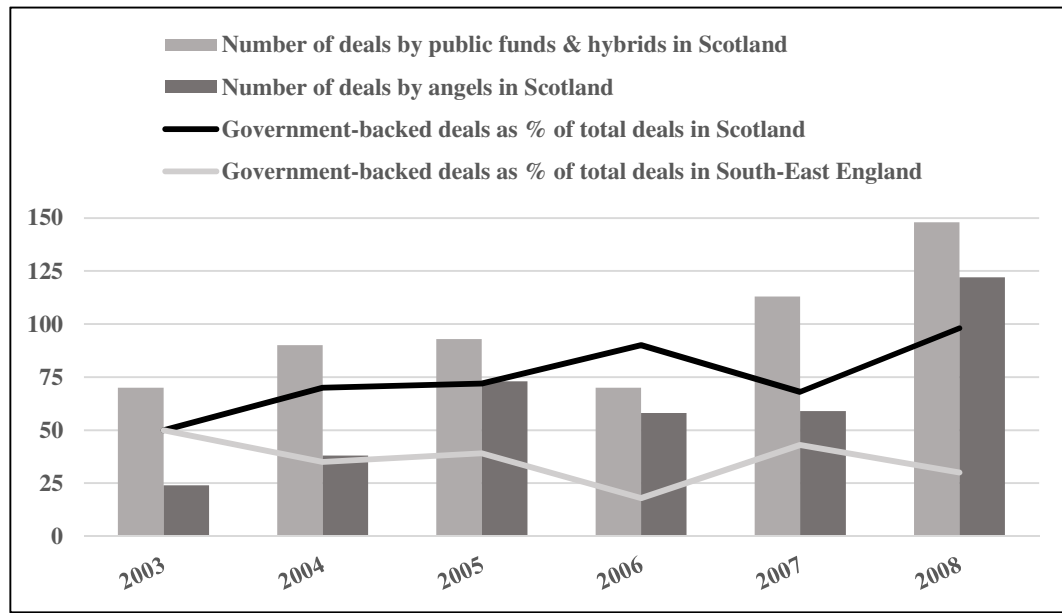
Yet, the policy impacts of Scottish nationalism were also felt before the SNP era. Early on in its second mandate, in the aftermath of the “dot.com bust,” the SLP-SLD coalition revealed its concern for the preservation and improvement of the corporate ownership structure in Scotland. As Dr. Geoffrey Whittam explains, this issue underpinned the first major initiative of this government, in 2003: “[at the source of the SCIF] was this recognition that Scotland’s biggest problem in terms of business is not really a shortage of new, potentially high-growth businesses more than businesses getting to a certain size and selling out. You see that in particular in the computer gaming sector. I think it was an attempt to provide funding for those who wanted to continue as Scottish-based companies” (personal interview). Economic nationalism, as Chapter 4 demonstrated, never was limited to the SNP. In this chapter, we show how the latter actually built, after 2007, on policies initiated by the SLP-SLD government.

6.1. The second SLP-SLD administration (2003-2007)

The second mandate of the SLP-SLD coalition was characterized by a general shift in government-backed corporate funding toward a co-investment model bringing together the public sector, business angels, and VCs. Between 2003 and 2006, three hybrid funds were established to form the basis of what was later known as SE’s “funding escalator” (Gordon 2013; PACEC 2013: 15-16). The SCIF, first, was devised with a particular focus on early-growth ventures, providing equity investments in the £250,000-£2,000,000 range

alongside private partners. The SSF and SVF, both launched in late 2006, were respectively crafted to cover the seed and expansion stages, offering investments of between £20,000-£250,000 in the first case and £2 to £10 million in the latter, always alongside private partners.

Graph 32: Government-backed VC deals as % of total early-stage VC deals¹²⁹, Scotland 2003-2008



The “official” story about these funds is that they were intended to fill funding gaps, as private-sector deals declined in volume, increased in size, and shifted toward safer investments after the “dot.com bust” (Pierrakis & Mason 2008; Mason & Pierrakis 2013). Yet, there was much more to this story than gap filling, leveraging, or counter-cyclical motives. The advent of the co-investment model in Scotland widened policy divergence

¹²⁹ By number of investments. Sources: *The Risk Capital Market in Scotland (2008-2016)*; Pierrakis & Mason (2008); Mason & Pierrakis (2013); Mason & Harrison (2010). *Figures for angel investments in 2003 and 2004 only include LINC members. We classify angel investments as “government-backed” because most of those investments were made alongside public sector investors and would not have been made otherwise.

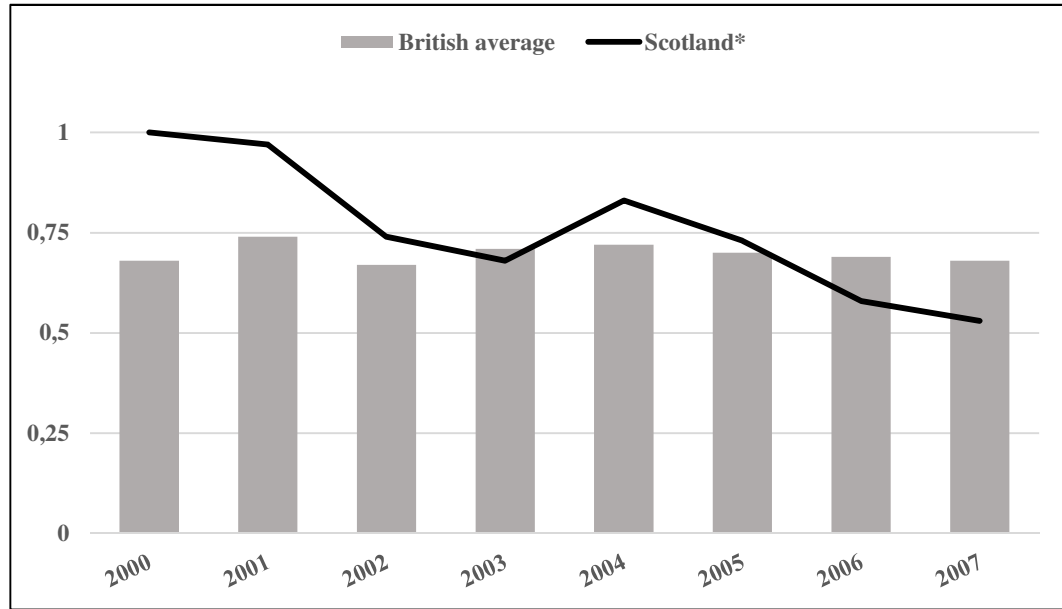
with the RoUK, by favoring the growth of state-sponsored VC deals and co-investment alongside angel syndicates. By 2008 as Graph 32 illustrates, state presence in Scottish early-stage VC deals was, at close to 100%, significantly higher than in the RoUK and more than triple that in South East England/London (Mason & Pierrakis 2013). As the next sections show, the advent of such public activism and asymmetry was in itself a key objective.

6.1.1. The Scottish Co-Investment Fund

The SCIF was the fruit of consultations launched in 2002, and the fund was set up by November of that year although operations really began in 2003 (GEM Scotland 2002). With Scottish businesses facing dwindling private-sector investments – dropping from £440 million in 2001 to £109 million in 2003 (Graph 30) – it seems reasonable to attribute a counter-cyclical rationale to the SCIF. Yet, this fund was not crafted as a response to the downturn, but almost by accident. As LINC’s David Grahame recalls, the £48 million SCIF was first capitalized with £20 million¹³⁰ that had been earmarked to support inward FDI projects in 2001-2002, many of which were canceled following the “dot.com bust” and closure of a number of high-tech branch-plants in Silicon Glen. Thus, “the Minister found himself with a £20 million grant which had already been set aside, and was able to build a political announcement around it by establishing a co-investment fund. Then, they opened negotiations with partners” (personal interview).

¹³⁰ Another £28 million was later added by the ERDF.

Graph 33: Private VC/private equity investees per 1000 registered businesses, 2000-2007 (%)¹³¹



On the one hand, Scotland was losing ground as a private VC destination, with a smaller proportion of Scottish businesses receiving private equity investments each year (Graph 33). More importantly, it was witnessing the closure and/or flight of foreign-owned high-tech businesses, after decades of efforts in building this sector and its pool of indigenous suppliers. In such a context, the perceived necessity of a renewed intervention model, geared toward the transition of “high growth potential” ventures into Scottish-owned, medium-sized businesses capable of sustaining local supply chains was sharpened (Brown 2002). As Dr. Geoffrey Whittam explains, the SCIF was intended to provide such SMBs the necessary capital and expertise to grow, instead of selling out: “the idea behind

¹³¹ Sources: BVCA (2007-2008), *Reports on Investment Activity*. *Because the figures used for this graph are based on the investment activities of BVCA members (SE and most Scottish angels/angel syndicates are not), Scotland’s quotient is significantly undervalued for the whole period.

promoting co-investment and syndication was to try and support the potentially high-growth businesses. It was partly risk-reduction and partly this idea of overcoming the perennial problem of firms getting to a certain size and selling” (personal interview).

This underlying rationale was confirmed by the body of business support tools developed after 2002, of which the SCIF became part. One example was the creation of *Business Gateway* (BG) in July 2003, an extension of the *Small Business Gateway* established in 2000. As a subsidiary of SE, BG was to continue as a network of “one-stop-shops” offering managerial advice, but its remit was extended beyond start-ups and small businesses, to companies of all sizes and especially to “high-growth” businesses (O’Hare 2004). BG was to act as a conveyor belt between local and national levels, focusing on growing SMBs and *gazelles* which could be referred to SE/HIE for support. This renewed emphasis on growing businesses was complemented, within SE, by the development of the “High-Growth Start-up Unit” in 2003, given as an official objective to assist – notably with the SCIF – thirty young “high-tech” businesses in reaching a valuation of over £5 million within three years (GEM Scotland 2003: 32).

The SCIF was thus part of a shift in state support, away from business birth rates and toward the development of high-growth, medium-sized businesses capable of replacing foreign-owned companies as contractors and job creators in key sectors. The SCIF was also part of government-devised economic plans. First among those was the refreshed *Framework for Economic Development in Scotland*, which recognized that “many of the overseas-owned operations that had prospered during the 1990s came under great pressure, with a significant number being forced to cut back their operations and, indeed, close in

some cases” (Scotland 2004: 14). For the Scottish Executive, closures and foreign takeovers underlined the need for counter-cyclical investment, but also that of a more balanced corporate ownership structure (Scotland 2004: 66):

While the ultimate decisions on where to locate corporate headquarters, and on takeovers and mergers, will lie with individual private companies, the *Framework* aims at widening opportunities for business and giving the right incentives for creating employment and entrepreneurship in Scotland.

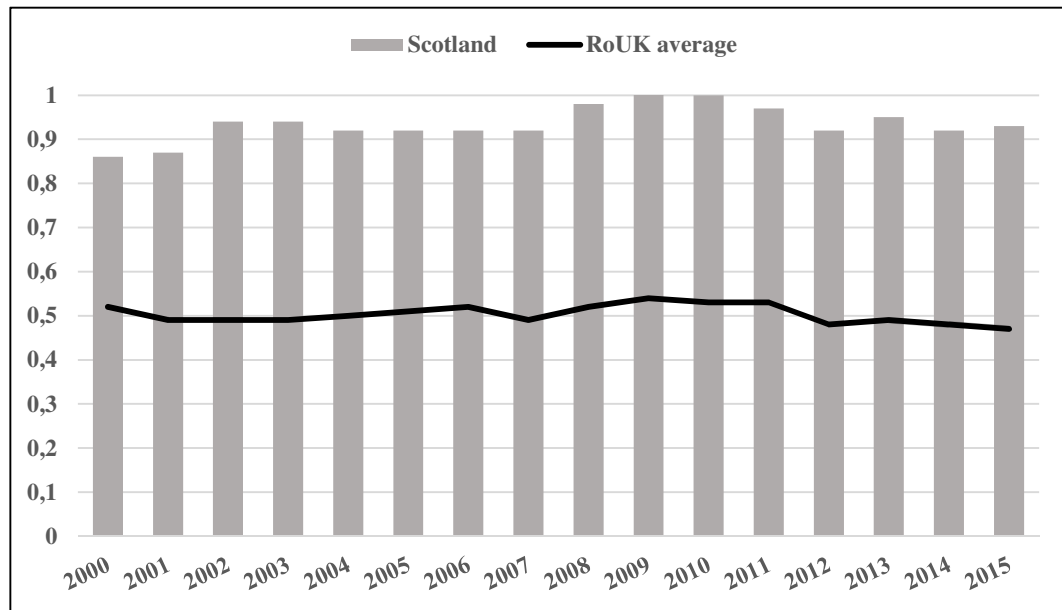
The launch of the new economic strategy, *A Smart Successful Scotland* (Scotland 2004c), confirmed this emphasis on the productivity and growth levels of Scottish businesses – benchmarked against the RoUK’s and European countries’ (Scotland 2004: 10) – with the aim of generating new national champions (Scotland 2004c: 15):

increasing new business starts are not enough to impact significantly on overall productivity. There remains significant scope to increase productivity levels in established businesses and, while Scotland has successful, innovative businesses, we lack a critical mass of larger businesses. A key challenge is **growing and sustaining businesses of scale** – both nationally and relative to others in their local area.

One way to achieve enhanced productivity and growth among Scottish-based SMBs was to ensure a better connection between existing businesses and R&D activities conducted by higher-education institutions (Roper et al. 2006). This led to the launch of three ITIs for the biotechnology, ICT, and (renewable) energy clusters in 2003 (Scotland 2004: 72-73). ITIs were to act as “intermediaries” between R&D institutions and Scottish SMBs, identifying innovations likely to lead to enhanced productivity and assisting their implementation in coordination with SE’s instruments such as the *Proof of Concept Fund*, *R&D Plus*, and the newly established SCIF (SE 2005: 12; Roper et al. 2006: 60; Adamek 2007). Each ITI was endowed with £150 million in public funds over ten years, for a total of £450 million. As such, they contributed in widening the divergence between Scotland and the RoUK with regards to government-backed R&D, as Graph 34 demonstrates. They were also an

important complement to the second strategic approach privileged to increase productivity and growth: improved access to VC (Scotland 2004c: 15-16).

Graph 34: Government-backed R&D¹³² as % of GDP, Scotland vs. RoUK 2000-2015



Such improved access did not only entail a surge in the quantity of capital made available to SMBs but a more selective approach to investment. As Joan Gordon¹³³, head of “Development and Market Intelligence” at SE, explains,

the people who developed the SCIF did so in a way that was collaborative: they talked to the private sector and understood what would work in Scotland. There was a recognition that equity investment is not something that’s appropriate or suitable for a large number of companies; but the small number of companies where it was suitable were also the companies that could make a material difference for the Scottish economy.

The SCIF was to form part of SE’s “equity investment package” (Scotland 2004: 76), alongside the BGF and High-Growth Unit’s “Investment Readiness Programme.” It was to

¹³² R&D financed/performed by governmental and higher-education institutions. Sources: Scottish Government, *Gross Expenditures on Research and Development* (GERD 2003-2015).

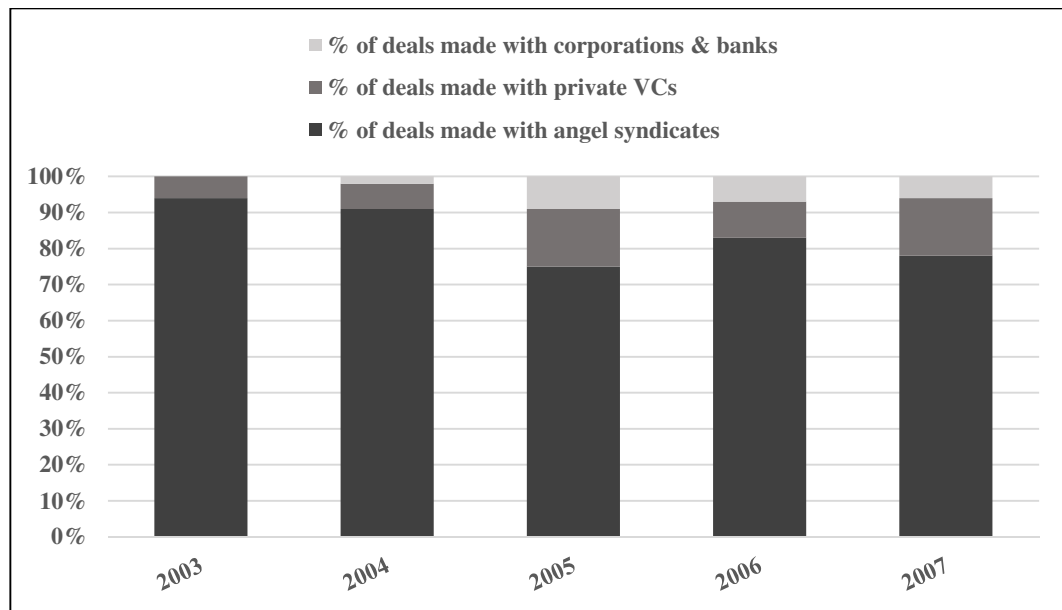
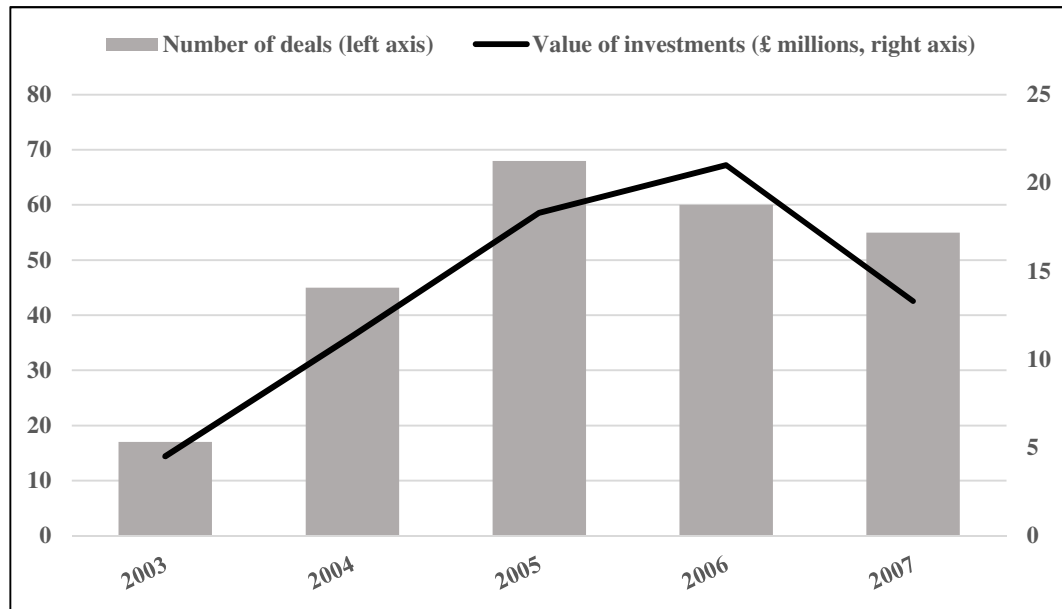
¹³³ Personal interview, Glasgow, August 15th 2015.

be highly selective, only investing in “eligible sectors” and in businesses identified as having high growth and high impact potentials. Over its first four years in operation for instance, two-thirds of SCIF investments were made in electronics/ICT and biotechnology/life sciences (Hayton et al. 2008: 105, 111).

Finally, the SCIF was to partner mainly with LINC members and, most particularly, angel syndicates. As Graph 36 shows, close to 85% of deals were made, on average, with angel syndicates and in fact, the SCIF was specifically designed to act as a catalyst for angel syndication (Mason & Harrison 2010; Paul & Whittam 2010). This was for two related reasons, illustrative of perceived needs for policy asymmetry. First, the SCIF was launched in part as a reaction to the establishment, between 2000 and 2003, of the smaller *Regional Venture Capital Funds* in England, which mainly partnered with VCs and were criticized from the outset for investing in companies neither owned nor even based in their respective region (Sunley et al. 2005: 264-266; Webster 2009). For the SCIF, which had to invest in Scottish-owned or Scottish-based companies (Hayton et al. 2008: 105), the government thus favored the “home-biased,” hands-on, highly-specialized and patient approach of angels, and especially of long-time partners at LINC.

The justifications for the SCIF favoring angel *syndicates* in particular were twofold. First, this would allow for larger deals and the provision of a higher number of funding rounds for investees (Hayton et al. 2008). Relatedly, the promotion of angel syndication was to provide a “Scottish solution to a Scottish problem,” i.e. to reflect the fact that Scottish angels were “poorer” and less numerous than, in particular, their counterparts in England (Harrison et al. 2010: 231).

Graphs 35 & 36: Contributions of the Scottish Co-investment Fund, 2003-2007¹³⁴



¹³⁴ Approximate figures, including leverage ratio of 2.43. Source: Hayton Consulting (2008).

