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PROACTIVE ENVIRONMENTAL STRATEGIES IN SMALL BUSINESSES: RESOURCES, INSTITUTIONS AND DYNAMIC CAPABILITIES

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2008

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Dissertation submitted to the Faculty of Economics and Business Administration, Ghent University, in fulfillment of the requirements for the degree of Doctor in Applied Economic Sciences

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Prof. Dr. Ir. Guido Van Huylenbroeck Universiteit Gent I dedicate this work to Jessica,
To my unborn son and (hopefully) more children to come,
To Papá, for your will to change the world,
And to everyone that does not look to the ground while walking,
but lifts his eyes up to be amazed by what this beautiful life has to offer.

"(...)

Lift up your eyes upon
The day breaking for you.

Give birth again To the dream.

Women, children, men, Take it into the palms of your hands.

Mold it into the shape of your most
Private need. Sculpt it into
The image of your most public self.
Lift up your hearts
Each new hour holds new chances
For new beginnings.

Do not be wedded forever To fear, yoked eternally To brutishness.

The horizon leans forward, Offering you space to place new steps of change (...)"

(Excerpt taken from "Inaugural Poem", Maya Angelou)

Acknowledgements

Whenever, as a result of yet another Google search for articles or books, or serendipitously stumbling upon one while strolling through a library, I would come across a doctoral dissertation, the first thing I would look for, even in stressful periods with little spare time, would be the "acknowledgements" section. I guess I consider it a way to understand the person, the soul behind the work. Just like it helps to have met someone at a conference to better understand his or her work and where it comes from, it sort of helps to have this background about a person. But the most important reason for looking up the acknowledgments would be because it also made the work more human. Behind those thousands and thousands of words was actually a human being with the equally human necessities for fun, sharing doubts, eating, drinking, and - who knows - even going to the bathroom. It made the concept of actually finishing a PhD a little less impossible. After I would finish reading the acknowledgements, I would usually start dreaming about the day that I would be writing my own acknowledgments section and that thought would fill me with hope and inspiration. And here I am, actually writing my own acknowledgments section. Dear reader, if you would also be one of those people like me that likes to read acknowledgment sections: IT IS POSSIBLE!!! Yet, there is one substantial condition: I would never have been able to do this without the help and support of a number of very important people... And I am extremely happy that the moment has come to thank them.

Before anything, I would like to thank my supervisors and mentors, *Prof. Dr. Aimé*Heene and Prof. Dr. Erik Mathijs. Aimé, your interest in my work and the comments you made throughout my doctoral process have acted as a continuous push to improve my analyses and refine its implications. As a mentor, you have thought me the value of disciplined care for theoretical rigor and the importance of valuing every word in writing research findings. I would also like to thank you for your openness to new ideas and approaches, both in research and education. It was an honor to be involved in the teaching and planning of the "Corporate Social Responsibility" course, which I believe truly reflects the motto of our university "Durf Denken" (dare to think). That you have given me the freedom to develop my ideas in this course was an inspiring and welcome change for research and dissertation work. Erik, your trust in me as a researcher and your openness to my ideas from

the very beginning of this journey at Stedula have encouraged me to grow as a multi-disciplinary researcher and to be dedicated to bringing new analyses to the research on agricultural firms. This dissertation would certainly never have been written without your support in developing multi-disciplinary ideas.

Yet I have had the formidable fortune to have two additional mentors as part of my guidance committee. Thank you, *Prof. Dr. Bart Nooteboom*, not only for your guidance and critical reflections on small business and entrepreneurship literature, but also for the interesting and challenging discussions on quality in science and organizational research and many broader topics alike. *Prof. Dr. Johan Lambrecht*, thank you for inspiring me to qualitative research and for sharing your experience in small business research throughout the last years. I find it an honor to defend my dissertation to the both of you.

I also want to thank all the members of the examination committee. I have gotten to know all of you over the past years and I am looking forward to hearing your comments. *Prof. Dr. Marc Buelens*, I hope we can continue the fantastic exchange of ideas I have enjoyed over the last two years. Your academic wit combined with an unparalleled ability to explain complex processes with enthusiasm and humor has made every encounter with you a true "experience". *Prof. Dr. Pratima Bansal*, thank you very much for inviting Mike and me to the Ivey Research Series, the great comments on our work and for being such a wonderful host in London. *Prof. Dr. Ir. Guido Van Huylenbroeck*, thank you very much for your support during the first years at Stedula. Your membership of this dissertation committee makes this a true Stedula dissertation. *Prof. Dr. Roland Pameleire* and *Prof. Dr. Patrick Van Kenhove*, I thank you for the responsibilities you have taken within the faculty and for the efforts you make for representing our faculty in both academic and social life. I thank all of you for taking the time for being member of my examination committee and hope you enjoyed reading my work.

This dissertation would not have been possible, however, without the collaboration of a number of very important people in the actual process of collecting and analyzing the data. *Mike Valente*, after we met at the Academy of Management in Atlanta, I instantly knew a joint collaboration of both our data sets would yield interesting findings and we would both learn a lot from working together. But I could not have known what a kind, patient, critical and intelligent person you are. Thank you for all the fun skype times analyzing our data, and

many more thanks for the trip to Ontario and Victoria last year. I hope I manage to get to your cottage soon!! Two of the most important people for my dissertation were *ir. Griet Grillaert* and *ir. Adrien Saverwyns*. Without you I could not have had such easy access to the Flemish ornamental horticulture sector and VMS. Your reflections and time for interviews taught me a lot about this fascinating sector. Flemish ornamental horticulture would be truly different without your influence. I also thank all the *growers*, the *key informants* and the "strategy 2020" group for making time on several occasions for interviews and round tables. I was only able to collect the findings in this dissertation because you made time for that. I have gained deep respect for the profession of ornamental horticulture and in particular for those that engage in the ambitious project of VMS in this process.

Although at times I felt that my social life was reduced to four walls, a computer screen, papers and coffee, I have been fortunate over the years to share my doubts, problems, visions, ideas, laughs and sighs with many people as well. I therefore firstly would like to thank all my colleagues at Stedula. Thank you *Steven Van Passel* for the laughs, the inspirational talks, the trains to The Hague, CPeX and for teaching me to be pragmatic. Thank you *Frank Nevens*, for your openness, your energy and your innovative approaches to bridge science with practice. Thank you *Joost Dessein*, for opening the world of social sciences to me. You truly made me look at things in a different way. Thank you *Marijke Meul, Elke Rogge, Annelies Mulier, Koen Foncke, Ignace Verbruggen, Xavier Goossens, Luk Sobry* and *Karin Van Peteghem* for the wonderful times in Gontrode. I also want to thank *Dirk Reheul* and *Jeroen Buysse* (UGent); *Ludwig Lauwers, Dirk Van Liedekerke and Nicole Taragola* (ILVO); *Jose Gavilan, Koen Carels, and Dirk Van Gijseghem* (AMS); and *Hennie Van der Veen, Wietse Dol, Foppe Bouma* and *Sjaak Wolfert* (LEI) for the collaboration during my Stedula time.

I am also very grateful for the great atmosphere at the Department of Management, Innovation and Entrepreneurship: thank you *Annick Willem, Anne-Line Balduck, Sebastian Desmidt, Nikolay Dentchev and Edgar Izquierdo*! Besides sharing many laughs and pondering organizational developments in the faculty, the mere presence of having you as ambitious scholars around has encouraged me to further push my own limits and quality as a researcher. Thank you also *Mia De Meyer*, *Gust Devolder* and *Inge Degraeve* for all your support and kind help whenever I needed it. Life is so much easier with you around.

I also want to thank *Dirk Le Roy, Peter Wollaert, Luc Van Liedekerke, Mieke Vercaeren, Magali Decloedt, Jelle Janssen, Dirk Coeckelbergh, Herman Siebens, Dries Elsen, Maarten Crivits, Yves Fassin, Wim Vandekerckhove, Céline Louche, and Nigel Roome* for the occasions in which we were able to reflect on putting sustainable development into actual practice and scholarship in Belgium.

And then a big thank you to you, my dear friends, who will probably agree with me on the following phrase: AT LAST!!!!! Thank you *Arnout, Birgit, Bert, Bram, Catherine, Ellen, Filip, Joke, Jan, Liesbet, Lionel, Mark, Rein, Roseline, Siegfried, Stijn, Vinnie, Willem, Wim* and so many others for the squashing, surfing, snowboarding, discussions, sharing joy and frustrations, parties, weekends, travelling, and so many other things that I needed to blow off some steam at times. I cannot even begin to tell you how important you were for me in following through on my ambitions. It's funny how I sometimes had the best ideas while I was simply explaining something to you over a beer or dinner.

Mamá en Papá, Rit, Bob en Paul; Mama en Papa, Gert en Nancy, Gerry en Christa, Jelmer en Inès, Eveline, Emma, Roxanne, Arno en Olivia and my entire family: Rejoice!! You can finally expect to say something new when they ask you what it is I am doing (and maybe this time it will actually sound a little bit more like actually working). Although there are a million things I want to thank you for, I want to thank you especially for showing me the value of realizing the best of what is inside me. Although you have been my most critical audience, you have also been my most loyal audience. This has made me stronger and has pushed me to become, so I believe, a better person. There is no way I can thank you for having done that. But I'll start by being home a bit more from now on!

And finally, *Jessica*, my home, my best friend, my everything. Your drive, your interest and passion, your encouragements, your scrutiny, your love and especially your patience are hidden in every single word in this dissertation. Thank you for being my "woman of the desert" while I looked for my "Personal Legend". Up to the next dream!

Thank you!

Jan Lepoutre Gent, 22/8/2008

Table of Contents

Acknowledgem	ents	V
Table of Conter	nts	ix
List of Tables		xiv
List of Figures.		XV
List of Abbrevi	ations	xvi
Summary		xvii
Samenvatting		xxiv
List of publicat	ions and conference presentations based on this dissertation	xxxii
1. General In	troduction	3
1.1. Aims a	nd scope	3
1.2. Structu	re of this thesis	5
2. Proactive 1	Environmental Strategies in Small Business: Definitions and	d Theoretical
2.1. Introdu	ction	12
	gy"	
2.2.1. Ou	tside-In Perspectives of Strategic Management	15
2.2.1.1.	Industrial organization economics	15
2.2.1.2.	Contingency Theory	16
2.2.1.3.	Resource Dependence Theory	17
2.2.1.4.	Institutional theory	19
2.2.1.5.	Population Ecology	21
2.2.2. Ins	side-Out Perspectives of Strategic Management	22
2.2.2.1.	Upper echelon theory	22
2.2.2.2.	The Resource-Based View	23
2.2.2.3.	Dynamic capabilities	24
2.2.3. Sy	nthesizing Perspectives of Strategic Management	25
2.2.3.1.	Grass-roots models of strategy formation	25
2.2.3.2.	Competence-based view	26
2.2.3.3.	Oliver's institutional – resource based perspective	27

2.2.4.	Summarizing	28
2.3. "E	nvironmental"	28
2.3.1.	The natural environment and market failures	29
2.3.2.	The natural environment as a social issue	32
2.3.3.	Paradigm shift	35
2.3.4.	Summary	38
2.4. "P	roactive"	38
2.5. "S	mall business"	42
2.6. Co	nclusion	46
3. Develo	oping Research Questions: the State-of-the-Art on Proactive E	nvironmental
Strategies		48
3.1. Int	roduction	48
3.2. Me	ethods	49
3.3. De	scriptive review of the literature	52
3.4. Th	ematic review of the literature	55
3.4.1.	Antecedents of Proactive Environmental Strategies	56
3.4.1	1.1. Internal drivers: motivation and goal-related factors (a)	57
3.4.1	1.2. External drivers: institutions (b)	60
3.4.1	1.3. Internal facilitators (c)	67
3.4.1	1.4. External facilitators: contingencies (d)	69
3.4.1	1.5. Summary	71
3.4.2.	Consequences	72
3.4.2	2.1. Environmental performance (e)	72
3.4.2	2.2. Economic performance (f)	73
3.4.2	2.3. Internal moderators (g)	74
3.4.2	2.4. External contingencies (h)	75
3.4.2	2.5. Summary	77
3.5. Di	scussion and research questions	77
3.6. Ov	verview of chapters addressing the research questions	80
4. Investi	igating the Impact of Firm Size on Small Business Social Res	ponsibility: A
Critical Do		

4.1. Introduction	87
4.2. Defining the Small Business and its Social Responsibility	89
4.3. Issue characteristics	90
4.4. Personal characteristics.	93
4.4.1. Entrepreneurship and ethics	93
4.4.2. Characteristics of small business owner-managers	94
4.4.2.1. Time	95
4.4.2.2. Knowledge	95
4.5. Organizational characteristics	97
4.5.1. Resource poverty	97
4.5.2. Power	99
4.6. Context characteristics	100
4.6.1. External stakeholder pressures.	100
4.6.2. Socio-economic context	101
4.6.3. Institutional environment	102
4.7. Discussion and conclusion	103
5. Methodological and Contextual Introduction to the Empirical Studies	108
5.1. Introduction	108
5.2. Methods	
5.2.1. Research design	108
5.2.2. Data collection and analysis	
5.2.2.1. Context assessment	111
5.2.2.2. Case study research	113
5.3. Contextual description of the Belgian ornamental horticulture and its rela	ation with
the natural environment	
5.3.1. What is ornamental horticulture?	119
5.3.2. The natural environment and ornamental horticultural production	
5.3.2.1. Plant nutrition	
5.3.2.2. Ensuring plant health and quality	
5.3.2.3. Energy	

	5.3.3	Beneficial impacts of ornamental horticultural production and products	125
	5.3.4	VMS – the Flemish Environmental Plan for Ornamental Horticulture	126
	5	3.4.1. The MPS system	129
	5.3.5	The Belgian ornamental horticulture sector	132
	5	3.5.1. General demographic and socio-economic characteristics	
		3.5.2. General business environment	
	5	3.5.3. External institutional environment	142
	5.4.	Conclusion	147
6		inst All Odds: Realizing Proactive Environmental Strategies in S	
	_	es	
		Introduction	
		Γheoretical background	
	6.2.1		
		Proactive environmental strategies and small businesses Methods	
		Findings	
	6.5.1		
	6.5.2		
	6.5.3		
		Discussion	
		Contributions and future research	
7.		s Breaking Out: Explaining Successful Small Business Institutional	
		ity	
		Introduction	
		The problem of institutional non-conformity	
	7.2.1		
		MethodsFindings	
	7.4.1	Interaction Scope with the Organizational Field	

7.4.3. Organizational Conduciveness to Institutional Non-conf	ormity206
7.5. Discussion	212
7.5.1. Institutional theory	213
7.5.2. Resource-based view of the firm	214
7.5.3. Organizations and the natural environment	214
7.6. Limitations and research implications	215
8. Concluding Remarks	220
8.1. Conclusions	220
8.1.1. RQ1: What is the impact of firm size on the adoption of 220	of PES in smaller firms?
8.1.2. RQ2: What are the resources and capabilities associate	ed with successful PES
execution in small businesses?	222
8.1.3. RQ3: How can small business be successful in PES	when the (institutional)
conditions are against having one?	222
8.2. Discussion of the findings	223
8.3. Limitations	227
8.3.1. Methodological limitations	227
8.3.2. Contextual limitations	228
8.4. Future research	231
8.5. General conclusion	232
References	236
Appendix	266
A.1. Interview guidelines with key informants	266
A 2. Interview guidelines for grower interviews	268

List of Tables

Table 2.1 - Typologies of environmental strategies	40
Table 3.1 – Top cited articles and their citation number	51
Table 3.2 - Proxies used for PES in empirical literature	54
Table 3.3 - Size of firms investigated in empirical papers	55
Table 3.4 - Overview of research questions and corresponding chapters	81
Table 5.1 - Data sources used in the empirical study	111
Table 5.2 - Overview of key informants interviewed in sector analysis	112
Table 5.3 - Archival data sources used in sector analysis	114
Table 5.4 - Overview of firms in sample	115
Table 5.5 - Overview of data sources collected for case study companies	118
Table 5.6 - MPS certificates per country and qualification in 2005. Source: MPS, 2006	5 128
Table 5.7 - Maximum point that can be acquired depending on cultivation type	130
Table 5.8 - Demographic data on ornamental horticulture firms in 2006. Source: AN	ЛS, APS
	135
Table 5.9 - Institutional pressures regarding environmental production in the	Belgian
ornamental horticulture sector	145
Table 6.1 - Overview of firms in sample	158
Table 6.2 - Promoting factors of PES in theory and in the ornamental horticulture indu	ıstry 159
Table 6.3 – Illustrations of high and low munification along its three constitutive din	nensions
	161
Table 6.4 - Variation of munification across sample firms	162
Table 6.5 - Illustrations of high and low organicity along its three constitutive dimensi	ons 169
Table 6.6 - Variation of organicity across sample firms	170
Table 7.1 – Interaction Scope with the Organizational Field.	193
Table 7.2 – Cognitive Approach to Institutional Non-conformity	199
Table 7.3 – Organizational Conduciveness to Institutional Non-conformity	208

List of Figures

Figure 1.1 - Overview of this dissertation	6
Figure 3.1 - The systematic review process (based on Thorpe, 2005)	50
Figure 3.2 - Number of publications found on proactive environmental strategies	52
Figure 3.3 - The antecedents and consequences of PES	56
Figure 5.1 - The ornamental horticulture market structure	120
Figure 5.2 - The assignment of scores in the MPS / VMS system	130
Figure 5.3 - The MPS A, B, C and D-labels	131
Figure 5.4 - The Belgian ornamental horticulture sector in demographic	134
Figure 6.1 - Mintzberg's strategy types. (Based on Mintzberg, 1978)	152
Figure 6.2 - Theoretical predictions on proactive environmental strategies	154
Figure 6.3 - A model of realizing proactive environmental strategies in	constrained
environments	178

List of Abbreviations

CEO Chief Executive Officer

I/O Industrial Organization Economics

MNC Multinational company

MPS Milieuproject Sierteelt (Environmental Project Ornamental Horticulture)

O/M Owner-manager

ONE Organizations and the Natural Environment

PES Proactive Environmental Strategy / Strategies

RBV Resource-Based View

RDT Resource Dependence Theory

VMS Vlaams Milieuplan Sierteelt (Flemish Environmental Plan Ornamental

Horticulture)

VRIN Valualbe Rare Inimitable and Non-substitutable

Summary

This dissertation aims to contribute to a better understanding of proactive environmental strategies among small firms. Specifically, it seeks to answer the question "how can small businesses successfully implement proactive environmental strategies?" Proactive environmental strategies (PES) aim to minimize a firm's negative impact and to maximize its positive effects on the environment, beyond what can be expected from a legal perspective or standard practice in the industry. As such, this dissertation is situated in the theoretical discipline of "strategy", and the context of inquiry is "the natural environment" on the one hand, and "small businesses" on the other. A specific approach on proactive environmental strategies in small businesses is necessary for two reasons. First, although the impact of small businesses on the natural environment is estimated to exceed that of large businesses, most of the PES research has been limited to large businesses. Second, small firms possess characteristics that make them fundamentally different from large firms. Hence, this dissertation has the objective to address three questions that we found to remain unanswered in the current literature:

- 1. What is the impact of firm size on the adoption of PES in smaller firms?
- 2. What are the resources and capabilities associated with successful PES execution in small businesses?
- 3. How can small businesses be successful in PES when the (institutional) conditions are against having one?

In order to provide a basis and answers for these research questions, the dissertation presents both literature reviews and empirical research. Before summarizing the contributions of chapters 4, 5, 6 and 7 in answering these research questions, the attempts of chapters 1, 2 and 3 to theoretically delineate and ground the research questions in the literature are briefly presented.

Conceptual delineation of the research

The discipline of "strategy" investigates organizational performance as a result of the complex interactions between the external environment on the one hand, and the internal possibilities of the organization to interact with it on the other. Although it is still debated whether it is the organization or the environment that ultimately determines the performance of an organization, scholars increasingly agree that theory-building exercises need to approach organizations both from the point of view of the organization (e.g resource-based

view, dynamic capabilities), as well as from a contextual point of view (e.g. contingency theory, institutional theory). Hence, this dissertation followed an approach that combined both perspectives. Specifically, we present the resources and (dynamic) capabilities that aid small businesses to implement their proactive objectives towards the natural environment in their specific institutional and business environmental setting.

It is important to view the natural environment as a specific influencing factor on strategy. The natural environment confronts organizations with particular challenges that can be summarized in three dimensions: market failures, social issues and paradigm shifts.

- 1. Firstly, the natural environment induces *market failures*: the costs that are born by those that voluntarily engage in efforts to reduce their impact on the environment result in benefits that third parties can enjoy for free, without having to bear the costs of enjoying them. As a result, firms with proactive environmental strategies may have competitive disadvantages.
- 2. Second, the natural environment also results in *social issues*. As a consequence of the market failures, third parties can also experience costs or disadvantages because of an organization's activities. Organizations can therefore encounter social resistance as a result of such negative effects, but may also be rewarded in the event they display sensitivity to these social demands.
- 3. Thirdly, the natural environment and its relation with businesses is currently undergoing a *paradigmatic debate*. Whereas organizational activities have been based on a worldview that sees the natural environment as a source of resources and a sink for waste external to the organization, this model is being questioned today. An alternative approach, based on the assumption that healthy businesses are only possible in a healthy natural environment, places organizations *within* the natural environment and gives businesses the responsibility to voluntarily care for the natural environment. Such a debate induces new questions for business and, hence, new strategic challenges.

Businesses can respond in multiple ways to these challenges. Where one possibility would be to respond *reactively*, and to only take the natural environment into account as far as this would be required legally, the focus of this dissertation was on those firms that were *proactively* taking the natural environment into account in their activities. Throughout this dissertation, we used the following definition of PES as a beacon:

A proactive environmental strategy is the continuous process of resource building, selection and deployment for value creation and distribution, by navigating through and interacting with the structural and social conditions that influence their value, with the purpose to prevent negative effects, or create positive impacts on the natural environment, beyond what is legally required or accepted as standard practice.

After this conceptual delineation in chapter 2, chapter 3 synthesizes the current state-of-the-art of the PES literature around the antecedents and consequences of PES. In this process, four influencing factors emerged: internal motivators, external motivators, internal facilitators and external facilitators. While the motivating factors provide the impetus to proactive environmental strategies, the facilitators acted as reinforcing of inhibiting factors for their implementation or in realizing improved environmental and financial performance.

- 1. Internal motivators. The likelihood of finding PES in firms is higher when there is a sense of moral responsibility towards the natural environment in the firm, when there are opportunities from a competitiveness point of view, or when the firm wants to maintain its legitimacy in society.
- 2. External motivators. PES are also more likely to be found when the institutional context pushes firms towards more voluntary attention to the natural environment. However, whereas some sources find that this institutional context is absolutely necessary, others find the opposite.
- 3. Internal facilitators. The big constant in the literature is the finding that the larger the firm, the higher the likelihood of finding a PES. In addition, the availability of slack resources, often associated with larger organizational size, also has a positive effect. Other than that, a general strategic proactivity or international experience also play a role. Furthermore, the same factors also seem to impact the likelihood that a PES results in higher performance in economic and environmental terms. Theoretical closure is difficult, however, since for most general findings contradictory evidence can to be found.
- 4. External facilitators. Finally, the likelihood that an organization has a PES diminishes with lower munificence, and higher complexity and uncertainty of the business environment. On the other hand, these same circumstances are predicted to have a positive effect on the impact of PES on financial and economic performance.

In summary, the PES literature provides a similar conclusion as was promoted in the general strategy literature: in order to explain PES, it is necessary to simultaneously take the interaction between different motivators and facilitators into account. In order to contribute to

such a further refinement, this dissertation presents three studies that aim to uncover the interactions between the aforementioned factors in the specific context of small businesses, and which address the three research questions as mentioned above.

What is the impact of firm size on the adoption of PES in smaller firms?

One inconsistency that emerged from the literature review in chapter 3 was the impact of firm size on PES. While large studies consistently find a positive correlation between firm size and PES, a growing number of anecdotal and case studies contradict that relationship. We therefore further explored the relationship between firm size and the ability and willingness of small firm size to realize PES. De most important findings of this dissertation in this perspective can be summarized in three points:

- 1. Small businesses are not principally against having a responsibility towards social issues. Rather, small firms simply do not recognize many social issues as a result of their limited visibility and (perceived) impact on the natural and social environment. Hence, small firms pay attention mostly to their internal stakeholders (employees) and the opinions of peers, and less to external stakeholders and the natural environment.
- 2. Besides limited recognition, it became clear that it is especially the *implementation* of proactive social and environmental strategies that is difficult for many small firms. For most small firms, proactive environmental strategies remain good intentions as a result of a lack of time, knowledge, financial resources and power. Some firms nevertheless seem to succeed, especially when firms possess the capabilities that can reduce these constraints (see research question 2)
- 3. Small businesses, more than large firms, depend upon their environment to implement realize PES. A culture of shared responsibility, and an institutional and business environment that supports PES seems to be particularly important in this perspective. The findings in this dissertation show, however, that small firms can employ certain dynamic capabilities to also influence their immediate environment (see research question 2 about how this was possible).