Through both syndication *and* co-investment with SE/HIE, Scottish angels were able to invest larger amounts of capital and to adopt a more “patient” approach (Mason & Harrison 2010: 29):

angel investors organized in the form of syndicates and with access to co-investment fund monies are adopting a different approach to their investment portfolio. They appear to be following more of a ‘cradle-to-grave’ funding model in which they provide the follow-on finance necessary, rather than the ‘relay-race’ model in which angel investors pass deals on to other investors, typically VCs, for follow-on funding.

Notably as an effect of the SCIF’s partnership with LINC, a notable divergence widened between the Scottish and English angel markets (Mason & Botelho 2013; Gregson et al. 2013) as the latter continued to rely on individual angels: “the Scottish [angel] market is distinctive – deals are larger, there is more co-investment activity, more follow-on investing and larger investee companies. This is attributable to the different institutional structure and organisation of the market in Scotland – notably the greater prominence of angel groups and presence of the SCIF” (Mason & Harrison 2010: ix). In 2002, only two angel syndicates existed in Scotland, accounting for around 70 angels; by 2008, there were nineteen with over 400 angels, most of whom were by then LINC members. The SCIF, in sum, was a successful first step toward a more widespread use of hybrid co-investment in Scotland. Both this success and the motives for its establishment had much to do with the asymmetry it was *designed* to foster.

6.1.2. The Scottish Seed Fund and the Scottish Venture Fund

VC specialists have noted how governments across the UK, after 2002, became increasingly worried about the stagnating levels of private-sector investment for early-stage businesses, therefore compensating for growing funding gaps with public sector initiatives

(NESTA 2009; Pierrakis 2010). With a few exceptions, this was particularly evident outside of England – in Northern Ireland, Wales, and Scotland (Mason & Pierrakis 2013). The big picture, however, remains striking for the UK as a whole: between 2000 and 2008, VC deals comprising some degree of public sector involvement climbed from around 10% of annual deals to over 40% (Mason & Pierrakis 2013: 1161). Although public sector presence in the Scottish VC sector was growing rapidly, it would thus appear reasonable not to consider Scotland, in the specific context of the early 2000s, as an outlier or anomaly of the British VC ecosystem.

Yet, what distinguished Scotland, as the SCIF illustrates, was that as opposed to the English and UK-wide public-sector initiatives which mostly had supply-side, counter-cyclical, and/or leveraging purposes (NESTA 2009; Pierrakis 2010; UK 2012; Baldock & North 2012), state involvement in the Scottish ecosystem almost always had strategic underpinnings related to regional-level, “national” objectives. The SCIF was in fact only one part of an overarching concern for Scotland’s corporate ownership structure. In the biotechnology cluster, for instance, over one-third of businesses and a majority of the largest employers were foreign-owned by the early 2000s (Peters & Hood 2002: 96). The ten largest employers and contractors of Silicon Glen’s ICT cluster were in turn American-owned, with Scottish SMBs concentrating in the “lower value segments of the supply chain” (Brown 2002: 132, 134).

As the SCIF was launched and as the Scottish Executive’s economic strategies were published, SE thus ordered a study on the status of “corporate headquarters” in Scotland. The report, published in early 2005, highlighted many key issues (Botham & Clelland

2005). As in the early 1990s, South East England was used as a comparator case because it was home to a disproportionate number of UK-owned *and* foreign-owned headquarters: “South East England has 40% more independent limited companies per capita than Scotland” (Botham & Clelland 2005: 22). Most significantly, this was because Scotland had been witnessing, since the mid-1990s, many locally-owned businesses “drift” toward London (2005: vi-vii). Although the report did not include specific policy prescriptions, it left no doubt as to whether the loss of corporate ownership to foreign interests, in high value-added sectors most specifically, should be cause for concern. Studying “the impact of acquisition on five small Scottish high-tech companies” in the 1990s and 2000s, the authors concluded the following (2005: 84):

the entrepreneur generally sold out for good business reasons and the new parent provided resources (e.g. capital, distribution channels) which enabled the business to grow. However, in the longer term, the outcome has been fairly or completely negative for both the company and the Scottish economy. While all the founders recycled some of their assets resulting from the sale (e.g. as business angels, business advisors etc.), the possibility of growing a new, independent company with its corporate HQ in Scotland was closed off by the acquisition.

Noting that, from 1994 to 2004, over 75% of all Scottish-owned businesses having joined the group of the 500 largest companies based in Scotland did so through growth or mergers and acquisitions (Botham & Clelland 2005: 32), the report concluded (2005: 91):

the ‘case for HQs’ is little different from the case for indigenous development [...] The question is not about HQs, but rather whether sufficient and appropriate support is provided for Scotland’s indigenous businesses [...] As indigenous companies grow, their HQ functions can drift away from Scotland. In some cases, it may be possible to work with individual companies to offer assistance which prevents such relocation.

The influence this concern about Scotland’s corporate ownership structure had on policymakers could not be overstated. As the report was published, in February 2005, an inquiry on “business growth” in Scotland was launched by the Scottish Parliament’s *Enterprise and Culture Committee*, to “identify why Scotland’s rate of business growth

continues, in many respects, to lag behind its competitors and what needs to be done to change this.” In the recommendations published in March 2006, the first two “action points” identified by the Committee were as follows (Scotland 2006b: n.p.):

Agree a national consensus that establishes a clear focus and priorities for Scotland’s business growth effort and identifies explicitly the sectors and market niches in which Scotland seeks to become a world leader. Promote an investment-led business growth strategy, by encouraging entrepreneurship, substantially improving the quantity and quality of investment.

What these “action points” entailed in terms of specific policy – and policy asymmetry – was directly informed by the recognition of the existence of a “disincentive to grow” created by the British taxation system (Scotland 2006b: n.p.):

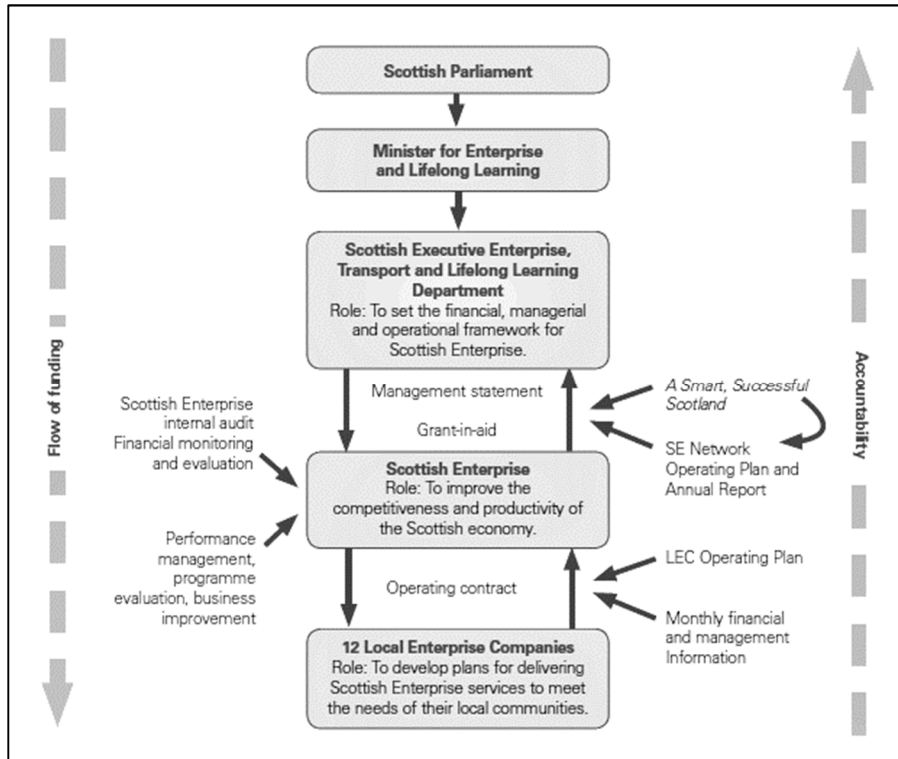
current tax differentials encourage the sale of a company before it reaches a size and level of profit that would begin to turn it into a mature, expanding company from its original start-up period. In essence, the money a business owner takes out of a company’s profits as income is taxed at over 50%, whereas the windfall (capital gains) that could be earned from selling the business would be taxed at only 10%. This reality means that there is a very strong incentive to sell on a nascent Scottish business and, therefore, the desire to develop the company into a successful medium-sized Scottish business is weakened. It reinforces the problem of Scotland’s “wine glass syndrome:” lots of small companies, a healthy number of very large companies but few medium-sized companies with the potential to grow into larger, world leaders.

In such a context, refined state intervention *and* policy asymmetry seemed necessary and the Committee therefore recommended that the Executive and SE/HIE focus on “increasing the proportion of Scottish SMEs that develop into bigger and more profitable firms and eventually become, perhaps, world-leading, larger companies” (Scotland 2006b: n.p.). A massive reinjection of capital into Scottish businesses was advocated to this end, notably through the creation of new hybrid funds “providing investment capital at *all levels* of the young and expanding company market.”

Given the integrated relationships between the Scottish Executive and SE (Figure 5), these policy blueprints were quickly implemented. In its “Operating Plan” for 2006-2009, published weeks after the Committee’s report, SE identified six “national priority

industries” in which high-potential businesses would be targeted: life sciences, energy, electronics, food & drink, and tourism (SE 2006: 5).

Figure 5: Scottish Executive / Scottish Enterprise / LECs organizational flowchart as of 2006¹³⁵



By November 2006, two new co-investment funds had been established to complete the existing suite of tools (R&D funds, ITIs, SCIF, BGF) used to sponsor high-growth SMBs alongside angel syndicates or VCs. The £14 million SSF, for one, was to have three main functions (PACEC 2013: 7-9). First, as confirmed by SE’s Joan Gordon (personal interview), it was to act as a screen and “pipeline,” identifying and funding promising start-

¹³⁵ Taken from Audit Scotland (2006: 6).

ups which could then be taken to the expansion stage by the SCIF and SE. Pat McHugh¹³⁶, who helped set up the SSF, explains that it was also to replace pre-existing local, seed-stage funding schemes:

both SE and HIE had agreed with the Scottish government that it made a lot of sense for a small country like Scotland that its investment funds should be national instead of having a plethora of “me too” schemes. Most LECs provided investment support, so we looked at those that were the best, and that was the starting point to the national scheme that we introduced in 2006, the SSF. It was meant to be an improvement on the best.

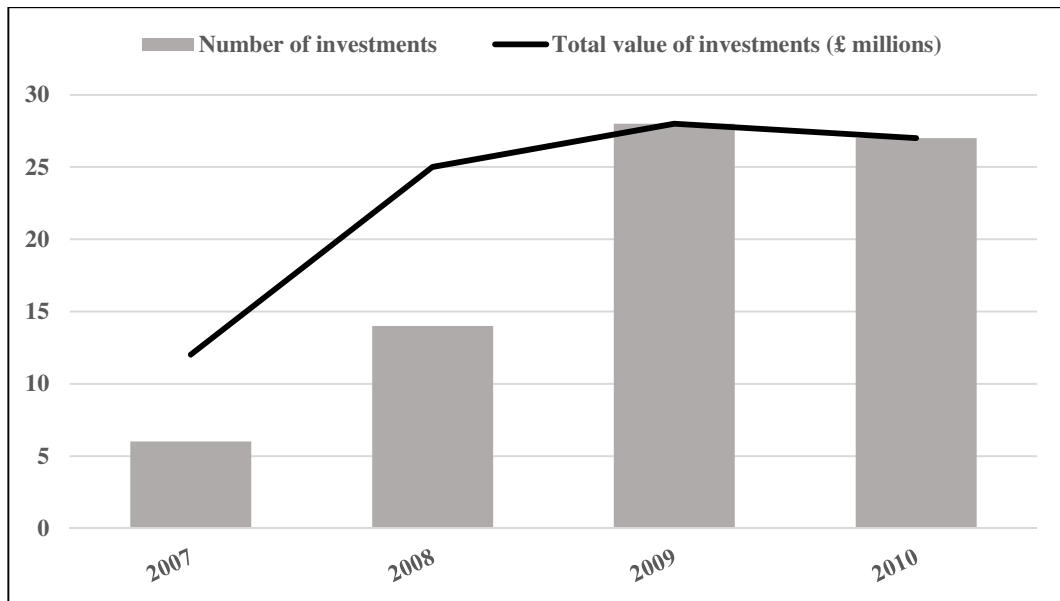
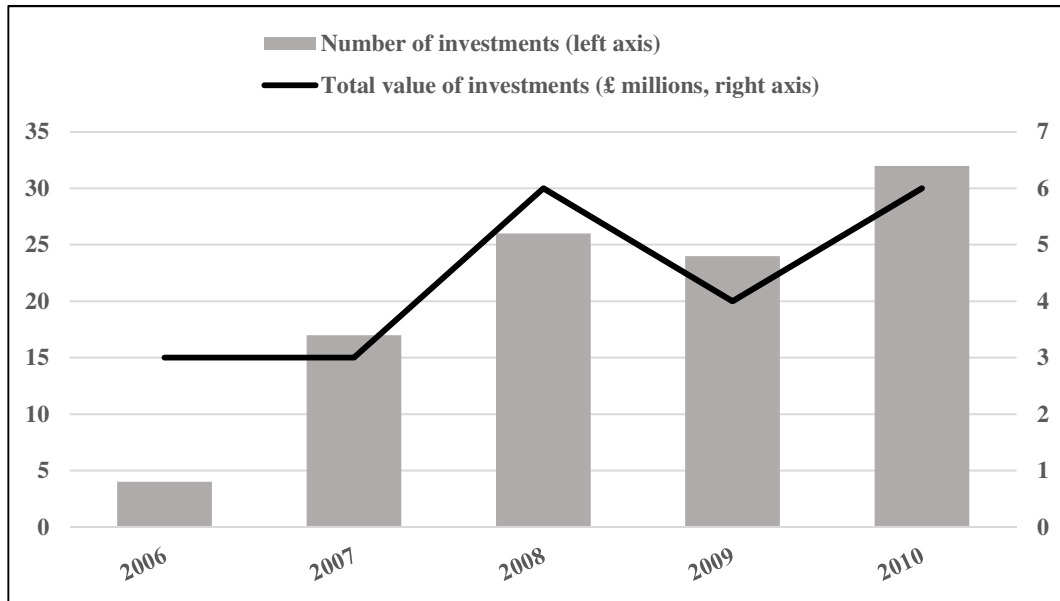
As LINC’s David Grahame remarks, “the SSF was then simply an adjustment, recognizing that the very bottom end was being ignored” (personal interview). It was intended to fill the gap opened by the SCIF in the seed-stage, £20,000-£100,000 niche. By fostering syndication, the SCIF had contributed to a concentration of angel investment in larger deal sizes, above £100,000. As a result, a gap had reopened below and the SSF was designed to close it. It was crafted both to complement *and* feed the SCIF, with the same objective of supporting the local growth of Scottish-owned, high-potential companies in key sectors. Accordingly, close to 70% of investments made by the SSF up to 2010 were in electronics/ICT and life sciences (PACEC 2013: 30).

The second co-investment fund launched in late 2006, the £20 million SVF, was even more clearly geared toward the sponsoring of Scottish-owned national champions, investing in the £2 to £10 million range and in developing/expanding businesses, i.e. in Scottish SMBs vulnerable to delocalisation or takeover: “SVF is to provide capital and expertise that will enable more Scottish companies to develop and grow from a Scottish base, retaining high value services in Scotland, and with the aspiration that more Scottish

¹³⁶ Investment Director, Scottish Investment Bank. Personal interview, Glasgow, August 11th 2015.

companies can become internationally competitive companies of scale” (PACEC 2012: 19).

Graphs 37 & 38: Contributions¹³⁷ of the Scottish Seed Fund (37) and Scottish Venture Fund (38)



¹³⁷ Approximate figures, including leverage ratios of 2.3 for the SVF and 2.2 for the SSF. Source: PACEC (2012, 2013).

Like the SSF, the SVF was thus partly intended to complement the SCIF by providing follow-on funding to its investees. Around one-third of SVF investments, according to SE's Joan Gordon, are following on funding provided by the SCIF (personal interview). Most importantly, the SVF was crafted to steer partner VCs, of which 25% were then overseas-based (PACEC 2012: 62), toward key sectors and key Scottish businesses. No less than 80% of SVF investments, consequently, were also made in electronics/ICT and life sciences from the onset (PACEC 2012: 30): "the partners know our investment criteria, they know the sectors we will invest in," Joan Gordon remarks (personal interview). That, in a nutshell, is the core character of a "sponsor state:" public resources, in such a model, are not only used to leverage private investments but to give them a "national" purpose and direction, beyond high rates of return. In that regard, the SNP's approach was to be marked, from 2007 onward, by continuity rather than change.

6.2. The first SNP government (2007-2011)

In May 2007, the secessionist SNP won a parliamentary minority (47/129 seats) and formed an alliance with the (also secessionist) Scottish Greens, who held two seats. This was significant in that the Greens would support the SNP's ministerial appointments and the latter, in return, pledged to "pursue a progressive programme which places addressing climate change at the heart of its agenda." This pledge manifested itself when, in the wake of the 2008 financial crisis, the SNP government launched a counter-cyclical investment strategy geared toward the establishment of Scotland as a world-leader in the production of renewable energy. This strategy was a reflection of the ambitions set for the Scottish

economy by the SNP, clearly rooted in a nationalist perspective on Scotland's place in the UK and Europe.

As soon as 2005, the SNP had been critical of the SLP-SLD coalition for failing to allow Scotland to catch-up to other European nations in terms of economic growth. Higher ambitions, better targeted investments, and a much greater degree of policy asymmetry were still needed, according to the SNP, to match the growth rates of other autonomous regions such as Bavaria, Catalonia, and Lombardy, but also that of “small European nations” like Ireland and the Scandinavian countries (SNP 2005: 9-11):

Scotland's challenge is to compete with London, as well as Dublin, Frankfurt and other hubs across Europe [...] If we are to compete with the world we must first compete at home which is why we are setting a goal to be the most competitive of the present UK nations [...] Countries and regions within nations are competing with each other whether they acknowledge it or not. The question is whether they succeed. Labour is fond of comparing the UK's economic performance with France, Germany, America and Japan. What the Government doesn't mention is that within the UK, Scotland is underperforming due largely to its London-centric policies.

This nationalist perspective was reflected in the party platform for the 2007 election. The SNP advocated for a refocusing of business support, as well as for “increased access to venture capital” for Scottish companies, all in order to emulate the economic success of the “Arc of Prosperity” countries: Iceland, Ireland, Denmark, Norway, Sweden and Finland (SNP 2007: 18). Although the first term of the SNP government was deeply marked by the financial crisis and recession that followed, between 2008 and 2011, this commitment for enhanced policy asymmetry and state intervention was maintained, through initiatives such as the *Scottish Investment Fund*, *National Renewables Infrastructure Fund*, *Scottish Investment Bank*, and *Scottish Loan Fund*.

6.2.1. The “statecraft phase,” part II (2007-2009)

When the SLP-SLD coalition formed the first Scottish Executive in 1999, it embarked on structural reforms to establish its authority and facilitate the implementation of economic development strategies. The recentralization of the SE/HIE networks notably served this purpose. During the autumn of 2007, the SNP administration did the same. In November, a new *Government Economic Strategy* was launched and announced two particular initiatives reflecting a nationalist perspective. The rhetoric was unmistakable: “one hundred years ago, Scotland was an economic giant which left the rest of the world in its shadow. Today, we have everything it takes to be a Celtic Lion economy, matching, and then overtaking, the Irish Tiger” (Scotland 2007: v). The objectives were as well: catching up to the UK’s GDP growth-rate, productivity, and “entrepreneurial activity levels” by 2011, and to “Arc of Prosperity” countries’ by 2017 (2007: 11-14).

Weeks after the election, the SNP imposed its first major reform: the dissolution of the LECs and the withdrawal of professional training responsibilities from SE/HIE, to form the separate public agency *Skills Development Scotland*. This reform was aimed at “the de-cluttering and refocusing of public sector business support in Scotland, allowing the enterprise agencies to focus more strategically on maximizing their impact” (Scotland 2007: 28). It was also an endorsement of the selective approach implemented since 2003, steering investment toward potential “companies of scale” (Scotland 2007: 27): “the enterprise networks will now be focused on supporting investment and innovation by companies and sectors which have growth potential and are of national or regional

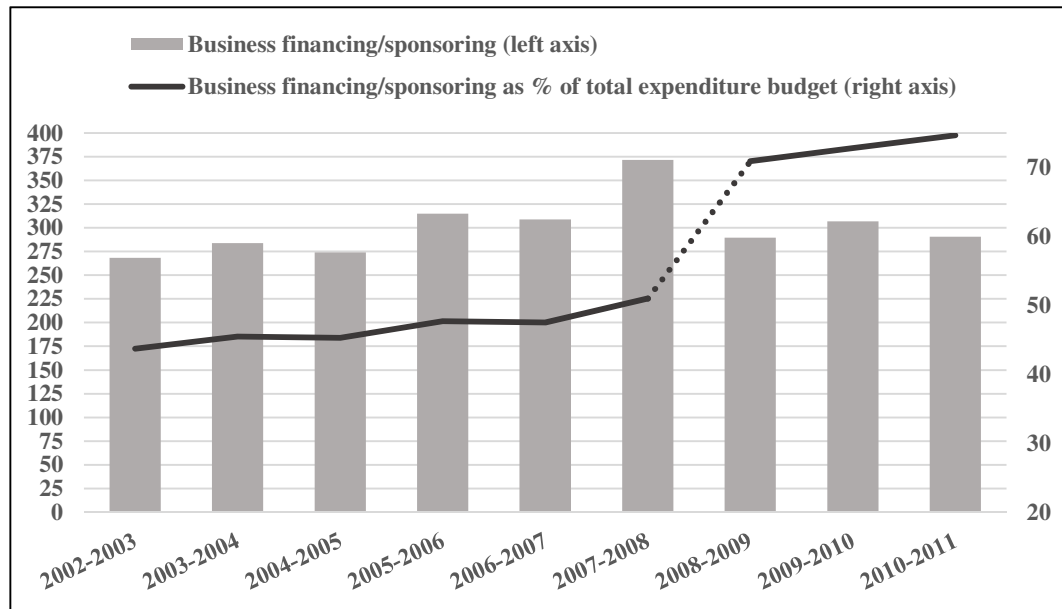
significance.” By April 2008, the LECs had all been dissolved and training responsibilities spun out of SE.

Merely a decade after devolution, the changes that were imposed in 1990 were thus completely reversed, with SE/HIE activities recentralized and refocused. In parliamentary committee, the new SE Chief Executive explained the merits of this reform (Scotland 2008e: n.p.): “operating as a single organisation gives us the flexibility to allocate resources and people where they can have the biggest impact [...] We now have the clarity of focus, which we have sought for some time, on economic development driven by the demands of our industries and providing support for growing companies.” The activities of the LECs would henceforth be performed by local authorities in collaboration with BG, with the specific purpose of building a “pipeline” of high-potential Scottish businesses. As Cabinet Secretary for Finance John Swinney remarked, “if an emerging start-up company does well and begins to grow, the key point about the business gateway process is that it should identify where the growth potential is and how the range of added-value services that SE can deliver can apply to that company” (Scotland 2007c: n.p.).

To this end, “prospecting managers” were specifically hired to work as intermediaries between BG and SE/HIE: “they will go out prospecting among the companies served by BG for companies that have the potential to grow to £1 million turnover within three years, and those companies will transfer to account management at SE” (Scotland 2008e: n.p.). On top of that, ITIs were integrated to SE as subsidiaries in January 2009, to streamline the R&D commercialization effort and have SE-backed companies benefit from it in priority: “now that it has been operating for three or four years,

and many of its programmes are reaching maturity, the big challenges are how we can more rapidly commercialise the intellectual property that it has created; how we can drive it into the account-managed base” (Scotland 2007c: n.p.). The SNP, in sum, put SE/HIE and the economic development apparatus as a whole through significant recentralization as soon as it took power. As a result, business financing and sponsoring became the sole focuses of SE/HIE, and after a peak in 2007-2008, their spending levels were maintained at around £300 million per year despite the financial crisis and budget cuts imposed by Westminster (Graph 39).

Graph 39: Contributions of SE & HIE, 2002-2011 (£ millions)¹³⁸



The importance of the strategic and ideological underpinnings of these reforms could hardly be overstated. Recentralization was justified on the grounds of enhanced “**alignment**

¹³⁸ Sources: SE & HIE (2004-2012), *Annual reports and accounts*. Dashes represent the reform of 2007-2008, when professional training activities were spun out of SE/HIE.

with the Government’s purposes: the complex landscape of public bodies has, in the past, resulted in different organisations having priorities that are not always compatible with each other and do not assist consistent approaches to the delivery of Government’s overall policy objectives” (Scotland 2009: 6). As SE’s Brian McVey points out, this was known at the time as “duplication and confusion.” The change in government, McVey explains, was thus very impactful: “the shift in the relationship with the SNP administration that came in 2007 was highly significant [...] SE was given a clear mandate, to focus on the growth of companies and of sectors. We’ve been able to use that sharper focus to develop our activities better and we’ve been on a lot better trajectory because of that” (personal interview).

This perceived imperative for centralization and coordination was also rooted in an *ideological preference* for the kind of government leadership the SNP (and SE) were observing in Scandinavian countries. During a parliamentary inquiry reviewing the reforms of 2007-2009, SE’s Chairman Crawford Gillies argued their economic success rested on such leadership: “the real enablers of their growth have been the political will of, and support from, their national governments and the collaboration between all public agencies behind a single strategy and approach” (Scotland 2011: n.p.). As SE’s Brian McVey, who organized some of those, remarks, SE started to send policy learning taskforces to Scandinavia after 2007. Finland drew a lot of attention: “what’s of interest for us in Finland is how they organize in relation to innovation, because that’s been an area of underperformance for Scotland. One thing they seem particularly good at is collaboration and integration across different parts of the public sector and in relation, particularly, to

innovation” (personal interview). The “Arc of Prosperity” rhetoric the SNP had been using to promote policy asymmetry and state intervention wasn’t only symbolic. Behind the SNP’s “statecraft phase” was a preference for economic development models very different from the UK’s.

Perceived imperatives and ideological preferences for asymmetry and government activism gained further prominence during the second part of the SNP’s term. The financial crisis of 2008 and the recession that followed provided opportunities for strategic recovery initiatives not merely geared toward economic takeover but also devised as tools to counterbalance the central government’s austerity measures and to build on Scotland’s own competitive advantages. From the second half of 2008 onward, Scotland entered an “investment phase” during which new public sector funds were created not only for counter-cyclical purposes, but primarily for strategic, regional-level “national” objectives. The first initiative set in motion during that phase consisted in a major increase in government support for Scotland’s “third sector” businesses (Scotland 2007d: 10). The flagship element of this new policy was the *Scottish Investment Fund* (SIF) launched in 2008 (Scotland 2008f) but in fact, the SNP was again in this case building on efforts initiated by the previous government.

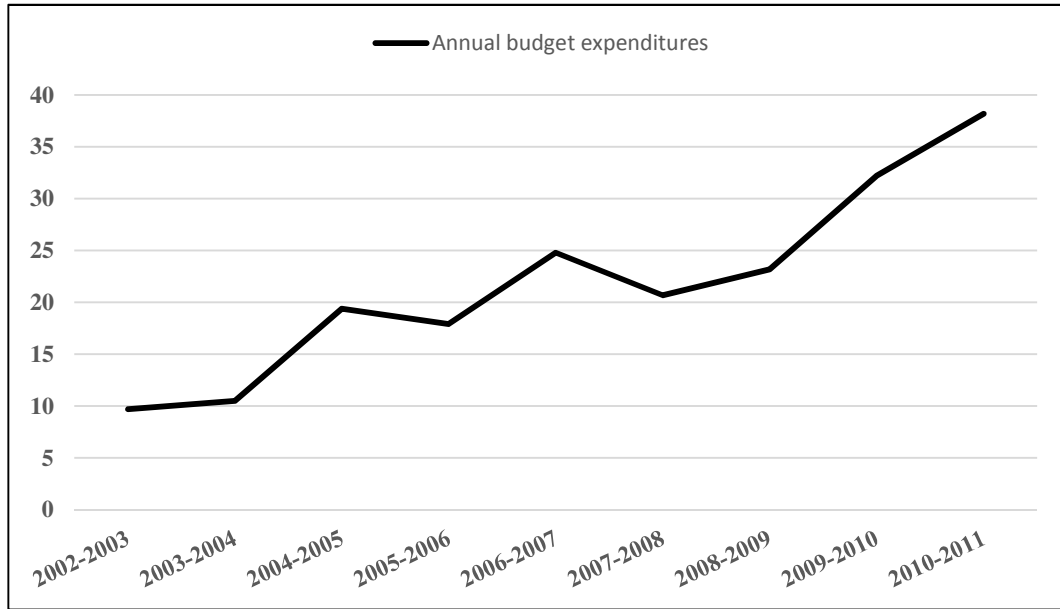
6.2.2. The crisis and the investment phase (2009-2011)

By 2007, the economic crisis was looming and Scotland’s GDP was stagnating. The recession took hold in 2008, with two zero growth first trimesters followed by six negative quarters from mid-2008 to 2010, for a total drop of around 3% (Scotland 2015d). In this

context, considering the tightening budget transfers from the UK Treasury (Scotland 2007d: 1), it made sense for the Scottish Government to invest in stable “third sector” social enterprises and cooperatives. Almost £100 million in new money were thus earmarked for this sector in the 2008-2009 budget (Scotland 2007d: 10), and by June 2008 the “Enterprising Third Sector Action Plan” had been launched (Scotland 2008f). The core initiative contained in this plan was the £30 million SIF, offering a mix of grants, loans, and VC to social enterprises and coops. As evaluations of that fund later showed, it quickly proved successful in generating new business and job opportunities in a challenging economic context (Scotland 2010; Social Investment Scotland 2014). For this reason, it became part of the Scottish Government’s recovery strategy (Graph 40), along with similar initiatives such as the *Third Sector Enterprise Fund* and *Third Sector Resilience Fund* (Scotland 2009b: 14; 2009c: 19; 2010).

The SIF and these adjoining measures, however, were far from being mere counter-cyclical tools. They were mainly part of an overarching and long-standing effort to build on the higher survival rates of third-sector businesses. Budgets dedicated to this sector had more than quadrupled since 2002-2003, and already more than doubled by 2007 (Graph 40). The “sustainability” of social enterprises and coops had been at the center of public support for the “third sector” since 2004, when the previous administration committed to strengthen Scotland’s corporate ownership structure. The “autonomy and independence” of coops were seen as underpinning the key contribution of this business model: “securing wealth, employment and other benefits for local communities, since co-operatives cannot easily be bought up or closed arbitrarily” (Scotland 2004e: 6, 11).

Graph 40: Budget spending on “Third Sector and Social Economy,” Scotland 2002-2011 (£ millions)¹³⁹



This mounting interest for the cooperative model led to the establishment, as a SE subsidiary, of *Co-operative Development Scotland* in late 2006. Its operations included managerial support, market intelligence, and the “conversion of other business structures to the co-operative model” (Ekos 2008: 6; Scotland 2004e: 19), but not corporate funding. This is where, in addition to its counter-cyclical purposes, the SIF fit in when it was launched a year later.

This intermingling of recovery and strategic objectives characterized the SNP approach and manifested itself in other major initiatives. One was the creation of the NRIF in 2010, which merged the SNP’s counter-cyclical strategy (Scotland 2009b, 2009c) with an objective established as soon as 2007: “for Scotland to take the lead and **become the**

¹³⁹ Source: Scotland (2008g: 119).

green energy capital of Europe” (Scotland 2007d: 13). Hence the publication of the “*Renewables Action Plan*” in July 2009 which, as the Minister for Enterprise Jim Mather then put it (Scotland 2009d: 4), “is more than a set of measures to cope with short-term challenges [but] seeks to drive low carbon energy production, in a way which capitalises on Scotland’s unique resources.” Among such resources was offshore wind, for which this plan established as an objective to “champion and coordinate the delivery of appropriate Scottish regions as clusters for integrated innovation, manufacturing, port and grid infrastructure” (2009d: 7). In early 2010, as the UK Treasury was cutting back on stimulus packages (Scotland 2010b: 10), the Scottish Government thus embarked on its own program of “large scale infrastructure investment in the offshore wind, wave and tidal sectors” (Scotland 2010b: 20).

In November 2010, the Scottish Government and SE/HIE capitalized the £70 million NRIF, offering grants and equity “to support the development of port and near-port manufacturing locations for offshore wind turbines and related developments including test and demonstration activity, with the overall aim of stimulating an offshore wind supply chain in Scotland¹⁴⁰.” In addition to its counter-cyclical purposes, this fund was part of a reinforced drive for policy asymmetry in Scotland. The NRIF was launched at the exact same time as the announcement of a UK-wide *Green Investment Bank*, with similar purposes and headquarters in Edinburgh¹⁴¹. The NRIF thus wasn’t merely designed to boost capital investment, but also to give Scotland a competitive edge. This is why the SNP

¹⁴⁰ Web: <https://www.mygov.scot/national-renewables-infrastructure-fund-n-rif/> (02/22/2017).

¹⁴¹ Edinburgh Green Investment Bank Group (2012).

government and SE/HIE added another £35 million initiative only months later, the POWERS Fund¹⁴², specifically aimed at supporting the development of turbine prototypes in NRIF-backed facilities.

The SNP government's drive for a sustained public expenditure effort rooted in policy asymmetry extended, moreover, to Scotland's development capital ecosystem as a whole and was reinforced by another study on "high-growth firms" published in late-2010 on behalf of SE. This study emphasized that, in economic downturns particularly, businesses financed by private-sector investors are more vulnerable to foreign takeovers: "companies that have raised finance from private equity funds, either to grow the business or to finance a management buyout, are vulnerable to being sold because of the short-term investment horizon of such investors [...] Immediately at risk is their head office, whose functions are likely to duplicate those of the acquiring business" (Mason & Brown 2010: 48). The first reaction of the SNP was the recapitalization, in November 2008 and March 2009, of the SCIF and SVF with support from the ERDF: the SCIF then attained a significantly larger £67 million in capitalization and the SVF, £50 million (SE Investments 2009: 3).

The second was the establishment of the *Scottish Investment Bank* (SIB) in September 2009, which regrouped the SCIF, SSF, and SVF under a single, rebranded "investment arm" of SE/HIE. This reorganization and rebranding was primarily symbolic and aimed at increasing the three funds' visibility, as SE's Joan Gordon explains: "it was

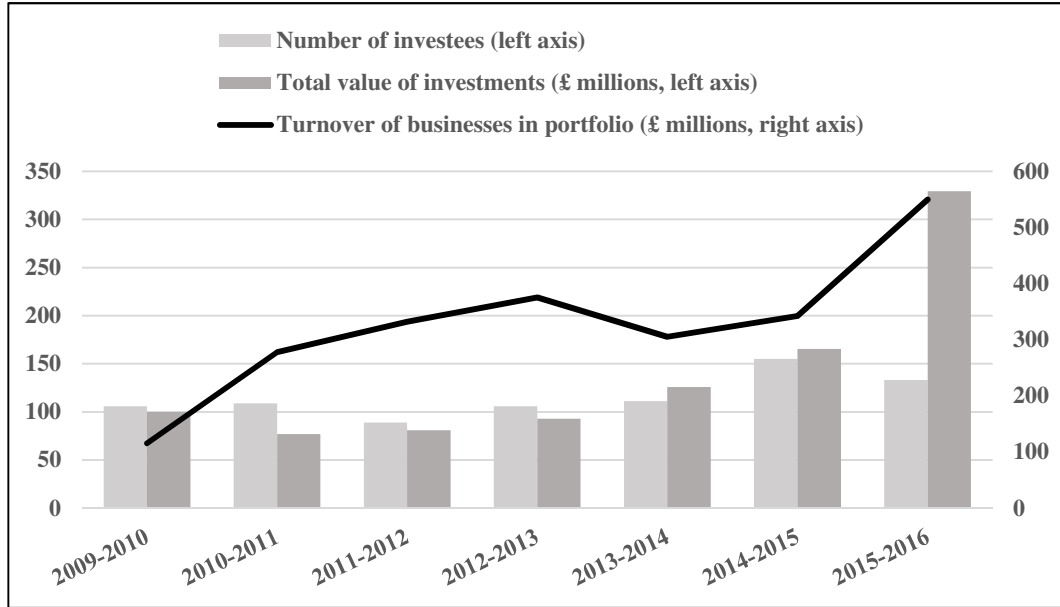
¹⁴² "Prototype Offshore Wind Energy Renewables Support," launched in September 2011.

quite political because you had an economic downturn, a reduction in available finance for SMEs. So politically, there was probably a need to enhance and widen our profile. The rebranding was part of that” (personal interview). There was, still, an important administrative effect to the creation of the SIB. As SE’s Brian McVey remarks, “it also created a vehicle where returns could be recirculated, reinvested into companies. Rather than the money getting back to SE’s main account, it would get recirculated back into investments and companies” (personal interview).

The launch of the SIB was accompanied, besides, by the addition of another link to the SSF-SCIF-SVF funding chain. First announced in late 2009 as the market for bank lending to SMBs was drying out, the new *Scottish Loan Fund* (SLF), a £95 million¹⁴³ limited partnership with the private-sector *Maven Capital Partners*, started operations in early 2011 (Scotland 2011). The SLF was designed to complement SIB funds in two ways. First, it was to operate as a bridge connecting the lending market and the VC market, between which the relative “lack of linkages” was a persistent problem (North et al. 2010: 182). Second, it was to provide “mezzanine finance:” £250,000 to £5 million loans for high-potential businesses too established for VC but too young and risky for bank lending. As SE’s Joan Gordon explains, mezzanine “is appropriate for a cohort of companies who have a revenue stream, the ability to repay an expensive loan, but at the same time are deemed to be high risk so that banks won’t go near them while equity is not appropriate” (personal interview).

¹⁴³ To which the public sector contributed £55 million (including £22 million from the ERDF).

Graph 41: Contributions of the Scottish Investment Bank, 2009-2016¹⁴⁴



Both the SIB and SLF were crafted in close coordination between SE/HIE and the Scottish Government. At the time the NRIF, SIB, and SLF were established, SE listed as its first priority to “maximise [its] contribution to the goals of the Government Economic Strategy” (SE 2011: 7). This pledge was realised through the supply of additional VC and debt finance (2011: 12), and through enhanced focus on renewables: “clearly, the development of a renewable energy sector offers the biggest opportunity we’ve seen in Scotland for a generation. We are determined not to let this opportunity pass us by” (2011: 14). Unsurprisingly, the contributions of SIB funds thus really took off from 2010 onward, with investments doubling in value over five years (Graph 41). The SNP’s economic nationalism played key roles in that regard, with the drive for policy asymmetry and strategic state

¹⁴⁴ Including the SCIF, SSF, SVF, SLF, Portfolio Fund, REIF, and other direct investments. Value of investments include leverage. Sources: Scottish Investment Bank, *Annual Review* (2010-2016).

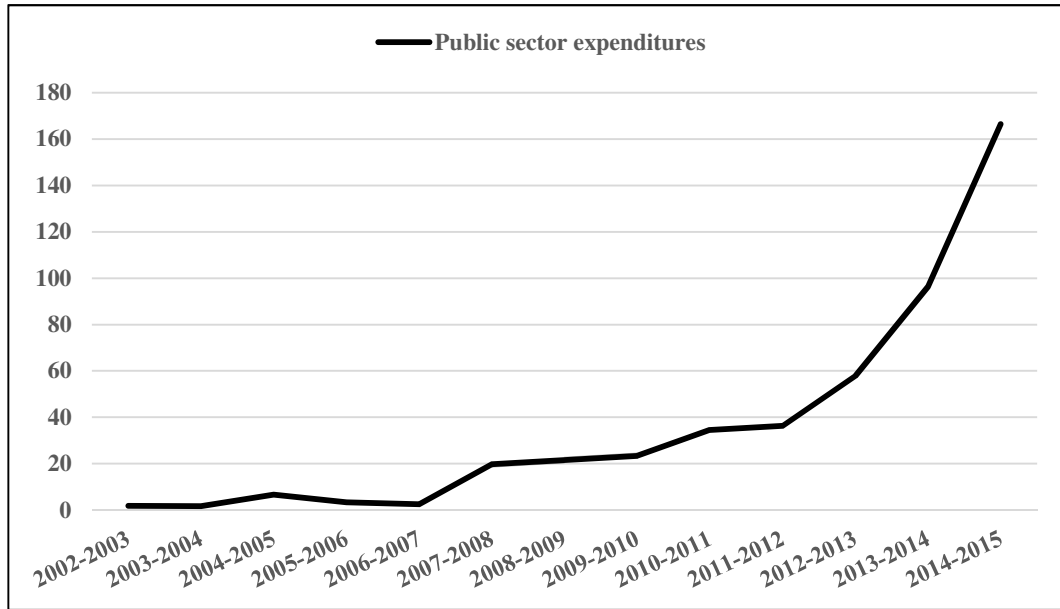
involvement underlying counter-cyclical and recovery initiatives. This was obviously to persist under a majority SNP government.