What are the resources and capabilities associated with successful PES execution in small businesses?

The empirical research in this dissertation is an embedded in-depth case study research that was done among eight firms in the Belgian ornamental horticulture. An extensive methodological and contextual justification of this empirical study in chapter 5 demonstrated that firms that are member of VMS (Vlaams Milieuplan Sierteelt – Flemish Environmental Plan Ornamental Horticulture) have the intention to realize a PES despite a general lack of internal and external resources and institutional support. By comparing firms with high and low VMS scores, which signal whether a firm was capable of realizing its proactive environmental intentions or not, chapter 6 demonstrates that a successful realization of the firm's environmental intentions depended on the ability of the firm to create a microenvironment for the firm that mimicked the theoretical conditions favouring PES. More specifically, we identified "munification" and "organicity" as the two interacting and composite dynamic capabilities that enabled the firm to change its internal and external resource base.

- 1. Munification was a composite dynamic capability with three constitutive elements: (1) the building and attracting of networks rich with existing complementary resources and capabilities; (2) collaborating for the joint development of lacking external resource and institutional capital; and (3) the institutional agency to create an institutionally enabling context.
- 2. Organicity consisted of (1) bootstrapping (the ability to find and create pockets of resources in the organization), (2) focused adaptability (the ability to flexibly integrate emerging solutions to persistently realize set objectives) and (3) disciplined scrutiny (the ability to critically collect and assess internal and external information), together increasing the internal resource capital in the firm.

In addition, we also found that both dynamic capabilities interacted with each other and further reinforced the potential of the firm to realize its objectives. The presence of organicity increased the effectiveness of munification in the firm, while the external resource conditions further increased the effectiveness of organicity in building internal resource capital.

How can small business be successful in PES when the (institutional) conditions are against having one?

Given that organicity and munification helped the firm to realize its proactive environmental intentions when not only the institutional but all conditions were set against having one, chapter 6 helped to explain the third research question as well. Yet one striking observation in chapter 6 was that the firm's PES went against institutionalized practices and prescriptions in their industry. Whereas PES are generally seen as an act of conforming to institutional pressures, the dominant institutional pressures in our study were strongly discouraging PES. As a result, achieving high VMS scores reflected an act of institutional non-conformity. Since current explanations in institutional theory offer contradictory explanations about how institutional non-conformity was possible in the small firms of our study, we therefore further explored how the capabilities as identified in chapter 6 helped to explain institutional non-conformity in small business contexts. As such, chapter 7 took an institutional theoretical lens to zoom in on how small businesses can be successful in PES when the institutional conditions were against having one. In this process, three factors predicted successful institutional non-conformity:

- Firstly, the successful firms' particular network characteristics lowered their embeddness in the organizational field. By assuming multiple roles within the organizational field and by being exposed alternative institutional logics they were able to detach from institutionalized prescriptions in the Belgian ornamental horticulture sector.
- 2. Second, whereas successful firms theorized the institutional non-conformity as an envisioned future, the unsuccessful firms saw the institutional non-conformity as an inevitable future or a potential trend. Importantly, the cognitive approach of the institutional non-conformity as a desired future resulted in flexibility to adopt alternative solutions to persistently realize their aspirations.
- 3. Third, the successful firms seemed "immune" to the negative effects other firms would experience with institutional non-conformity. By drawing upon a business model that was not only deviating with regards to the PES, but was non-conforming in different perspectives and in a way that was conducive to realizing a PES, they became insensitive to the uncertainty and legitimacy risks that other firms perceived.

In conclusion

Whereas most reports to date either describe how proactive environmental strategies can yield benefits to small firms, or in contrast how the small scale of small firms inhibits proactive environmental strategies among firms, this dissertation brings a more nuanced story. Proactive environmental strategies are not easy for most small firms, but not impossible. The contribution of this dissertation lies in the description of how this process is manifested. In addition, the process was described in a context were none of the environmental conditions yielded a direct benefit for firms with PES. Given that many firms are in such a situation, or perceive they are, we hope that our insights can inspire other firms to also reduce their environmental impact.

Samenvatting

Dit proefschrift wil een bijdrage leveren tot een beter begrip van proactieve milieustrategieën bij kleine bedrijven. Specifiek peilt het naar antwoorden op de overkoepelende onderzoeksvraag: "Hoe kunnen kleine bedrijven een proactieve milieustrategie uitvoeren?" Daarbij hebben proactieve milieustrategieën als doel de negatieve impact van bedrijfsactiviteiten op het milieu te minimaliseren en positieve effecten erop te maximaliseren, en bovendien op een manier die voorbij gaat aan wettelijke verplichtingen of aanvaarde standaardpraktijken. Het proefschrift situeert zich daarmee in de theoretische discipline "strategie", en de context voor het onderzoek is enerzijds "milieu" en anderzijds "de kleine onderneming". Een dergelijke specifieke benadering van proactieve milieustrategieën op kleine bedrijven is niet alleen opportuun, maar ook noodzakelijk. Hoewel de cumulatieve impact van kleine bedrijven op het milieu groter geschat wordt dan die van grote bedrijven, is het onderzoek over proactieve milieustrategieën tot op heden voornamelijk gericht op grote bedrijven. Bovendien bezitten kleine bedrijven een aantal kenmerken die hen fundamenteel doen verschillen van grote bedrijven. Dit proefschrift heeft daarom als doelstelling tegemoet te komen aan drie vragen die uit een overzicht van de relatief recente literatuur over milieustrategieën bij bedrijven nog onbeantwoord bleven:

- 1. Wat is de impact van de kleine bedrijfsschaal op proactieve milieustrategieën bij kleine bedrijven?
- 2. Welke zijn de hulpbronnen en bedrijfsvaardigheden die kleine bedrijven helpen om proactieve milieustrategieën te realiseren?
- 3. Hoe kunnen kleine bedrijven proactieve milieustrategieën realiseren wanneer de institutionele context hen daarin beperkt?

Om deze onderzoeksvragen te duiden en er antwoorden voor aan te reiken, werd er in dit proefschrift enerzijds gewerkt aan de hand van literatuurstudies en anderzijds aan de hand van empirisch onderzoek. Vooraleer over te gaan tot een samenvatting van de bijdragen van het proefschrift aan elk van deze onderzoeksvragen volgt eerst een samenvatting van de belangrijkste uitgangspunten waarop het onderzoek gebaseerd was.

Conceptuele afbakening van het onderzoek

De discipline van "strategie" bestudeert de performantie van een bedrijf als gevolg van de complexe interactie tussen de externe omgeving van een onderneming enerzijds en de interne mogelijkheden om daar mee te interageren anderzijds. Hoewel er in de sociale

wetenschappen nog steeds een debat wordt gevoerd over of het nu de organisatie zelf of de omgeving is die de uiteindelijke performantie van een bedrijf bepaalt, lijken verschillende theoretici het er over eens dat een benadering die zowel vertrekt vanuit het standpunt van de onderneming (bv. resource-based view, dynamic capabilities) als vanuit het standpunt van de interactie met de omgeving (bv. contingency theory, institutional theory) noodzakelijk is om zinvolle theoretische inzichten over strategie te construeren. In dit proefschrift volgen we daarom een benadering waarin beide perspectieven gevolgd worden. Specifiek beschrijven we de hulpbronnen en bedrijfsvaardigheden die kleine bedrijven kunnen helpen om hun proactieve doelstellingen ten aanzien van het milieu in hun specifieke institutionele en bedrijfscontext te realiseren.

Het is belangrijk om het milieu als een specifieke beïnvloedende factor op strategie te onderzoeken. Het milieu stelt ondernemingen immers voor specifieke uitdagingen die kunnen samengevat worden onder drie noemers: marktfalingen, sociale kwesties, en paradigmaverschuivingen.

- 1. Ten eerste geeft het milieu aanleiding tot *marktfalingen*: de kosten die gedragen worden door de vrijwillige inspanningen van proactieve bedrijven om het milieu te verbeteren, resulteren in voordelen die derden gratis kunnen genieten zonder daarvoor de eventuele kosten te moeten dragen. Bedrijven met een proactieve milieustrategie kunnen daardoor concurrentienadelen ondervinden.
- 2. Ten tweede is het milieu ook een sociale kwestie voor bedrijven. Door de marktfalingen kunnen derden ten gevolge van bedrijfsactiviteiten kosten of milieunadelen ondervinden. Bedrijven kunnen daarom sociale weerstand ondervinden ten gevolge van negatieve effecten, maar kunnen ook beloond worden indien ze gevoelig zijn voor deze sociale wensen.
- 3. Ten derde woedt er omwille van deze sociale kwesties een *paradigmatisch debat* over hoe ondernemingen zich moeten verhouden ten aanzien van de natuur. Waar tot op heden bedrijfsactiviteiten gestoeld zijn op de veronderstelling dat bedrijven naast de natuurlijke omgeving staan en ervan gebruik kunnen maken als bron voor hulpbronnen en opvangcapaciteit voor afval, wordt dit model in vraag gesteld. Een alternatieve benadering, gebaseerd op de veronderstelling dat gezonde ondernemingen slechts mogelijk zijn in een gezond milieu, plaatst bedrijven binnen het milieu en legt een

verantwoordelijkheid bij bedrijven om er vrijwillig mee zorg voor te dragen. Een dergelijk debat roept nieuwe vragen op voor ondernemingen en dus nieuwe strategische uitdagingen.

Ondernemingen kunnen op verschillende manieren reageren op deze uitdagingen. Daar waar één mogelijkheid zou zijn om zich *reactief* op te stellen en enkel het milieu in rekening te nemen voor zover wettelijk noodzakelijk, lag de focus van dit proefschrift bij bedrijven die in hun bedrijfsactiviteiten *proactief* rekening houden met het milieu op een manier die voorbij gaat aan wettelijke verplichtingen of aanvaarde standaardpraktijken. Doorheen het proefschrift werd daarom de volgende definitie als baken gehanteerd:

Een proactieve milieustrategie is het continue proces van het ontwikkelen, selecteren en gebruiken van hulpbronnen om waarde te creëren en te verdelen, door te interageren met en te navigeren doorheen de structurele en sociale voorwaarden die de waarde van deze hulpbronnen beïnvloeden, met als doelstelling om negatieve effecten op het milieu te voorkomen en positieve effecten op het milieu te creëren, op een manier die voorbij gaat aan de wettelijke verplichtingen of aanvaarde standaarden.

Na deze conceptuele afbakening in hoofdstuk 2, volgde in hoofdstuk 3 een overzicht van de bestaande literatuur over proactieve milieustrategieën. Bij het in kaart brengen van deze literatuur was de aandacht vooral gericht op de *antecedenten* en de *gevolgen* van proactieve milieustrategieën. Daarbij kwamen de volgende beïnvloedende factoren naar boven: interne motivatoren, externe motivatoren, interne facilitatoren en externe facilitatoren. De motivatoren geven de impuls tot proactieve milieustrategieën, terwijl de facilitatoren werken als versterkende of verzwakkende factoren bij het realiseren ervan of het resulteren in financiële of milieuresultaten.

- 1. Interne motivatoren. De kans om proactieve milieustrategieën terug te vinden bij bedrijven is groter wanneer er een morele verantwoordelijkheid ten aanzien van het milieu is, er kansen gezien worden vanuit concurrentiestandpunt of wanneer het bedrijf haar legitimiteit in de maatschappij wil behouden.
- 2. Externe motivatoren. Proactieve milieustrategieën worden ook vaker teruggevonden wanneer de institutionele context bedrijven in de richting van meer vrijwillige aandacht voor het milieu duwt. Waar sommige bronnen vinden dat die context hoogst noodzakelijk is, vinden andere dan weer het tegendeel.
- 3. *Interne facilitatoren*. De grote constante in de literatuur is de bevinding dat hoe groter het bedrijf is, hoe groter de kans dat er een proactieve milieustrategie is. Ook de

beschikbaarheid van overtollige hulpbronnen, vaak geassocieerd met schaalgrootte, heeft een positief effect. Daarnaast hebben een algemeen proactieve bedrijfsstrategie en de internationale ervaring een rol. Dezelfde factoren blijken ook een impact te hebben op de kans dat een proactieve milieustrategie tot hogere performantie op economisch en milieuvlak leidt. Voor de meeste bevindingen lijken er toch ook hier weer tegenstrijdige voorbeelden te bestaan, waardoor er nog geen sluitende voorspellingen kunnen gemaakt worden.

4. Externe facilitatoren. Tenslotte neemt de kans dat een bedrijf een proactieve milieustrategie heeft toe naarmate de algemene bedrijfsomgeving meer vrijgevig is met ondersteuning en hulpbronnen, ze minder onzeker is en ze minder complex is. De kans dat proactieve milieustrategieën vervolgens in hogere economische performantie resulteren is echter omgekeerd. Hoe lager de vrijgevigheid en hoe groter de onzekerheid en complexiteit van de omgeving, hoe groter de kans dat een bedrijf haar proactieve milieustrategie in betere performantie kan laten resulteren.

Over het algemeen lijkt de literatuur over proactieve milieustrategieën aan te sturen op een gelijkaardige conclusie als in de algemene strategische literatuur: om proactieve milieustrategieën te verklaren is het noodzakelijk om de interactie tussen de verschillende motivatoren en facilitatoren tegelijk in ogenschouw te nemen. Om aan een dergelijke verfijning een bijdrage te leveren, voerde dit proefschrift 3 studies uit die de interactie tussen bovenstaande factoren in de specifieke context van kleine bedrijven tracht bloot te leggen en een antwoord probeert te bieden aan drie voornoemde onderzoeksvragen.

Wat is de impact van de kleine bedrijfsschaal op proactieve milieustrategieën bij kleine bedrijven?

Eén inconsistentie die uit de literatuur naar boven kwam was de impact van bedrijfsschaal op proactieve milieustrategieën. Terwijl grootschalige studies steevast een positieve correlatie terugvinden tussen bedrijfsgrootte en de kans dat een bedrijf een proactieve milieustrategie heeft, lijkt een groeiend aantal casestudies en anecdotes die relatie tegen te spreken. In hoofdstuk 4 gingen we daarom dieper in op de specifieke relatie tussen bedrijfsschaal en de mate waarin kleine bedrijven proactieve milieustrategieën willen en kunnen realiseren. De belangrijkste bevindingen kunnen samengevat worden in 3 punten:

1. Kleine bedrijven staan principieel niet weigerachtig tegenover hun verantwoordelijkheid ten opzichte van maatschappelijke kwesties. De beperkte

- zichtbaarheid en impact van kleine bedrijven zorgt er echter voor dat vele kwesties simpelweg niet herkend worden. Bijgevolg wordt er meest aandacht geschonken aan de interne stakeholders (werknemers) en de meningen van collega's en minder aan externe stakeholders en het milieu.
- 2. Naast het beperkte herkennen van kwesties is het vooral duidelijk dat het *uitvoeren* van proactieve sociale en milieustrategieën voor vele kleine bedrijven moeilijk is. Bij de meeste kleine bedrijven blijven proactieve milieustrategieën bij goede intenties omwille van een pertinent gebrek aan tijd, kennis, financiële middelen en macht. Toch lijken sommige bedrijven er in te slagen, vooral wanneer het bedrijf over bedrijfsvaardigheden beschikt die de beperkingen verminderen (zie onderzoeksvraag 2).
- 3. Kleine bedrijven zijn meer dan grote bedrijven afhankelijk van de omgeving om hun proactieve milieustrategieën uit te voeren. Een cultuur van gedeelde verantwoordelijkheid, en algemeen een institutionele en bedrijfsomgeving die ondersteunend werkt zijn hierbij van groot belang. Langs de andere kant toont het empirische onderzoek in dit proefschrift aan dat kleine bedrijven zelf die ondersteuning en bedrijfsomgeving in de hand hebben (zie ook hier bij onderzoeksvraag 2 op welke manier dit mogelijk was).

Welke zijn de hulpbronnen en bedrijfsvaardigheden die kleine bedrijven helpen om proactieve milieustrategieën te realiseren?

Het empirische onderzoek van dit proefschrift is een ingebed diepte-onderzoek door middel van case-studies dat werd uitgevoerd bij acht bedrijven in de Belgische sierteelt. De methodologische en contextuele verantwoording van deze empirische studie in hoofdstuk 5 toont aan dat sierteeltbedrijven die lid zijn van het Vlaams Milieuplan Sierteelt (VMS) proactieve milieu-intenties willen realiseren ondanks het feit dat de algemene bedrijfsvoorwaarden en de institutionele en marktomgeving dit eerder tegenwerken dan ondersteunen. Aan de hand van een vergelijking van bedrijven met hoge en lage VMS scores, dewelke aangeven of een bedrijf in staat was om haar intenties te realizeren of niet, beschrijft hoofdstuk 6 dat de succesvolle VMS bedrijven een micro-omgeving voor hun bedrijf gecreëerd hadden waarin de theoretische motivatoren en facilitatoren om proactieve milieustrategieën te realizeren desalniettemin aanwezig waren. Bovendien konden we op basis van een diepgaande analyse "munificatie" en "organiciteit" als twee "dynamic capabilities"

identificeren die hen in staat hadden gesteld om de interne en externe omgeving aan hun eigen noden aan te passen.

- 1. Munificatie is een drieledige bedrijfsvaardigheid, bestaande uit (1) het bouwen van netwerken waaruit complementaire bestaande hulpbronnen en bedrijfsvaardigheden konden gehaald worden, (2) samenwerken voor de gemeenschappelijke ontwikkeling van ontbrekende ondersteunende hulpbronnen, bedrijfsvaardigheden en instituties, en (3) institutionele "agency" gericht op het bijsturen van de institutionele context.
- 2. Organiciteit is eveneens een drieledige bedrijfsvaardigheid, bestaande uit (1) bootstrapping (de mogelijkheid om hulpbronnen aan te spreken en te creëren waar anderen dit onmogelijk achten), (2) gerichte aanpasbaarheid (het flexibel opnemen van oplossingen die zich aandienen in de omgeving om gericht het bedrijfsdoel te realiseren), en (3) gedisciplineerde beoordeling (de vaardigheid om op een nauwgezette manier interne en externe informatie te beschouwen en te beoordelen).

Naast het individuele belang van deze dynamic capabilities in het realiseren van een voordelige micro-omgeving voor het realizeren van proactieve milieustrategieën, zorgde de interactie ertussen ook voor een versterkend effect. Enerzijds versterkte organiciteit de mogelijkheden van een bedrijf om munificatie om te zetten in een externe ondersteunende omgeving. Een bedrijf dat meer tijd en hulpbronnen heeft en deze op een kritische en flexibele manier inzet om mogelijkheden te vinden tot netwerken, samenwerken en institutionele agency, zal gemakkelijker externe bedrijfsvaardigheden kunnen creëren. Anderzijds zal een bedrijf dat meer hulpbronnen en ondersteuning uit de omgeving kan aanspreken haar organiciteit beter kunnen doen resulteren in het opbouwen van interne hulpbronnen en bedrijfsvaardigheden.

Hoe kunnen kleine bedrijven proactieve milieustrategieën realiseren wanneer de institutionele context hen daarin beperkt?

De analyses uit hoofdstuk 6 gaven al aan welke de bedrijfsvaardigheden zijn die een bedrijf helpen om een proactieve milieustrategie te realiseren wanneer de (institutionele) context hen daarin beperkt. Noch de markt, noch de vakorganisaties, noch wettelijke bepalingen zorgden voor een stimulerende omgeving die hoge VMS scores faciliteerde. Organiciteit en munificatie vormen dus ook het antwoord op deze derde onderzoeksvraag.

Tijdens het iteratief proces van data-analyse en het vergelijken met bestaande literatuur werd het echter duidelijk dat onze bevindingen ingingen tegen gangbare literatuur, waar proactieve milieustrategieën meestal voorgesteld worden als een tegemoetkoming ten aanzien van institutionele verwachtingen. In ons onderzoek waren proactieve milieustrategieën echter eerder een institutionele non-conformiteit. In de literatuur vonden we echter geen sluitende verklaringen over hoe het proces van institutionele non-conformiteit loopt bij kleine bedrijven. Om een bijdrage te leveren aan de theorievorming rond institutionele non-conformiteit onderwierpen we in hoofdstuk 7 de resultaten van hoofdstuk 6 aan een verdere analyse vanuit institutioneel theoretisch standpunt. Daarbij kwamen drie factoren naar voor die tot succesvolle institutionele non-conformiteit leidden:

- 1. Ten eerste had de specifieke manier waarop het bedrijf door haar netwerk interageerde met het organizatieveld een impact op de inbedding van het bedrijf in dat organizatieveld. Door meerdere rollen op te nemen in het organizatieveld en door blootgesteld te zijn aan alternatieve institutionele logica's waren de succesvolle bedrijven in staat om zich los te koppelen (en dus hun inbedding te verkleinen) van geïnstitutionaliseerde voorschriften in de Belgische sierteelt.
- 2. Ten tweede was er een verschil in de manier waarop de succesvolle en onsuccesvolle bedrijven de institutionele non-conformiteit (proactief de impact op het milieu verminderen) cognitief benaderden. Daar waar de succesvolle bedrijven de institutionele non-conformiteit benaderden als een gewenste toekomst, zagen de onsuccessvolle bedrijven VMS eerder als deel van een onontkoombare toekomst of een potentiele trend. De cognitieve benadering van de institutionele non-conformiteit als deel van een gewenste toekomst resulteerde bij de succesvolle bedrijven in de flexibiliteit om alternatieve oplossingen te internalizeren en zo volhardend hun doelen te realiseren.
- 3. Tenslotte leken de succesvolle bedrijven "immuun" tegen de negatieve effecten die andere bedrijven zouden ervaren in het geval van institutionele non-conformiteit. Door terug te vallen op een business model dat enerzijds niet alleen non-conventioneel was op het milieuvlak, maar ook op andere deelgebieden, maar anderzijds ondersteunend was aan een proactieve milieustrategie werden ze ongevoelig voor de onzekerheid en de legitimiteitsrisico's die andere bedrijven ondervonden.

Tot slot

Waar de meeste rapporten tot op heden ofwel beschreven hoe proactieve milieustrategieën voordelen konden opleveren voor kleine bedrijven, ofwel hoe de kleine bedrijfsschaal proactieve milieustrategieën bij kleine bedrijven onmogelijk maakte, brengt dit proefschrift een meer genuanceerd verhaal. Proactieve milieustrategieën zijn voor de meeste kleine bedrijven niet gemakkelijk, maar wél haalbaar. De bijdrage van dit proefschrift ligt in de beschrijving van hoe dit proces in zijn werk kan gaan. Bovendien werd het proces beschreven in een context waar de omgevingsvariabelen op geen enkele manier een direct voordeel voor proactieve milieustrategieën opleveren. Aangezien de meeste bedrijven zich in een dergelijke situatie bevinden of lijken te bevinden, hopen we daarom dat onze inzichten andere bedrijven zullen inspireren om ook hun milieu-impact te optimaliseren.

List of publications and conference presentations based on this dissertation

Papers published in refereed journals

- Lepoutre, J. and Heene, A. 2006. "Investigating the Impact of Firm Size on Small Business Social Responsibility: A Critical Review". Journal of Business Ethics, 67(3): 257 – 273

Working Papers

- Lepoutre, J. and Heene, A. 2006. "Investigating the Impact of Firm Size on Small Business Social Responsibility: A Critical Review". Working Paper, Faculteit Economie en Bedrijfskunde, Universiteit Gent 06/396: 1-43
- Lepoutre. J. and Valente, M. 2008. "Fools Breaking Out: Explaining Successful Small Business Institutional Non-Conformity". Working Paper, Faculteit Economie en Bedrijfskunde, Universiteit Gent 08/X: 1-58

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- Lepoutre. J. and Valente, M. 2007. "Overcoming Calimero Complexes in Small Business Social Responsibility". Proceedings of the conference of the International Association for Business in Society, May 31-June 3, 2007, Florence, Italy
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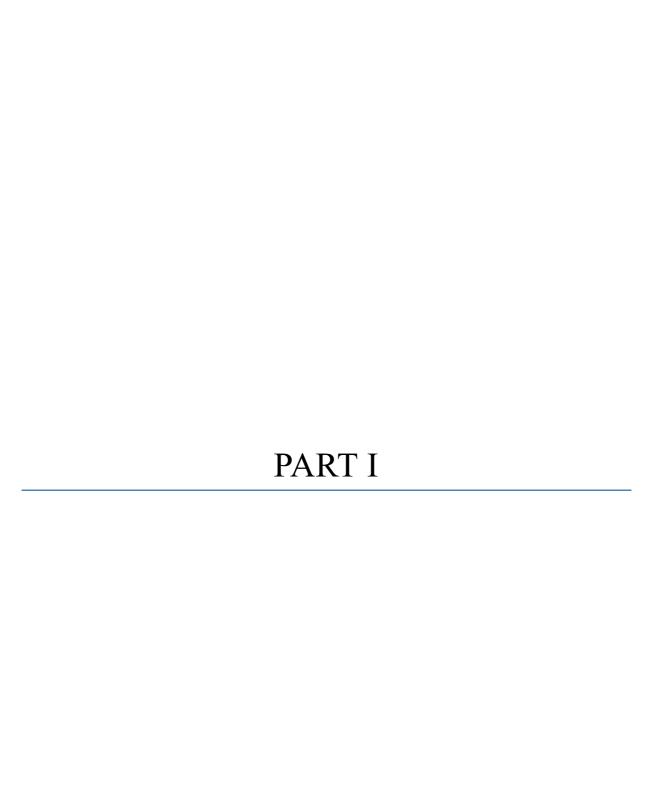
International conference and seminar presentations (not included above)

- Lepoutre. J. and Valente, M. 2008. "Fools Breaking Out: Explaining Successful Small Business Institutional Non-Conformity". Accepted for presentation at the conference of the Academy of Management, Anaheim, CA, 8-13 Augustus 2008
- Lepoutre, J. 2007. "The role of discretionary slack in effectively executing proactive environmental strategies in small business". Paper presented at RENT XXI Research in Small Business and Entrepreneurship, November 22-23, 2007, Cardiff, UK
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Chapter 1

General Introduction

1. General Introduction

1.1. Aims and scope

Since the beginning of the industrial revolution, the impact of business on the natural environment has been the object of growing debate. Despite the beneficial impacts industrial activity has yielded in terms of economic growth, employment, innovation and many other domains, industrial progress has induced a number of effects that have also endangered the carrying capacity of ecosystems and the vitality and health of biological – including human – life (WCED, 1987; Perman, Ma, McGilvray, & Common, 2003; Worldwatch Institute, 2003; World Resources Institute, 2005). Through a wide variety of consumption patterns and production emissions, these effects have been manifested as both local air or water pollution, biodiversity losses, soil degradation, waste accumulation, as well as global scale effects of climate change, desertification, flooding and resource depletion, among others. Besides the questions that *environmentalist* movements raised on the morality of such human and organizational impact on the natural environment and the losses of intrinsic value embedded in it, a number of *economists* have argued that these effects are also depleting the very resources our economies are dependent upon (Costanza et al., 1997; Common & Stagl, 2005; World Resources Institute, 2005; Stern, 2007).

Throughout the last century, both economists and sociologists have produced explanations that inform why firms have not responded *en masse* by voluntarily engaging in processes that curb the negative byproducts of their activities. While economists argue that internalizing environmental effects may put firms in a competitively disadvantageous position due to additional costs that other, less caring, firms do not have (Pigou, 1920; Coase, 1960; Hardin, 1968), sociologists argue that the voluntary adoption of environmental effects conflicts with the progressionist thinking and anthropocentric paradigm that has characterized Western societies since the Enlightenment (Gladwin, Kennely, & Krause, 1995; Purser, Park, & Montuori, 1995; Hoffman & Ventresca, 1999). In other words, firms that adopt proactive environmental strategies – going beyond legal expectations in taking the effects of their activities on the natural environment into account – will experience difficulties of both economic and social nature. As a result, such proactive environmental strategies have remained the exception rather than the rule.

Given these substantial hurdles associated with proactive environmental strategies, a large portion of the scholarly "organizations and the natural environment" conversation has been dedicated to investigating the impact of social and environmental strategies on economic

performance. Despite some theoretical arguments that there are many positive effects related to such strategies (Shrivastava, 1995a; Porter & van der Linde, 1995b), reviews on the empirical link between proactive environmental strategies (PES) and financial performance have found positive, negative and inconclusive results (Griffin & Mahon, 1997; Wagner, Schaltegger, & Wehrmeyer, 2001; Orlitzky, Schmidt, & Rynes, 2003; Gonzalez-Benito & Gonzalez-Benito, 2005c). A number of scholars have therefore introduced mediating and moderating variables that further refine the relationship between proactive environmental strategies and economic performance. For example, contributions in the tradition of the resource-based view of the firm have empirically proven that certain organizational capabilities and resources will aid in making a proactive environmental strategy a profitable endeavor (Hart, 1995; Sharma & Vredenburg, 1998; Marcus & Geffen, 1998; Judge & Douglas, 1998; Sharma, 2000; Christmann, 2000; Chan, 2005; Bansal, 2005). Other studies have taken a more contextual perspective and have demonstrated how the firm's institutional (Hoffman, 1999; Bansal, 2005; Clemens & Douglas, 2005) and external resource environment characteristics (Russo & Fouts, 1997; Aragon-Correa & Sharma, 2003) influence a firm's willingness and ability to engage in PES. Taken together, these studies uncover that successful implementation of PES will involve a complex interplay of internal and external resource processes, as well as institutional influences.

Despite the interesting findings this literature has thus provided, it has tended to focus on larger enterprises only. However, as small and medium-sized businesses easily surpass larger businesses in demographic terms, economic value added and employment (Observatory of European SMEs, 2003), their inclusion in the quest for a sustainable natural environment is paramount. Although no exact figures seem to exist, the cumulative impact of smaller firms on the natural environment is estimated to be bigger than the cumulative impact of larger firms (Hillary, 2000a). This makes the lack of specific research on smaller firms all the more perplexing. In addition, several empirical phenomena indicate that an inquiry into the specifics of small business environmental strategy is needed. First, empirical studies on proactive environmental strategies have mostly found a positive relation between firm size and the extent to which firms adopt and successfully implement such strategies (Aragon-Correa, 1998; Judge & Douglas, 1998; Observatory of European SMEs, 2002; Chan, 2005; Bansal, 2005; Vives, 2006; Elsayed, 2006). Even if the same models apply in both small and large business contexts, such as recently found by Aragon-Correa and colleagues (2008), this empirical material invites a more detailed investigation into the reasons why they fail to be implemented among most small businesses. Second, the small business literature has

indicated before that large business models will not necessarily apply to smaller businesses (Dandridge, 1979; Welsh & White, 1981). A smaller firm size seems to impose specific constraints and challenges that restrain proactive environmental strategies. The research reviewed in this dissertation indicates that a lack of time, knowledge, (financial) resources and power are most commonly mentioned as barriers (Jenkins, 2004; Lepoutre & Heene, 2006; Elsayed, 2006). Yet despite these constraints, there is ample anecdotal evidence of some very innovative and proactive small ventures around the globe (UNIDO, 2002; European Commission, 2003c), which are championing proactive environmental strategies even compared to larger businesses. Through "environmental entrepreneurship", they have captured opportunities in environmental market failures, the exploitation of which alleviates the market failure and contributes to reducing the environmental degradation (Dean & McMullen, 2007). How small businesses overcome the constraints that discourage them to adopt PES and be successful in their implementation, however, is largely unexplored terrain and invites further research.

Given the dearth of theoretical development on small business proactive environmental strategies, this dissertation presents an empirical attempt to answering the question "how can small businesses successfully implement proactive environmental strategies?"

1.2. Structure of this thesis

To provide the reader with a roadmap on the research covered in this book, this paragraph foreshadows the remaining chapters. In total, this dissertation consists of seven chapters which are structured in four parts. Figure 1.1 provides a visual overview of how the eight chapters are interrelated.

In Part I, containing the current chapter, I introduce the general research question that has guided me throughout this dissertation and present the empirical context in which the research was executed.

Part II, consisting of chapters 2 and 3, provides a theoretical background for the research in this dissertation. To this purpose, chapter 2 introduces the reader to a theoretical delineation of each of the semantic building blocks of "proactive environmental strategy in small business". Next, the goal of chapter 3 is to develop specific research questions that are grounded in a state-of-the-art analysis of the general proactive environmental strategy literature. To this purpose, I first outline the methodology used in the review and then move to a thematic description of the antecedents and the consequences of PES that have been found

in the literature. Using my observations of remaining questions and research gaps, I then formulate three research questions:

RQ1: What is the impact of firm size on the adoption of PES in smaller firms?

RQ2: What are the resources and capabilities associated with successful PES execution in small businesses?

RQ3: How can small business be successful in PES when the conditions are against having one?

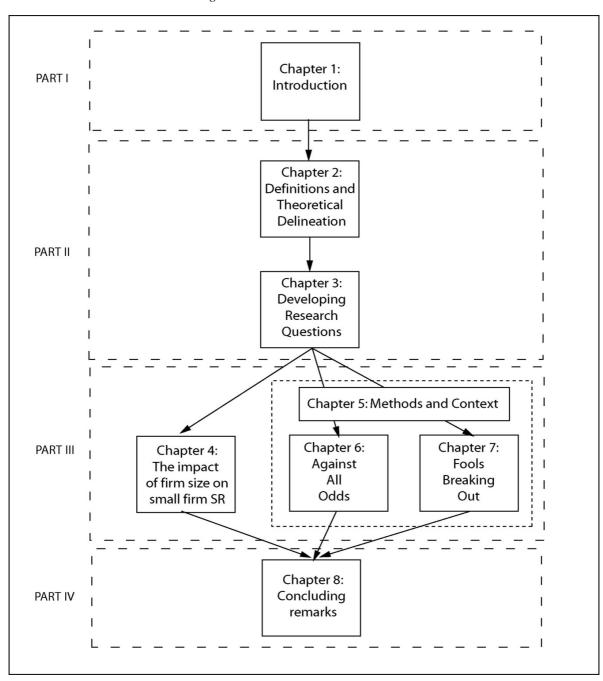


Figure 1.1 - Overview of this dissertation

Part III, consisting of chapters 4, 5, 6 and 7, represents the main body of this dissertation, as each chapter represents part of the exercise to provide answers to the aforementioned research questions. First, chapter 4 draws on an extensive literature review to explore the inconsistent empirical findings on the relationship between small firm size and the adoption of proactive environmental strategies. Given the scarce literature on small business proactive environmental strategies, the literature review is expanded to a broader, yet still limited, literature of social responsibility (including the natural environment) in small businesses. Using a generic framework of contextual influences on businesses, the literature is then reviewed in four parts: (1) issue characteristics, (2) personal characteristics, (3) organizational characteristics, and (4) context characteristics. The chapter concludes with the idea that the smaller size does incur a number of constraints that inhibit smaller firms to engage in social responsibility strategies, yet that a number of conditions can mitigate these constraints. In particular, our review hinted at the potential of capabilities within and across the boundaries of the firm to bring a more dynamic perspective of small business proactive environmental strategies.

Next, the cluster of chapters 5, 6 and 7 takes the reader to the Belgian ornamental horticulture industry, where the empirical data of this dissertation were collected. To this purpose, chapter 5 first presents an overview of the research design, and the procedures that were followed in collecting and analyzing the data. Subsequently, the particular research setting of the Belgian ornamental horticulture sector is provided as a contextual introduction to chapters 6 and 7, which report the actual findings of two empirical studies on the same data set.

Chapter 6 builds further on the suggestion of chapter 4 to look at the capabilities that facilitate small businesses to engage in proactive environmental strategies, despite conditions that make a successful implementation of these strategies run "against all odds". As such, it was designed to provide answers to research questions 2 and 3. After connecting the methodology as described in chapter 5 with the specific research question at hand, we describe munification and organicity as the two composite dynamic capabilities that explained the realization of PES in our firms. Subsequently, we discuss our findings and the implications for the resource-based perspectives that predict small size to be incompatible with PES.

Using the same empirical data, chapter 7 further explores an insight that emerged in chapter 6. Since all the firms in our sample had the intention to engage in proactive environmental strategies, they assumed a strategy that ran counter to the institutionalized

practices and expectation in their industry. Whereas proactive environmental strategies are generally perceived as conforming to institutional pressures, they were an act of non-conformity in the Belgian ornamental horticulture. Yet the current literature on institutional non-conformity is inconsistent in explaining how such processes can be possible in small businesses. After our explanation of this theoretical inconsistency and reiterating some methodological issues for the paper, we explore and discuss the underlying mechanisms that help to better understand how the successful institutional non-conformity came about in these firms. More specifically, our findings include (1) the interaction scope with the organizational field, (2) the cognitive approach towards institutional non-conformity, and (3) the organizational conduciveness to institutional non-conformity. Subsequently, we discuss the implications of our findings for institutional theory, the resource-based view of the firm and the organizations and the natural environment literature.

Finally, chapter 8, as the only chapter in part IV, presents the general conclusions of this dissertation. First, I discuss how the findings from part III contribute to answering the research questions as presented in chapter 3. Next, I discuss how the research design limits the extent to which our findings are transferrable to other contexts. In conclusion, I present some avenues for future research based on the new questions that this dissertation uncovered.



Chapter 2

Proactive Environmental Strategies in Small Businesses: Definitions and Theoretical Framing

"There is perhaps no process in organizations that is more demanding of human cognition than strategy formation. Every strategy-maker faces an impossible overload of information (much of it soft); as a result he can have no optimal process to follow

The researcher or management scientist who seeks to understand strategy formation is up against the same cognitive constraints, but with poorer access to the necessary information.

Thus he faces no easy task. But proceed he must, for the old prescriptions are not working and new ones are badly needed.

These will only grow out of a sophisticated understanding of the rich reality of strategy formation, and that will require an open mind, a recognition of how little we really know, and intensive, painstaking research."

(Henry Mintzberg)

2. Proactive Environmental Strategies in Small Business: Definitions and Theoretical Framing

2.1. Introduction

The surge of interest of business and strategy scholars in the natural environment followed the general growth of attention in sustainable development after the World Council for Economic Development published its famous report "Our Common Future" in 1987 (WCED, 1987). After decades of growing public debates on the negative social and environmental impacts of business, "Our Common Future" presented a landmark reflection and shift in thinking about business and society issues (Schmidheiny, 1992; Hart, 1995; Gladwin et al., 1995; Shrivastava, 1995b). First, the Council formulated a definition that has become the standard citation in almost every work that has been written on sustainable development since:

"Sustainable development is the development that meets the needs of the present without compromising the ability of future generation to meet their own needs." (WCED, 1987: 43)

Although this definition has been further scrutinized and debated (Gladwin et al., 1995), it made clear that if the world was to assume a guiding principle for the future, it should care for the prosperity of all people today (implying the eradication of hunger, poverty, illiteracy, etc), but also for generations to come (implying a care for nature and prudence on the use of resources). Second, "Our Common Future" was a moral call for a shared responsibility by everyone in society, including business. Although businesses were part of the problem, they were equally invited as partners in the process of finding a solution (Schmidheiny, 1992; Bilimoria, Cooperrider, Kaczmarski, Khalsa, Srivastva, & Upadhayaya, 1995). Yet, Brundtland and her colleagues also warned that such a shared responsibility would involve tough choices and trade-offs:

"In the end, sustainable development is not a fixed state of harmony, but rather a process of change in which the exploitation of resources, the direction of investments, the orientation of technical development, and institutional change are made consistent with future as well as present needs. We do not pretend that the process is easy or straightforward. Painful choices have to be made." (WCED, 1987: 15)

In order to tackle these changes, the Brundlandt report, as "Our Common Future" is often referred to, incited a number of new initiatives that brought businesses together to reflect on their impact on the environment. The World Business Council on Sustainable

Development, the UN Global Compact, the Caux Round Table and the Equator Principles are but some of the initiatives that have been taken in this perspective. In the academic world, several new journals (Journal of Cleaner Production, Business Strategy and the Environment, Journal of Industrial Ecology, Business & Society, Journal of Environmental Management, Organization & Environment, Business & Society, etc) and academic groups (the Social Issues in Management and the Organizations and the Natural Environment divisions in the Academy of Management, the Greening of Industry Network, etc) were founded or grew in membership, reflecting the specific new research that was deemed needed (Bansal & Gao, 2006; Etzion, 2007).

The existence of these institutions indicates that the business academics community considers the natural environment a legitimate separate stream of research. But why would this be the case? What is the difference between a proactive environmental strategy and any other strategy (e.g. innovation, growth, cost leadership, differentiation, or internationalization) that has been researched? In order to present an answer to this question, we will explore each of the semantic building blocks of "proactive environmental strategy in small businesses". In this overview, my goal is to delineate the conversation to which this dissertation wishes to contribute, and to present my understanding of the boundaries of the literature on proactive environmental strategies. I will do so by first presenting "strategy", as it has been defined in several streams of the literature. I will then continue by summarizing a number of arguments that justify a specific inquiry of the strategy domain into issues related to the natural environment. Next, I will discuss the different postures that the literature has identified with regards to environmental strategies. I conclude with a delineation of "small businesses" and highlight the most important characteristics that justify small businesses as a separate domain of research.

2.2. "Strategy"

The fundamental interest of strategic management research and theory is the question how a firm (or any other organization) achieves *sustained superior performance* (Powell, 2001). Over time, researchers in "Business Policy and Strategy", "Organization Theory" and the more fundamental sciences that feed into Business Administration research (economics, psychology, sociology and ecology) have formulated theories that provide different perspectives on the antecedents and consequences of strategy, the process moderators and mediators between the constructs involved and "sustained superior performance" (Agarwal & Hoetker, 2007). In addition, each of these constructs has been parameterized for theoretical

and empirical purposes in different ways, increasing the perspectives that exist in strategic management research. Mintzberg and Lampel find such eclecticism in the definitions of strategy welcoming and attribute it to the various attempts of strategy scholars to capture a part of the whole 'beast': "each of us, in trying to cope with the mysteries of the beast, grabs hold of some part or other", yet "much of this writing and advising has been decidedly dysfunctional, simply because managers have no choice but to cope with the entire beast." (1999: 21).

In order to cope with such diverse theories, a number of scholars have provided synthesizing meta-frameworks to make sense of the respective assumptions these theories rely on, what part of strategy they are focused on, and what their main conclusions are (Whittington, 1993; Mintzberg & Lampel, 1999; Hoskisson, Hitt, Wan, & Yiu, 1999). Whittington (1993) distinguished between four approaches to strategy, in which each approach was characterized by a different conception of the human potential to think rationally and act effectively. Whittington conceived the evolution of strategy approaches as one that moved from a 'homo economicus' planning perspective with success the result of internal decisions and visions, to a more systemic perspective that viewed strategy as an organic process that included interaction with the external social and market environment. Hoskisson et al. (1999) presented a classification of strategy theories along a set of 'swings of a pendulum' over time. In their view, theories have swung back and forth between a focus on the *internal* characteristics of the firm on the one hand (especially the resource-based view of the firm), and attention directed externally towards the industry and societal structures on the other (especially the industrial organization literature). In the middle, they position the 'organizational economics' literature, which has been more concerned with "devising appropriate governance mechanisms or contracts to help reduce transaction or agency costs" (Hoskisson et al., 1999: 444), the internal and external positions have been mostly interested with the performance of the firm. Mintzberg and Lampel (1999) distinguished ten 'schools' of strategy formation. Portrayed as a tree, they saw the roots as the basic disciplines (economics, psychology, sociology, anthropology, etc), and the stem ramifying into a branch of prescriptive schools on the one hand, and the descriptive schools on the other. The ten schools differed, among other things, in the way they occupied a position on two dimensions: (1) whether they viewed the external world as comprehensive and controllable versus unpredictable and confusing, and (2) whether they saw *internal* processes as rational versus natural.

Throughout these classifications, the internal versus external focus, and the ongoing quest to bridge them, is a recurring distinguishing feature between strategy theories. Following these common perspectives, I choose to present a short overview of the different perspectives on strategy using this internal vs. external dichotomy and the attempts to bridge both perspectives. In the following subsections, I briefly summarize the prevailing perspectives in each of these threads.

2.2.1. Outside-In Perspectives of Strategic Management

The Outside-In Perspectives of Strategic Management share a recurring focus on the external environment as the dominant factor in explaining sustained superior performance. They share the assumption that "the existing internal structure, strategy, and success of an organization is heavily influenced by the environmental forces in which it operates and with which it interacts and competes" (Jaffee, 2001: 209). As a result, outside-in perspectives are sometimes criticized for their overemphasis on the external environment in shaping and molding of organizations and their behaviors. It is interesting to observe that the constructs in these theories are often defined using a very aggressive language: "competitive advantage", "rivals", "power" or "pressure". The perspectives differ, however, in their interpretation of both the context and the content of sustained superior performance, reflecting the different assumptions on which they are founded. Rather than seeing this diversity in assumptions as a "battle of truths", the combination of perspectives offers a rich literature one can draw from to be informed about achieving particular states of excellence.

2.2.1.1. Industrial organization economics

In the "industrial organization economics" (I/O) literature, the performance of a firm follows a "structure-conduct-performance" logic (Mason, 1939; Bain, 1956; Porter, 1980; Porter, 1985). Essentially, the structural properties of the industry define what the appropriate conduct of the firm should be, and how this will result in firm performance. Michael Porter synthesized the structural properties of the industry in his "five forces model" (Porter, 1980; Porter, 2008). Depending on (1) the competitive rivalry in the market, (2) the bargaining power of suppliers and (3) the bargaining power of customers, (4) the threat of new entrants and (5) the threat of substitutes, firms must find a unique position in the market. Strategy is thus a choice: "the essence of strategy is in the activities – choosing to perform activities differently or to perform different activities than rivals" (Porter, 1996: 64). According to Porter, this choice generally has to be made between three generic strategies: cost leadership

(being the cheapest in the market as a result of structural cost advantages over competition), differentiation (creating superior value for customers) or focus strategy (cater to a specific segment in the market by offering a customized value proposition). These strategies determine the conduct the firm has to follow, in terms of price, advertising, capacity and quality decisions (Porter, 1981). In the I/O literature, strategy is thus essentially determined by the industry in which the firm operates, leaving the manager a set of options to choose from to respond to the challenges of the industry.

Although the influence of the industrial organization literature is enormous, Porter's view on the importance of industry in explaining organizational performance has not been without criticism. Whereas the importance of industry on organizational performance has been confirmed by Schmalensee (1985) and McGahan and Porter (1997), other studies by Rumelt (1991) and Roquebert et al. (1996) found that business specificities are more important than industry as explanatory factors of firm profitability. These studies have further spurred the debate on whether the perspective of the industrial organization literature was not too deterministic in its formulation (Bourgeois, 1984) and left an invitation for further research. Another critique on the industrial organization literature is in its normative conception of competitive advantage. In I/O, the source of competitive advantage can be found in the monopolistic, above normal returns that the firm is able to capture through its unique and protected product/market position (Mason, 1939). Interestingly, whereas the early I/O literature warned for the detrimental social welfare implications of monopolistic rents, the later literature turned this analysis around to a normative theory of organizational strategy in which above normal organizational rents could be achieved at the expense of social welfare, which was left out of the model (Barney, 1986; Barney, 1991). In other words, such a view implies that competitive advantage can only be achieved at the detriment of social welfare.

Taken together, the I/O literature has informed the strategy literature especially in the way strategists must analyze and deal with their external market environment. In this perspective, Porter has reaffirmed his belief that the role of strategy is to find, and maintain, an immaculate *position* relative to the structural forces in its industry: "a company can outperform rivals only if it can establish a difference that it can preserve." (Porter, 1996: 62).

2.2.1.2. Contingency Theory

Although it has been criticized for lacking clarity, ambiguous statements and essentially not conveying a theoretical message (Schoonhoven, 1981), the basic premise of contingency theory is one of the most prevailing and recurrent messages in strategic

management research. In contingency theory, organizational performance is a result of the proper alignment of internal organizational design in response to external context variables (Burns & Stalker, 1961; Lawrence & Lorsch, 1967; Thompson, 1967). The call for theoretical statements that take the impact of environmental contingencies into account is still present today (Oliver, 1997; Priem & Butler, 2001; Zahra, 2007; Tsui, 2007).

In its most condensed form, contingency theory states that there is no universal, one-size-fits-all, best way to manage. Rather a strategist must seek to "fit" the design of his organization and its subsystems with the environment in which it operates. In other words, the right *response* of the organization, in terms of design variables, culture, objectives, etc, to the particular state of the context in which the organization operates will yield superior performance. Determinants of the circumstances in which the firm operates include munificence (the abundance of resources in the environment that facilitate growth), dynamism (the turbulence and instability of the environment) and complexity (the number and variety of factors that influence the environment) (Dess & Beard, 1984). Depending on the variance of these influences, firms must maintain either mechanistic or organic organization types (Burns & Stalker, 1961), and formal or informal organizational structures (Lawrence & Lorsch, 1967).

Similar to most outside-in theories, however, contingency theory has a rather mechanistic and deterministic conception of management, which leaves little discretion to management to influence the external environment (Bourgeois, 1984). Nevertheless, the influence of contingency theory is still present today, given that it has "laid the groundwork for an approach to organizational theory that views organizations and their various subsystems as adaptive entities in relation to their environment." (Jaffee, 2001: 214). This perspective is even present in some of the inside-out perspectives, such as the dynamic capabilities perspective, which I will discuss below.

2.2.1.3. Resource Dependence Theory

Whereas the I/O literature focuses on the positioning of an organization relative to the structural forces in an industry, and Contingency Theory on the adaptation of the organization's internal structures to cope with the external context, the Resource Dependence Theory (RDT) is mainly interested in the management of the interdependencies organizations have with their surroundings.