6.3. The second and third SNP governments (2011-2017)

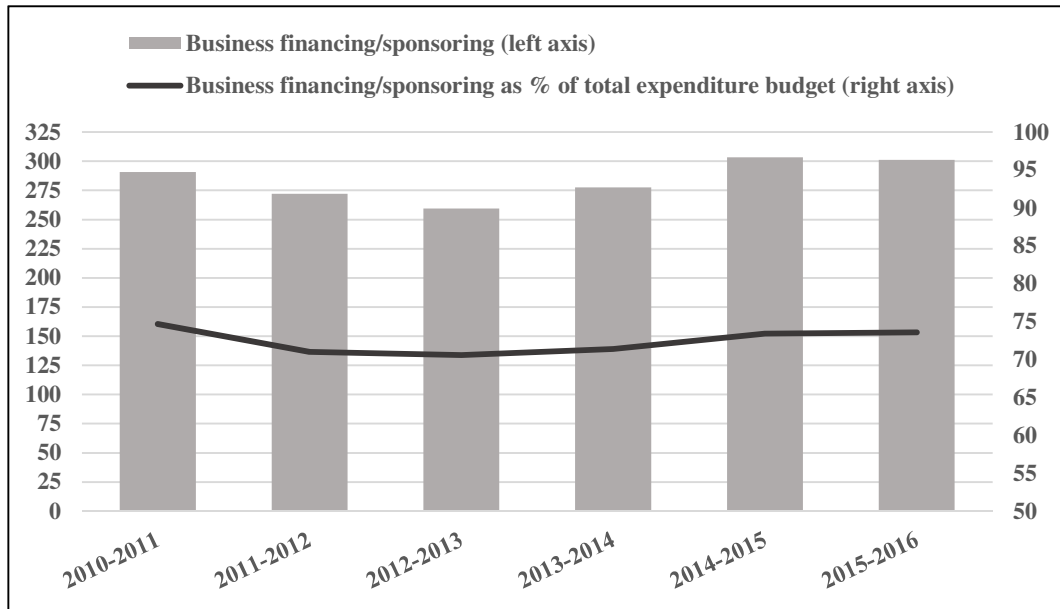
In the Scottish election of May 2011, the SNP gained a majority of 69/129 seats by running on a platform criticizing Westminster’s austerity and “one-size-fits-all” economic policies (SNP 2011: 5, 8). Through enhanced policy asymmetry and ultimately secession, the SNP pledged to “reindustrialise Scotland” and “make Scotland Europe’s green energy powerhouse.” Two initiatives launched to this aim, the *Renewable Energy Investment Fund* (REIF) and the *Scottish Business Development Bank* (SBDB), were already evoked in this platform and in both cases, the drive for policy asymmetry would prove crucial. The creation of REIF would require Scotland to strike a deal with the Treasury in order to use capital earmarked for the UK-wide *Green Investment Bank* (SNP 2011: 35), while the idea of a SBDB emerged out of a concern with the banking market: “we want to see greater competition in the Scottish banking market and wider access to capital for businesses [...] We believe banking must be more closely aligned with the real economy” (2011: 10).

As Graph 42 illustrates, renewables also became the SNP government’s priority. From 2011 onward, public spending on renewable energy increased almost fivefold in a context of stagnating economic development budgets (Graph 43). This surge was driven by a government-led repositioning of SIB investments following the establishment of REIF.

Graph 42: Public spending on renewable energy, Scotland 2002-2015 (£ millions)¹⁴⁵



Graph 43: Contributions of SE & HIE, 2010-2016 (£ millions)¹⁴⁶



¹⁴⁵ Source: Audit Scotland (2013). Figures include Scottish Government and SE/HIE/SIB spending.

¹⁴⁶ Sources: SE & HIE (2011-2016), *Annual reports and accounts*.

This was accompanied by a general intensification of state presence and state sponsoring in Scotland’s development capital ecosystem, with the introduction of a number of new co-investment funds and limited partnerships such as the *Scottish Life Sciences Fund*, the *Scottish Growth Scheme*, and the *SME Holding Fund*. In each case, underlying nationalist rationales were to prove key motives of the Scottish Government, for which the long journey to the 2014 referendum on independence and, later, Scotland’s opposition to “Brexit” set the stage.

6.3.1. REIF and the Scottish Life Sciences Fund

The first part of the SNP’s mandate as a majority government was indeed marked by the continuation of the strategic shift toward renewable energy and a concomitant, unrelenting promotion of policy asymmetry. In July 2011, the SNP published its *2020 Routemap for Renewable Energy in Scotland*, establishing very ambitious targets (Scotland 2011d: 4) which would not only require that SE/HIE intensify efforts to promote “indigenous supply chains” in the green-tech sector (Scotland 2011d: 52-53), but also that fiscal resources levied in Scotland for environmental purposes be reinvested locally. Therefore, when the SNP learned that Westminster intended to use money from the *Fossil Fuel Levy* – a UK-wide tax imposed on non-renewable electricity suppliers – for its *Green Investment Bank*, negotiations on asymmetry were engaged (Scotland 2011d: 34):

The UK Government has proposed that Scottish Ministers agree to waive our right to the Fossil Fuel Levy, now standing at over £200 million, in return for a guaranteed investment of £250 million by the Green Investment Bank in Scotland. This does not meet the clear wish in Scotland to see early investment of the Fossil Fuel money in Scotland by Scottish Ministers, and discussions are continuing with Treasury.

Given how central the “transition to a low carbon economy,” the use of public resources for this purpose, and Scotland’s comparative advantages over continental Europe in renewable energy were to the new *Government Economic Strategy* launched in September 2011 (Scotland 2011c), maximum discretion over investments in renewables was perceived as necessary (Scotland 2011e: 94): “targeted investment in renewable energy in partnership with our enterprise bodies will act as a key motor of the Scottish economy. Scotland is blessed with abundant energy resources and we are committed to taking full advantage of the opportunities that exist in transforming to a low carbon economy.”

By November 2011, “the UK Treasury agreed to a Scottish Government proposal to release half of the £206 million Fossil Fuel Levy surpluses generated from Scotland’s energy industry to invest in renewable projects, with the remainder being made available to capitalise the UK *Green Investment Bank*”¹⁴⁷. Almost immediately, as SE’s Pat McHugh confirms (personal interview), SE and the SIB were asked to sharpen their focus on renewables as well as to set up and manage, with the £103 million from the Fossil Fuel Levy agreement, a new investment fund. SE accordingly identified renewables as its very first “strategic priority” and vouched to spend at least £120 million in this sector through the NRIF and other initiatives (SE 2012: 16). The SIB then announced that the £103 million would be used to capitalise the new REIF, which would “complement” the *Green Investment Bank* by investing in the specific sub-sectors of marine energy (wave & tidal), community renewables (wind & hydro), and district heating systems (SIB 2012: 26-27).

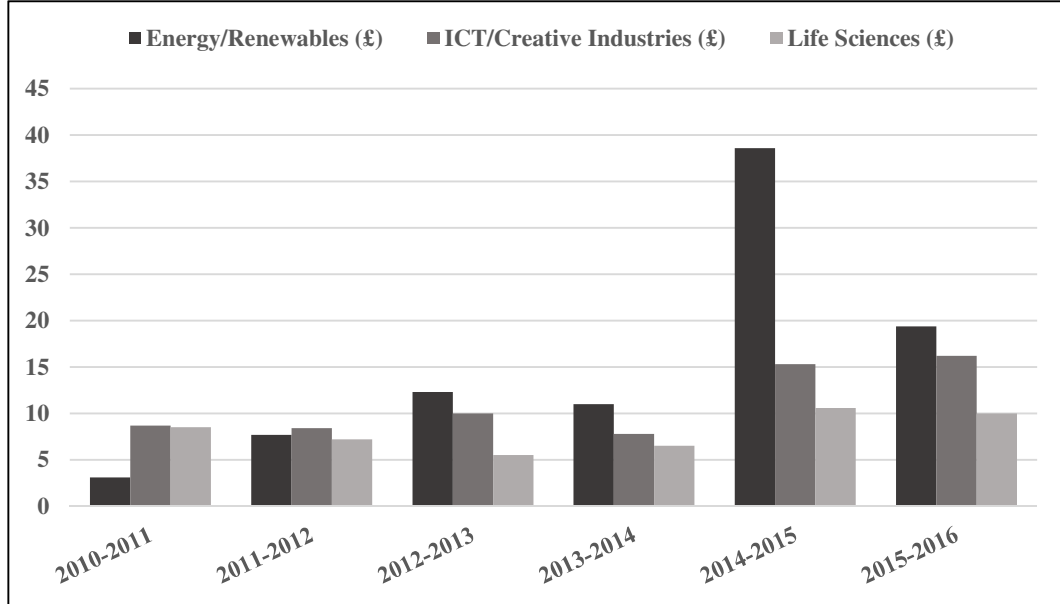
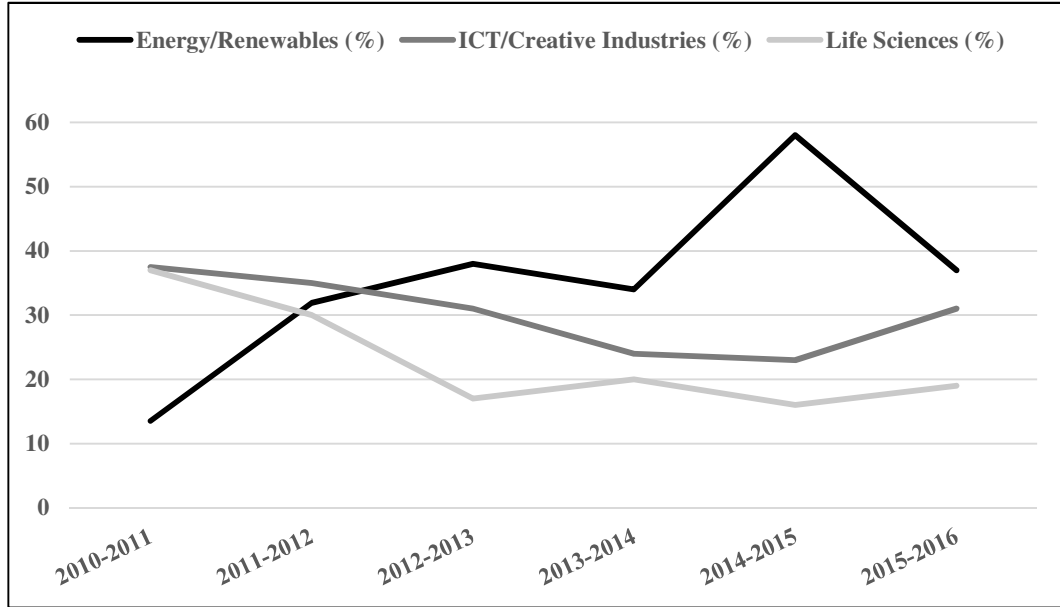
¹⁴⁷ Web: <http://www.offshorewind.biz/2012/10/10/scotlands-renewable-energy-investment-fund-opens-for-business/> (03/09/2017).

The Fossil Fuel Levy agreement was an important asymmetry gain not only because it allowed Scotland to invest according to its priorities, but also because REIF would relieve other SIB funds from the financial pressure associated with renewables, most often very costly endeavors (SIB 2012: 16). As SE’s Pat McHugh explains, “before the REIF was set up, the SVF was doing renewables deals. But these were putting pressure on the SVF budget, because renewables don’t really fit its model. Renewables take much greater sums of money than classic technology” (personal interview). REIF was thus devised without a particular deal size range: “in marine renewable energy investments, deal sizes are expected to be in the order of several millions whereas for community-owned renewable investments, these could be more variable and as small as £100k or less” (SE 2012b: n.p.).

When REIF was officially launched in October 2012, SE’s Chief Executive Dr. Lena Wilson recognized its favourable timing, with Scotland entering a new and more expensive phase in the development of renewable energy¹⁴⁸: “Scotland is already at the forefront of developing and testing emerging wave and tidal technologies and, with the correct level of government support, we can become a global centre of excellence in both the deployment of these technologies and their accompanying supply chains.” REIF was set up with the specific mandate to “offer long-term investment support” through loans, guarantees, or equity and to “focus explicitly on Scottish opportunities,” unlike the *Green Investment Bank*.

¹⁴⁸ Web: <http://www.offshorewind.biz/2012/10/10/scotlands-renewable-energy-investment-fund-opens-for-business/> (03/09/2017).

Graphs 44 & 45: Scottish Investment Bank investments by sector in % and in £ millions, 2010-2016¹⁴⁹



¹⁴⁹ Annual value of investments (excluding leverage). Sources: Scottish Investment Bank (2011-2017), *Annual Review*.

Moreover, REIF's remit was to be flexible: "the fund will also consider projects which do not fall into the priority sub-sectors but [...] accelerate Scotland's transition to a low carbon economy" (SE 2012b). Along with the NRIF and POWERS, REIF accelerated the SIB's shift toward renewables (Graphs 44 & 45). By 2013, energy and renewables had become the prime investment sector, ahead of ICT and life sciences, thanks to a tenfold increase in annual investments between 2010 and 2015.

That said, SIB contributions as a whole kept progressing at a rapid pace after 2011, with a 300% increase in annual investment value up to 2016 (Graph 41). Therefore, investments in other priority sectors also increased in absolute terms: from a low point in 2012, investments in life sciences doubled following the launch of the *Scottish Life Sciences Fund* (SLSF) in January 2013, to which the SIB contributed £5 million. In this case as well, regional-level "national" objectives were key: in its economic strategy, the SNP government identified life sciences, alongside renewables, as one of the priority "growth sectors" in which "Scotland typically has distinctive capabilities and businesses with the potential to be internationally successful" (Scotland 2011c: 45).

As in the case of renewables, objectives were ambitious. The new *Scottish Life Sciences Strategy* aimed to double the entire sector's turnover by 2020, notably by "anchoring" existing businesses in Scotland and "building" new national champions out of successful SMBs (Life Sciences Scotland 2011: 3-7). Capital requirements in health technologies and pharmaceuticals were so important that many seed-stage companies and start-ups had been, until then, funded by the SVF rather than the SSF or SCIF. In this context, a £5 million contribution might seem small but this allowed the SIB to play a

significant role in the £50 million SLSF, managed by the private sector *Rock Spring Ventures*¹⁵⁰ but capitalized in good part by other public sector partners such as the *European Investment Fund*, the *Strathclyde Pension Fund*, and many Scottish universities. As SE's Joan Gordon explains, public sector presence imposed a “national” investment focus (personal interview):

Because we would invest alongside Scottish universities and the EIF, it gave us comfort and we were able to ensure that 60% of funds would be invested into Scottish companies. For our £5 million, that was particularly good value for money. Life sciences were identified as a sector where having a specifically targeted fund in Scotland would be beneficial. That's the reason why we invested: we recognized it would really benefit the sector, and that was the only fund that wished to locate in Scotland and do this.

The point here is not to deny that REIF and the SLSF were devised with gap filling, leveraging, and spillover purposes in mind. What these two cases demonstrate, however, is that limiting the explanation for state intervention to these motives without accounting for the impact of the SNP's drive for policy asymmetry and the development of *Scottish-owned*, internationally competitive medium-sized businesses – i.e. for economic nationalism – would be a mistake. In the months preceding Scotland's referendum on secession, the SNP made clear its efforts were intended to counterbalance the “one-size-fits-all” policies favoring London's financial sector, and that such interventions were aimed at the development of an alternative economic model, closer to European CMEs and promoting “high-value manufacturing” (Scotland 2013b; 2013d; 2014b). The proposed establishment of a *Scottish Business Development Bank* would illustrate it even better.

¹⁵⁰ *Rock Spring Ventures* became *Epidarex Capital* in 2014. *Epidarex* still manages the SLSF.

6.3.2. *The Scottish Business Development Bank*

In 2013, the SNP government started publishing, as part of its campaign in favor of Scottish independence, policy statements on the economic development model of a sovereign Scotland. In its *Scotland's Economy: the Case for Independence*, the SNP's perspective was expressed unambiguously (Scotland 2013b: 26):

Since devolution our economic performance has improved because of our ability to use even limited levers in the interests of Scotland [...] There are also numerous examples in particular areas of economic development – such as in our renewables ambitions – where a distinct approach in Scotland has provided real economic benefits. However, the paradox we face is that despite all of these strengths, we are not as successful as we should be [...] The evidence for the proposition that Westminster isn't working for Scotland lies in current Westminster policy, in our long-term economic performance relative to other small nations, in the growing gap between rich and poor, and in a system which has clearly benefitted London and the South East to what is now a quite startling degree.

Despite improvements brought through devolution, the SNP Government considered the lack of policy asymmetry constitutive of the British system as the prime cause of Scotland's unbalanced corporate ownership structure and lack of medium-sized businesses, as compared notably to Germany (Scotland 2013d: 88-89):

Firstly, merger and acquisition strategies have led to Scottish companies being taken-over by larger UK or international rivals (despite the consequences for market concentration or economic activity in Scotland) [...] Secondly, the existence of “one-size-fits-all” economic and business policies that reflect Scotland's increasing emergence as an economy within the UK have acted as a barrier to local business growth. Thirdly, the lack of autonomy to prioritise policies to help business invest, secure appropriate finance, tackle local challenges (such as distance from markets) and take advantage of local opportunities, has put Scotland at a disadvantage.

In *Reindustrialising Scotland for the 21st Century*, the SNP continued to advocate for an “alternative model” closely inspired from countries like Germany, Austria, Finland and Sweden, where economic development depends on “close cooperation and coordination across partners,” on “innovation and investment in R&D,” and on “the importance of strategic planning” (Scotland 2014b: 38-39). The way toward such an alternative model

would have to include further efforts in increasing Scottish ownership in key sectors: “strengthened, and competitive domestic supply chains can also make an important contribution to rebalancing the economy through import substitution. For example, more competitive domestic suppliers can capture a larger share of input markets from producers; whilst stronger domestic suppliers for emerging industries should prevent the need for large elements of the production chain to be imported” (Scotland 2014b: 47).

In this context of intensifying economic nationalism, the idea of a SBDB emerged out of a perceived need to provide growing Scottish businesses enhanced access to debt finance. This idea was first expressed in the SNP’s *Sustainable, Responsible Banking: A Strategy for Scotland* published in May 2013. The plan was to expand the SIB’s remit to the provision of long-term loans and loan guarantees for growing and exporting SMBs, not only to increase the supply of funds but also to ensure a more efficient coordination between public sector players and Scotland’s banking sector (Scotland 2013c: 28). There were also strictly nationalist motives behind the SBDB initiative, particularly with regards to policy asymmetry given the establishment of the *British Business Bank* (BBB) in 2012-2013, a state-owned holding integrating all UK-wide public funding schemes and replacing the English *Regional Development Agencies* and *Regional Venture Capital Funds* dissolved after the financial crisis (Baldock & North 2012). An influential player of the Scottish VC ecosystem remarked (personal interview):

It is completely political. Party-political. There was no lobbying for it from any part, although the small business organizations were concerned about the lack of bank borrowing and expressed themselves about that. But it was a complete political reaction to the launch of the BBB, because we have a separatist government. No one is opposing it, because it is completely political and it will happen. The consultation itself is more of a notification.

Although it was devised in response to a British policy, there were financial issues specific to Scotland which justified asymmetry and which the SBDB aimed to address. As early as 2011, the SNP expressed concern with the banking sector's response to the financial crisis, denouncing a lack of alignment with the "real economy" and a drought in corporate lending (SNP 2011: 10). This concern was reiterated in the aforementioned banking strategy, as the SNP argued the Scottish lending market was still much too focused on short-term considerations, risk averse, and "concentrated," with 70% of loans issued to SMBs coming from only two banks (Scotland 2013c: 16). This observation was informed by many other governmental, state-ordered, and independent studies on the subject (North et al. 2010; Royal Society of Edinburgh 2014; Scotland 2015e).

The SBDB was presented as a good way to link the public sector's existing equity tools with potential new lending tools, to inject a degree of competition in Scotland's banking sector (forcing it to be more responsive to growing SMBs' needs), and finally to leverage debt finance at lower interest rates. The SBDB's close relationships with the Scottish Government and SE/HIE, moreover, would distinguish its model from that of the BBB. A well-informed anonymous source explains (personal interview):

The SIB does not offer the money on its own, without companies being able to also look at SE's wider support. The BBB just does money, it does not give advice and support and that's another key difference. Ministers here also have a wider approach, one they call the "National Outcomes Approach:" this is largely about access to finance, but they set out a much bigger agenda on the drivers around company growth, employment, exports, internationalization, and innovation. It's not just about how much money we put into the system or the return on investment; it is a much wider "social return" on investments, the impacts those investments have on us as well. So there is a philosophical difference, that's about outcomes as well as inputs; and there's a service difference, in the advice being part of the Scottish model and having to be integrated into a SBDB.