In the introduction to a revised version of the seminal work in Resource Dependence Theory, "The External Control of Organizations: A Resource Dependence Perspective" (Pfeffer & Salancik, 1978), Jeffrey Pfeffer summarized the core of the RDT in three major themes (Pfeffer & Salancik, 2003). First, he argued that the central theme in the resource dependence theory is that the *social context* in which organizations operated, mattered: "The idea was that if you wanted to understand organizational choices and actions, one place to begin this inquiry was to focus less on internal dynamics and the values and beliefs of leaders and more on the situations in which organizations were located and the pressures and constraints that emanated from those situations." (Pfeffer & Salancik, 2003). An important implication for this is the decreasing impact of managers and individuals in explaining organizational performance and to put much more emphasis on the organization as an economic actor embedded in networks of interdependencies and social relationships (Granovetter, 1985).

The second theme featured the construct of "power" as a critical ingredient for organizational survival or success. Underlying the RDT, and largely influenced by the contemporary discussions in the general economics literature, are the strategic influences that come with power asymmetries between organizations. Power asymmetries may lead organizations to hold-up situations (Williamson, 1975) and opportunistic behavior (Williamson, 1985). Due to the particularities of a firm's interdependencies and their embeddedness in the social space, some organizations acquire more powers than others.

The third theme is the role of organizational strategy. Given the organizational dependencies on the external environment, the role of the strategist is to seek opportunities to diminish the dependencies on other organizations by coopting sources of constraint (Selznick, 1949) and to negotiate more favorable dependencies. In this sense, the RDT is one of the few outside-in perspectives that allows for managerial discretion in the management of externally imposed constraints (Pfeffer & Salancik, 1978; Oliver, 1991; Jaffee, 2001): "rather than viewing organizations as largely passive or impotent in relation to environmental forces, resource dependence theory emphasizes proactive strategies that can be pursued to deal with environmental constraints" (Jaffee, 2001: 218).

Taken together, the role of strategy according to the RDT is to work towards two related objectives: (1) to acquire control over critical resources to minimize the organizational dependence on external actors, and (2) to ensure a control over resources that further a dependency of the external environment on the focal firm.

2.2.1.4. Institutional theory

Whereas the RDT already expanded the influence of the social context on organizational performance, institutional theory further emphasized the notion that organizational success and survival is essentially determined by the prevailing institutional forces in which firms operate (Meyer & Rowan, 1977; DiMaggio & Powell, 1983). Rather than focussing on the question how organizations differ from one another, DiMaggio and Powell were interested in the question "why there is such startling homogeneity of organizational forms and practices" (1983: 148). Institutional theorists are unsatisfied with the arguments from economic theories that homogeneity in markets and organizations is the result of rational choices of individuals that are guided by economic pressures for efficiency. Many organizations and individuals, they argue, develop and continue practices and organizational forms that are clearly at odds with the prescriptions of economic optimization. Instead, organizational behaviour is the result of choices that are made within a range of possibilities that are determined by habits, traditions, taken-for-granted and cultural assumptions, but also by legally or other normatively imposed restrictions (product standards, occupational safety, etc). "A key institutional insight is that individual preferences and choices cannot be understood apart from the larger cultural setting and historical period in which they are embedded." (Powell, 1991)

Institutional theory posits that organizations will seek social approval or "legitimacy" (Suchman, 1995) through conformity with the 'isomorphic' pressures of social prescriptions and expectations (Meyer & Rowan, 1977; DiMaggio & Powell, 1983; Oliver, 1997; Dacin, 1997; Zimmerman & Zeitz, 2002), especially in uncertain and unstable situations. They do so, because:

"Organizational success depends on factors other than efficient coordination and control of productive activities. Independent of their productive efficiency, organizations which exist in highly elaborated institutional environments and succeed in becoming isomorphic with these environments gain the legitimacy and resources needed to survive" (Meyer & Rowan, 1977: 352).

New firms in search for resources, for example, depend a great deal on the perceived and projected legitimacy that they have relative to the institutional expectations in which they operate (Dacin, 1997; Zimmerman & Zeitz, 2002; Davidsson, Hunter, & Klofsten, 2006). The motives for organizational and individual behaviour thus "extend beyond economic optimization to social justification and social obligation" (Oliver, 1997: 699).

Institutions rest on three pillars (Scott, 2001): a regulative, a normative and a cognitive pillar. Each of these pillars is the result of an institutional force (DiMaggio & Powell, 1983) that shapes the expectations and norms of each pillar. Coercive pressures (norms and rules that are enforced through legal means and sanctions) result in regulative institutions; normative pressures (the norms and social obligations that come with membership of a community) result in normative institutions; and mimetic forces (the norms and taken-forgranted assumptions that are engrained in habitual interactions and behaviours) result in cognitive institutions. Alternative denominations of these categories have also been used in the literature. Spender, for example, formulated the central role of strategic management as dealing with uncertainty. He further argued that "industry recipes" - "the shared knowledgebase that those socialized into an industry take as familiar professional common sense" (Spender, 1989: 66) – are important elements that managers tap into to resolve the uncertainty in their environment. In DiMaggio and Powell's (1983) framework, these "industry recipes" would be equivalent to the cognitive institutions that firms use to deal with environmental uncertainty. Similarly, Prahalad and Bettis's coined the concept of the "dominant logic" as "a mind set or world view or conceptualization of the business and the administrative tools to accomplish goals and make decisions in that business." (Prahalad & Bettis, 1986: 491). Dominant logics, like cognitive institutions, are the result of people developing a shared understanding of the world, by interacting with each other over an extended period of time. Such shared understanding not only drive people's interpretations, but are enacted as a shared reality as well.

Despite the powerful message and new insights from the institutional theory as developed by DiMaggio and Powell, and Meyer and Rowan, this theory has been criticized for the fact that "much of the imagery of institutional theory portrays organizations too passively and depicts environments as overly constraining" (Powell, 1991). From the end of the 1980's and the beginning of the 1990's, much of the theoretical (Oliver, 1991; Barley & Tolbert, 1997; Seo & Creed, 2002) and empirical (Leblebici, Salancik, Copay, & King, 1991; Brint & Karabel, 1991; Palmer & Barber, 2001; Seo & Creed, 2002; Greenwood & Suddaby, 2006) work within institutional theory has increasingly embraced more latitude in the way organizations can go about their institutional context. Especially when the institutional context results in contradictory expectations (Oliver, 1991; Seo & Creed, 2002), or when it threatens the very survival of the organization (Sherer & Lee, 2002; Greenwood, Suddaby, & Hinings, 2002), will organizations take action beyond what is considered institutionally legitimate. Depending on the context in which an organization operates, it may develop a

range of strategies that range from conformity all the way to the manipulation of the institutions (Oliver, 1991). Recently, these latter strategies have been getting specific attention, because they represent a "paradox of embeddedness" (Seo & Creed, 2002): how can organizations change the very institutions that guide their thinking about the options they can take?

The implication of institutional theory for strategy is that organizational survival and success depends on the legitimacy a firm can develop in its context. Besides carefully assessing the organizational efficiency, strategists should take the institutional expectations of the environments in which they operate into account. Yet, depending on a number of contextual factors, a number of strategies can be developed that may have as their goal to influence the institutional context.

2.2.1.5. Population Ecology

Largely in line with many of the insights of institutional theory and increasingly intertwined with it (Dacin, 1997), the Population Ecology derives its theoretical assertions from the metaphorical comparison of organizational populations with those of biological populations. Importantly, the level of analysis in population ecology is not at the level of individual organizations, but at the level of a *population*, a collection of organizations in an industry (Jaffee, 2001). Similarly, the analytical focus of the 'outside world' is not on the entire environment, but on a population's ecological niche: the resource pool that a population draws from and for which its members compete (Hatch & Cunliffe, 2006). As a result, the Population Ecology perspective is informative on what strategies are best suited for populations in a particular environment (Jaffee, 2001).

Population ecologists are especially interested in organizational 'birth' and 'death': organizational success can therefore be measures by its survival or not. The central conception of population ecologists is that performance is the result of a system of variation, selection, and retention of practices developed by organizations that compete for scarce resources for their survival (Hannan & Freeman, 1977; Hannan & Freeman, 1984). Whereas some variety may exist in strategies and organizational forms within a population, resource scarcities will start a selection process that favors the survival of the best suited organizations and the 'death' of others. Markets thereby follow a logic that is akin to the Darwinian logic of natural systems. In order to increase the possibility of survival, however, organizations may 'mimic' the strategies and organizational forms of successful organizations, hoping to be retained by the population as a result.

The role of strategy in all this is a much debated topic within Population Ecology. An important notion for population ecologists is "structural inertia" (Hannan & Freeman, 1984). Hannan and Freeman take the premise that "individual organizations are subject to strong inertial forces, that is, that they seldom succeeded in making radical changes in strategy and structure in the face of environmental threats" (1984: 149). The possibilities to engage in radical changes are small because of "sunk costs in plant, equipment and personnel, the dynamics of political coalitions and the tendency for precedents to become normative standards (...) legal and other barriers to entry and exit from realms of activity" (Hannan & Freeman, 1984: 149). Organizational survival is thus entirely the result of environmental selection processes, which are hard to adapt to given the structural inertia of many organizations. Taken as such, strategy is a completely irrelevant discipline, given that organizational survival is "largely a matter of luck" (Kaufman, 1985).

2.2.2. Inside-Out Perspectives of Strategic Management

Contrasting with the focus of the aforementioned outside-in perspectives, are the inside-out perspectives of strategic management. Instead of focusing on the external environment as the source of performance, these latter perspectives emphasize features internal to the firm in explaining organizational performance. Interestingly, the focus here is on exploiting the heterogeneity of firms and its opportunities, drawing on concepts of "comparative advantage", "learning" and "rejuvenation".

2.2.2.1. Upper echelon theory

The central theme in the upper echelon theory is that "organizational outcomes – both strategies and effectiveness – are viewed as reflections of the values and cognitive biases of powerful actors in the organization" (Hambrick & Mason, 1984: 193). The way in which the environment is perceived by the firm's decision makers and how they act upon their insights are considered more important than the environment itself. Especially, the complexity, ambiguity and the information overload that decision-makers get from their environment makes managers guide their organizations based on their personal frames of reference, experience in different functions and careers, education, socioeconomic roots and other personal characteristics (March & Simon, 1958). As such, the upper echelon theory resonates with the findings of behavioral decision-making theories that individuals are constrained by their "bounded rationality" (Simon, 1982): decision-makers are limited in the amount of information they can process in complex settings and therefore make strategic choices based on their cognitions and values. As a result, organizations are a reflection of their top managers

(Hambrick & Mason, 1984), and organizational competition becomes a competition between the sensemaking processes of their decision-makers (Daft & Weick, 1984). In this perspective, upper echelon theory and its associated theories of strategic leadership (Mintzberg, 1973; Kotter, 1982) and strategic choice (Child, 1972) have laid bare the necessity of strategy to incorporate a "missionary zeal", to infuse the organization with meaning and direction which will guide future decision-making processes based on the strategy.

Although upper echelon theory was part of the rediscovery of the importance of managerial "free will" (Bourgeois, 1984) and has reemphasized the role of strategic management in organizational performance, it has acknowledged the constraints that both organizational and environmental factors may nevertheless impose. An important concept in this context is "managerial discretion" (Hambrick & Finkelstein, 1987): the latitude of decision spectrum the manager has within the organization and is allowed in the environment, but also the degree to which the chief executive is able to develop and envision multiple courses of action. As such, managerial discretion has the potential to bridge the theoretical explanations of organizational performance as an interplay between the cognitive and personal characteristics of strategists and the context in which they operate.

2.2.2.2. The Resource-Based View

Reacting to the somewhat deterministic role attributed to the industry structure in the "industrial organization economics" (I/O) and building on the work of Edith Penrose (1959), the "resource-based view" (RBV) redirected the strategist's orientation to the inside of the organization and stressed the importance of an organization's resources and capabilities in yielding competitive advantage (Wernerfelt, 1984; Dierickx & Cool, 1989; Barney, 1991; Grant, 1991; Amit & Schoemaker, 1993; Peteraf, 1993). Thus, whereas the Resource Dependence Theory was influenced by the market failures stemming from power asymmetries, the basis of the Resource Based View lies with incomplete factor markets (Peteraf, 1993). Here, sustained superior performance draws from firm-specific resources and capabilities that are valuable, rare, inimitable and non-substitutable (Dierickx & Cool, 1989; Barney, 1991; Grant, 1991; Amit & Schoemaker, 1993), the so called "VRIN"-conditions (Eisenhardt & Martin, 2000).

In contrast to assumption in the "industrial organization economics" literature that resources are distributed homogenously among firms, resources and capabilities are

distributed heterogeneously among firms. Resources include both tangible and intangible assets and capabilities that the organization uses to achieve its goals (Grant, 1991). Capabilities are generally defined as "the firm's capacity to deploy resources, usually in combination, using organizational processes, to effect a desired end" (Amit & Schoemaker, 1993: 35). The VRIN conditions are essentially met in the presence of incomplete factor markets (Peteraf, 1993), but also when the acquiescence of resources or capabilities is path dependent (e.g. tacit knowledge) (Dierickx & Cool, 1989).

Although the RBV is considered one of the most important theoretical frameworks in the strategic management literature, it has been criticized for its overly static description of strategy, its predominant focus on internal resources and capabilities and its tautologic nature (Priem & Butler, 2001; Powell, 2001). The latter criticism becomes clear that, in a way, the resource-based view suggests that the source of competitive advantage can be brought back to those resources and capabilities that give the firm competitive advantages. From a theoretical point of view, such a statement makes the theory redundant, since it results in analytic propositions, i.e. statements that cannot be falsified.

The role of strategy here is not in seeking monopolistic rents through its positioning in the market and a deliberate restriction of output, but rather to look for Ricardian rents from its unique access to or possession of resources (Grant, 1991; Peteraf, 1993; Priem & Butler, 2001): to identify the best use of the firm's resources and capabilities so that they generate a return that is superior relative to the returns other firms may get from them.

2.2.2.3. Dynamic capabilities

Emerging from the RBV and tackling the criticism that it was too static in its explanations about performance (Priem & Butler, 2001), the "dynamic capabilities" approach conveys a more dynamic approach to the effect of internal characteristics of the organization on sustained competitive advantage: "overall, dynamic capabilities are best conceptualized as tools that manipulate resource configurations" (Eisenhardt & Martin, 2000: 1118). Since the RBV did not explain where resources and capabilities come from, nor explained that they can become obsolete due to changes in the context of an organization (Priem & Butler, 2001), the dynamic capabilities literature suggested that there was more than just the resources to explain superior performance (Teece, Pisano, & Shuen, 1997; Eisenhardt & Martin, 2000). Whereas the dynamic capabilities perspective agrees that the resource configuration of a firm ultimately determines its performance (Eisenhardt & Martin, 2000), dynamic capabilities are needed to adjust this resource base in the event of changing circumstances. Strategy then

becomes constant process of altering the resource base "sooner, more astutely, or more fortuitously than the competition to create resource configurations that have that [competitive] advantage". As such, sustained superior performance is appropriated to the Schumpeterian rents that come with the constant renewal of the firm's practices to cope with the changes in the environment (Teece et al., 1997; Eisenhardt & Martin, 2000; Powell, 2001).

The dynamic capabilities perspective thus builds on the emphasis in the RBV on organizational capabilities as the explanatory factor for sustained superior performance, but refines the theory by replacing static capabilities with more dynamic versions of capabilities. In contrast to the RBV, however, which maintains that superior performance comes from heterogeneous resources configurations across firms, dynamic capabilities have commonalities across firms. Although they may be manifested differently depending on the particular circumstances the firm is in, the same dynamic capability may be present in different firms. As such, the dynamic capabilities perspective presents a first step in combining the interaction between the environment outside the firm and the configuration inside the firm in explaining organizational performance. More elaborated perspectives of this kind, however, are the focus of the next subsections.

2.2.3. Synthesizing Perspectives of Strategic Management

Given that some of the aforementioned theories on strategy assume quite different sources of sustained superior performance, a number of scholars have attempted to reconcile these differences. The product of these efforts are interesting overarching theoretical frameworks that offer more comprehensive worldviews, where one theory is used to inspire for solutions on the inconsistencies of the other.

2.2.3.1. Grass-roots models of strategy formation

A number of descriptive accounts of organizational strategy have been developed over time that reject a strategy as the sole result of a deliberate and rational process (Mintzberg, 1978; Mintzberg & Mchugh, 1985). Whereas the majority of the inquiry and theory-building in both inside-out and outside-in strategy research has tended to follow a normative and causal logic, other organizational theorists have given more descriptive accounts of strategy (Mintzberg, 1978; Sarasvathy, 2001; Farjoun, 2002). These authors mostly draw Mintzberg's work in the late 1970s and early 1980s, in which he rejected the idea that strategies are the result of a deliberate process, but emerge as an interplay between a planning process and its

testing in the environment instead (Mintzberg, 1978). Since the context of most organizations is in permanent flux, and the inability of people to process all the information that it receives (Simon, 1982), strategies will often be infused by unforeseen influences and processes. As such, realized strategies are the result of both intended and emergent strategies. Yet Mintzberg and McHugh were not entirely pessimistic about the way this influenced the job of the strategist:

"The inability to dictate fundamental strategic direction — establish target markets, select products or services — does not, of course, preclude management from trying to influence it. Managers can, for example seek to define broad boundaries around what is done (...). They can also exercise their influence on the emerging patterns, encouraging or discouraging the ones in which they find promise or danger." (Mintzberg & Mchugh, 1985: 192-193).

Along those lines, a number of scholars have progressively embedded these less deliberate types of strategy processes in their theoretical frameworks (Sarasvathy, 2001; Farjoun, 2002). What seems most important for strategy in these grass-roots models of strategy is the 'vision' or 'goal' that guides strategies in every day life. By defining (or borrowing) a strategy as the basic principles of purpose, a vision, an "ideology or missionary zeal" (Mintzberg & Mchugh, 1985: 193), strategists possess "a clear strategy focus of the company, while allowing employees to enact the strategy in adaptive, innovative ways" (Grant, 2008). What is a necessary goal for strategists, then, is to be aware, even ingrained, of one's aspirations (Sarasvathy, 2001) or the ontological purport of the organization, in order to guide the cyclical process of strategy as "planned emergence" (Grant, 2008).

2.2.3.2. Competence-based view

The "competence-based view" (CBV) has as its objective to be an "integrative theory that incorporates economic, organizational, and behavioral concerns" and which is "dynamic, systemic, cognitive and holistic" (Sanchez & Heene, 2004). In its core, the CBV addressed a critique of the RBV that, although a firm's critical resources may extend beyond firm boundaries (Dyer & Singh, 1998; Zaheer & Bell, 2005), the RBV had been focussed mainly on internal resources. Therefore, the role of strategy is not only its ability to seek "fit" between the organization and its environment, but also to "stretch" the organization by acquiring new competences and capabilities that may change the environment in its favour (Sanchez, Heene, & Thomas, 1996). As such, the CBV relates superior performance to an organization's ability to respond to dynamic and changing environments, by attributing the

cognitive possibility of strategic management to imagine, design and implement the organizational processes and resources to respond to the environment, or even change it. Such an interplay between the organization and its environment is possible, since the organization is seen as a *system* of intra- and extra-organizational resources and actors over which the strategist must maintain a *holistic* view (Prahalad & Hamel, 1990; Sanchez et al., 1996; Sanchez & Heene, 2004). Strategy is thus the process of building the organization as an open system for value creation and value distribution through the building and leveraging of competences.

In its formulation, the CBV adopts many of the insights from the resource-based view, upper echelon theory, resource dependence theory and institutional theory and thus represents an integrative theory of strategic management. Although as such, it is promising as a theory for management and instructive purposes, its use in research has been rather limited to date.

2.2.3.3. Oliver's institutional – resource based perspective

Drawing upon both institutional theory and the resource-based view, Oliver argued that "resources selection and sustainable competitive advantage are profoundly influenced, at the individual, firm and interfirm level, by the institutional context of resource decisions." (Oliver, 1997: 698). Essentially, the message is that resource characteristics and the capabilities to use them are important precursors of organizational performance, but only to the extent that they are valued by the institutional context: "even highly productive, inimitable resources will be of limited value without the organizational will or political support to deploy them." (Oliver, 1997: 710). But the relationship between institutions and resources also works the other way around. By imposing regulation or developing certain policies, governments can change the institutional context in such a way that specific resources become rare or highly valuable. This assertion would be confirmed by the research suggesting that many regulations are the result of firms lobbying for standards that function as entry barriers for their competitors (Stigler, 1971).

For Oliver, the role of the strategist is to manage both the organization's resource capital as well as its institutional capital. The resource capital consists of all the resources and competencies that enhance the value-creation possibilities of the firm. The institutional capital is defined as the context which surrounds this resource capital and which enhances or inhibits its optimal use. By defining the role of strategy as this integrative purpose of managing both

economic and normative rationalities, a bridge can be built between the outside-in and the inside-out perspectives on strategy.

2.2.4. Summarizing

Although the former descriptions highlight the differing conceptions of how strategy is defined and where the sources for superior organizational performance lie, the most recent contributions stress the importance to seek a combination of perspectives when considering strategy: "because the nature of strategy problems cannot easily be framed within a fixed paradigm, strategic management is necessarily a multi-paradigmatic discipline, requiring varied theoretical perspectives and methodologies". (Hoskisson et al., 1999: 444). As a result, research in strategy will benefit most from an integrative approach to firm performance, that blends insights both from inside-out and outside-in approaches to organizational performance. In addition, the unifying element in all concepts is an ontological search for what an organization stands for, and how this can inspire an organization to deploy its resources and capabilities in dynamic markets and societies in a way that enables it to achieve its objectives.

In summary, I will use the following interpretation of strategy as a reference throughout this dissertation:

Strategy is the purpose-driven and continuous process of resource building, selection and deployment for value creation and distribution, by navigating through and interacting with the structural and social conditions that influence their value.

2.3. "Environmental"

Within the domain of strategy, the (biophysical natural) environment presents a particular domain of interest. Environmental strategies are positioned alongside other strategies, in which the specific interaction between the focal firm and an extra-organizational issue is described. Each of these strategy types differ from another in the specific challenges imposed on organizations and how they endorse a customized strategic reflection process. For example, internationalization strategies (Melin, 1992; Caves, 1996; Peng, 2001) need to deal with "the liability of foreignness", cooperation strategies (Dyer & Singh, 1998; Nooteboom, 2004) with information asymmetries and agency problems, and political strategies with power asymmetries and institutional inertia (Hillman & Hitt, 1999). In this subsection, the focus is on the natural environment as a specific issue to strategy. The Merriam-Webster online dictionary defines the (natural) environment as:

"the complex of physical, chemical, and biotic factors (as climate, soil, and living things) that act upon an organism or an ecological community and ultimately determine its form and survival" (www.merriam-webster.com)

As a consequence, I define a (natural) environmental strategy as

the purpose-driven and continuous process of resource building, selection and deployment for value creation and distribution, by navigating through and interacting with the structural and social conditions emanating from the natural environment that influence their value.

I argue that (natural) environmental strategies are distinctive from "other" strategies in three respects: (1) the natural environment is a common good and, as a result, generates a number of market failures; (2) the natural environment is a social issue; and (3) the natural environment instigates reflections of a paradigmatic nature.

2.3.1. The natural environment and market failures

Many natural resources are "common goods": they are transitory and indivisible in nature, which hinders the necessary allocation of property rights that allow market transactions to put a price on the consumption of the common good (Perman et al., 2003). As a result, economic agents that consume common goods in their production processes are unlikely to consider the free consumption of the common good in their production function. Such a cost-free consumption has been related with market failures (Coase, 1960). A market failure is a situation where markets fail to generate Pareto-efficient outcomes, i.e. where free market competition distributes utilities in a way that produces the maximum level of welfare to society (Arrow & Debreu, 1954), in this particular case: a natural environment that is able to sustain the well-being of its inhabitants. The natural environment elicits market failures because it does not meet the conditions set to the idealized neoclassical model of the free market (Pigou, 1920; Coase, 1960; Hardin, 1968): for many environmental resources, markets simply do not exist. The three most important market failures in the context of the natural environment are "externalities", "tragedy of the commons" and "inefficiency".

The first situation, *externalities*, occurs when the cost of a transaction is carried by someone that has not consented to or has played any role in the execution of that transaction (Pigou, 1920; Coase, 1960). In this respect, pollution is presented as the free consumption of a non-polluted resource that has a value for a third party. An oil company getting rid of waste oil by dumping it in the sea may cause great losses to the tourism industry living of a beach

that is polluted by the spilled oil. Similarly, excess nitrogen applied in manure on soils may run off with surface or ground water, which will subsequently need to be treated (often by public environmental services) against nitrogen toxicity if one would want to use it for human consumption. Besides the lack of property rights, common goods also suffer from information asymmetries. For many externalities it is difficult to pinpoint the originator of the externality. Whereas this may give bad-willed polluters the incentive to produce externalities because they cannot be caught or sanctioned for producing them, externalities are not always the result of deliberate ignorance or bad-willed intentions: the polluting or welfare-destroying effects are not always visible to its creator and he or she may thus not be aware of the externality. Furthermore, the effects of externalities are not always traceable to one specific actor: some emissions or consumption patterns only become harmful as a result of the culmination of the practices of a host of actors. Taken together, a recurring characteristic in these situations is that the polluting firm receives no incentives from the market to internalize the costs inflicted on third parties:

"Economic systems make many polluting and wasteful goods seem alluringly inexpensive because they do not incorporate the full ecological costs of their production or use. These costs are passed on to future generations, transferred to nonusers of products as taxes or exported to less environmentally regulated countries." (Shrivastava, 1995b)

The second situation, "the tragedy of the commons" (Hardin, 1968; Ostrom, 1990), refers to a situation where the short-term consumption of clean air, fish, pasture or any other common good, may extinguish the longer term existence of the natural resource. Without external constraints imposed or artificial markets created through quota trading or permits, economic agents lack the feedback mechanisms (i.e. discounted future costs reflected in the price) that signal the longer term peril of overconsuming the common good. As a result, they will tend to continue consuming the free common good until it is entirely gone. A typical example of the tragedy of the commons can be found in fisheries: by fishing too much, the regenerative capacity of fish is endangered in such a way that the population can not be sustained. From a more macroscopic point of view, the "tragedy of the commons" has been the focal point of worry since the industrial revolution. Since the early warnings by Malthus and Ricardo that there are limits to the carrying capacity of natural resources to sustain a growing economy, scientists have continued to question the possibility to sustain a development with increasing levels of consumption of natural resources (Meadows, Meadows, & Randers, 1972). The biggest question in this perspective is whether we can

sustain our current consumption levels through technological progress or whether it is only possible through self-organized resource consumption or even population control (Hardin, 1968; Shrivastava, 1995b).

Third, since there is no or little (perceived) cost for using common goods, there are no economic incentives to use them in a way that is socially efficient (Baumol & Oates, 1988).

"Fundamentally, it [pollution] is a manifestation of economic waste and involves unnecessary, inefficient or incomplete utilization of resources, or resources not used to generate their highest value. In many cases, emissions are a sign of inefficiency and force a firm to perform non-value-creating activities such as handling, storage and disposal." (Porter & van der Linde, 1995b).

From a strategic management point of view, the particularity of environmental strategies is rooted both in the free-rider problem that underlies the described market failure effects, and the lack of visibility or relative impact of one's actions on the improvement of the natural environment. Firms that want to voluntarily refrain from causing externalities or social harms stemming from resource depletion face the peril of bearing the cost that careless businesses do not. At the same time, these latter businesses may benefit from the efforts from the former. Similar to the difference between those who pay and those who do not pay for a train ticket, the polluters free-ride the non-polluters' efforts. As a result, environmental strategies are often perceived as costly endeavors that do not create market positions that are favorable from a strategic point of view (Walley & Whitehead, 1994; Reinhardt, 1999).

"In a world where environmental externalities were the only departure from the assumptions of perfect competition (...) firms that volunteered to internalize these costs could not survive." (Reinhardt, 1999: 10)

Whenever the production of waste also represents a cost to the firm, reducing pollution obviously presents an opportunity for cost reduction (Hart, 1995; Porter & van der Linde, 1995a). Such a situation represents a "win-win" between the minimization of environmental impact and the maximization of profit and is therefore the "low hanging fruit" of environmental strategy. Things become more difficult when the voluntary internalization of environmental impacts that do not present themselves as immediate win-wins (Walley & Whitehead, 1994; Palmer, Oates, & Portney, 1995). In order to overcome these market failures, strategists will need to seek alternatives that redeem their investments in the natural environment (Nehrt, 1996; Nehrt, 1998; Reinhardt, 1999; Dean & McMullen, 2007; Cohen & Winn, 2007).

2.3.2. The natural environment as a social issue

Besides the idiosyncratic properties of the natural environment in its relationship towards the market (the economic sphere), the natural environment induces specific interactions with the social sphere. The counterpart of the indivisibility of the natural environment is that every one claims to have the right to use or access the common good. As a result, a consumption level of the common good in a way that impedes the consumption for other agents, will prompt social protest and pressure to abandon the consumption. As such, the natural environment becomes a social issue (Clarkson, 1995). Social issues present particular conditions to strategy, since they may influence the possibilities, opportunities, threats and challenges to strategy in the form of (1) regulation, (2) stakeholder issues and (3) market segmentations.

First, the natural environment is presented as regulation. Over the last decades, governments on different levels in society have engaged in substantial efforts to tackle the market failures associated with the natural environment through a variety of policy measures. Such measures include legislation stipulating which products can be used or produced, formalized "licenses to produce", forbidding the use of polluting practices or even the production of certain products, market regulation through cap-and-trade systems, taxes and subsidies, compulsory reporting on toxic substances, and many more (Baumol & Oates, 1988). The goal of these coercive measures follows a logic of sticks, carrots and sermons (Bemelmans-Videc, Rist, & Vedung, 1998). Through sticks (punishment when failing to comply with the law), carrots (using financial incentives to further environmentally friendly practices) and sermons (sensitizing and awareness rising through media campaigns and knowledge diffusion), governments try to direct the economy to more environmentally friendly practices and products. The literature presents environmental regulation both as a threat and as an opportunity (Dean & Brown, 1995; Nehrt, 1996). It is argued that environmental regulation may destroy the economic possibilities of incumbent and conservative firms (Walley & Whitehead, 1994; Palmer et al., 1995), or may inhibit the foundation of new firms (Dean & Brown, 1995). Advocates of environmental regulation, however, argue that environmental regulation sets the stage for creative destruction and green innovation (Porter & van der Linde, 1995a; Rugman & Verbeke, 1998; Hart & Milstein, 1999).

Second, the natural environment is presented to businesses as a stakeholder issue (Freeman, 1984; Clarkson, 1995; Jones & Wicks, 1999) and embedded in the larger concept of "corporate social responsibility" (CSR) (Davis, 1973; Carroll, 1979; Wartick & Cochran,

1985; Wood, 1991; McGee, 1998). Despite the trend that more and more natural environmental issues are regulated, the last decades have also seen a dynamic surge in stakeholder activism. A stakeholder is "any group or individual who can affect or is affected by the achievement of an organization's objectives" (Freeman, 1984), and may be both internal (employees, shareholders) or external (suppliers, customers, governments, competitors, civil society organizations) to the firm. Stakeholder theory argues that organizations should voluntarily take the claims of important stakeholders into account, because their support is necessary for the survival of the organization (Freeman, 1984; Clarkson, 1995). In a similar vein, caring for the natural environment is seen as a "corporate social responsibility", the moral call to businesses to voluntarily take the effects of their activities on the social and natural environment into account (Carroll, 1979; Wartick & Cochran, 1985; Wood, 1991; Swanson, 1995; McGee, 1998): "the moment corporations and their managers define and accept responsibility and obligations to primary stakeholders, (...) they have entered the domain of moral principles and ethical performance, whether they know it or not" (Clarkson, 1995: 112). Firms that do not respond to their social responsibility do so at the peril of facing consumer or supplier boycotts, pressure group "naming and shaming", employee strikes or shareholder activism (Freeman, 1984; Henriques & Sadorsky, 1996; Brammer & Millington, 2006). From a strategic risk management point of view, stakeholders are important when they are perceived powerful, when their claims are considered legitimate and when their interests solicit urgent responses (Mitchell, Agle, & Wood, 1997; Eesley & Lenox, 2006). A strong vehicle in conveying stakeholder influence is the reputation of an organization. Firms that create bad perceptions of their behavior in the social domain, may find themselves with decreasing trust and loyalty (Barney & Hansen, 1994) or access to critical resources (Fombrun & Shanley, 1990), such as human capital (Turban & Greening, 1996; Reinhardt, 1999). The type of influence that a stakeholder can have on the firm depends on the resource dependencies between a firm and its stakeholders (Pfeffer & Salancik, 1978; Frooman, 1999) or the position a firm holds in a stakeholder network (Rowley, 1997): it is evident that claims from stakeholders possessing critical resources for the firm (and which they may withhold in the event that the firm does not respond appropriately) will be assessed in different ways than those that do not (Frooman, 1999). Such insights are important; since they highlight that the influence of stakeholders may be both direct and indirect through other stakeholders (Rowley, 1997; Frooman, 1999; Hart & Sharma, 2004). Although "the natural environment" is not "a group or individual" by itself and is therefore most often represented by such civil society organizations (Crane & Matten, 2004) as Greenpeace, the Rainforest Alliance or WWF, it is sometimes argued that the natural environment should be seen as a stakeholder in its own right (Leopold, 1948; Purser et al., 1995; Shrivastava, 1995b; Sharma & Henriques, 2005). In sum, through the interaction with stakeholders, the natural environment is presented as a strategic management issue. The growing attention for stakeholder management and social responsibilities in the organizational and strategy literature is proof of the specific set of resources, capabilities and response patterns which are required (Grant, 2008).

A last manifestation of the natural environment as a social issue is that it may be used to appeal to customers and suppliers in product and factor markets. Since people and organizations want a healthy environment, it is argued that organizations that diminish their negative environmental impact on the environment will be remunerated for their efforts in the market, at least by some segments in the market that show specific sensitivity to it (Arora & Gangopadhyay, 1995; Arora & Cason, 1995; Shrivastava, 1995b; Henriques & Sadorsky, 1996; Klassen & McLaughlin, 1996; Prakash, 2001). Conversely, it is argued that organizations that produce negative impacts on the environment will be punished in the market (Klassen & McLaughlin, 1996).

To strategy, social issues present both opportunities and challenges, paving the way for product differentiation and cost minimization, but also as potential regulation or stakeholder induced cost increments. In addition to these unidimensional challenges, however, the most difficult challenges lie in the harmonization of the natural environment with other social challenges (Hall & Vredenburg, 2003; Matos & Hall, 2007). Solutions that would be very beneficial to the natural environment often conflict with other social claims. For example, it has often been suggested that the environmental burden is a function of population, affluence and technology (input/output) used to bring affluence to the population. As a result, one could argue – as some authors do – that one way to reduce environmental burden is by limiting the population (Hardin, 1968; Shrivastava, 1995b). A decrease in environmental burden by limiting population growth or affluence, however, often encounters fierce social resistance (Hart, 1997). Similarly, whereas biotechnology was presented as an important example of environmental leadership strategies (Hart, 1995; Hart, 1997), it has encountered the resistance of environmental and antiglobalization advocates alike, who raised concerns about the transfer of genes from genetically modified crops to wild plant species and the potential dependence of developing countries on seed companies (Hall & Vredenburg, 2003). In sum, by considering the natural environment in strategic questions, strategic management is confronted with higher levels of complexity (Matos & Hall, 2007) and

uncertainty (Lewis & Harvey, 2001). Reconciling these differences requires fundamental answers from strategists as to what the company stands for, who it will please, why and how (Wheeler, Fabig, & Boele, 2002; Wheeler, Colbert, & Freeman, 2003).

2.3.3. Paradigm shift

The last idiosyncrasy of the natural environment to strategy lies in the place the natural environment occupies in one's worldviews: the "natural environment" means different things to different people (Gladwin et al., 1995; McGee, 1998; Hoffman & Ventresca, 1999). Most importantly, perception differences not only reside in the heads of individuals, but amount to different paradigms in economic and business theory as well. A paradigm is an established epistemological framework that guides the thinking around a specific topic (Kuhn, 1962). The result of the attention to environmental issues with probably the most far reaching consequences is an ontological questioning of "business" itself, and especially how business relates to the natural environment. Over the last decades, researchers have argued for a reconsideration of the role of the environment in economic thinking, because the way we define the human or business—natural environment relationship legitimizes, and reinforces our subsequent behaviors.

"By disassociating human organization from the biosphere and the full human community, it is possible that our theories have tacitly encouraged organizations to behave in ways that ultimately destroy their natural and social-life support systems" (Gladwin et al., 1995: 896).

The paradigmatic debate is thus concerned with the question whether the natural environment is an entity external to the firm with instrumental value, or whether organizations are intertwined and interdependent on a natural environment that has a moral value to economic life (Gladwin et al., 1995; Purser et al., 1995; Shrivastava, 1995b). We stress the difference between these perspectives, since they shed light on the *unit of analysis* employed in the context of environmental strategies. In the former approach, the unit of analysis is the firm or the organization, with the natural environment something that may be external to the firm (it can also be internal to the firm, to the extent property rights are owned for the natural resources), whereas this is impossible in the latter approach. It is evident that the perspective that is taken may have implications for the role and object of strategy, as is shown also in the theoretical thinking on the natural environment in both economics and strategy.

In the history of economic thought, the natural environment has been investigated from two general streams: environmental economics and ecological economics. Whereas the former perceives the natural environment and the economy as two distinct spheres that are linked with each other along transactions and exchanges, the latter defines the economy as an interlinked subsystem of the entire biosphere (Perman et al., 2003; Vatn, 2005; Common & Stagl, 2005). In environmental economics, the natural environment simply represents a source for production (e.g. land for tillage or building, minerals for ore, air to breath, drinking water, ...), a sink able to accept pollution or waste (e.g. landfill, air or water for CO2 absorption or dilution, ...), an amenity to enjoy (e.g. beaches, natural reserves, food ...), an object of worship (animistic religions) or something to get rid off (e.g. diseases, floods, drought, ...). In contrast, the ecological economics perspective equates "the environment" with both the individual building blocks, as well as all the bio-geochemical processes that keep this system functioning (Common & Stagl, 2005). The approach is holistic and embedded in ecological principles. Rather than considering the economy and the natural environment as independent systems that are connected trough exchanges and transactions, the economy is embedded in the natural environment.

A similar distinction has emerged in management theory, which was catalogued by Purser and colleagues (1995) as the anthropocentric vs. the ecocentric organization paradigm and by Gladwin and colleagues (1995) as the technocentric vs. ecocentric paradigm. Put in simpler terms, the difference between the two perspectives is in seeing "nature-as-object" (anthropocentrism) versus "nature-as-self" (ecocentrism). In the ecocentric paradigm, strategy is concerned with the natural environment from a moral point of view (Purser et al., 1995) and strives — above anything else — for the sustainability of natural and cultural values. Conversely, in the anthropocentric paradigm, the natural environment is perceived though its instrumental function to the human being or the organization. The main vehicle is "environmental management", concerned with "searching for better means to engineer and control nature for instrumental purposes" (Purser et al., 1995: 1078). It is in line with libertarian views of corporations, that state that "the social responsibility of business is to increase its profits" (Friedman, 1970: 32) and that the voluntary endeavor for the social good is fundamentally subversive and wrong (Smith, 1776; Friedman, 1970).

Gladwin and colleagues have argued that neither ecocentrism nor anthropocentrism provide the practical basis to achieve sustainable development, and that only a pragmatic "sustaincentric paradigm" is able to harness the theoretical underpinnings for this immensely complex social objective (Gladwin et al., 1995). In the sustaincentric paradigm, humans are "neither totally disengaged from, nor totally immersed in the rest of nature" (Gladwin et al., 1995: 890), and the relationship between humans and nature is guided by both moral and

instrumental principles. The basic premise is that a prosperous economy depends on a healthy environment and vice versa, and that as a result, the role of humans towards nature is one of stewardship: we are responsible ourselves to uphold a state of nature that is able to support us. Recently, Michael Porter and Mark Kramer expressed the core of this view in their paper on "Strategy & Society" (Porter & Kramer, 2006):

"Successful corporations need a healthy society. Education, health care, and equal opportunity are essential to a productive workforce. Safe products and working conditions not only attract customers but lower the internal costs of accidents. Efficient utilization of land, water, energy, and other natural resources makes business more productive. Good government, the rule of law, and property rights are essential for efficiency and innovation. Strong regulatory standards protect both consumers and competitive companies from exploitation. Ultimately, a healthy society creates expanding demand for business, as more human needs are met and aspirations grow. Any business that pursues its ends at the expense of the society in which it operates will find its success to be illusory and ultimately temporary." (Porter & Kramer, 2006: 83)

The general implication of this paradigmatic debate for strategy is twofold. First, a person's paradigm reflects whether the natural environment is a parameter that is taken into account only in the production function (as a cost or a constraint) or becomes so important that it is included in the objective function of the firm (part of the mission and the evaluation criteria). The natural environment currently asks the strategist to make a choice and to reflect on where he or she will position the natural environment in his or her strategy. Second, paradigm shifts generally experience institutional inertia and resistance to move away from the business-as-usual. Such periods increase the complexity and uncertainty, as the paradigm shift opens new questions, requires new solutions and often new knowledge (Kuhn, 1962; Gladwin et al., 1995). The natural environment is now generally part of the production function as environmental departments and managers, compliance departments and officers, taxes, permits, quota and the like. The legal structures, expectations from shareholders, takenfor-granted assumptions on the environment vs. economy reflect how deeply engrained and intertwined this paradigm is within the veins and fibers of our society (Hoffman & Ventresca, 1999). A wave of new paradigmatic assumptions questions many of these fundamentals, strategies and practices and may thus require new capabilities, structures in response. One such a development is a shift from the dyadic relationship between business and government, with government controlling business, to a triadic relationship where both governments and civil society organizations are watchdogs over and facilitators of business activities that are in line with societal expectations (Hoffman, 1999). Furthermore, although a paradigm shift imposes difficult questions from a macro-social point of view, it has clear implications for strategy. One of the problems of paradigms is that they cannot be compared: each paradigm has its own logic and conceptual frameworks that make it impossible to understand the logics of another. As a result, "choice" of a paradigm is impossible without accepting all the conceptual consequences that derive from its basic assumptions. For example, accepting the sole role of a corporation to make profits requires accepting a strong state to legally enforce property rights and to provide common services. Furthermore, the fact that paradigms exist may also enable strategists to recognize arguments that derive from alternative paradigmatic backgrounds. Finding solutions for the fierce debates that may derive from inter-paradigmatic differences first requires understanding that organizations or individuals ground their thinking on different assumptions. Unless a common ground is found where joint understandings between different paradigmatic viewpoints are created, such inter-paradigm debates will endup in a "dialogue of the deaf" (Hoffman & Ventresca, 1999; Lepoutre, Dentchev, & Heene, 2007).

2.3.4. Summary

With the analysis as presented above, my goal was to summarize the arguments why the natural environment presents a particular domain of interest in the field of strategy. As I have demonstrated, the natural environment imposes challenges of free-rider problems, social and stakeholder interests and more paradigmatic, more philosophical reflections on the nature and role of the firm in relation to society. These challenges are important for strategy, since they will influence a firm's performance, and will therefore require appropriate responses in terms of objectives and practices. The variety in responses that a firm can develop in this perspective are the object of the following section.

2.4. "Proactive"

The final semantic building block of "proactive environmental strategies" relates to the way how businesses can develop strategies in response to the natural environment as a contextual variable. "To prepare a[n environmental] strategy, managers must decide where they want to be on the spectrum from strict compliance to environmental leadership." (Walley & Whitehead, 1994: 52).

The term "proactive" derives from the general business and strategy literature, where a number of descriptions have been developed to characterize reaction typologies of firms with regards to their circumstances. Miles and Snow (1978), for example, identify firms as

"prospectors" when they continually look for opportunities and lead in responses towards changing contexts, "analyzers" when they critically follow up on their competitors and respond accordingly, "reactors" when they are unable to react upon changing environments, and "defenders" when they do not assess the environment outside their limited competency domain and aim to protect their current positions. Covin and Slevin (1989) and Lumpkin and Dess (1996) draw on Miles and Snow to define proactivity as part of the concept of entrepreneurship, highlighting the need to take initiatives or introduce new practices or products ahead of competitors. In their view, proactiveness is opposed to passiveness, rather than reactiveness: whereas passiveness is an indifference or inability to seize opportunities or lead in the market, reactiveness suggests an active response to resist competitors. As such, they position their view in line with Chen and Hambrick, who stated that "proactiveness involves taking the initiative in an effort to shape the environment to one's own advantage; responsiveness involves being adaptive to competitors' challenges." (1995: 457).

In the context of the natural environment, strategies have been placed mostly on a continuum that varies in the way organizations deal with the natural environment relative to what is required by law. Table 2.1 provides an overview of the various typologies that have been defined in the literature on environmental strategies. In the continuum of environmental strategies, proactive is opposed to what the literature has referred to as "reactive" (Henriques & Sadorsky, 1999; Buysse & Verbeke, 2003; Aragon-Correa & Sharma, 2003), "beginner" (Hunt & Auster, 1990) or "non-compliance" (Roome, 1992) postures. Firms that are labelled with these latter postures towards the environment are unable or unwilling to take the impact of their practices on the natural environment into account, even if this would be required by coercive legal or normative stakeholder pressures. "Reactive" postures thus generally feature a response revolving around complying with legal regulations, but may even involve behavior that does not meet the legal standards set (either deliberate or not). Accounts of firms with reactive strategies mostly describe practices as end-of-pipe solutions that do not question the business-as-usual of the firm (Hunt & Auster, 1990; Russo & Fouts, 1997; Sharma & Vredenburg, 1998) or try to obstruct environmental regulation (Meznar & Nigh, 1995; Newton & Harte, 1997; Cho, Patten, & Roberts, 2006). Proactive postures, on the other hand, demonstrate a voluntary adoption and development of practices that go beyond obeying the law in taking environmental issues into account. To the minimum, these practices comprise the willingness to prevent pollution at the source, but may go as far as completely redesigning products and processes (Hart, 1995), to redefining the business model (Sharma & Henriques, 2005) and engaging in active roles in the industry or society to change behavioral patterns

(Hunt & Auster, 1990; Hart, 1995). In addition to merely going beyond the law, Sharma and Vredenburg added an additional dimension to the term "proactive". In their definition, proactive environmental strategies are strategies that involve practices not required to be undertaken "in fulfillment of environmental regulations or in response to isomorphic pressures within the industry as standard business practice" (Sharma & Vredenburg, 1998: 776). In other words, proactive means that firms go beyond legal and within-industry norms.

Table 2.1 - Typologies of environmental strategies

Author	Continuum	Definitions
Roome, 1992	Noncompliance vs. Leading Edge. ¹	Noncompliance refers to a complete irresponsiveness to environmental issues, not even when this would be required by law. Compliance refers to a responsiveness in line with what is legally required. Compliance-plus covers a proactive approach that goes beyond the law to integrate environmental issues in the structure and systems of the firm. A Commercial and Environmental Excellence approach is characterized by the inclusion of the environment in the core values and strategy of the firm.
Hunt and Auster, 1992	Beginner vs. Proactivist	"Beginners" consider environmental programs unnecessary and turn their back to the problem "Fire fighters" deal with environmental problems in an ad-hoc way and further have little concerns about the environment. "Concerned citizens" express good intentions towards the environment, but do not implement any programs to realize them. "Pragmatist" companies take their time to manage their environmental problems actively, by empowering their environmental departments with sufficient expertise, funding and authority. Environmental problems, however, are not top priority. "Proactivists" attach top priority to environmental issues, dedicate high profile and motivated staff to it and are engaged in the public debate and political agenda-setting.
Hart, 1995	Pollution control vs. Sustainable development	Pollution control refers to firms that use end-of-pipe pollution abatement. Through "pollution prevention", firms abate the impact generated on the environment by minimizing emissions, effluents and waste. "Product stewardship" involves an approach towards a firm's products which integrates the impacts generated on the entire lifecycle and value chain of the product. Such an approach extends the boundaries of the analysis to both the history (raw materials, extraction methods, etc), as well as the future (waste, recycle procedures, etc) of the product. Finally, "sustainable development" represents the most advanced strategy towards the natural environment. The goal of this type of strategy is to not only account for the impact of a product or production system, but of more abstract issues as firm growth or development on countries in the developing world.
Russo and Fouts, 1997	Compliance vs. Proactive	 End-of-pipe compliance policies affect only physical asset resources. () Compliance is achieve primarily by the addition of pollution removing or filtering devices to the existing assets of a firm and does not require the firm to develop expertise or skills in managing new environmental technologies or processes. () As a proactive environmental policy takes hold in a firm, we would expect it to redesign its production or service delivery processes. Such a redesign would likely involve the acquisition and installation of new technologies" (Russo & Fouts, 1997: 538)
Sharma and Vredenburg, 1998	Proactive vs. Reactive	"Companies were considered proactive only if they exhibited a consistent pattern of environmental practices, across all dimensions relevant to their range of activities, not required to be undertaken in fulfillment of environmental regulations or in response to isomorphic pressures within the industry as standard business practices. In addition to consistency across dimensions, the proactive firms (by our definition) should have exhibited a consistent pattern of such voluntary actions over time."
Sharma, 2000	Conformance vs. Voluntary	An environmental strategy of <i>conformance</i> involves complying with regulations and adopting standard industry practices that, according to institutional theory, would be the result of pressures from industry associations (King & Lenox, 2000), environmental NGOs, government regulators, competitor actions, and other industry stakeholders.