The SBDB initiative is not only about policy *autonomy*, aiming to address Scottish issues with an equivalent to the BBB, but also about policy *divergence*, aiming to provide

“Scottish solutions to Scottish problems.” This is why the Scottish Government looked well beyond the BBB for blueprints, gathering information on business development banks from countries whose models correspond the SNP’s ideological preferences better: the German *Kreditanstalt Für Wiederaufbau* (KfW), Finland’s *Finnvera*, and Sweden’s *Industrifunden* among others (Michie & Wishlade 2014). From mid-2014 to mid-2016, with the Scottish Government’s focus shifting to the independence referendum and negotiations on fiscal devolution that followed (Rioux 2016), the SBDB initiative progressed slowly. In its new *Scotland’s Economic Strategy*, the SNP reiterated its intention to proceed with the SBDB, noting in passing what its main purpose would be (Scotland 2015: 44):

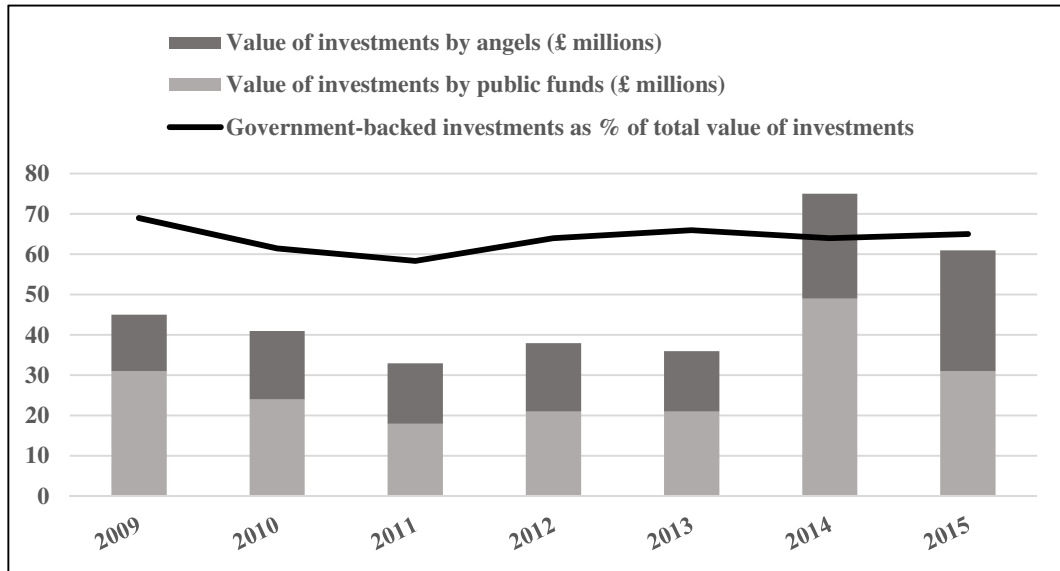
Building on the work of the SIB, we are establishing a SBDB, to work directly with small and medium-sized enterprises and the financial markets to support businesses with high growth potential in Scotland. Scotland has a lower proportion of medium-sized enterprises than other European countries such as Germany, Austria, Finland and Sweden. The SBDB will therefore, in particular, help to build more medium-sized enterprises, and is an important addition to the institutional landscape in Scotland.

Major steps toward the establishment of the SBDB were taken in late 2016, first with a £21.5 million grant from the Scottish Government to the SIB for expansion purposes, then with the launch of two new measures, the *Scottish Growth Scheme* (SGS) and *SME Holding Fund*. The SGS was announced in September, following the Scottish elections which saw the SNP re-elected and after 62% of the Scottish electorate rejected *Brexit* in June. It was directly motivated by the *Brexit* vote – and thus by perceived imperatives for policy asymmetry and state involvement – and was presented as “an exceptional response to an exceptional economic challenge [...] a half-billion pound vote of confidence in Scottish business, Scottish workers and the Scottish economy¹⁵¹.”

¹⁵¹ Web: <http://news.gov.scot/news/500m-new-support-for-businesses> (03/15/2017).

This new initiative was crafted in reaction to what was perceived as a decision of the English people, and was accordingly announced without any previous notification to the UK Treasury. Yet, the SGS was also elaborated as the first concrete step toward a SBDB: its £500 million budget would essentially be used to provide loans and guarantees of up to £5 million for growing, early-stage businesses in technology-intensive sectors, thereby complementing SIB funds and boosting Scotland’s lending market. Besides, this scheme was accompanied by the £40 million *SME Holding Fund* announced in December, capitalized by the ERDF and managed by the Scottish Government as a fund of funds (Scotland 2016b: 74; 2016c: 31).

Graph 46: Government-backed VC investments as % of total early-stage VC investments¹⁵², Scotland 2009-2015



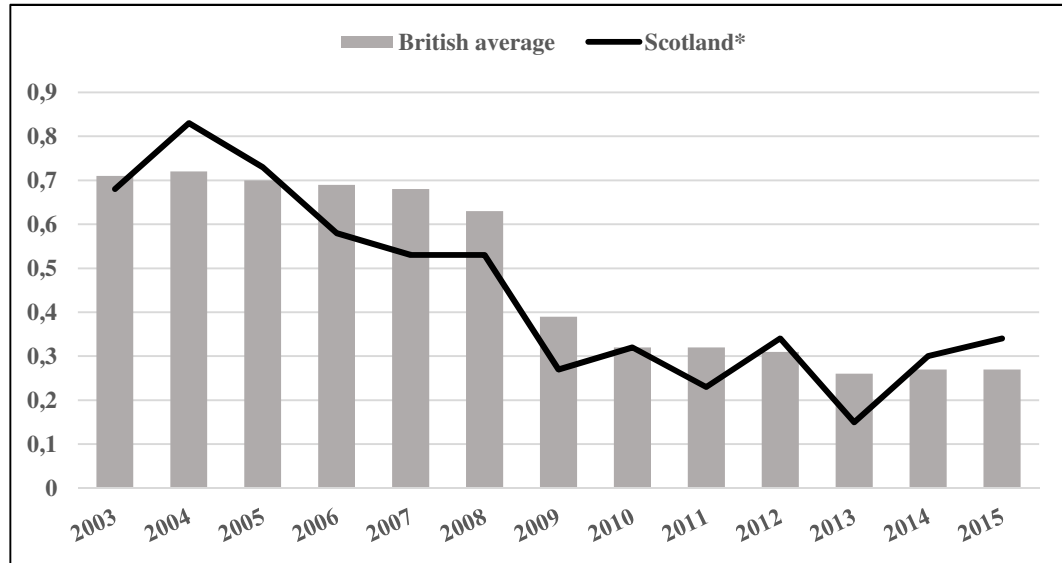
¹⁵² Sources: *The Risk Capital Market in Scotland* (2008-2016). We classify angel investments as “government-backed” because most of those investments were made alongside public sector investors and would not have been made otherwise. * “Government-backed investments as % of total value of investments” refers to investments in the Scottish VC market’s “middle band” range (£100,000-£2,000,000). Figures do not include leverage.

The constitution of a SBDB out of such funds would represent the culmination of a process which saw the intensification of state presence in the Scottish VC and development capital ecosystem since the end of the recession (Graph 46). At the heart of the SNP's drive for government activism since then, and more generally since 2007, stood economic nationalism and the perceived imperatives for policy asymmetry it entails. As of 2017, twenty years after devolution, the Scottish Government was present, either directly or indirectly, at all VC stages and deal-sizes in Scotland. With the SBDB, it aims to extend its influence to the Scottish lending market in order to safeguard the ownership and increase the size of Scotland's promising businesses.

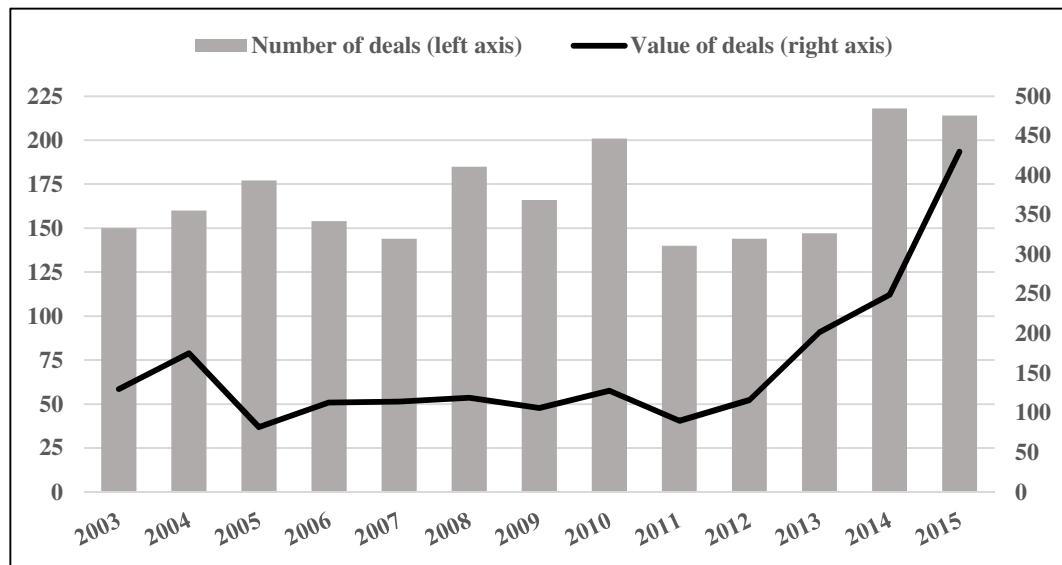
6.4. Concluding remarks

The main objective of this chapter was to determine whether the policy impacts of economic nationalism which led, throughout the 1990s and early-2000s, to the deepening of asymmetries between Scotland and the RoUK persisted since then. The first indication that such was the case, as Graphs 47 and 48 illustrate, is that despite an uninterrupted decline in the provision of private-sector VC and equity to Scottish businesses from 2004 onward, the number and value of annual VC deals made in Scotland actually followed an upward trend. The explanation for such a paradox is that government presence in Scotland's development capital ecosystem, through either direct investment (*faire*) or hybrid co-investment schemes (*faire faire / faire avec*), was not only maintained since 2003 but actually enhanced.

Graph 47: Private VC/private equity investees per 1000 registered businesses, 2003-2015 (%)¹⁵³



Graph 48: Total number and value of early-stage VC deals, Scotland 2003-2015 (£ millions)¹⁵⁴



¹⁵³ Sources: BVCA (2007-2016), *Reports on Investment Activity*. *Because the figures used for this graph are based on the investment activities of BVCA members (SE and most Scottish angels/angel syndicates are not), Scotland's quotient is significantly undervalued for the whole period.

¹⁵⁴ Including foreign, private, institutional, public, hybrid, and angel investors. Source: *The Risk Capital Market in Scotland* (2006-2016). See, in particular, *The Risk Capital Market in Scotland* (2016: 7).

The very core of what is known today as the “Scottish model” was put in place since then, with the launch of all the co-investment funds which established the foundations for the SIB and for a SBDB. As summarized in Table 6, initiatives introduced during this period refined the Scottish approach to corporate funding, grounded in an influential public sector and a mix of *faire*, *faire avec* and *faire faire*. Most importantly, economic nationalism continued to play key roles and to exert a strong influence on the elaboration and implementation of such initiatives.

Even during the financial crisis and recession, classic economic rationales for state intervention were always complemented if not subordinated by political imperatives and ideological preferences for policy asymmetry and strategic government involvement. From the promotion of angel syndication (SSF-SCIF-SVF) to the inexorable re-centralization of the economic development apparatus (SE/HIE & LECs); from the strengthening of Scotland’s corporate ownership structure (SVF, SIF, SLF, SBDB, SGS) to the maximization of its comparative advantages in renewables (NRIF, POWERS, REIF); and from the denunciation of Westminster’s “one-size-fits-all” policies to the promotion of secession as the best way to safeguard and perfect the “Scottish model,” the drive for policy autonomy and divergence was always central.

Table 6: Summary of major government initiatives, Scotland 2003-2016

Sponsoring style		Policy objectives
“faire faire”	“faire / faire avec”	
Business Gateway (2003)	Scottish Co-investment Fund (2002-2003)	Alternative to canceled FDI projects; safeguarding Scottish ownership of medium-sized businesses; promote angel syndication (policy asymmetry); leverage
		Expansion of Small Business Gateway; conveyor belt between local/national levels; identification of gazelles.
	Intermediary Technology Institutes (2003-2004)	Linking productivity-enhancing R&D to Scottish SMBs; complement to SE financial instruments; policy divergence.
	Scottish Seed Fund (2006)	Pipeline for growth businesses; complement to SCIF; centralization of public seed-stage funding schemes; leverage
	Scottish Venture Fund (2006)	Sponsoring of Scottish-owned national champions; complement to SCIF; steering and leveraging of VC toward priority sectors
	Cooperative Development Scotland (2006)	Strengthening Scotland’s corporate ownership structure; conversion of businesses to cooperative model; community development
	Dissolution of the LECs (2007-2008)	Centralization; focus on investment support; increasing reliance on BG; alignment with Government purposes
	Scottish Investment Fund (2008)	Complement to Co-operative Development Scotland; building on higher survival rates of coops; countercyclical
National Renewables Infrastructure Fund (2010-2011)	Scottish Investment Bank (2009)	Rebranding and promotion of the SSF-SCIF-SVF funding chain; internal recycling of investment returns
		Implementation of renewables strategies; establishment of Scottish cluster in offshore wind power manufacturing; counter-cyclical
POWERS Fund (2011)		Complement to NRIF; attraction of FDI; policy asymmetry
Scottish Loan Fund (2011)		Complement SIB equity funds; connecting VC market to lending market; occupy mezzanine finance niche; leverage
Scottish Life Sciences Fund (2013-2014)	Renewable Energy Investment Fund (2012)	Policy asymmetry; transition to low carbon economy; complement to Green Investment Bank and SIB funds
		Implementation of the Scottish Life Sciences Strategy; steering privately-managed funds toward Scottish businesses
	Scottish Business Development Bank (...)	Increasing access to bank lending; coordination between public and banking sectors; policy asymmetry (vs. BBB); increase competition and leverage cheaper bank finance
SME Holding Fund (2016)	Scottish Growth Scheme (2016)	Reaction to Brexit uncertainty; financial base for SBDB’s loan and guarantees programs
		Distribution of ERDF money; coordination among co-investment partners; financial base for SBDB; leverage

CHAPTER SEVEN

CONCLUSIONS & DISCUSSION

At the beginning of Chapter 1, it was pointed out we were determined to go “from *whether* to *how*” with regards to the effects of minority nationalism on economic policymaking, and on the sectors of development capital and VC in particular. Our main challenge was to demonstrate why minority nationalism in Quebec and Scotland constitutes a crucial explanatory factor for higher levels of government intervention as well as for the persistence and deepening of policy asymmetry with the RoC and RoUK. From an epistemological perspective, we hypothesized that demonstrating it would require an in-depth, long-term process tracing effort aimed at the uncovering of particular mechanisms through which nationalism affects concrete policy choices. It is now necessary to take a step back to evaluate and discuss what our findings were, as well as how they contribute to the confirmation of our hypotheses and, more generally, to the advancement of knowledge.

In what follows, we provide a summary of our findings, and illustrate those by revisiting major policy initiatives. It should now be clear that Quebec and Scotland did converge toward the SME model, through a plethora of sponsoring initiatives requiring active involvement on the part of the government and state-backed funds. The two regions did converge, moreover, toward an increasing reliance on hybrid co-investment funds since 2003 (*faire faire / faire avec*). Such convergence in the development of Quebec and Scottish

ecosystems could not be explained without reference to nationalism: as expected, we did find economic nationalism to have produced ideological, political, and institutional pressures in favor of policy asymmetry and state intervention. In the second part of this concluding chapter, we evaluate how those findings and the policy examples associated with them contribute to existing knowledge on minority nationalism, economic nationalism, policy analysis, and political economy. This will allow the identification of some of the avenues for research this thesis opens.

In the introduction, we paraphrased nationalism scholar Ernest Gellner (1999) by stating that if nationalism's core principle is that political and national "units" should be congruent, then at the heart of *economic nationalism* is the idea that economic and national "units" should be as well. This is one major contribution: to demonstrate that, consistent with this classic definition, Québécois and Scottish nationalisms have concrete impacts on economic policymaking, just as we already knew they have on social policy or international relations. Not only, therefore, does this thesis contribute to the literature on economic nationalism at large, by confirming that it remains a relevant lens through which policy choices can be assessed and policy models compared, but it also adds to existing knowledge on *minority* nationalism in particular, by showing that the various asymmetries it generally favors or leads to within multinational states also apply to economic development. Finally, epistemological and empirical contributions to the fields of public policy and political economy can be derived from this work, which teaches that minority nationalism can lead to the development of "regional" or "sectoral" economic models, and how to demonstrate it.

7.1. Summary and findings

This first section provides a general overview of the thesis' main arguments and findings. First, we revisit Chapters 1 and 2 and highlight some of their key claims. Then, a summary of the empirical chapters is offered which brings our assessments of major policy initiatives together, so as to underscore their similarities and the comparable impacts nationalism had in both regions with respect to their elaboration and implementation. In the second part of this section, we then proceed to a more focused evaluation of the ways and extent to which process tracing efforts confirmed the arguments and hypotheses made in introduction. More specifically, we explain how Quebec and Scotland evolved, through government intervention and policy asymmetry, into “sponsor states” in the sector of development capital and VC, thereby moving toward the SME model defined in Chapter 1. Finally, we emphasize the particular *mechanisms* – ideological, political, and institutional – through which nationalism exerted causal effects on economic policymaking.

7.1.1. General overview

In order to circumscribe the thesis' main findings correctly, it is first useful to provide a detailed summary of its major arguments. Our introductory chapter showed that in both Quebec and Scotland, government spending on economic development remained, since the 1990s, as much as two to three times more important, as a proportion of GDP, than in other parts of Canada or the UK. This convergence of Quebec and Scotland in terms of government involvement is moreover particularly evident, we argued, in the specific area of VC where their public sector was backing – directly or indirectly – over half of all

VC deals at the turn of the century, against 20% to 30% in South East England and Ontario. Consequently, the VC sector and that of development capital were presented as especially relevant for a research centered on government involvement and on the causes of such convergence.

As Figures 2 & 3 illustrated, these two regions' VC ecosystems are particularly well-developed for subnational entities, and both are structured around a large number of regional-level public and hybrid funds. Therefore, although Quebec's ecosystem can be distinguished from Scotland's by the presence of very active tax-advantaged funds and LSIFs – which, in turn, differentiates it from RoC ecosystems where such funds have all but disappeared – such divergence pales in comparison with striking similarities in terms of **a)** government presence and influence; **b)** policy asymmetry; and **c)** the increasing use of hybrid funds such as Teralys, the SCIF, and so many others. The obvious questions, from our perspective, were thus “how did Quebec and Scotland get there” and most importantly what were the common policy influences which led, in both regions, to the development and sustenance of state activism and policy asymmetry.

Unlike most of the existing literature on VC and state intervention, we also argued that political and ideological variables, rather than mere economic or institutional ones, would provide the key elements of an answer. Given the multiple dissimilarities between Quebec and Scotland with regards to union density, electoral and party systems, political autonomy, state size, or corporate structures, the explanation for their convergence had to lie elsewhere. Most importantly, as explained in Chapter 2, this thesis' objective wasn't only to explain state intervention in VC per se, but also the development, preservation, and

deepening of policy asymmetries between Quebec and the RoC/Ontario, and Scotland and the RoUK/South East England. This is why, even if they all played key roles in particular contexts, classic economic justifications for state involvement in VC – funding gaps, economic downturns, geographic concentration of investments, leveraging, positive externalities – could not provide complete and satisfying answers to our questions.

Instead, the argument was made that the explanation for the development and persistence of state intervention and policy asymmetry in Quebec and Scotland had to lie in the influence of *minority nationalism*, defined by a set of “collective commitments *to* and demands *for* significant policy self-determination carried by national communities forming demographic minorities within sovereign nation-states.” In making such an assumption, we were following the example of authors who showed minority nationalism to have major impacts on the development of asymmetries, either through autonomy or divergence, in fields such as social policy (Béland & Lecours 2008) or international relations (Paquin 2004; 2004b). We weren’t far removed, besides, from major works in political economy which found “small states” to be particularly susceptible of perceiving themselves as economically “vulnerable,” and of cultivating nationalism as an “ideology of social partnership” favoring strategic state intervention to “compensate” for such vulnerability (Katzenstein 1985; Campbell & Hall 2009).

The major challenge, from there, was to demonstrate *if* and most importantly *how* nationalism was linked, in the particular cases of Quebec and Scotland, to major policy initiatives having marked the development of their regional VC ecosystems. To do so, a definition of *economic nationalism* was adopted which extends beyond the amalgamation

with protectionism (Boulanger 2006) or the provision of economic advantages to particular ethnic groups (Haddow 2015). Adapting our definition to the *subnational* contexts within which Quebec and Scotland evolve as well as to our focus on *policy*, we thus expected economic nationalism to take, in these two cases, the following forms: **1) *perceived needs and ideological preferences for policy asymmetry and strategic planning*; 2) *political and institutional imperatives to uphold such asymmetries*; and 3) *a concomitant tendency for governments – secessionist or not – to intervene based on those needs, preferences, and imperatives***. The second part of Chapter 2, as well as Chapters 3 to 6, were devoted to the process tracing and policy analysis efforts necessary to uncover economic nationalism's impacts. These chapters demonstrated that nationalism does provide crucial explanations for the peculiar development of these regions' VC ecosystems, both before and after 1990.

Although the focus was put on the last thirty years or so, it would have been difficult to ignore the thirty previous ones, which saw the creation of the major organizations and funds having established the bases of such ecosystems. The major contribution of the second part of Chapter 2 was to demonstrate that despite the different institutional contexts within which Quebec and Scotland were evolving, the first as an autonomous province in a decentralized federation and the second as part of a unitary state, both regions dedicated significant amounts of public resources, from the 1960s onward, to the establishment of state-backed funds devoted to regional-level, "national" interests. Although the growth of such strategic interventions was more directly informed by ethno-linguistic considerations in Quebec's case, with organizations such as the *Société générale de financement* (1962), the CDPQ (1965), and the *Société de développement industriel* (1971) favoring

Francophone-owned businesses, the agencies launched in Scotland in the 1960s (*Highlands and Islands Development Board*) and 1970s (*Scottish Development Agency*) were also dedicated to the enhancement of Scottish ownership in key industrial sectors.

Beyond mere economic rationales, the advent of such organizations reflected ideological preferences and perceived needs for higher levels of policy asymmetry. Their primary objectives were to contribute in building and sustaining specifically regional investment ecosystems, in order to transform and diversify industrial structures by fostering the development of locally-owned SMBs in high value-added clusters. By the early 1990s, thanks to such efforts, Quebec and Scotland had both become VC powerhouses. The former surpassed Ontario as Canada's first VC market, and the latter was now by far the UK's leading region with regards to the proportion of businesses receiving VC investments. This was almost entirely due to the upsurge of public sector activism. By 1990, Quebec's government was present in all deal sizes, deal stages, and industry sectors, already accounting for over 40% of the total value of annual VC investments in the province. In Scotland, most of the UK-wide initiatives (LGS, EAS, BES) aimed at boosting entrepreneurship levels in the 1980s failed, while both the SDA and HIDB were investing and leveraging, each year, tens of £millions in equity investments.

In Quebec, the VC market then literally skyrocketed from 1990 to 2003. Such a rapid development could not have happened without the launch of major government-backed initiatives, from the SRI and FDT in the late 1980s to the *Sociétés Innovatech*, CLD, IQ, and tax-advantaged funds (SOLIDE, FACSIN, FRS, CRCD) established during the 1990s and early-2000s. In Scotland, meanwhile, public spending per head on economic

development remained around 50% greater than the UK average throughout the 1990s, and was sustained by the increasing amounts – a 115% growth between 1991 and 2001 – dedicated to business sponsoring and financing at SE/HIE. Public sector-led or backed initiatives such as the BBRS, LINC, SEP, STF and BGF, moreover, clearly contributed in efficiently mitigating the VC downturn of the early-2000s.

Equally interesting were the motivations which drove such intervention, both in Quebec and Scotland. In the latter case, ideological preferences and perceived imperatives for policy asymmetry played key roles. Most of the major initiatives launched during this period, indeed, were crafted either as parts *of* or as complements *to* the BBRS, which objectives were in turn to help Scotland catch-up to South East England's entrepreneurial levels. In Quebec, similarly, the 1990s were characterized by a further push toward policy divergence from the RoC, with the establishment of new LSIFs, tax-advantaged funds and the extension of such models to the local level. Many developments of the late-1990s and early-2000s, such as *Objectif emploi* (1998) and CRCD (2001), were specifically geared toward the enhanced channeling of Québécois' savings into local businesses, and the strengthening of Quebec's corporate ownership structure. Throughout this period, in this sense, economic nationalism thus continued to complement, if not to supersede economic rationales for state involvement.

Chapters 5 and 6 showed that the same can be said of the last fifteen years. Although both Scotland and Quebec progressively turned to more indirect investment approaches, launching hybrid co-investment funds and limited partnerships with specialized VCs, this shift did not result in less state influence or policy asymmetry, but quite the opposite.

Quebec's hybrid initiatives (*Relève-PME*, *Desjardins-Innovatech*, *FIER-Partenaires*, *CCPME*, *Cycle Capital*, *Teralys*) most often involved other state-backed or public partners (FSTQ, FACSQ, CRCQ, CDPQ, IQ) and stabilized state presence in Quebec's VC industry at between 45% and 50% of its total value. Quebec thus continued to reap a disproportionate share of both VC and equity investments throughout the 2003-2016 period, with the upsurge in "private" and foreign VC investments in the province having had a lot to do with steadily intensifying sponsorship by government-backed funds such as IQ and the FDÉ, the FSTQ, or the CDPQ¹⁵⁵.

The Scottish VC ecosystem evolved along similar lines from 2003 onward. Mostly until but also after the financial crisis, it was marked by the creation of limited partnerships (SLF, SLSF) and hybrid co-investment funds (SCIF, SSF, SVF, REIF) investing alongside private partners and angel syndicates whose formation was supported and to an extent subsidized by the Scottish Government and LINC. Such initiatives were also complemented by direct investment tools (ITIs, SIF, NRIF, POWERS, SGS) and as a result, overall government presence in Scotland's VC increased rather than receding. By 2015 government-backed investments (including co-investments with angels) represented around 65% of the total annual value of Scotland's early-stage VC deals. The establishment of the SIB (2009), finally, contributed in institutionalizing public involvement in the VC

¹⁵⁵ In late-2016 and early-2017, the CDPQ launched three new VC funds capitalized with over \$550 million: the *Fonds Espace CDPQ*, *Fonds Croissance CDPQ*, and *Fonds Relève-CDPQ* (see Figure 2). Along with CRCQ, moreover, the CDPQ invested in a new funding round of CCPME, bringing its overall capitalization to \$540 million.

ecosystem, facilitating coordination with the government’s industrial strategies and establishing bases for the SBDB project.

As these last two chapters demonstrated, economic nationalism continued to play key roles in government activism, including in the elaboration of hybrid schemes crafted to leverage private-sector investments. Beyond leveraging and counter-cyclical motives, nationalist rationales had significant impacts. In Scotland, major initiatives up to 2008 were aimed to nurture *Scottish-owned* medium-sized businesses and “national champions,” to replace multinationals. After 2008, policy asymmetry and the promotion of Scotland’s “competitive advantages,” notably in renewables, became key focuses of the SNP. In Quebec, even hybrid schemes launched after the “*rapport Brunet*” (2003) had as an objective to steer private investors in strategic directions, while many of the post-2008 measures were crafted in reaction to Ontarian initiatives, to support local entrepreneurial succession and avoid foreign takeovers, or in the case of the FRQ for instance, both. Perceived imperatives for state involvement and, as the saga surrounding LSIFs’ federal tax credits illustrated, for policy asymmetry thus remained central in Quebec as in Scotland.

7.1.2. Evaluation of findings

That brings us back to our initial arguments and hypotheses, the question being whether the demonstrations made in Chapters 3 to 6 provided efficient and convincing confirmations. As stated in Chapter 1, our thesis’ main objective had two components. On the one hand, to demonstrate that “through policy asymmetry and government activism in the sector of development capital, Quebec and Scotland moved toward the SME model

while remaining part of Canadian and British LMEs.” Drawing from Vivian Schmidt’s addition to the classic VoC typology differentiating LMEs and CMEs, we indeed associate Quebec and Scotland, in contrast to the Canadian and British LMEs, with “state-influenced market economies” where “the state is influencing because it tends to intervene where it sees fit [...] or sees a need to reshape the general economic environment to promote competitiveness” (2009: 522). In such SMEs, indeed, and most notably as compared to LMEs, the state will often substitute itself to market actors (*faire / faire avec*) in addition to providing them with various incentives to act in accordance with its strategies (*faire faire*). That does not mean “liberal” states never do so, but that SMEs will tend to do so on a greater scale (see Figure 1).

Our argument, therefore, was that “with a mix of *faire, faire avec* and *faire faire*, Quebec and Scotland have been pushing market actors [businesses, investors, banks and labour unions] in strategic directions via the multiplication of public funds, tax-advantaged funds, hybrid funds and limited partnerships.” The specific case of development capital and VC offers a good illustration of the magnitude and particular type of influence Quebec and Scottish states exert on market actors. As the title of this thesis indicates, the strategic role of Quebec and Scottish governments since the 1990s consisted in ‘sponsoring’ domestic SMBs. Such sponsorship, we argued, consists in **a) *allocating significant amounts of public resources to the development of SMBs; b) assisting such businesses in securing appropriate funding throughout their growth stages; and c) supporting the establishment of organizations promoting coordination in the sector of corporate funding.*** A first aim of this section will be to evaluate the nature and strength of our findings with regards to the

forms and extent such public sponsorship activities took in Quebec and Scotland since 1990.

The second objective, on the other hand, was to identify and explain the effects of economic nationalism on the development of such “sponsor states.” One of our major arguments is that Québécois and Scottish nationalisms provide a crucial explanation for the development of state intervention, policy autonomy, and policy divergence in the sectors of development capital and VC. In order to adequately identify such effects and explain *how* they unfolded over the past thirty years we drew from the perspective developed by Helleiner and Pickel (2005), approaching economic nationalism as a set of “mechanisms” – as Andreas Pickel (2006) puts it, “nationalizing mechanisms” – taking *ideological*, *political*, and *institutional* forms. From this perspective,

it is the nationalizing mechanisms that we need to take into account in order to make sense of the relationships between national identity and political economy. These nationalizing mechanisms include the political legitimation of states; the reproduction of a repertory of common epistemic and moral orders fundamental for the coordination of political and economic action; a constantly evolving national discourse; and national identities as processes of shared social representations, social practices, and forms of collective action (Helleiner & Pickel 2005: 13).

More precisely, we adapted such a perspective to the particular context of *minority* nationalism, and therefore contended that in Quebec and Scotland, economic nationalism generally takes the form of such mechanisms: ***ideological preferences, perceived political imperatives, and institutionalized (path dependent) sets of ideas or policies favoring state intervention and policy asymmetry***. Combined with the VoC perspective described above, this approach allowed us to elaborate four main hypotheses, which we will now revisit in light of our process tracing efforts and findings:

Hypothesis 1: *The causal influence of nationalism on economic development is mediated through ideological, political and institutional “mechanisms.”*

Hypothesis 2: *In Quebec and Scotland since the 1990s, nationalism favored policy asymmetry (involving autonomy or divergence) and greater government intervention (compared with neighboring regions in Canada and the UK) in economic development, thereby fostering the emergence of autonomous “sponsor states” in these two regions.*

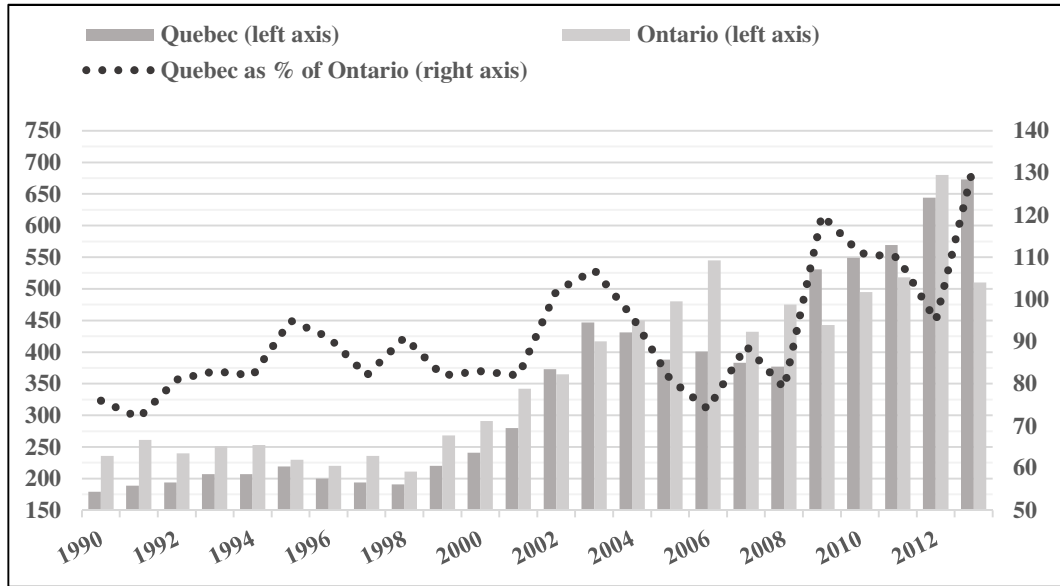
Hypothesis 3: *The effects of nationalism on the sponsoring activities of Quebec and Scottish governments are manifest in the sector of development capital and subsector of venture capital, where they offer crucial explanatory complements to classic economic justifications for state intervention.*

Hypothesis 4: *Given the mixed ideational-institutional nature of economic nationalism, we expect its effects to be constant since 1990, giving way to both ideational and institutional path-dependency. Therefore, the development of regional “sponsor states” in Quebec and Scotland – through policy asymmetry and state activism – will have persisted regardless of the alternation between secessionist (PQ, SNP) and non-secessionist (SLP-SLD, PLQ) governments.*

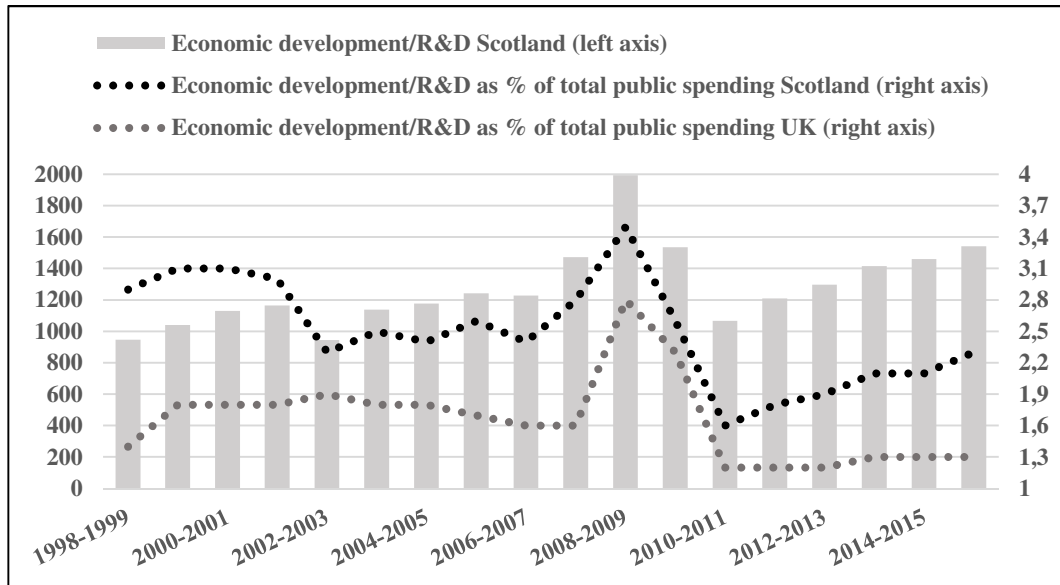
For both Quebec and Scotland, consistent with our hypotheses, economic nationalism did lead to significant levels of government intervention and the deepening of policy asymmetries with the RoC and RoUK. The development of a variety of “sponsoring” initiatives in the sectors of development capital and VC involved both the use of significant amounts of public resources and the elaboration of policies and schemes departing – either through autonomy or divergence – from those prevalent elsewhere in Canada or the UK.

The extent of the Quebec and Scottish states’ sponsoring efforts can be demonstrated through an assessment of their economic development and R&D spending levels since the 1990s as compared with Ontario and the RoUK (Graphs 49 & 50). In Quebec’s case, the sponsoring role of the provincial government in R&D kept progressing since 1990. By 2013 Quebec’s government was spending, in absolute terms, 30% more on R&D than the Ontario government despite a provincial GDP almost 50% smaller.

Graph 49: Provincial government’s R&D spending, Quebec vs. Ontario 1990-2013¹⁵⁶
 (\$millions)



Graph 50: Public spending on economic development and R&D, Scotland vs. UK 1998-2016 (£ millions)¹⁵⁷



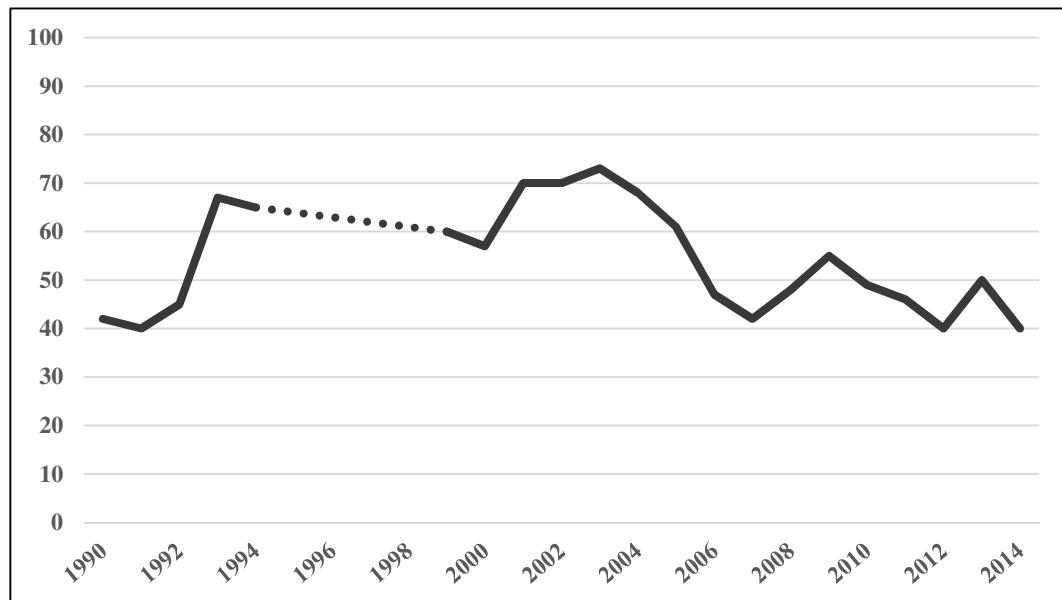
¹⁵⁶ Source: CANSIM 3580001

¹⁵⁷ “Enterprise & Economic Development” + “Science & Technology” categories as % of total public spending (including debt servicing). Sources: GERS (1999-2016).

The same can be said of Scotland since devolution, where public spending on economic development and R&D kept progressing both in absolute and relative terms. Between 1998 and 2016, such spending in Scotland was multiplied by almost 165% and always remained, as a proportion of total public expenditures and with a peak at 3.5% in 2008, around 1% greater than the UK average.

A reasonable argument could thus be made that Quebec and Scotland not only maintained, but deepened their economic influence and the extent of their market interventions since the 1990s. As expected, a similar argument can also be made in the specific case of the VC sector, in which both Quebec’s government and Scotland’s maintained a very important presence (see Graphs 51 & 52).

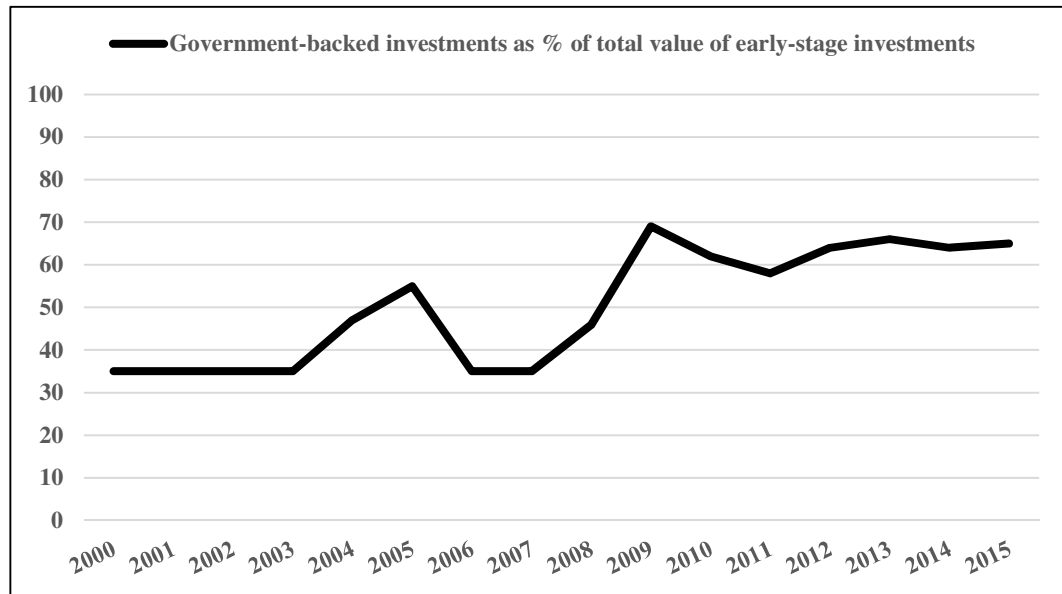
Graph 51: Government-backed VC investments as % of Quebec’s, 1990-2014¹⁵⁸



¹⁵⁸ Approximate figures. By value. *Information on investor type for the years 1995 to 1998 unavailable. Sources: Macdonalds & Associates Limited (1990-2004), Thomson Financial (2008), Industry Canada (2008-2015), Thomson Reuters (2009-2015), CVCA (2015, 2016).