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¹ Although Roome is generally cited with 5 strategies, including "Leading Edge" – the state of the art in environmental management as practiced by a firm in its sector of the economy, Roome himself described this strategy as a position that could be adopted both by non-compliance, as well as by excellence companies".

		At the other end of the spectrum, a <i>voluntary environmental strategy</i> represents a consistent pattern of company actions taken to reduce the environmental impact of operations, not to fulfill environmental regulations or to conform to standard practices." (Sharma, 2000: 683, emphasis added)
Aragon-Correa and Sharma, 2003	Proactive vs. Reactive	"Corporate strategies for managing the interface between business and the natural environment can be classified along a continuum that ranges from reactive to proactive. At one end of the continuum, a <i>reactive posture</i> is a response to changes in environmental regulations and stakeholder pressures via defensive lobbying and investments in end-of-pipe pollution control measures.
		At the other end of the continuum, <i>proactive postures</i> involve anticipating future regulations and social trends and designing or altering operations, processes, and products to prevent (rather than merely ameliorate) negative environmental impacts."
Buysse and Verbeke, 2003	Environmental leadership vs. Reactive strategy	Reactive strategies are the equivalent of Hart's end-of-pipe firms. Pollution prevention firms have a limited adoption of environmental practices, a limited development of related competencies and a weak integration of environmental issues into corporate strategy. Environmental leadership firms are characterized mostly by the development of green competencies and environmental reporting, but excel in all perspectives in comparison to the other categories.
Sharma and Henriques, 2005	Proactive vs. Reactive	Reactive environmental strategies involve "following regulatory guidelines (to avoid penalties) or reducing energy costs, both of which are undertaken because organizations can see clear links between these activities and ability to operate within the law and enhance their profitability. The practices included were detoxification, synthetic reduction, fuel efficiency and energy efficiency." (Sharma & Henriques, 2005: 169)
		Proactive environmental strategies "have moved beyond regulatory responses that involve costly investments in controlling polluting wastes and emissions (Walley and Whitehead, 1994). These proactive strategies include eco-efficient strategies for reducing wastes, materials, and energy use (Hart and Ahuja, 1996) and preventing pollution at sources (King and Lenox, 2001; King and Shaver, 2001; Russo and Fouts, 1997) via the redesign of processes and products (Klassen and Whybark, 1999)." (Sharma & Henriques, 2005: 160).

Following the overview as presented, I adopt a definition of proactive environmental strategies (PES) as:

The continuous process of resource building, selection and deployment for value creation and distribution, by navigating through and interacting with the structural and social conditions that influence their value, with the purpose to prevent negative effects, or create positive impacts on the natural environment, beyond what is legally required or accepted as standard practice.

To strategy, proactiveness may yield both advantages, as well as considerable hurdles. On the one hand, engaging in the active and anticipatory search for new opportunities may yield first mover advantages (Nehrt, 1996). In the event that environmental practices or technologies take time to learn or establish, first movers will simply have the benefit that comes with more experience or the time that lagging firms need to incorporate new technologies. Furthermore, first movers may be more able to capitalize on the market opportunities identified: "by exploiting asymmetries in the marketplace, the first mover can capture unusually high profits and can get a head start in establishing brand reputation." (Lumpkin & Dess, 1996: 146). On the other hand, proactive firms may also bear the risks and costs of the uncertain and experimental endeavors that imitating firms may subsequently copy without having had to bear these risks and costs. Furthermore, establishing new practices may

also put firms "in an institutional vacuum of indifferent munificence and, at worst, in a hostile environment impervious to individual action." (Aldrich & Fiol, 1994: 645) In other words, besides the particular complexities of environmental strategies as described above, the particular choice of choosing a proactive posture towards them adds additional complexity and uncertainty to it.

2.5. "Small business"

Given the description of what will be meant by "proactive environmental strategies" in this dissertation, I now turn to the final and focal construct: the small business. As with proactiveness, "small" is not an isolated construct by itself. Rather, it is a qualitative category in the "organizational size" continuum that spans the extremes of various versions of "small" on the one hand, and various versions of "large" on the other (Curran & Blackburn, 2001). The literature, however, is not consistent on how these categories are used. More specifically, firm sizes can be measured on either a relative or an absolute basis. Whereas *relative* measures take the entire spectrum of firms and then assigns the label "small" to the smallest firms in the spectrum and the label "large" to the largest firms, *absolute* measures assign labels based on predefined cut-off levels. In this dissertation, however, I take an absolute perspective on size. More specifically, I follow the definition as provided by the European Commission (European Commission, 2003a), which considers businesses to be "small" when they have

- Fewer than 50 employees
- A turnover and/or balance sheet total that that does not exceed € 10 million

By defining small business as such, we include the micro-enterprises, which have been defined as those that have

- Fewer than 10 employees;
- A turnover and/or balance sheet total that does not exceed € 2 million.

Small businesses present a specific domain of inquiry within business and strategy research, because they possess certain idiosyncratic attributes that make certain models designed for larger firms inappropriate for smaller firms (Dandridge, 1979; Welsh & White, 1981; d'Amboise & Muldowney, 1988). As such, firm size is presented as an internal contingency factor that needs to be taken into account, both when interpreting or generalizing

study results (therefore it is very often used as a control variable), as well as when designing managerial activities and responses to the external environment (Merz & Sauber, 1995). Although one of the characteristics of small business is their large heterogeneity, which makes it virtually impossible to make overarching and generic propositions about them (d'Amboise & Muldowney, 1988; Curran & Blackburn, 2001), general agreement exists about the following three idiosyncrasies of small businesses.

1. *Importance of the owner-manager*. One of the most important characteristics of small firms is that in many small firms, the manager of the firm is also the principal owner of the firm:

"the importance of the owner-manager in the small business cannot be overemphasized. Because of his or her central function a greater comprehension of the role of the owner-manager will enhance the understanding of small business itself" (d'Amboise & Muldowney, 1988: 227).

Although ownership is mostly financial – which means that some personal assets may be at risk, it will most often be more than that. Besides financial assets, large investments of personal time and effort make the ownership as much psychological as financial (Gibb, 2000). Associated with ownership is the advantage that the ownermanager does not have other owners or stockholders to report to as in many large corporations, leaving strategic decision-making in the firm entirely based on his own independent discretion. Although the small firm may be under great pressure and dependent relationships with key customers, suppliers, banks, regulatory officials, and many more stakeholders, their independence still grants them the free possibility to decide who they deal with and who not (Gibb, 2000). Given the large personal investments in the company, and the fact that very few small business ownermanagers rely on extensive information searches or formal strategic planning (Shrader, Mulford, & Blackburn, 1989), decision-making in the firm results mostly in a process that involves and reflects the vision and values of the owner-manager (Carson, Cromie, McGowan, & Hill, 1995). Such a vision is most often "an intuitively experienced image of what is to be achieved and how" and is "often hidden even from the entrepreneur himself", but "helps the entrepreneur realize and enact his environment and rationalize his behavior" (Johannisson, 1987: 51). Such an intertwined relationship between personal and business life has been shown to result in

- higher levels of commitment of the owner-manager to the firm than organizational employees (Thompson, Kopelman, & Schriesheim, 1992; Cooper & Artz, 1995).
- 2. Organizational configuration. Next to the importance of the owner-manager, probably the second most cited characteristic of smaller firms is its limited access to resources and limited power to modify environmental forces to their advantage (Woo & Cooper, 1982; Carson et al., 1995; Lee, Lim, & Tan, 1999; Gibb, 2000). Due to their smaller size, smaller firms face disadvantages compared to their larger counterparts in terms of managerial expertise, experience curves, knowledge, R&D capabilities and general slack resources (Bourgeois, 1984; Nooteboom, 1993; Dean, Brown, & Bamford, 1998; Atherton, 2003). The owner-manager and his employees are often responsible for a wide variety of tasks, which results in lower functional expertise and a constant process of 'firefighting' problems with ad-hoc solutions (Nooteboom, 1993). In addition to the short-term effects in terms of available knowledge, this also inhibits the potential to absorb new knowledge in the future (Cohen & Levinthal, 1990). In addition, small businesses cannot use scale advantages as bargaining power with suppliers (including capital suppliers) and buyers to negotiate better prices (Porter, 1980) or use their clout in direct influences on political decision-makers (Hillman & Hitt, 1999). In contrast, smaller firms have been attributed the advantage of being more flexible to adapt to changing to external changes in the environment (Woo & Cooper, 1982; Fiegenbaum & Karnani, 1991; Chen & Hambrick, 1995; Ebben & Johnson, 2005). Whereas larger firms often have formalized and rigid decision structures that give them structural inertia in the event of environmental change (Hannan & Freeman, 1984), smaller firms are able to respond more swiftly because of their short communication lines and informal type of management (Mintzberg, 1979). In addition, larger firms are, due to their generally larger size, more prone to the scrutiny of external stakeholders, while smaller firms may remain invisible on the radar screen and exploit their "stealth" (Chen & Hambrick, 1995) to exploit small niches and market pockets that are too small for larger firms (Porter, 1980; Chen & Hambrick, 1995; Dean et al., 1998).
- 3. *Task environment*. Finally, as a result of the limited resources and the reduced influence on the environment, smaller firms will be more vulnerable to uncertainty and complexity in their environment (d'Amboise & Muldowney, 1988; Storey, 1994; Atherton, 2003). In response, small business owner-managers must "travel light" (Carson et al., 1995) draw upon simple organizational structures with short

communication lines within the firm and use their external network contacts to diminish their uncertainty (Covin & Slevin, 1989; Gibb, 2000; Atherton, 2003). Again, how the firm responds to these uncertainties and complexities and how quickly, depends on the personality of the owner-manager. Carland et al. (1984), for example, distinguish between entrepreneurs – those that own a firm with the purpose of profit making, and small business owner-managers – those that have a firm to further their own goals. The latter firms are often referred to as 'lifestyle' firms or 'craftsman' firms, and are often described as more reactive, less progressive and less reliant on external and internal information processing. Merz and Sauber (1995), for example, found that the least proactive and entrepreneurial firms were often the smallest, with least engagement in collecting external or internal information, the shortest time horizons and impulsive owner-manager centered decision-making.

Besides particularities of small businesses to theory and practitioners alike, small businesses present idiosyncratic challenges to researchers as well. These challenges are reflected in the fact that, although small businesses constitute the larger part of firms in the economy, and generate over 60% of employment and total GDP in most economies (Observatory of European SMEs, 2003), there has been relatively less research done on small firms (Curran & Blackburn, 2001). Among other reasons, Curran and Blackburn attribute this to the fact that small businesses present "a difficult area in which to conduct research" (2001: 5). In contrast to larger businesses, small businesses rarely have secondary material, reports and statistics available, which makes conducting quantitative studies more difficult. In addition, "one of the most difficult aspects of strategy research is collecting primary data from individual firms. This problem is often more difficult when working with small firms, since they are notorious for their inability and unwillingness to provide desired information" (Fiorito & Laforge, 1986: 10-11). In addition, the small businesses community is immensely diverse, which makes generalizations all the more difficult and inappropriate (d'Amboise & Muldowney, 1988; Curran & Blackburn, 2001): "in other words, there are no perfect, unchallengeable outcomes form research on SMEs (...). The test of quality of any research is the extent to which its conclusions can be generalized convincingly to any wider audience and especially to fellow researchers." (Curran & Blackburn, 2001: 7). The many contributions in such specialized journals as Journal of Business Venturing, Entrepreneurship Theory and Practice, Small Business Economics, International Journal of Small Business Management, the recent surge in publications on entrepreneurship and the new journal on entrepreneurship

by the Strategic Management Society are proof that "small business" and "entrepreneurship" scholars are nevertheless engaging in this quality testing endeavor. It is my objective to participate in this process, in the first instance through this dissertation.

2.6. Conclusion

With this chapter, my goal was to delineate the conceptual barriers of this dissertation. Box 1 repeats the definitions of proactive environmental strategy and small business as they will be used throughout this dissertation. It is clear that these boundaries, albeit providing the useful limits and focus to facilitate research, comprise a substantial domain, with different views on what strategy, the natural environment and proactiveness constitutes. As such, it substantiates Mintzberg's quote in the beginning of this chapter that research in such a domain, especially given the morality and interests that are woven in many of the arguments that are developed on the topic, is no easy task. Yet, with the definitions and concepts as provided in the analysis presented above, we can now proceed to description of what he have learned so far on proactive environmental strategies, where the research questions and gaps in the literature remain and especially those for which this dissertation will try to present some answers.

Box 1 - Definitions of proactive environmental strategy and small business

A proactive environmental strategy is

the continuous process of resource building, selection and deployment for value creation and distribution, by navigating through and interacting with the structural and social conditions that influence their value, with the purpose to prevent negative effects, or create positive impacts on the natural environment, beyond what is legally required or accepted as standard practice.

A small business has

- fewer than 50 employees
- a turnover and/or balance sheet total that that does not exceed € 10 million

Chapter 3

Developing Research Questions: The State-of-the-Art on Proactive Environmental Strategies

"We are like dwarfs sitting on the shoulders of giants. We see more, and things that are more distant, than they did, not because our sight is superior or because we are taller than they, but because they raise us up, and by their great stature add to ours."

(John of Salisbury)

3. Developing Research Questions: the State-of-the-Art on Proactive Environmental Strategies

3.1. Introduction

In order to position the contribution and research question of this dissertation, my goal in this chapter is to identify, by means of a general overview of the current knowledge on proactive environmental strategies, the most prevailing conclusions and research gaps in the literature. Metaphorically, this section presents my climbing on the proverbial "shoulders of giants", and to subsequently stand on them to present my own findings and reflections. To this purpose, I benefited from two recent pieces that have summarized the "Organizations and the Natural Environment" (ONE) literature to date (Bansal & Gao, 2006; Etzion, 2007). Bansal and Gao's paper was concerned mostly with the question in which top journals the ONE literature was published and how the natural environment was used: as context variable ("environmental context"), as mediator/moderator in determining organizational (financial) performance ("organizational outcomes") or as dependent variable ("environmental outcomes"). Etzion's paper, on the other hand, used three distinct viewpoints to review the ONE literature between 1992 and 2007: the level of the individual firm (its strategic and contingent attributes); the level of the industry (regulation, consumers and intra-industry dynamics) and the organizational environment (stakeholder influences and the institutional environment). Although both studies have provided helpful frameworks and viewpoints to structure the growing PES literature, I choose to organize my analysis around the two questions that have been dominating the field: "what determines whether an organization adopts a PES?" (antecedents), and "what are the effects of a having a PES to an organization?" (consequences).

Reviewing the growing of PES literature is a treacherous task as, similar to the semantic confusion in the entire domain of "corporate social responsibility" and "sustainable development" (Gladwin et al., 1995; Henderson, 2001; van Marrewijk, 2003; Perman et al., 2003), the literature has used a plethora of expressions to refer to PES. Terms such as "green strategy", "environmental strategy" and "strategy and the natural environment" are but some of the possible alternative denominations used. In order to manage this variety and to disclose the choices I made in delineating the field, I used a systematic review process that has as its most important goal to be as transparent as possible about the followed methodology. Before presenting the actual literature review, the next section is therefore dedicated to a description of the research methods used in the literature review. I then continue with a descriptive report

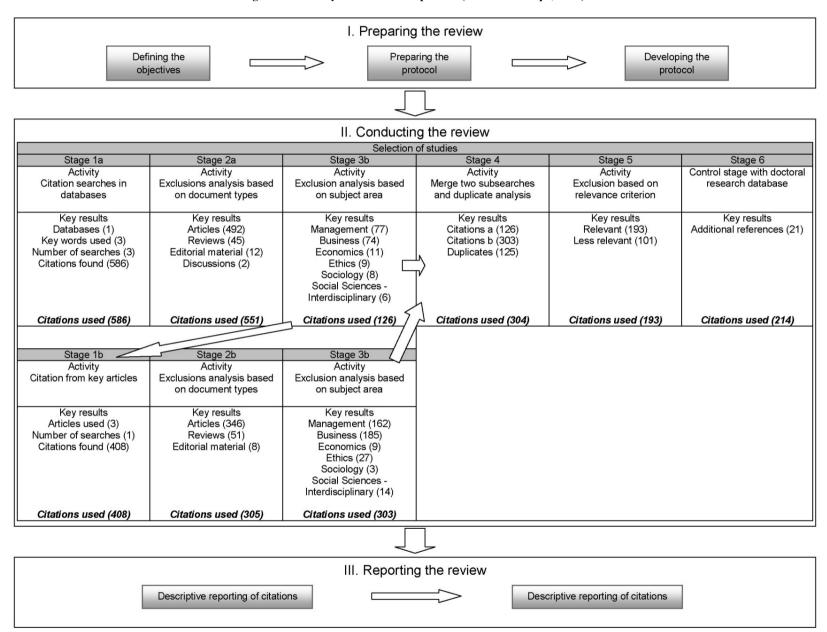
of the papers that were used in the literature review and subsequently describe the thematic findings on the antecedents and consequences of PES in the third and fourth section. I conclude this chapter with a discussion of the findings and a formulation of research questions.

3.2. Methods

In order to present a systematic review of the antecedents and consequences of PES, I followed the method of systematic literature reviews as developed by Tranfield (2003) and which was further refined by a number of articles in the International Journal of Management Reviews (e.g. Leseure, Bauer, Birdi, Neely, & Denyer, 2004; Thorpe, Holt, Macpherson, & Pittaway, 2005). The goal of this methodology is to use a "replicable, scientific and transparent process" (Tranfield, Denyer, & Smart, 2003: 209) that brings together "as many already existing (...) studies as possible that are relevant to the research being undertaken, irrespective of their published location, or even disciplinary background." (Thorpe et al., 2005: 258), and provides "an audit trail of the reviewers decisions, procedures and conclusions" (Tranfield et al., 2003: 209). Figure 3.1 shows the several steps that were undertaken in this process.

Prior to the review, I defined as its objective "to systematically assess the antecedents and consequences of proactive environmental strategies as they are described in current literature". I decided to focus only on articles that were published in the Web of Science (WoS), since this database coupled high quality with functionality and full article access to the most important and impactful journals in their respective fields. I then set out in a five stage study selection process as follows. First, I did three searches using "environmental strateg*", "green strateg*" and "natural environment" + "strateg*" as key words. This process yielded 586 citations. I then used the WoS functionality that allows for selection on document type and excluded all book reviews, meeting abstracts, letters and news items. The combination of remaining articles, reviews, editorial materials and discussions yielded 551 articles. Finally, I used an additional WoS functionality that allows selecting papers based on subject areas. I retained all articles with key words "management", "business", "economics", "ethics", "sociology" and "social sciences – interdisciplinary", to exclude papers with key words such as "marine & freshwater biology", "genetics & heredity" or "oncology". This selection process left a total of 126 articles.

Figure 3.1 - The systematic review process (based on Thorpe, 2005)



The second stage attempted to address a bias in the generated database resulting from key word selection. Given the different nomenclatures used to refer to proactive environmental strategies, besides "environmental strategy", "green strategy" or "strategy and the natural environment", I expected the search to miss out on important articles. A quick scan of the remaining papers based on my prior knowledge of the field confirmed my expectation. I therefore ranked the 126 articles based on the number of citations each article had received, to capture the most influential articles in the selection. Using the citation ranking, I then selected papers until the cumulative number of citations of the selected papers yielded at least 25% (390 citations) of the total citations to the 126 articles (1561 citations).

Table 3.1 shows these top cited articles and the selection process of 3 articles: Hart (1995), Walley and Whitehead (1994) and Sharma and Vredenburg (1998). Subsequently, I selected all the papers that cited these three papers in a new selection, and applied the same document type and subject area exclusion criteria as in the first stage. This process yielded 303 articles.

Number of Cumulative Author Article citations percentage 1561 100% (Total) Hart, 1995 "A natural-resource based view of the firm" 182 12% Walley and "It's not easy being green" 135 20% Whitehead, 1994 "Proactive corporate environmental strategy and the Sharma and development of competitively valuable organizational 91 26% Vredenburg, 1998 capabilities" "Beyond greening: Strategies for a sustainable Hart, 1997 86 31% world" "The impact of environmental technologies on Klassen and 70 36 manufacturing performance" Whybarck, 1999

Table 3.1 - Top cited articles and their citation number

In stage 3, I exported both searches to Reference Manager software and continued the selection process with 429 articles. After deleting all duplicates in the database, I set out in a process of screening all titles and abstracts for relevant and less relevant articles in stage 4. Articles were considered less relevant if their topic was not related to the natural environment, dealt with technical aspects or did not have a business focus. Examples of titles that were excluded included "Public parks and the geography of fear", "Antecedents and consequences of internet use in procurement: An empirical investigation of US manufacturing firms" and

"The resource-based theory: dissemination and main trends". This exclusion process yielded a total of 170 usable papers.

I am aware that the combined approach of key words and key paper citations may not entirely correct for variant classifications or nomenclature usage. For example, influential articles that were published before or around the same time as the three key articles would not be captured in this process. To correct for this bias, the fifth phase consisted of an additional check using a database of papers that was collected during the time of my PhD project and by checking the references used by the articles read. Together, this process yielded a total of 202 papers that were used in the review process.

3.3. Descriptive review of the literature

Given the extensive discussion on the evolution and publication outlet characteristics of the PES research in Bansal and Gao (2006), I will only describe three observations that drew my attention while reading the sampled papers.

Observation 1: the number of papers published on PES is stabilizing after a dramatic increase in the 1990s.

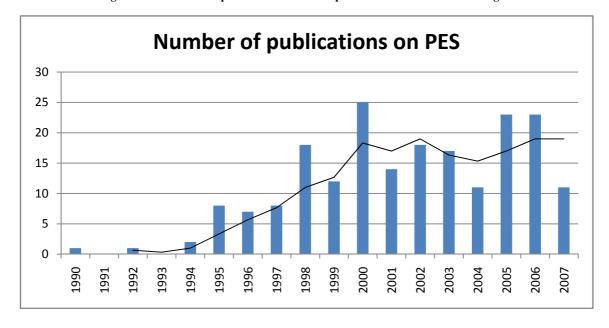


Figure 3.2 - Number of publications found on proactive environmental strategies

Although the number of papers that are published on PES seems to stabilize in recent years, Figure 3.2 shows a dramatic increase in publications in the 1990's. The pattern is similar to the review as presented by Bansal and Gao (2006) and shows a stable publication rate, with a number of peaks in 1995, 1998 and 2000 that reflects the publication of special issues on PES in the Academy of Management Review in 2005 and in the Academy of Management Journal

in 2000. No definite explanations can be found for the peak in 1998, although Bansal and Gao (2006) suggest that this surge may be the effect of a sudden increased attention in PES in general, in response to the 1995 AMR Special Issue, or because of a larger supply of recently graduated doctoral students that publish their doctoral research. Although Bansal and Gao (2006) concluded that the publishing rate was stable over the period 1995 – 2005 when correcting for the special issue peaks, the 3-year average trend line in Figure 3.2 nevertheless shows that the number of publications has grown from almost nothing in the beginning of the 1990's to about 18 papers per year today.

Observation 2: "Proactive environmental strategies" cover a broad spectrum of operationalizations, confusing the comparability of findings.

As argued in the introduction and the methods section, many denominations have been used to refer to the equivalents of "proactive environmental strategies". In addition to the key words that we used in our search, we found such alternatives as "ecologically sustainable environmentalism", organizations", "corporate "pollution prevention strategies", "enviropreneurial marketing" and many more. In addition to this semantic variety, however, the "environmental strategies" have been operationalized and measured in multiple ways as well. In order to assess the way PES were manifested in the literature, I first coded all papers on their conceptual or empirical contribution, yielding 66 conceptual (33%) and 136 (67%) empirical papers. I then focused only on the empirical papers and coded whether PES were used as a dependent variable or independent variable (112 papers), and indicated how the PES was manifested. Table 3.2 provides an overview of the uses of each PES proxy. Whereas some studies measure PES by the strategic intentions and attitudes towards the natural environment (Rojsek, 2001; Goldstein, 2002), others have used more actions-based proxies (Gilley, Worrell, Davidson, & El-Jelly, 2000; Aragon-Correa, Matias-Reche, & Senise-Barrio, 2004; Sharma & Henriques, 2005; Pujari, 2006), environmental management systems (Curkovic, Melnyk, Handfield, & Calantone, 2000; Jiang & Bansal, 2003; Potoski & Prakash, 2005; McKeiver & Gadenne, 2005), awards and/or events (Klassen & McLaughlin, 1996; Banerjee, 2001), membership of programs (such as Responsible Care in the chemical industry or the CST scheme in Costa Rica) (King & Lenox, 2000; Rivera & De Leon, 2005; Lenox, 2006), and still others have used a combination of practices and (perceived) environmental results (Sharma & Vredenburg, 1998; Sharma, 2000; Zhu & Sarkis, 2004; Bansal, 2005).

Such a plethora of meanings of PES has led some authors to differentiate between "environmental orientation" and "environmental strategy" (Banerjee, 2001; Banerjee, Iyer, &

Kashyap, 2003). Whereas environmental orientation is "the recognition by managers of the importance of environmental issues facing their firms", environmental strategy reflected "the extent to which environmental issues are integrated with a firm's strategic plans" (Banerjee et al., 2003: 106). Other authors conclude that "there are different types of proactive initiatives and practices, and that they might not always be reduced to a single dimension" (Gonzalez-Benito & Gonzalez-Benito, 2005c: 2). As a result, the most recent articles, and most specifically those published in operations management journals, have engaged in a further refinement of correlations between antecedents and consequences of specific subdimensions of PES, such as strategic practices vs. operational practices (Gonzalez-Benito & Gonzalez-Benito, 2005a; Wagner, 2007) or product-related improvements vs. process-related practices (Gilley et al., 2000). Such further refinements are likely to increase in the future, since they uncover the complexity of processes that are underlying the broader concept of proactive environmental strategy. This will also become clear in the discussion of the antecedents and consequences of PES.

Table 3.2 - Proxies used for PES in empirical literature

PES proxy	Number	%
Actions	57	51
Intentions + actions	19	17
Environmental management system	14	13
Intentions	8	7
Actions + results	6	5
Program membership	5	4
Awards + events	2	2
Patents	1	1
Total	112	100

Observation 3: The larger enterprise dominates PES research.

A third element that emerged from the literature was its predisposition towards investigations of the larger firm. In order to get a more quantitative estimate of the firm size balance in the sample, I coded all empirical papers on the size of the firms that were used in their investigation. As the cut-off levels, I used the earlier presented definition of micro (< 10 employees), small (10-50 employees), medium (50-250 employees) and large (> 250 employees) businesses as provided by the European Commission. Table 3.3 presents an overview of this analysis.

Table 3.3 - Size of firms investigated in empirical papers

Type	Number	%
Micro	2	1
Micro + Small	3	2
Micro + Small + Medium	6	4
Micro + Small + Medium + Large	6	4
Small	1	1
Small + Medium	2	1
Small + Medium + Large	16	12
Medium + Large	18	13
Large	65	48
N/A	10	7
Level of analysis other than firm level	7	5
Total	136	100

Although small and medium-sized businesses generally represent over 99% of businesses and generate over 40% of economic added value and 60% of the employment in a country (Observatory of European SMEs, 2003), they are represented in less than 30% of the research. Furthermore, investigations that are specifically interested in PES in small or microbusinesses are almost inexistent. Only 4% of the papers in the sample were specifically focused on this group of firms. Such a low interest in small businesses is not only inappropriate because of the large impact small firms have on the natural environment (at least, in cumulative terms), but the models that have been developed for large firms may also not be applicable to smaller firms: "Given differences in the structure, governance, scale, reach and resource base of large and small enterprises, it would be unwise to presume that findings in the general literature can be directly applied to the small company sector" (McKeiver & Gadenne, 2005: 200). Before making such conclusions, however, the next subsections are dedicated to a thematic overview of the models and relations that have been either proposed or tested based on theoretical and empirical work in the sampled papers.

3.4. Thematic review of the literature

As mentioned before, I have structured my review along two major streams in the literature, namely the antecedents and consequences of PES. As a roadmap through the various constructs that were defined in this process, Figure 3.3 presents an overview of the categories that are presented in each of the following subsections.

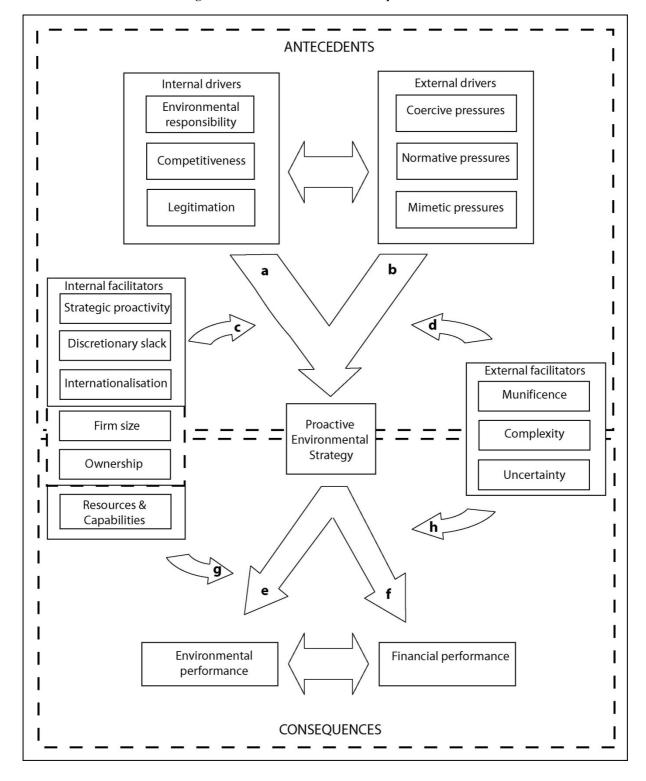


Figure 3.3 - The antecedents and consequences of PES

3.4.1. Antecedents of Proactive Environmental Strategies

A large part of the literature has been interested in the reasons *why* and *when* a firm would be inclined to adopt a PES. In line with the description of strategy in the former chapter, I have summarized these antecedents as the external drivers and contingencies (outside-in perspectives), and the internal drivers and facilitators (inside-out perspectives). In

the next subsections, I will discuss the literature of each of these antecedents and highlight gaps in the literature where this dissertation aims to contribute.

3.4.1.1. Internal drivers: motivation and goal-related factors (a)

The importance of motivations and goal-related factors becomes most evident when asking the question "why do firms *not* adopt a PES"? In general, this question generally elicits the response "because they simply do not want to." In other words, a lack of motivation is considered one of the most important reasons why firms do not take environmental issues into

account, let alone be proactive in the matter. One of the most comprehensive efforts to synthesize the internal drivers for PES to date can be found in Bansal and Roth (2000). Based on their findings in 53 diverse companies, using several data sources, they proposed "environmental responsibility", "competitiveness" and "legitimacy" as the three main motivations for environmental responsiveness and some indications were given on their implications for the level of proactivity assumed. Their model was further confirmed by Gonzalez-Benito and Gonzalez-Benito (2005a) in a survey among Spanish firms and several contributions in the literature can be fit in to their framework. This has given both interesting and sometimes diverging conclusions.

1. Environmental responsibility. Although the level of our analysis is the firm, a number of authors have argued that the strategies, initiatives and actions spring from the personal theories, values and perceptions of individuals operating in the firm (Egri & Herman, 2000; Prakash, 2001; Gonzalez-Benito & Gonzalez-Benito, 2005b). Several studies therefore highlighted the importance of "environmental champions" or "environmental stewardship" in the firm: employees or managers that have – as an individual - a concern for the environment and sell their concern inside the organization (Bansal, 2003). Only when there was some form of commitment from employees (Andersson & Bateman, 2000; Bansal, 2003), or more importantly from strategic decision-makers (Sharma, 2000; Banerjee, 2001; Banerjee et al., 2003; Aragon-Correa et al., 2004; Branzei, Ursacki-Bryant, Vertinsky, & Zhang, 2004; del Brio, Fernandez, & Junquera, 2007), did firms engage in strategic environmental actions. In their study on 'environmental leaders', Egri and Herman (2000) found that such individuals were mostly characterized by an openness to change, selftranscendence and ecocentrism, along with personality characteristics that correlate well with entrepreneurship and leadership. However, despite the importance of

- individual values, Bansal (Bansal, 2003) found that the speed, scope and scale of an organization's response to environmental issues depended on the combined effect and congruence of individual concerns *and* organizational values. This finding is important, since it highlights how individual concerns may be attenuated by the culture and values of his or her environment.
- 2. Competitiveness. Businesses will also be more inclined to adopt PES when they perceive environmental responsiveness as an opportunity to increase or secure the longer-term profitability of the firm (Sharma, 2000; Bansal & Roth, 2000; Banerjee, 2001; Bansal & Bogner, 2002; del Brio & Junquera, 2002; Banerjee et al., 2003; Carmona-Moreno, Cespedes-Lorente, & De Burgos-Jimenez, 2004; Gonzalez-Benito & Gonzalez-Benito, 2005c). The need for this competitiveness argument pervades almost all studies that discuss motivational antecedents of PES. While some believe that attention to the natural environment will spawn innovations, reduce costs and uncover new market opportunities (Shrivastava, 1995a; Porter & van der Linde, 1995b), other think that such win-wins between economic and environmental prosperity are only possible to a certain point and will incur costs from thereon (Walley & Whitehead, 1994; Palmer et al., 1995; Schaltegger & Synnestvedt, 2002). As a result, many firms that do not engage in more proactive types of environmental strategies motivate their choice by referring to a lack of competitiveness benefits (Boiral, 2006).
- 3. Legitimation. Another internal motivator for the adoption of PES is the sensitivity of a firm to the way it is perceived as a legitimate organization by its constituencies, both internal and external. Whereas competitiveness relates more to legitimacy in the market, legitimacy here is referred to the goodwill an organization receives from society to continue its existence or practices (Suchman, 1995), both in response to social (regulatory) and stakeholder (non-regulatory) issues (Clarkson, 1995). Firms adopting PES out of legitimation reasons do so in order to comply or stay ahead of regulation (Shrivastava, 1995a; Bansal & Roth, 2000; Banerjee et al., 2003; Clemens & Douglas, 2006). In addition, especially firms that have lost their legitimacy at some point are more likely to adopt a PES in response to assure their "license to produce" for the future. In its most cynical form, firms may even adopt a PES to counter or cover up for other, less ethically defendable practices (Williams & Barret, 2000; Bansal & Clelland, 2004).

These three internal drivers have been found in a wide variety of sectors and hold in different firms with different sizes. It is important to note, however, that each of these motivation categories are ideal types. In reality, firms with proactive environmental strategies will do so as a result of a combination of motivations. In fact, the highest levels of proactivity are likely to emerge from firms where all three motivations are present. Yet two important, seemingly contrasting conclusions on the internal drivers for PES can be drawn from the literature: (1) the all pervasive importance of competitiveness and external pressures and (2) the need for a moral commitment perspective.

1. The need for competitiveness and external pressures. Many studies have found that employees and managers stay away from selling their concern with the environment as a moral responsibility and sell it as an 'amoral' (Crane, 2000) business benefit (Banerjee, 2001; Bansal, 2003) or inevitable threat (Fineman & Clarke, 1996):

"motives of ethics and social responsibility for greening initiatives are rarely claimed by executives other than those from social mission companies. This suggests that coercion from powerful stakeholders, such as pressure groups and regulators, mediated by politically adept and professionally ambitious internal champions, is more likely to encourage corporate greening than any voluntary moral impulses or principles." (Crane, 2000: 691).

The message that echoes from many studies that have investigated the antecedents of environmental responsiveness is one of warning: firms will only engage in practices or strategies that go beyond the law if they see an economic benefit in it, or when resistance would result in reduced legitimacy with its constituencies. In the absence of such incentives, the number of firms with PES will remain largely marginal.

2. The need for moral commitment. Given that we define PES as the voluntary internalization of environmental impacts beyond legal requirements, the former conclusion could provoke pessimism and cynicism about the mere existence and credibility of PES. Are environmental strategies not always a response to some form of external pressure? And, if yes, then how can one still consider them to be the result of 'voluntary' initiatives? Yet despite the apparent need for external pressures in many companies, "directly or indirectly, corporate environmental action depends on how stakeholder pressures connect with managers' values, with their personal theories of economic/instrumental purpose, and with their self or role identities." (Fineman & Clarke, 1996: 728). To the minimum, this implies that action is impossible without managers or employees making sense of, or being concerned with the natural

environment. To the maximum, this suggests that – in the end – external pressures are not necessary for those firms engaging in proactive environmental strategies. The studies of Branzei and colleagues (2004), Buysse and Verbeke (2003) and of Aragon-Correa and colleagues (2004) show that external pressures are not always necessary to champion natural environmental issues. Many case studies and surveys that have probed firms for the underlying mechanisms why they have gone beyond legal requirements still refer to a moral and ethical responsibility "to do good" or "to do the right thing" (Bansal & Roth, 2000; Banerjee, 2001). This implies that behind many proactive environmental strategies, an affectionate, value-laden moral sensitivity is hidden, triggering exploration and further commitment to take the natural environment into account. It is exactly this affectionate component that differentiates PES from many other strategies (Halme, 2002). Such a conclusion may especially be important in smaller firms, where the organizational goals and values reflect those of the owner/manager more so than the management in larger firms. As such, the effect of the personal values of a manager can be expected to be larger in smaller firms than in larger firms (Aragon-Correa, Hurtado-Torres, Sharma, & Garcia-Morales, 2008).

In sum, we can conclude that the adoption of PES will be a result of the interplay of both internal *and* external drivers. Since both external pressures and internal motivations seem to influence why a firm engages in practices that take it beyond the law to internalize the natural environment in its strategy, I conclude that any endeavor undertaken to investigate PES should be mindful of both perspectives.

3.4.1.2. External drivers: institutions (b)

Whereas the focus of the former literature has been mostly concerned with the adoption of PES deriving from deliberate managerial choices, a second stream in the literature has been investigating PES as a result of external pressures exerted on organizations. The PES literature sometimes gets the critique of being overly "evangelic" (Newton & Harte, 1997) in believing that organizations will voluntarily take environmental issues into account. Although the critics of this "overoptimistic" view of PES acknowledge the need for more business attention to the natural environment, they warn that the majority of firms will only engage in more proactive environmental strategies in the event of increasing public or regulatory pressure (Newton & Harte, 1997). In addition, concerns are raised whether increased public

pressure will even be enough to stimulate business to – either voluntarily or out of instrumental concerns – move towards more environmentally friendly directions.

The research on external drivers for PES is embedded in the theoretical categories as provided by institutional theory (Meyer & Rowan, 1977; DiMaggio & Powell, 1983) and resource dependence theory (Pfeffer & Salancik, 1978). More specifically, studies have been done on the responses of firms to individual or combinations of pressures as defined in DiMaggio and Powell's (1983) framework of coercive, normative and mimetic pressures. *Coercive pressures* stem from legal requirements, the breaching of which involves a legal sanction. *Normative pressures* follow from social obligations and duties that are associated with membership of a community or association. Finally, *mimetic pressures* emerge as the imitation and continuance of successful practices from peers or tradition in response to uncertain or ambiguous situations. The empirical contributions investigating the adoption of environmental strategies in response to these institutional pressures show a progressive refinement and understanding of the relevant processes involved.

1. Coercive pressures. As was mentioned before, legal requirements are among the most important drivers for PES. Many studies demonstrate how environmental responsiveness is the result of the perceived pressures from regulatory bodies (Henriques & Sadorsky, 1996; Andrews, 1998; Henriques & Sadorsky, 1999; Banerjee, 2001). In the context of *proactive* environmental strategies, however, this regulatory influence is somewhat problematic. Since we defined a proactive environmental strategy as organizational actions beneficial for the natural environment beyond regulatory requirements, the influence of coercive pressures should still be assessed in the way a firm's actions and strategies go beyond these pressures. The literature provides three interesting findings in this perspective. First, the most proactive firms often do not consider coercive pressures to be important. In their study of 197 large Belgian firms, Buysse and Verbeke (2003) found that firms with pollution prevention strategies (medium proactivity) attached far more importance to coercive regulatory pressures than those firms with a reactive strategy (least proactive) and a leadership (most proactive) strategy. They argued that leadership firms would be more driven by internal drivers and would hence consider regulatory pressures only as an extra support rather than as the main driver. Similar results were found by Rivera and De Leon (2005), who reported that the most environmentally proactive CEO of Costa Rican hotels did not consider regulatory incentives important for their strategies. Also,

Clemens and Douglas (2006) found that firms that already had superior resources associated with PES perceived significantly less coercive pressures than their less proactive peers. Second, Maxwell and colleagues (2000) found that a *perceived threat of regulation*, without the actual threat being in place, functioned as a great stimulus for firms to decrease their environmental impact. Third, recent studies indicate that multinational companies (MNCs) often take up proactive environmental strategies in the clear absence of host country environmental regulations, yet follow the standardized practices emanating from their headquarters which operated in organizational fields where these institutional pressures for attention to the environment are present (Dowell, Hart, & Yeung, 2000; Christmann, 2004; Child & Tsai, 2005). All these studies indicate that coercive pressures will influence the environmental responsiveness of a firm, but do not seem to instigate firms to opt for more proactive strategies and go beyond legal requirements.

2. Normative pressures. The impact of normative pressures on the adoption of PES is somewhat inconclusive, and mostly depends on both structural features of the firm and the characteristics of the stakeholder that is exerting some kind of pressure on it. A widely used and confirmed perspective in this context is the responsiveness organizations develop in response to a firm's internal (employees, shareholders) and external constituents (suppliers, customers, civil society organizations). Various studies have shown that firms develop PES to abide to the wishes of these myriad stakeholder pressures (Henriques & Sadorsky, 1999; Buysse & Verbeke, 2003; Bansal, 2005; Eesley & Lenox, 2006). The term "stakeholders", however, seems to cover a range of actors that is too broad to make conclusive statements about which responses are elicited by whose interests. Whereas some studies found that the internal stakeholders were most important (Buysse & Verbeke, 2003) and that lobby groups were considered of negligible influence (Henriques & Sadorsky, 1996), others found that firms only developed PES in response to external 'campaigning' organizations (Fineman & Clarke, 1996). A potential explanation for these results lies with the specific relational interdependencies between a firm and its stakeholders, and the power of the stakeholder over the resources needed by the firm (Frooman, 1999; Sharma & Henriques, 2005). Often ignored in the literature that uses a stakeholder perspective to PES, however, are the within-industry normative pressures that derive from trade associations and professional associations that represent the sector (Hoffman & Ventresca, 1999; Wade-Benzoni, Hoffman, Thompson, Moore, Gillespie,

- & Bazerman, 2002). Over the last decades, several industries around the globe have made collective agreements with governments to realize environmental improvements through self-regulation (Segerson & Miceli, 1998; Delmas & Terlaak, 2002). Several studies have indicated that trade association membership can be an important stimulus for the adherence to these voluntary programs (Hoffman, 1999; King & Lenox, 2000; Rivera, 2002). Yet, despite the normative pressures exerted from trade and professional associations to achieve a collective environmental goal, strong forces for opportunism exist to defect (King & Lenox, 2000; Darnall & Carmin, 2005; Lenox, 2006). Only when groups are small enough or when some sort of normative sanction or exclusion criterion exists, will firms conform to the normative pressures for self-regulation (Olson, 1965; Ostrom, 1990; King & Lenox, 2000; Maxwell, Lyon, & Hackett, 2000; Kollman & Prakash, 2002; Orsato, den Hond, & Clegg, 2002; Potoski & Prakash, 2005; Lenox, 2006).
- 3. Mimetic pressures. Mimetic pressures present themselves mainly in situations of higher uncertainty. In situations where little (valuable) information is available to predict the evolution of a firm's environment or the strategic actions of its constituents, firms may emulate the opinions or behaviors of leading individuals or organizations in the industry. They do so to keep the firm from suffering social or financial sanctions resulting from actions deviating from the social norm. Both the conceptual and the empirical literature, however, are again in conflict on how the mimetic pressures influence PES. The larger part of the literature argues that firms will conform to the clout of industry associations and leading firms and adopt PES as a result (Jennings & Zandbergen, 1995; Rivera, 2002; Bansal, 2005; Clemens & Douglas, 2005; Child & Tsai, 2005; Shah & Rivera, 2007). Bansal (2005), for example, found that firms started conducting environmental audits in response to mimetic pressures. Child and Tsai (2005) found that MNCs in China and Taiwan often adopted the same environmental manners as those of other members of local networks, such as the American Chamber of Commerce. Similar results were found by Shah and Rivera (2007) in the export processing zones in Trinidad and Tobago. Also, voluntary initiatives for environmental self-regulation like the Responsible Care program in the chemical industry hinge on the mimetic pressures of the larger and more visible business in the industry to attract and retain members (King & Lenox, 2000; Lenox, 2006). Yet the direction of within-industry pressures is not always conducive to the adoption of proactive environmental strategies. Bansal and Roth, for example, found

that mimetic within-industry pressures tended to discourage higher levels of proactivity to the environment "because it made other field members 'look bad', (...) ratcheted up standards for other field members, raising operating costs", and made them "conform to standard industry practice" (2000: 731). Such hesitancy towards PES would especially be present in organizational fields with high levels of cohesion (close and embedded connections between field members). This would suggest that the most proactive firms are actually going against mimetic pressures within their industry, which is confirmed by a few studies that found lower importance of competitor pressures among proactive firms (Andrews, 1998). Most interesting, however, is that the majority of studies that investigate business responses to stakeholders simply do not include trade associations or within-industry pressures (Henriques & Sadorsky, 1996; Fineman & Clarke, 1996; Banerjee, 2001; Banerjee et al., 2003; Lefebvre, Lefebvre, & Talbot, 2003; Sharma & Henriques, 2005; Kassinis & Vafeas, 2006; Eesley & Lenox, 2006) or focus predominantly on the pressures they exert in favor of proactive environmental strategies as argued above.

The former paragraphs demonstrate the importance of each of the institutional forces on the adoption of PES. Institutional theory literature suggests, however, that the institutional environment always consists of a combination of coercive, normative and mimetic pressures and their relative importance may change between sectors, between organizational fields, and also over time. One important factor for such dynamic changes in the relative importance of institutional pressures comes with 'triggering events'. The importance of triggering events has been documented in several publications by Hoffman in the chemical industry (Hoffman, 1999; Hoffman & Ocasio, 2001). In his historical analyses of the US chemical industry over the last four decades, Hoffman was able to demonstrate how important events changed the norms and responses of chemical companies and of their constituents. Events may shift the power, legitimacy and the urgency (Mitchell et al., 1997; Eesley & Lenox, 2006) of certain stakeholders, instigating a change in business behaviors more in line with stakeholder demands.

Together, these empirical studies highlight the growing importance of institutional pressures pushing businesses to strategies more inclusive of the natural environment. This influence is widely accepted and empirically confirmed. However, these papers also highlight that very similar stakeholder pressures may be perceived differently among firms, with different responses to stakeholder pressures as a result. The presence of stakeholder pressures,

by itself, is thus not a good predictor for the adoption of PES. Although many explanations can be given why these differences in perceptions exist and why not all pressures from a firm's constituencies result in the adoption of PES, I believe the current literature has neglected two potential explanations:

- 1. A first reason is that a firm simply may not experience any pressure. Pressures can only be responded to if they exist. Even in these times in which the natural environment is rising on the public agenda, an individual firm may not be exposed to any noticeable pressure about it. Although it is often argued that there is an increasing public interest in the environmental actions of firms, this is not always the case: "not everyone is equally interested in all aspects of preserving the environment, and some [stakeholders] may be more inclined to act than others" (Aragon-Correa & Rubio-Lopez, 2007: 362). This may be especially the case with smaller firms (Azzone, Bertelè, & Noci, 1997; Noci & Verganti, 1999; Hillary, 2000a; del Brío & Junquera, 2003; Vernon, Essex, Pinder, & Curry, 2003), of which the perceived contribution to pollution may be considered negligible both by stakeholders and the firms themselves (Merritt, 1998; Hillary, 2000a). As a consequence, in many industries only the larger and more visible firms attract the scrutiny from both regulators and the general public (Pfeffer & Salancik, 1978; Greening & Gray, 1994; Goodstein, 1994; Meznar & Nigh, 1995). Although smaller size is not necessarily correlated with lower visibility (Bowen, 2000), smaller firms may nevertheless benefit from their "stealth" (Chen & Hambrick, 1995) and remain invisible to public scrutiny. As a result, if small firms experience any institutional pressure, it is mostly coercive (Worthington & Patton, 2005; McKeiver & Gadenne, 2005), which makes the adoption of environmental initiatives beyond legal expectations more a result of "elective action" than a result of an urgent response to economic or institutional pressures (Bansal & Bogner, 2002).
- 2. Secondly, pressures for more PES may conflict with other pressures that resist PES. Institutional pressures against increasing environmental attention still exist. As described in chapter 1, the movement towards the voluntary adoption of environmental practices by companies represents a paradigm shift (Gladwin et al., 1995; Purser et al., 1995; Kilbourne, Beckmann, & Thelen, 2002; Starkey & Crane, 2003; Prasad & Elmes, 2005), with inevitable institutional inertia as a result

(Kuhn, 1962; Hoffman & Ventresca, 1999). Although some coercive and normative pressures may push firms in the direction of more proactivity towards the environment, they may therefore conflict with more conservative withinindustry normative and mimetic pressures that defend an industrial common goal of maintaining the business-as-usual. Especially the within-industry mimetic pressures should not be underestimated, given that "mimicry is more likely than normative pressure to influence organizations in a field to adopt concepts and practices related to ecological sustainability" (Jennings & Zandbergen, 1995: 1034). The uncertainty of adopting a PES may be larger than not having one, which directs the isomorphic pressures inwards towards traditional and thus 'safer' grounds. The influence of these cognitive institutions is particularly strong among smaller firms. As said, smaller firms are less visible to the larger public. Small businesses have therefore been found to be strongly influenced by the cognitive frameworks that are shared with peers and the local business community (Meyer & Rowan, 1977; Brown & King, 1982; Vyakarnam, Bailey, Myers, & Burnett, 1997; Arbuthnot, 1997; Tilley, 2000). Hence, only when the dominating practices and taken-for-granted assumptions are changed or questioned, will organizations move along towards more proactive environmental strategies. Yet similar resistance may exist among larger firms as well. Given the high probability that increased normative pressures and regulatory requirements will need organizational change or even make current business models impossible, "there are indications that business networks are actively resisting moves towards increased compulsion" (Newton & Harte, 1997: 90), and that the scant initiatives of business environmental networks (such as the Business Council for Sustainable Development and the Global Compact) are "just a pretence to subvert the environmental agenda and fight off regulatory control" (Newton & Harte, 1997: 90). Research has shown that the most polluting firms are also the firms that spend most money to lobbying with politicians represented in environmental commissions (Meznar & Nigh, 1995; Cho et al., 2006), especially larger firms (Hillman & Hitt, 1999). In conclusion, firms are probably under differing pressures from their various constituencies in the organizational field, pushing them in opposite directions. An inquiry in how firms react to or reconcile the institutional pressures that are in fact against the adoption of PES, however, is lacking to date.