In Scotland, a steadily increasing proportion of the value of early-stage VC investments made since devolution is represented by government-backed deals. Whereas this proportion was of approximately 35% at the turn of the century, it increased sharply after the financial crisis of 2008 to reach an annual average of almost 65% since 2009. In Quebec, the trend was somewhat different although the end result was convergent: after having reached very high levels – between 55% and 70% – during the 1990s and early-2000s, government-backed deals stabilized between 45% and 50% of the annual value of VC investments since 2006.

Graph 52: Government-backed VC investments as % of Scotland’s, 2000-2015¹⁵⁹



¹⁵⁹ Approximate figures (including public, hybrid, and angel investments). We classify angel investments as “government-backed” because most of those investments were made alongside public sector investors and would not have been made otherwise. We also added a 5% proportion of “institutional investments” to government-backed investments, to reflect the presence of hybrid co-investments and limited partnerships with VCs. “Government-backed investments as % of total value of investments” refers to investments in the Scottish VC market’s “middle band” range (£100,000-£2,000,000). Sources: Don & Harrison (2006); Mason & Harrison (2002); Harrison et al. (2010); Mason & Pierrakis (2013); Young Company Finance (2016, 2015, 2014, 2009).

In economic development at large just as in the particular sector of VC, Quebec and Scottish states thus exert a significant influence. The forms this influence can take are multiple but can be classified, following Schmidt's (2009: 526) typology, in three main categories: *faire*, *faire avec*, and *faire faire*. As Tables 2, 4, 5 and 6 illustrate, most of the major sponsoring initiatives set in motion, in Quebec as in Scotland, since 1990 correspond to such categories in many respects.

To summarize, it can be said the *faire* approach refers to direct investments in private businesses by public funds such as SE or IQ. The *faire avec* approach is represented by hybrid funds where public or state-backed players co-invest alongside private and/or institutional funds. The *Scottish Co-investment Fund* is a perfect example, as the SIB will only invest through this fund to match private (mostly angel) contributions. In Quebec, the co-investment approach developed by the CDPQ and CRCQ with the creation of *Capital Croissance PME* is one good example of *faire avec*. Finally, the *faire faire* method consists in the financial sponsoring of private or institutional funds by public or governmental organizations, either through subsidies, capitalization, or tax advantages. In Quebec for instance, the LSIFs are representative of such an approach, which consists in allocating, through tax credits, millions of dollars in public funds to institutional investors. The *Scottish Life Sciences Fund*, managed by the private-sector *Epidarex* but capitalized in part by the SIB, is another good illustration of *faire faire*.

The development of regional “sponsor states” in Quebec and Scotland, through the large-scale use of regional-level, government-backed investment tools has been well demonstrated over the last four chapters. The crux of the challenge, however, was to *explain*

the development of such “sponsor states” and to demonstrate if and how nationalism affected it throughout the 1990s and 2000s. To highlight our major findings in that regard, and to demonstrate how they confirmed our hypotheses, a review of Quebec’s and Scotland’s flagship policy initiatives of the 1990s and 2000s, for all three sponsoring styles, is offered below which distinguishes the “nationalizing mechanisms” having impacted their elaboration. A mapping of those initiatives and mechanisms is also available in Table 7 below.

A first observation should be made at this point: as these flagship initiatives demonstrate, state intervention and policy asymmetry in Quebec and Scotland indeed persisted, since 1990, regardless of the alternation between non-secessionist and secessionist governments, *thereby confirming our fourth hypothesis*. Even though, for instance, the PLQ government presided over a drop in the proportion of government-backed VC investments in Quebec between 2003 and 2007, this was largely compensated by a sharp increase in the public sponsorship of specialized VCs, through initiatives such as the \$700 million *Teralys* launched in 2009. In Scotland, similarly, many of the major programs of the 1990s, as the examples of the BBRs or LINC illustrate, were crafted *before* the advent of a Scottish government and under Tory administrations in London. Scotland’s co-investment model (SCIF, SSF, SVF), moreover, was mainly developed by the SLP-SLD coalition before 2007, and the secessionist SNP government actually built on these policy efforts to establish the SIB, REIF, and SBDB project.

Part of the explanation for such continuity in the effects of economic nationalism can be found in the *institutional and ideational path dependency dynamics* it induces. The

most telling example of such dynamics in Scotland probably was that of the progressive recentralization of the SE/HIE networks after the UK-led reforms imposed in the early-1990s. This was done through internal reorganization, by ex-SDA and HIDB officials who made sure that, despite the creation of the LECs, the new SE and HIE retained institutional capacity for strategic, national-level coordination. After devolution, this was then conducted politically, with the SLP-SLD coalition and the SNP government – both in their initial year in power – first reintegrating the LECs to the national SE/HIE structures and finally abolishing them. Both governments justified such reforms exactly as early-1990s’ SE/HIE officials justified their efforts to ensure continuity: by stating their preference for the long-standing “Scottish model,” allowing for close coordination between development agencies and the Government as well as, concomitantly, for the efficient implementation of national strategies. From the early 1990s to this day, Scottish officials made sure these agencies could – and would – remain committed to policy asymmetry and state intervention.

A good example of such dynamics in Quebec, in turn, was that of the creation of *Investissement Québec* in 1998, a policy initiative of the PQ government which, revealingly, was amended following concerns from the PLQ opposition regarding the absence of a clear and wide-ranging “economic development” mandate in the initial Bill. This was evoked in previous chapters, but it is worth mentioning again given how representative it was of the path dependency mechanisms induced by economic nationalism. When the initial IQ Bill was introduced, it was planned the new organization would be formed out of the previous *Société de développement industriel* (SDI). The Bill,

however, did not at first explicitly mention that IQ would perpetuate the economic development and “jobs creation” missions of the SDI. To ensure continuity with the SDI’s model, thus, the Liberal opposition introduced an amendment reformulating IQ’s mandate so as to include a responsibility to “contribute to the economic development of Quebec and the creation of employment opportunities” (Québec 1998f). This, as explained in Chapter 3, had important consequences on IQ’s subsequent roles as part of Quebec’s development capital ecosystem.

In addition to ideational and institutional path dependency dynamics, economic nationalism also impacted many of Quebec’s and Scotland’s policy initiatives through ideological and political mechanisms, always having as a result to favor state involvement, policy asymmetry, or both. The example of IQ was, again, illustrative of such mechanisms. IQ was created in the wake of the PQ’s *Objectif emploi* strategy (1998), which first revealed an ***ideological preference*** for government involvement and asymmetry in order to meet its central objective of surpassing Ontario’s average annual rate of jobs creation by 2002. Most importantly, this strategy was also a ***political reaction*** to the perceived imperative for intervention deriving from *L’Action Nationale*’s 1996-1997 reports on Canadian mutual funds, which showed how peripheral Quebec – and Francophone businesses in particular – still were as destinations for private-sector investments. This is why, both to meet employment objectives and to mitigate this persisting weakness, the “*Action Plan to Promote the Development of the Financial Sector*” was launched as part of the strategy and led to the establishment of many new state-backed investment funds, such as the FAIRE, *Services financiers CDPQ*, SIRR, and IQ.

The same can be said of Scotland's *Business Birth Rate Strategy* (1993). As discussed in Chapter 4, the BBRS stemmed from a *perceived political imperative for intervention* in that it represented the first national-level economic strategy following the UK-led reforms imposed in the early 1990s, and thus the first major test for the new SE/HIE networks. SE/HIE officials, in particular, wanted to demonstrate that after more than a decade of *Thatcherism*, they had retained an *institutional capacity* for nationally coordinated, autonomous interventions, bringing together the business support networks, businesses themselves, the Scottish financial sector, and the education system. Such perceived imperatives for public intervention and policy asymmetry clearly had *ideological underpinnings*, in that the objective of the BBRS wasn't simply economic development per se, but above all to have Scotland catch-up to the UK's leading entrepreneurial region, South East England, by sponsoring the birth of at least 25,000 new businesses by the year 2000.

Comparable arguments can be made with regards to another flagship initiative of the early 1990s, that of LINC Scotland. Launched in 1993 as well, this publicly-subsidized organization was an integral part of the BBRS and as such, of the *institutional effort* to recentralize the LECs network. First established as a national "introductory service" linking angel investors with Scottish businesses, LINC was a spin-off from the Glasgow LEC and was thus crafted out of a perceived need for the national coordination of such services. That coordination was organized to maximize Scotland's comparative advantage – notably over England – as a small nation and as a small VC market, home to an integrated economic development ecosystem. LINC was also, in turn, part of *perceived political imperatives for*

public involvement, in the wake of the Maastricht Treaty’s implementation and of the relocations of multinational corporations which ensued. In that context, LINC came to represent *ideological preferences for policy asymmetry* (and especially for policy divergence) in that it was specifically crafted to offer a “Scottish solution to Scottish problems” by sponsoring the home-biased, hands-on investment approach of business angels, a large number of whom were high net-worth Scots having just left such multinational corporations.

Similar imperatives and preferences for government involvement and policy divergence were behind the establishment of a second LSIF in Quebec around the same time. *Politically*, the FACSQ (1995) was established in part, with adjoining tax-credits for its shareholders, to muster CSN support for Quebec’s secession referendum of October 1995. The sponsoring of a second LSIF however, after that of the FSTQ in 1983, also reflected genuine *ideological support* for this model among PQ leaders. Not only was PM Jacques Parizeau a long-time proponent of LSIFs, because of the provision of “patient capital” to local SMBs guaranteed by their investment guidelines, but Quebec nationalists always saw this model as promoting a “sense of national belonging” among workers and business owners. On the one hand, thus, the FACSQ represented *institutional continuity* and the extension of the successful FSTQ model; on the other, it represented *institutional complementarity* in that it was notably devised, as opposed to the latter, to specialize in the financial support of cooperatives and to supplement, as such, the work of *Investissement Desjardins*.

Table 7: Flagship policies, sponsoring style and nationalizing mechanisms, Quebec & Scotland 1990s-2000s

Sponsoring style	<i>Quebec's policies</i>	Nationalizing mechanisms	<i>Scotland's policies</i>	Nationalizing mechanisms
<i>Faire & Faire avec</i>	<p>1990s: Objectif Emploi / Investissement Québec (1998) <i>PQ government</i></p> <p>2000s: Relève-PME, FIRA & FRQ (2005-2011) <i>PLQ government</i></p>	<p>Ideological: surpassing Ontario's job creation rates</p> <p>Political: <i>Action Nationale's</i> reports and Facal report</p> <p>Institutional: PLQ's amendment to IQ's initial mandate * * *</p> <p>Ideological: SMBs as "comparative advantage" (local ownership)</p> <p>Political: comparisons with Ontario & RoC (business creation & survival rates); land grabbing/foreign speculation</p> <p>Institutional: ecosystem coordination (CDPQ, FSTQ, CRCD, FACSNS)</p>	<p>1990s: Business Birth Rate Strategy (1993) <i>Pre-devolution / Tory government</i></p> <p>2000s: Scottish Co-investment Fund (2002-2003) <i>SLP-SLD coalition</i></p>	<p>Ideological: catching up to South East England's business birth rates</p> <p>Political: first national strategy following UK-led reforms of HIDB/SDA (LECs)</p> <p>Institutional: BBRS as a national "coordination" effort * * *</p> <p>Ideological: sponsoring of medium-sized, national champions ("companies of scale")</p> <p>Political: reaction to canceled FDI projects & launch of RVCFs</p> <p>Institutional: promotion of angel syndication; SSF-SVF complements</p>
<i>Faire faire</i>	<p>1990s: FACSNS (1995) <i>PQ government</i></p> <p>2000s: Teralys Capital / Teralys Capital Fonds d'Innovation (2009-2015) <i>PLQ government</i></p>	<p>Ideological: LSIF model promoting "sense of belonging" among workers</p> <p>Political: mustering CSN support for secession (1995 referendum)</p> <p>Institutional: complement to FSTQ; coordination with Desjardins * * *</p> <p>Ideological: steering specialized VCs (proportion of investments in Quebec, sectoral focuses)</p> <p>Political: reactions to Ontario's funds of funds (OVCF & NVCF)</p> <p>Institutional: ecosystem coordination (IQ, CDPQ, FSTQ, FACSNS)</p>	<p>1990s: LINC Scotland (1993) <i>Pre-devolution / Tory government</i></p> <p>2000s: Scottish Business Development Bank (...) <i>SNP government</i></p>	<p>Ideological: preference for angels' "home bias" and early-stage focus</p> <p>Political: reaction to closure/relocation of multinational corporations (Maastricht)</p> <p>Institutional: recentralization of LEC's services (national coordination); integral part of BBRS * * *</p> <p>Ideological: intensifying economic nationalism; preference for "coordinative" models</p> <p>Political: reaction to the launch of the BBB</p> <p>Institutional: need to mitigate Scottish banking sector's "concentration;" refining the "Scottish model" (expanding the SIB)</p>

The same “nationalizing mechanisms,” favoring intervention and asymmetry, were at work under the PLQ government later. In parallel to their efforts in developing the *faire faire* model in Quebec, the Liberals created a number of direct investment funds, from 2005 onward, representative of the classic *faire* and *faire avec* approaches. Such were the three “business succession” funds created between 2005 and 2011, aimed at the preservation of indigenous SMBs. As part of the “*L’Avantage québécois*” economic strategy, which specifically presented Quebec’s economic reliance on locally-owned SMBs as a “comparative advantage” (*ideological preference*), IQ’s *Relève-PME* program (2005) was devised to complement the CDPQ’s existing *Accès-Relève* fund. Such *institutional coordination* between public and other state-backed funds also distinguished the creation of the FIRA and that of the FRQ in 2011, both capitalized alongside partners such as the FSTQ, CRCQ, and FACSQ. As with *Relève-PME*, both the FIRA and FRQ were underpinned by *perceived political imperatives*: in the first case, to offset land grabbing by foreign speculators and safeguard locally-owned farms; in the latter, to catch up to Ontario’s and the RoC’s superior business survival rates.

In Scotland, policy asymmetry with the RoUK and especially with England was furthered in the early 2000s by the development of the co-investment (*faire avec*) approach. As Chapter 6 demonstrated for instance, the SCIF and, later, the SSF and SVF were purposely crafted to promote angel syndication, and thus to perpetuate and refine the process of *institutional divergence* initiated with LINC ten years earlier. This notably allowed the Scottish angel ecosystem, despite a smaller population of high net-worth individuals in Scotland, to become the most dynamic in the country. Beyond syndication,

furthermore, the SCIF was launched as a *political response* to canceled FDI projects in the wake of the “dot.com bust,” and to the creation of *Regional Venture Capital Funds* in England. Most importantly, it responded to an *ideological commitment*, in the particular context of the early-2000s’ economic downturn, to the public sponsoring of growing SMBs and their transformation, through appropriate funding, into locally-owned, medium-sized national champions or “companies of scale.”

The development of Scotland’s co-investment approach under the SLP-SLD coalition paved the way to the *Scottish Business Development Bank* (SBDB) project recently initiated by the SNP government. The establishment of such a public investment bank would represent *institutional continuity* in the sense that, as explained at the end of Chapter 6, it would aim to boost Scotland’s corporate lending market through an expansion of the existing SIB. That said, the SBDB initiative is also informed by specifically nationalist motives. On the one hand, the project was launched as a *political riposte*, by a secessionist government, to the creation of the *British Business Bank* in 2012; on the other, it was introduced in a context of intensifying economic nationalism, in the months preceding the September 2014 referendum on Scottish independence. This *ideological preference* for policy autonomy and refined state intervention, stemming from Scottish nationalism, was also made evident by the public investment banks closely studied by the SNP government – those of Germany, Finland, and Sweden, notably – and which revealed its inclination for “coordinative” models mixing investment *and* management support.

In Quebec, the *faire faire* approach developed after 2003 was not devoid of nationalist motivations either. The initiatives most representative of this approach, the

Terallys fund of funds (2009) and its adjoining *Terallys Capital Fonds d’Innovation* (TCFI), were driven by an ***ideological preference for the steering of specialized VCs*** toward strategic sectors. Capitalized by state-backed investors (IQ, CDPQ, FSTQ), the \$700 million *Terallys* was to be the largest fund of funds in Canada and was to dedicate at least 75% of its resources to Quebec VCs or Canadian VCs investing in Quebec. This had as a result to promote a long-overdue ***institutional coordination between state-backed funds*** with regards to indirect investment activities (sponsoring of private VCs). Both *Terallys* and the \$375 million TCFI, indeed, were to focus on the ICT, green tech, and life sciences sectors. As such, they were also ***political reactions to the launch of two similar funds of funds in Ontario***, also focused on these three sectors: that of the \$205 million *Ontario Venture Capital Fund* in June 2008, and that of the \$300 million *Northleaf Venture Catalyst Fund* in July 2015.

All these flagship policy initiatives are representative of the way in which, through *faire, faire avec* and *faire faire* approaches, Quebec and Scotland developed regional “sponsor states” since 1990. The ideological, political, and institutional “nationalizing mechanisms” through which each of these initiatives were influenced by Québécois and Scottish nationalisms are all good illustrations of our general findings. Such mechanisms were shown to have been present, in one form or another, behind most of the policy measures, strategies and funds studied. Our hypotheses 1, 2, and 3, accordingly, have been confirmed: nationalism, both in Quebec and Scotland, did play key roles and continues to have crucial impacts, beyond economic rationales, on the implementation of sponsoring schemes and, consequently, on the deepening of asymmetries between the Quebec/Scottish

and Canadian/British VC ecosystems. Through higher levels of government intervention and through the development of both autonomous and divergent policy tools, Quebec and Scotland have moved away from Canadian and British LMEs in the sector of corporate funding. In both cases, this would not have happened – at least not in the same way or to the same extent – without the contribution of economic nationalism.

7.2. Final remarks: contributions and avenues for further research

Two questions remain to be answered at this point: so what, and now what? In other words, how does this thesis contribute to scientific knowledge, and what research opportunities do its arguments and findings provide? In the introduction, we remarked this thesis would mostly be useful in “generating hypotheses *about* and methods to *assess for* the effects of minority nationalism on economic policymaking.” Although its findings did confirm the hypotheses set out in Chapter 1, it should be reiterated that this thesis, given its relatively limited scope, primarily serves the purpose of demonstrating *how* the policy impacts of economic nationalism can be studied across cases. The generalizability of our findings remains to be determined and our contention is that this could only be done through other in-depth process tracing efforts and comparative case studies. In its contributions to knowledge themselves thus lie opportunities for further research, as the cases of Quebec and Scotland will have served to illustrate that minority nationalism *does* affect economic policymaking, and that such effects could be uncovered in other cases, by focusing on similar ideological, political, and institutional mechanisms.

In what follows, we conclude by specifying the complements this thesis provides to existing knowledge on policy analysis, political economy, venture capital, economic nationalism and minority nationalism. Finally, the avenues for future research those contributions open are assessed, and we briefly engage on some of them. In terms of empirical contributions, the cases of Quebec and Scotland demonstrate how nationalism can exert similar influences – notably with regards to state involvement and policy asymmetry – across different institutional contexts. From epistemological and methodological perspectives, this thesis will have shown that such policy influences are best uncovered through deep knowledge of policymakers’ intent, but also of the roles of specific policy initiatives in particular historical contexts and as part of evolving “ecosystems.” At least two major doors are thus left open by such a research: that of a study of other regions and states where minority nationalism is long-standing and politically salient, and that of an investigation of other economic sectors.

7.2.1. So what?

The first contribution this thesis makes has to do with the study of ideas and public policy. Its findings demonstrate that nationalism continues to exert significant influence on concrete policy initiatives even though such initiatives are no longer justified in explicit, ethnolinguistic terms. On the other hand, from an epistemological perspective, it makes a contribution with regards to a key debate in political science, and in the study of ideas in particular: as observed by Béland and Cox (2011: 13), “an epistemological tension arises when we ponder whether ideas are central to political processes if no one utters them. This is an important concern when the ideas under investigation are part of a broad political

ideology or public philosophy.” Anyone studying economic development policy today, even in places such as Quebec and Scotland, will rarely find policymakers openly justifying particular programs or investments in plain political, let alone ethnolinguistic terms. Yet, this thesis demonstrates that the economic rationales behind policy choices can in fact be underpinned by such a “broad political ideology” as nationalism.

In “The Varied Roles of Ideas in Politics: From Whether to How,” sociologist Jal Mehta (2011: 27) remarks that “a public philosophy is an idea about how to understand the purpose of government or public policy in light of a certain set of assumptions about the society and the market. That the local government is more attuned to the needs of the people than the federal government is one such public philosophy.” Minority nationalism, it can now be said, consists in such a “set of assumptions” in that it notably favors – or produces perceived imperatives for – policy asymmetry and strategic state intervention. In this sense, this thesis demonstrates that a political philosophy such as nationalism can contribute to the “construction” of economic interests or what is perceived as such (Hay 2011). The challenge was to illustrate *how* this is so, and this was the methodological contribution of this study. It is only through an in-depth process tracing effort that we were able to uncover the ideological, political and institutional mechanisms through which economic nationalism affected policy choices, the lesson being that deep knowledge of a limited number of cases and policy sectors probably is necessary to understand the impacts of such a “public philosophy.”

This brings us to the second set of major inputs our findings provide. From a political economy perspective, this thesis established the relevance of a study of “regional”

and “sectoral” cases to refine the classic VoC literature (Hall & Soskice 2001). It has demonstrated that distinct regional and/or sectoral models can develop, through policy asymmetry, within “liberal market economies.” This is not an entirely novel contribution, but what is innovative about it is that it revealed how *nationalism* can impact degrees of state intervention and institutional divergence, at the regional level, not merely with regards to particular industrial sectors but rather with respect to key determinants of the VoC typology itself: corporate financing and, to a lesser extent, R&D. To illustrate how Quebec and Scotland, as part of the Canadian and British LMEs, have been moving towards the “state-influenced market economy” model (Schmidt 2009) in these domains, we also developed a new concept, that of the “sponsor state.”

This concept, whose scope could extend to other cases and economic policy sectors, illustrates the conjunction between state influence and economic nationalism. In the sector of corporate financing and VC most particularly, the “sponsor state” is indeed one in which policymakers come to perceive it as their responsibility to ensure not only that indigenous businesses have access to the capital necessary to develop and expand, but also that the investment activities of market actors themselves become or remain congruent with both the needs of such businesses *and* government strategies or objectives devised with “national interests” in mind. The development of such a concept thus underlines the contribution this thesis makes to the literature on VC, and to the understanding of the various degrees of government intervention which distinguish VC ecosystems across regions and states. Most of the VC literature has indeed explained and/or justified state involvement – and the design of such involvement – through economic lenses, focusing on market failures or “spillover”

effects present, to various degrees, in any given market (Lerner 2009). This thesis studies it instead through a *political* lens, thus explaining variations in state involvement and the formation of regional ecosystems by looking *beyond* market imperatives.

Doing so, it most importantly contributes to the advancement of knowledge on economic nationalism in general and on minority nationalism in particular. This thesis confirms, on the one hand, that economic nationalism should no longer be conflated with protectionism or perceived as an “outdated” lens through which policy choices can be understood (Helleiner & Pickel 2005). Instead, economic nationalism should be approached on the basis of its “nationalist content,” which as this thesis demonstrates can take quasi-protectionist forms as in the case of the subsidization of business succession, or more liberal forms as in the cases of foreign investment prospection, the sponsorship of VCs and business angels, or the provision of financial support to exporters. Beyond such general considerations, the study of our cases led to three major observations with regards to economic nationalism. First, it entails policies which, although not “protectionist” in the restrictive sense of the word, will tend to favor the needs of *locally-owned* businesses heavily, thereby contributing to the preservation or strengthening of “national” corporate ownership. Second, policies influenced by nationalism will tend to be crafted so as to prioritize and implement government-devised strategies, through the coordination of public and private sector players.

Thirdly, and this is where the “minority nationalism” aspect becomes particularly interesting, economic nationalism will tend to push policymakers to react – either through policy emulation or through policy divergence – to initiatives adopted by neighboring

governments or by economic competitors. This was well illustrated by the Teralys/TCFI initiatives in Quebec, and by the SBDB project in Scotland (see Table 7). In the context of a region or province, therefore, economic nationalism will tend to produce, in addition to state involvement, varying degrees of *policy asymmetry*. This is an observation we share with other authors who, focusing on sectors such as international relations (Paquin 2004, 2004b, 2003) or social policy (Béland & Lecours 2008), already established minority nationalism in regions such as Quebec, Scotland, Catalonia and Flanders to lead to policy asymmetry for similar reasons. Such an argument had rarely been applied, however, and certainly not with this degree of detail, to the sector of economic development or subsectors of development capital and VC. This thesis is thus the first of its kind, the only work to have established a causal relationship between minority nationalism and the development trajectories of regional VC ecosystems.

7.2.2. Now what?

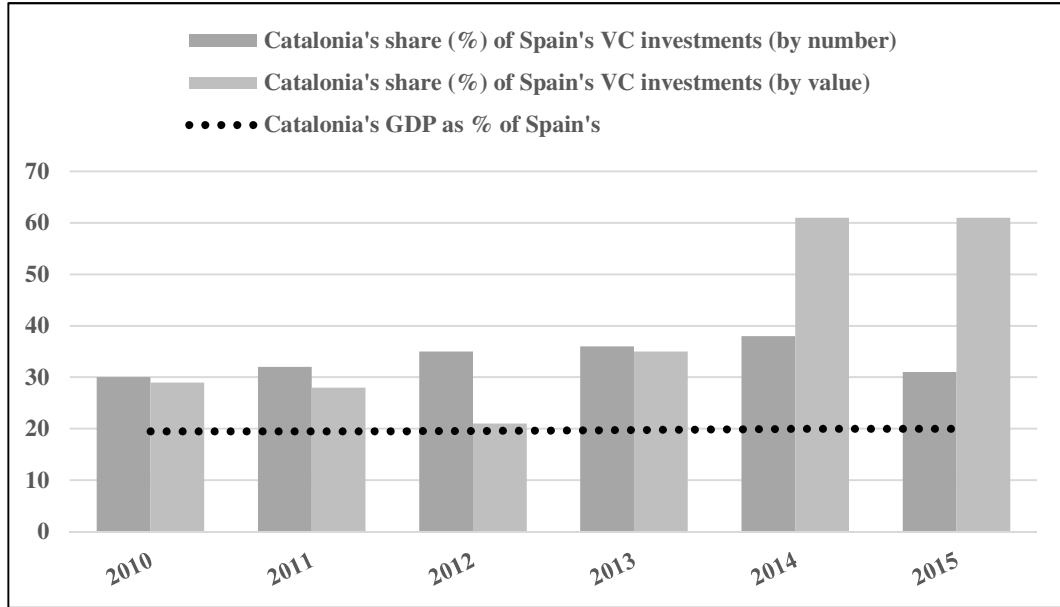
Such contributions to existing literatures on ideas and public policy, political economy and VC, and minority (economic) nationalism are important in good part because they open avenues for further research and provide hypotheses which could be tested through an investigation of other cases or sectors. One of the major contributions of this thesis is precisely to have *generated* hypotheses about the relationships between minority nationalism and regional government strategies with regards to corporate financing, as well as process tracing methods to assess for such evolving relationships. It is only natural, therefore, to ask whether and how its arguments and findings apply to other potential cases. One such interesting case could be that of Catalonia, a region – or “autonomous

community” – of Spain where minority nationalism, both in its autonomist and secessionist forms, has been politically influential for decades and even more so in recent years (Paquin 2001; Gagnon & Requejo 2011; Gagnon & Sanjaume-Calvet 2016). Similar to that of Quebec and Scotland, Catalonia’s economy, accounting for around 20% of Spain’s GDP, is highly reliant on SMBs with over 98% of its registered businesses having fifty employees or less¹⁶⁰.

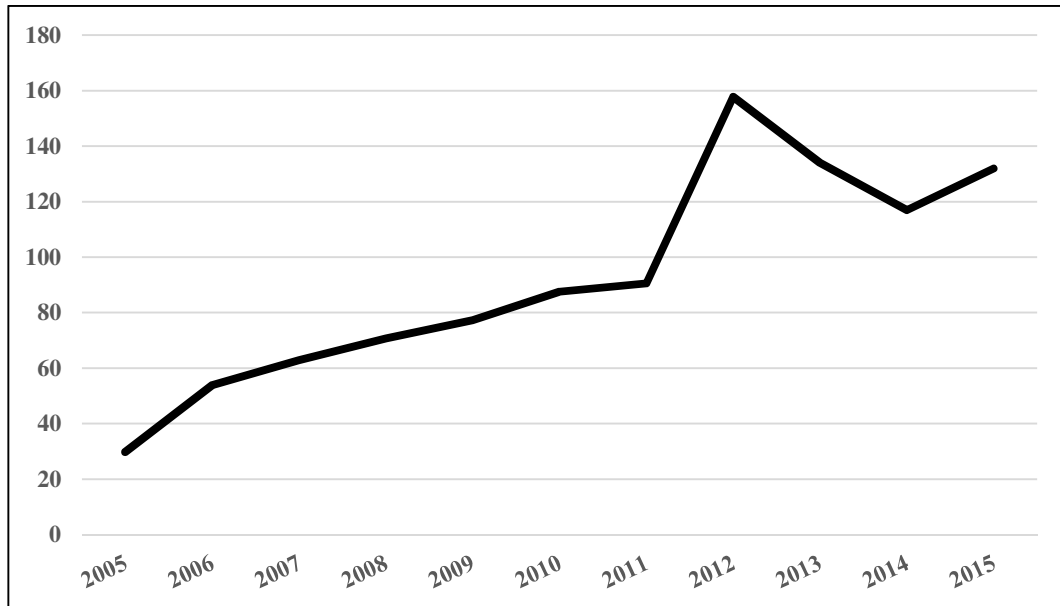
A number of basic statistics provide an interesting perspective with respect to Catalonia’s VC ecosystem, its relative importance in Spain and the influence of the *Generalitat de Catalunya* within it. As Graph 53 below demonstrates, Catalonia has constantly been reaping, since 2010 and increasingly so lately, a disproportionate share of Spain’s annual VC investments, both in terms of their number and value. Accounting for a fifth of Spain’s GDP, Catalonia has been receiving, on average, around a third of all VC deals made in Spain each year, and between 25% and 30% of the total value of those deals up to 2014, when this proportion jumped to 60%. Although the peaks of 2014 and 2015 were mainly due to unusually large investments in expansion-stage businesses, the general trend remains interesting: Catalonia systematically receives a greater proportion of VC investments than its economic weight would justify. The relative strength of Catalonia as part of Spain’s VC market seems to be partly related to the involvement of the public sector in the region’s ecosystem.

¹⁶⁰ Institut d’Estadística de Catalunya: <http://www.idescat.cat/economia/inec?tc=3&id=6004&lang=en> (04/13/2017)

Graph 53: Evolution of Catalonia’s VC industry, 2010-2015¹⁶¹



Graph 54: Institut Català de Finances’ total venture capital commitments, 2005-2015 (€ millions)¹⁶²



¹⁶¹ Sources: Asociación Española de Entidades de Capital – Riesgo (2011-2016), *Survey: Venture Capital and Private Equity in Spain*.

¹⁶² Sources: Institut Català de Finances (2012-2016), *Annual report*.

This involvement notably takes the form of VC investments – both direct and indirect – by the *Institut Català de Finances* (ICF), a public agency owned by the *Generalitat*. This agency, founded in 1985 in the wake of the adoption of Catalonia’s “statute of autonomy” in 1979, has the mission to “promote and facilitate access to financing for the business community of Catalonia, so as to contribute to the growth of the Catalan economy” (ICF, 2016: 7). Through its VC subsidiaries *ICF Capital* and IFEM (*Instrumentos Financieros para Empresas Innovadoras*) but also through a plethora of sponsored hybrid and private VC funds, the ICF accumulated over €130 million in VC investment commitments by 2015 (Graph 54) for a total value of €910 million including leverage (ICF 2016: 32), a significant part of the region’s VC market.

Not only is Catalonia the most important VC market among Spanish autonomous communities, on par with the *Community of Madrid*, but the Catalan government plays key roles in the region’s ecosystem through public and state-sponsored funds. Those roles extend far beyond VC moreover, as the ICF itself engages in massive business sponsoring initiatives through the issuance of loans, equity loans and guarantees. Between 2011 and 2015, the ICF sponsored 12,500 companies in Catalonia, issuing over 15,500 loans and guarantees for a total value of close to €4 billion, the equivalent of €800 million of financial aid every year (ICF 2016: 31). The Catalan case thus raises interesting questions, similar to those this thesis sought to answer: what were the main strategic imperatives behind the establishment of the ICF in 1985 and what roles, if any, did Catalan nationalism play in it? How influential, notably as compared to other autonomous communities’ in Spain, is the

Catalan government in the region's economic development in general and in the sector of corporate funding in particular?

Aside from investigating other regions' development capital ecosystems as well as the role economic nationalism might have played in their expansion, this thesis opens avenues for research in other sectors, such as commercial paradiplomacy (Rioux 2015). Although regional governments' strategies with regards to international relations have been studied in detail over the recent past (Aldecoa & Keating 2013), the particular sub-sector of *commercial paradiplomacy* – i.e. FDI prospection, economic “branding” through commercial missions and trade fairs, market intelligence and networking services offered to exporting or expanding businesses, etc. – has never been investigated as thoroughly, particularly from the perspective of economic nationalism. Yet, commercial paradiplomacy is a central part, if not the most important aspect of many regions' international efforts, as demonstrated by the fact that most if not all of their foreign “offices” are now partly and in many cases solely devoted to commercial activities. This reality is well illustrated by our cases as well as that of Catalonia: as can be seen in Table 8 below, these regions maintain wide international representation networks, in good part through their development agencies and in parallel of Canadian, British, or Spanish diplomatic apparatuses.

Part of this focus of regions on commercial paradiplomacy has to do with the distribution of responsibilities and competencies in federal and decentralized systems, most of which maintain formal political diplomacy as a reserved jurisdiction of the central government (Michelmann 2009). Still, it would be both important to investigate the impacts minority nationalism has had on the development of commercial paradiplomacy

apparatuses as well as on the responsibilities and activities of regional development agencies within those.

Table 8: International representation networks, Quebec, Scotland & Catalonia (2017)

<i>Investissement Québec & Export Québec</i> - <i>Quebec Government</i>		<i>Scottish Development International</i> - <i>Scottish Government</i>		<i>Catalonia Trade & Investment</i> - <i>Generalitat de Catalunya</i>	
<i>Europe & Americas</i>	<i>Africa, Middle East & Asia/Oceania</i>	<i>Europe & Americas</i>	<i>Africa, Middle East & Asia/Oceania</i>	<i>Europe & Americas</i>	<i>Africa, Middle East & Asia/Oceania</i>
<i>Brussels</i>		<i>London</i>		<i>Berlin</i>	
<i>London</i>	<i>Dakar</i>	<i>Brussels</i>	<i>Accra</i>	<i>Brussels</i>	<i>Accra</i>
<i>Munich</i>	<i>Mumbai</i>	<i>Moscow</i>	<i>Dammam</i>	<i>Copenhagen</i>	<i>Casablanca</i>
<i>Berlin</i>	<i>Beijing</i>	<i>Copenhagen</i>	<i>Dubai</i>	<i>London</i>	<i>Johannesburg</i>
<i>Paris</i>	<i>Shanghai</i>	<i>Paris</i>	<i>Delhi</i>	<i>Milan</i>	<i>Nairobi</i>
<i>Stockholm</i>	<i>Seoul</i>	<i>Düsseldorf</i>	<i>Mumbai</i>	<i>Moscow</i>	<i>Dubai</i>
<i>Rome</i>	<i>Qingdao</i>	<i>Stavanger</i>	<i>Hyderabad</i>	<i>Paris</i>	<i>Istanbul</i>
<i>Barcelona</i>	<i>Tokyo</i>		<i>Hong Kong</i>	<i>Stuttgart</i>	<i>Mumbai</i>
		<i>Calgary</i>	<i>Beijing</i>	<i>Warsaw</i>	<i>Tehran</i>
<i>New-York</i>		<i>Toronto</i>	<i>Shanghai</i>	<i>Zagreb</i>	<i>Tel-Aviv</i>
<i>Boston</i>		<i>Boston</i>	<i>Shenzhen</i>		<i>Hong Kong</i>
<i>Chicago</i>		<i>Washington</i>	<i>Singapore</i>	<i>Boston</i>	<i>Tokyo</i>
<i>Los Angeles</i>		<i>Chicago</i>	<i>Taipei</i>	<i>Miami</i>	<i>Seoul</i>
<i>Washington</i>		<i>Houston</i>	<i>Seoul</i>	<i>Montreal</i>	<i>Beijing</i>
<i>Atlanta</i>		<i>New-York</i>	<i>Tokyo</i>	<i>New-York</i>	<i>Shanghai</i>
<i>Houston</i>		<i>San Jose</i>	<i>Sydney</i>	<i>Silicon Valley</i>	<i>Singapore</i>
<i>Silicon Valley</i>		<i>Rio de Janeiro</i>		<i>Washington</i>	<i>Sydney</i>
<i>Mexico</i>				<i>Bogota</i>	
<i>Sao Paulo</i>				<i>Buenos Aires</i>	
				<i>Lima</i>	
				<i>Mexico</i>	
				<i>Panama</i>	
				<i>Santiago</i>	
				<i>Sao Paulo</i>	

In Quebec for instance, the roles of *Investissement Québec* as part of the province's international representation network have grown considerably, with regards to FDI prospecting most particularly. The same can be said of *Scottish Development International*,

the diplomatic “arm” of the SE/HIE network whose main responsibilities are not only to assist Scottish exporters and foreign investors interested in Scotland, but also to promote the “Scottish brand” as an economy and investment destination. Similarly, *Catalonia Trade & Investment*, the region’s public agency devoted to FDI prospection, is now present in 39 major cities around the world, making Catalonia’s the most important international representation network of any Spanish community.

The questions such active commercial paradiplomacy by national minorities raise are also very similar to those this thesis aimed to answer: how important a factor was minority nationalism in the establishment of such development agencies and in the expansion of their international activities? What are the roles played by economic nationalism in the international “branding” of Quebec, Scotland and Catalonia as investment destinations? How closely coordinated are these agencies’ activities and the regional governments’ industrial strategies? How much public resources are devoted to such activities and networks as compared with other regions in Canada, the UK and Spain? How can the efforts to attract FDI be reconciled with economic strategies geared toward local ownership of businesses? One of the most important contributions of this thesis, from this perspective, might thus have been to provide a framework and a set of approaches allowing future researchers to answer such questions. Reconciling the study of economic policymaking and that of minority nationalism remains an important challenge for political scientists. If anything, this work will have demonstrated *why it should*, as well as *how it can* be done.

Perhaps most importantly however, this dissertation will have served as a crucial theoretical and empirical reminder: while its elaboration took place in the historic context of a resurgence of populist and militarist nationalism across the globe, the Quebec and Scottish cases clearly demonstrate that nationalism in general and *economic* nationalism in particular are not by definition illiberal, racist, or protectionist ideologies. Underlying Quebec's and Scotland's "sponsor state" model is, above all, a long-standing and continuing commitment to the "general interest" (Bernier et al. 2003; Simard et al. 2006), rooted in self-determination principles (Seymour 2016).

That there remains such a thing as "civic" or "liberal" (economic) nationalism has already been well established by others (Helleiner & Pickel 2005). What this thesis adds to the discussion is a richer sense of the ways in which national identity and (minority) nationalism, without challenging the liberal economic order within which Western democracies evolve, can contribute in making sure it remains compatible with a diversity and a variety of economic models, where the "sponsoring" and "entrepreneurial" (Mazzucato 2014) activities of states can be geared toward community empowerment, technological progress, and environmental preservation – i.e. toward the "common good" – as much as toward "competition" for its own sake, or for the sake of domination and profit.

From this perspective, "small nations" or "minority nations" such as Quebec, Scotland and so many others can play a key economic role: that of demonstrating how the "rescaling of political economy" still ongoing can benefit *peoples* and not only corporations. "Sponsor states" can be a means to an end.

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Appendix I: list of interviews

Quebec

- David Brulotte, Directeur au développement des affaires – Europe, Investissement Québec, Paris, May 18th 2015.
- Hugo T. Lacroix, Directeur au développement des affaires – Europe, Investissement Québec, Paris, May 18th 2015.
- André Petitclerc, Directeur principal de l’investissement Petites Capitalisations, Investissement Québec, Phone interview, April 13th 2015.
- Alain Denis, Vice-Président principal Nouvelle Économie, Fonds de solidarité des travailleurs du Québec, Montreal, April 9th 2015.
- Gérald St-Aubin, Vice-Président Investissements stratégiques et Partenariats, Capital Régional et Coopératif Desjardins, Montreal, March 1st 2015.
- Jack Chadirdjian, Président-directeur général, Réseau Capital, Montreal, March 1st 2015.
- François Gilbert, Président-directeur général, Angés Québec & Angés Québec Capital, Phone interview, February 10th 2015.

Scotland

- David Grahame, Executive Director, LINC Scotland, Glasgow, August 17th 2015.
- Dr. Geoffrey Whittam, Reader in entrepreneurship, School for Business & Society, Glasgow Caledonian University, Glasgow, August 17th, 2015.
- Joan Gordon, Head of Development & Market Intelligence, Scottish Investment Bank, Glasgow, August 14th 2015.
- Pat McHugh, Investment Director, Scottish Investment Bank, Glasgow, August 11th 2015.
- Lisa Hamilton, Business Advisor, Glasgow City Council (Business Gateway), Glasgow, August 11th 2015.
- Brian McVey, Director of Strategy, Scottish Enterprise, Edinburgh, September 5th 2014.
- Anonymous interviewee # 1.
- Anonymous interviewee # 2.