3.4.1.3. Internal facilitators (c)

Besides the internal motivations and goals of the firm, several studies have revealed that the presence of certain organizational structural features, resources or capabilities may foster the development of PES. Beware that my focus here is *not* on how resources or capabilities aid in the execution of PES, but on their impact on the presence of such strategies.

- 1. Firm size. The empirical evidence indicating a positive correlation between a firm's size and the likelihood of it having a PES is overwhelming (Florida, 1996; Russo & Fouts, 1997; Aragon-Correa, 1998; Judge & Douglas, 1998; Spence, Jeurissen, & Rutherfoord, 2000; Sharma, 2000; King & Lenox, 2000; Hillary, 2000a; Remmen, 2001; Gil, Jimenez, & Lorente, 2001; Schaper, 2002; King & Lenox, 2002; Chan, 2005; Bansal, 2005; Gonzalez-Benito & Gonzalez-Benito, 2005c; Elsayed, 2006; Shah & Rivera, 2007). Smaller firms tend to adopt strategies that are focused on merely complying with the law (Azzone et al., 1997; Gerstenfeld & Roberts, 2000; Hillary, 2000a; Remmen, 2001; McKeiver & Gadenne, 2005), and are even "vulnerably compliant" (Petts, Herd, Gerrard, & Horne, 1999): smaller firms may not be aware of their legal requirements, making compliance sometimes more the result of luck than of a particular strategy. As a consequence, most of the literature suggests that PES are rare among small businesses. Despite these general assertions, a few studies have indicated that a refined picture that takes moderating factors into account is necessary. For example, recent results in the Canadian forestry industry indicate how smaller firms were constrained by their size in the more technical PES, where scale seems to have a benefit, yet that firm size did not have an effect on the adoption of ecostewardship practices or the general alignment of environmental issues with the firm strategy (Sharma & Henriques, 2005). In addition, ample anecdotal evidence seems to indicate that PES do exist among small businesses and are sometimes even championed by smaller firms (UNIDO, 2002; European Commission, 2003c). Such contradictory evidence indicates that firm size may hide undercurrents that may be better explanatory factors for PES than only size (Bowen, 2002a; Lepoutre & Heene, 2006).
- 2. Strategic proactivity. Several studies have found that firms which have more proactive postures in general will more likely adopt a PES as well (Aragon-Correa, 1998; Aragon-Correa et al., 2008). Often this proactivity was reflected in the prior presence of advanced capabilities such as R&D intensity developed by the firm (Arora &

- Cason, 1995), total quality management capabilities (Klassen, 2000; Curkovic et al., 2000), or general knowledge and education about the environment (Schaper, 2002; Fryxell & Lo, 2003) which have also been found to have a positive impact on PES adoption.
- 3. Discretionary slack. Although some correlation may exist with firm size, discretionary slack is another recurrent important facilitating factor for the adoption of PES. Discretionary slack refers to the latitude one has over one's decisions, due to an abundance of resources which function as a "cushion of actual or potential resources which allows an organization to adapt successfully to internal pressures for adjustment or to external pressures for change in policy as well as to initiate changes in strategy with respect to the external environment" (Bourgeois, 1981: 3). Several studies have found that slack resources facilitate the adoption of PES (Russo & Fouts, 1997; Sharma, 2000; Bowen, 2002b; Bansal, 2003; Aragon-Correa et al., 2004; Bansal, 2005; Clemens & Douglas, 2006), yet that its mere presence is not enough: "slack may facilitate strategic environmental behaviours, but will not necessarily initiate them" (Bowen, 2002b). Slack may provide the space for strategic change, innovation and experimentation, but hinges on the motivation of an individual to dedicate the slack to PES.
- 4. *International experience*. A number of studies indicate how the exposure of a firm to different national contexts increases the probability that it will adopt a PES (Buysse & Verbeke, 2003; Lefebvre et al., 2003; Bansal, 2005). International experience is related to an increased openness to stakeholders, which has been found as an important predictor of PES adoption (Klassen & Whybark, 1999a). However, not all international experience seems conducive to PES. King and Shaver (King & Shaver, 2001), for example, found that foreign firms investing in the US lagged their US counterparts in waste prevention. The complexity in regulatory differences was proposed as a possible explanation.
- 5. *Ownership*. Only three studies were found that discussed the ownership influences on the adoption of PES, unfortunately with contradictory results. Given that family-owned firms often have a longer strategic horizon, have a stronger attachment to the reputation of the firm and to the community to which it belongs (Sharma & Irving, 2005), it is hypothesized that family firms would be more inclined to adopt PES. However, whereas Dyer and Whetten (2006) were able to conform this hypothesis, Craig and Dibrell (Craig & Dibrell, 2006) found opposing results. Hence, further

research awaits the impact of the ownership structures on firm PES. Besides ownership by family or not, differences between public (government-based) and private (market-based) ownership were also investigated. Darnall and Edwards (2006) hypothesized and confirmed that due to the lower prior presence of advanced capabilities in public companies (total quality management, inventory control and pollution prevention capabilities), they inherited higher costs of adopting an environmental management system.

The large variety in responses with regards to the identified influences highlight, again, that generalizing across firms is difficult. In addition to the internal drivers and facilitators, and the external drivers, studies have also focused on the impact of external contingencies on the adoption of PES. These are discussed next.

3.4.1.4. External facilitators: contingencies (d)

In addition to the institutional forces that may push firms to adopt a PES, the literature has also identified a number of external contingencies that moderate the response organizations develop towards the natural environment. More specifically, these contingencies may pull firms towards or deter them from PES. In a recent article, Aragon-Correa and Sharma (2003) modeled these influences in the most comprehensive framework to date, by looking at three important contingencies of the task environment: munificence, complexity and uncertainty. Munificence refers to "the scarcity or abundance of critical resources needed by (one or more) firms operating within an environment" (Castrogiovanni, 1991: 542), usually to accommodate growth in an industry (Dess & Beard, 1984). Complexity results from the number and diversity of factors that influence the general business environment (Smart & Vertinsky, 1984), increasing the difficulty to locate the levers that make the environment manageable or understandable. *Uncertainty* refers to the "perceived inability to predict something accurately" because one "perceives himself/herself to be lacking sufficient information to predict accurately or because he/she feels unable to discriminate between relevant data and irrelevant data" (Milliken, 1987: 186). Together, these three external factors can be used to capture the external contingencies of PES adoption.

1. *Munificence*. Munificent business environments, as opposed to hostile environments, are characterized by an abundant supply of resources and capabilities (private or public) that feed in the industry. Aragon-Correa and Sharma (2003) hypothesized that munificent environments are conducive to the adoption of PES, because they allow

extra support, resources and learning abilities to aid in the uncertain and novel practices that may be associated with their introduction. The empirical literature seems to agree with this hypothesis. Halme (2002), for example, found that more munificent business environments allowed for more experimentation and learning that is needed for the sometimes novel practices associated with PES. McEvily and Zaheer (1999) found that small firms' embeddness in a munificent network of ties facilitated the acquisition of pollution prevention capabilities. Finally, industry growth rates (Russo & Fouts, 1997) and subsidies (Russo, 2003) have been found to foster the development of PES.

- 2. Complexity. Given that PESs are dealing with issues that have effects both in the social and economic realm, the number of factors and sometimes diverging interests are large. Matos and Hall argue that the complexity of strategies inclusive of natural and social issues had "increased complexities and presented ambiguous challenges that many current environmental management techniques cannot adequately address." (2007: 1083) As a result, Aragon-Correa and Sharma (2003) argue that the likelihood firms will want to take up this additional complexity in already complex environments is small. The higher the complexity in the general environment, the lower the probability firms will adopt a PES.
- 3. *Uncertainty*. The impact of uncertainty plays out both (1) on the general business environment, as well as (2) on the uncertainty on how environmental issues or strategies will affect the firm. First, when the general business environment has high levels of uncertainty altogether, firms will be accustomed to the need to innovate and scan the environment for information and would thus be more inclined to adopt PES. Sharma and colleagues (2007), for example, demonstrated how the likelihood that ski resort organizations had a PES increased with their higher perception of general environmental uncertainty. In contrast, Baker and Sinkula (2005) did not find the environmental turbulence to have an effect (neither positive or negative) on the presence of enviropreneurial marketing strategies in the firm. As it seems, the effect of uncertainty in the general environment on PES adoption has not yielded conclusive results. Second, when uncertainty exists about how issues related to the natural environment will affect either the firm (effect uncertainty) or its decision effects (response uncertainty), the likelihood that firms will engage in PES will be lower. In general, the natural environment embodies high levels of unpredictability, given the ongoing substantive uncertainty (Lepoutre et al., 2007) on the environmental effects of

certain practices (biodiversity risks in genetically modified organisms, human impact on climate change, etc) and the complexity of ecosystems – "everything is connected with everything else" (Lewis & Harvey, 2001: 202). Lewis and Harvey (2001), for example, found that executive perception of the general environment in the textile industry significantly increased when the natural environment was included in the uncertainty analysis. Firms would therefore mostly adopt a wait-and-see approach to proactive environmental investments or technologies (Rugman & Verbeke, 1998). Empirical evidence comes mostly from the impact of issue salience. The more visible and traceable a firm's impact on the environment is and the more emotions it elicits among its constituents, the higher the likelihood firms will adopt a PES. This is reflected in the findings of several studies that especially the most visibly polluting sectors adopt PES in response to the high levels of scrutiny they get (King & Lenox, 2000; Bansal & Roth, 2000; Banerjee et al., 2003). Also, Jiang and Bansal (2003) and Potoski and Prakash (2005) for example, found that issue salience increased the likelihood of firms adopting an ISO 14001 environmental management system in response to institutional pressures.

The description of these three contingencies shows how the external environment, in addition to the influence that it exerts as a driving force, also sketches the background against which firms make their decisions and which facilitate or inhibit the adoption of PES. The variety of studies that confirm this influence further assert that studies investigating proactive environmental strategies benefit from insights in these external conditions.

3.4.1.5. Summary

The picture that emerges from the different factors that influence the adoption of PES is one of complexity: whether a firm goes beyond legal requirements to integrate environmental concerns in its strategy is a result of both internal and external drivers and facilitating factors. As a consequence, the likelihood that overarching predictions can be made about the adoption of PES is low. In fact, this has led some authors to link the existence of "myths" and "misunderstandings" that exist about PES to the sometimes "evangelic" and normative exclamations that exist about PES (Newton & Harte, 1997; Prasad & Elmes, 2005; Aragon-Correa & Rubio-Lopez, 2007):

"We strongly advise avoiding the temptation to apply general prescriptions to the analysis of environmental strategies, and recommend using a contingent lens instead. Improving corporate environmental performance is urgent for a sustainable world, but environmental management demands a specific analysis of each firm and its business and general context." (Aragon-Correa & Rubio-Lopez, 2007: 375)

3.4.2. Consequences

As with many studies in strategy and management, the dependent variable that attracts the most attention of researchers is the question whether there are competitive benefits associated with PES. In addition, a natural interest would also be to investigate whether PES actually result in better environmental performance. This second section is dedicated to both effects of PES and the factors that influence their impact.

3.4.2.1. Environmental performance (e)

Although the improvement of the natural environment is the final goal of PES, remarkably little studies actually asses whether firms with a PES are successful in achieving improved environmental performance. Most studies seem to assume, however, that the adoption of proactive environmental practices automatically generates good environmental performance. Applications of social behavior theory on environmental intentions learn that noble intentions do not necessarily result in actions or willingness to act (Derksen & Gartrell, 1993; Schaper, 2002; McKeiver & Gadenne, 2005). For example, studies have shown that a firm disclosing a commitment to a PES, is not necessarily effective: a firm may disclose a commitment for "impression management" reasons, to decrease the impact of unsystematic risk (Bansal & Clelland, 2004). In addition, very few voluntary environmental programs or standards really check whether the environmental performance of their members really improves (Darnall & Carmin, 2005; Potoski & Prakash, 2005), which results in the adoption of PES on the fringe and not at the core of the firm strategy (Wagner, 2007; Boiral, 2007). Another explanation could lie in the measurement of PES: "some studies have used environmental management indicators as part of environmental performance", and others "have measured environmental performance within the variable environmental management" (Claver, Lopez, Molina, & Tari, 2007: 607). For example, environmental performance has been measured as having an environmental management system (Lefebvre et al., 2003; Chen, Lai, & Wen, 2006), awards (Klassen & McLaughlin, 1996), the perception of reductions relative to competitors (Branzei et al., 2004) and self-reported improvements of emissions (Melnyk, Sroufe, & Calantone, 2003; Zhu & Sarkis, 2004).

The few existing studies that do investigate the PES - environmental performance relationship seem to convey a startling finding: it is almost as if all firms engaging in a PES are successful in their endeavor (Klassen & Whybark, 1999a; Clelland, Dean, & Douglas, 2000; Zhu & Sarkis, 2004; Chan, 2005; Potoski & Prakash, 2005). Given the considerable challenges that the natural environment imposes to most organizations in terms of uncertainties, paradigm shifts, inexistent experience, etc, one would expect this not to be generalizable across all firms. More research would be needed to investigate the difference between intentions and results.

3.4.2.2. Economic performance (f)

Studies investigating "whether it pays to be green" have been interested in both the impact of PES on economic performance, as well as the impact of environmental performance on the economic performance. In this context, economic performance has been investigated as return on assets, stock price, market share and combinations of these aforementioned indicators (Wagner & Schaltegger, 2004; Wagner, 2007). Although a formidable number of papers promote the "business case of greening" by pointing at cost reductions, revenue enhancements, the strengthening of supplier ties, improved public image, reduction of liabilities, etc (Gallarotti, 1995; Shrivastava, 1995a), empirical results are inconclusive. Whereas the majority of studies indicate a positive association of PES with economic performance (Klassen & McLaughlin, 1996; Russo & Fouts, 1997; Klassen & Whybark, 1999b; Dowell et al., 2000; Clelland et al., 2000; Gil et al., 2001; King & Lenox, 2002; Melnyk et al., 2003; Carmona-Moreno et al., 2004; Chan, 2005; Chen et al., 2006), others find opposing results (Sarkis & Cordeiro, 2001; Galdeano-Gomez & Cespedes-Lorente, 2004; Bansal, 2005) or are inconclusive (Gilley et al., 2000; Zhu & Sarkis, 2004; Menguc & Ozanne, 2005; Wagner, 2005; Gonzalez-Benito & Gonzalez-Benito, 2005c; Wagner, 2007). This has led some authors to suggest that the relationship between PES and economic performance follows an inverse U-shaped pattern (Schaltegger & Synnestvedt, 2002; Wagner, 2005): environmental efforts may have an increase in economic performance first, but "sooner or later the increased environmental effort will represent net costs" (Schaltegger & Synnestvedt, 2002:341-342). The actual point at which environmental investment return net costs, however, depends on both internal (management) and external (consumer preferences, available technologies, etc) factors. In order to further refine the relationship between environmental strategies or environmental performance and financial performance, a number of studies have therefore argued in favor of and introduced mediating and moderating variables. Such an endeavor derives from the fact that it is very unlikely that a 'one-size-fits-all' rule for the link between proactive environmental strategies and financial performance would exist (Aragon-Correa & Rubio-Lopez, 2007; Wagner, 2007):

"discussions of business and the environment are too often derailed into sterile arguments about whether it "pays to be green", as though the answer had to be categorical. Rather than searching for an unconditional answer, it is useful to ask under which circumstances it makes sense from a business standpoint for firms to invest in in environmental performance." (Reinhardt, 1999: 10)

Again, both internal and external moderators have been proposed and investigated to refine the PES – economic performance relationship. In what follows, I will discuss the findings that have emerged from my reading of the literature in this perspective.

3.4.2.3. Internal moderators (g)

Most of the moderating and mediating factors that have been studied in PES - environmental/economic performance relationship are embedded in the resource-based view of the firm. The underlying logic is that PES instigate the development of complex, path-dependent and embedded capabilities, which in turn increase the competitive advantage and the financial or environmental performance of the firm (Hart, 1995; Russo & Fouts, 1997; Sharma & Vredenburg, 1998; Buysse & Verbeke, 2003). The theoretical basis is the 'Natural Resource Based View of the Firm' (Hart, 1995), which states that the natural environment imposes constraints to organizations that will necessitate the development of specific capabilities to remain competitive in the market. In fact, Marcus and Anderson have demonstrated that the complex capabilities needed for environmental management can only derive from having a mission that reflects a proactive environmental strategy (2006). Several of such capabilities have been identified in both conceptual and empirical papers:

- innovation (Sharma & Vredenburg, 1998; Christmann, 2000; Lefebvre et al., 2003; Chan, 2005; Chen et al., 2006)
- continuous improvement and total quality management capabilities (Kitazawa & Sarkis, 2000; Hanna, Newman, & Johnson, 2000; Darnall & Edwards, 2006)
- higher-order learning (Sharma & Vredenburg, 1998; Chan, 2005; Williander & Styhre, 2006)
- integration of stakeholder perspectives (Sharma & Vredenburg, 1998; Klassen & Whybark, 1999b; Buysse & Verbeke, 2003; Pujari, 2006)
- cross-functional teams (Pujari, Wright, & Peattie, 2003; Pujari, 2006)

- employee involvement (Kitazawa & Sarkis, 2000; Hanna et al., 2000; Forman & Jorgensen, 2001; Ramus, 2001; Tien, Chung, & Tsai, 2005; del Brio et al., 2007)
- the integration of environmental issues in strategic planning and core managerial processes (Judge & Douglas, 1998; Buysse & Verbeke, 2003; del Brio et al., 2007; Wagner, 2007)
- flexibility to reverse investments (Rugman & Verbeke, 1998)
- capacity for change (Judge & Elenkov, 2005).

Whereas most of these capabilities were investigated to determine their impact on the financial performance, some studies have also shown these capabilities to have an impact on the environmental performance, for example higher-order learning (Lapre, Mukherjee, & Van Wassenhove, 2000; Halme, 2002; Chan, 2005), innovation (Chan, 2005), stakeholder integration (Chan, 2005), integration of environmental issues in the strategic planning process (Judge & Douglas, 1998).

In addition to resources and capabilities, a number of studies hint that structural variables may also act as moderators. Here, firm size has been found with both positive (Wagner, 2007) as well as negative (Gonzalez-Benito & Gonzalez-Benito, 2005c) and without effects (Orlitzky, 2001). Also, Craig and Dibrell (2006) found that firms with PES achieved higher innovation capabilities and greater financial performance when they were family firms. These former structural features have led researchers to believe that the idiosyncratic nature of smaller firms will require a specific analysis on the resources and capabilities that aid in the execution of PES (McKeiver & Gadenne, 2005; Etzion, 2007; Aragon-Correa et al., 2008). At the moment, however, only Aragon-Correa and colleagues (2008) have investigated whether the capabilities that were found in larger firms were also needed for successful PES execution in small firms. In their study among 108 Spanish small garages they found that garages benefitted from similar resources and capabilities as large firms, i.e. shared vision, stakeholder management and strategic proactivity.

3.4.2.4. External contingencies (h)

In addition to the internal factors that mediate or moderate the PES – environmental and economic performance relationships, external factors have also been shown to have an influence. Again, we draw on Aragon-Correa and Sharma's (2003) contingency framework to synthesize the findings in the literature.

- 1. Munificence. The potential positive effects of PES on competitive advantage seem to be attenuated in munificent environments. Given that more hostile conditions (as opposed to munificent conditions) make it more difficult for competitors to imitate complex and dynamic capabilities (Teece et al., 1997) and that capabilities generating experience and credibility are more important in hostile environments (Brush & Artz, 1999), Aragon-Correa and Sharma (2003) hypothesized that most benefits in terms of competitive advantage could be harvested in hostile environments. Similar propositions were also made by Porter (1991) and Porter and van der Linde (1995b), who suggested that environmental regulations – decreasing the munificence – would result in increased firm performance (the 'Porter hypothesis'). Regulation attracts the formation of support industries for pollution abatement (Greaker, 2006), or may induce new innovations which accrue competitive advantages, especially to first movers (Nehrt, 1996). Two rare studies among smaller firms, however, present conflicting results on Aragon-Correa and Sharma's proposition. Whereas Clemens (2006) found that higher munificence in the form of green subsidies negatively impacts firm profitability, Lefebvre et al. found that "firms whose products are facing adverse market conditions find it difficult to turn environmental initiatives into profits" (2003: 277).
- 2. Complexity. Complexity in the general business environment seems to have a positive influence on the competitive advantage of PES as well. Maintaining the argument as presented above that a PES is associated with the development of capabilities which are difficult to imitate, Aragon-Correa and Sharma (2003) suggested that the few firms that develop a PES in a complex environment, will be able to reap benefits from their capabilities. Empirical indications have been found again in the context of environmental regulation: since environmental regulation is often complex and may require changes in business practices, firms that have engaged in proactive environmental practices benefit from their early mover learning advantages (Nehrt, 1996). In addition, such complex regulation may function as an entry barrier to new firms (Dean & Brown, 1995), decreasing the competitive threat that otherwise may have come from new entrants (Porter, 1980).
- 3. *Uncertainty*. Aragon-Correa and Sharma (2003) finally predict that uncertainty in the general environment will strengthen the PES ~ competitive advantage relationship. Conversely, they predict a weakened relationship in situations where the effects of the natural environment on the organization are uncertain or when it has difficulty to

predict the outcomes of one's decisions. To our knowledge, there are no studies that have explicitly looked at either of these propositions. One indication comes from Baker and Sinkula (2005), who found that industry turbulence did not have any effect on the effect of enviropreneurial marketing on the development of market share, yet positively effected new product success as a result of enviropreneurial marketing. As it seems, more empirical research will be needed to further investigate the impact of uncertainty.

3.4.2.5. Summary

The general pattern that emerges from studies on the consequences of PES is that – in general – firms with PES seem to generate better environmental and economic results. However, the literature also shows that these positive results may hide more complex effects that combine both positive and negative impacts of underlying processes and that these effects may also change over time. Capturing this complexity requires a further refinement of the measures and proxies which are used for both environmental and economic performance. Investigations that build upon how both internal resources and capabilities and external conditions work together to influence these constituting sub-elements are thus required to further understand the consequences of PES.

3.5. Discussion and research questions

In the foregoing sections, my objective was to summarize the extant literature on proactive environmental strategies. In this process, I followed an approach that is in line with two of the most important research questions that drive the literature on PES: (1) what are the driving forces and facilitating factors that predict organizations to adopt a proactive environmental strategy (antecedents), and (2) does a proactive environmental strategy lead to better environmental and/or economic performance, and when (consequences)? Although the extant literature is young, the reviewed literature demonstrates an ongoing effort, both theoretically and empirically, to increase the understanding of both these antecedents and consequences associated with PES. Despite the valuable results this endeavor has yielded so far, a number of questions remain unanswered or have yet to receive definitive answers. Specifically, the complexity that derives from the multiple combinations of interacting influences that drive and facilitate PES suggests that each unique combination of factors has

its own challenge. As a result, the research on antecedents and consequences of PES may best benefit from investigations that focus on these challenges and underlying processes:

"If a group of business academics wrote that all firms ought to seek differentiated niches in their marketplaces, or that all should maintain debt to capital ratios of 40%, or that all should seek maximum employee empowerment, executives would respond, correctly, that the answers depend on the nature of the business. (...) So too with the environment; the right strategy depends on the industry and the firm." (Reinhardt, 1998: 647)

In responding to the idiosyncratic challenges that stem from the interplay between organizational and contextual factors, the recent literature has argued in favor of using a perspective that use both inside-out theories (e.g. resource-based view, dynamic capability perspective) and outside-in theories (e.g. institutional theory, resource dependency theory, contingency theory). Whereas some papers have included institutional theoretical perspectives with resource based perspectives (Bansal, 2005; Darnall & Edwards, 2006; Clemens & Douglas, 2006), others have used a combination of contingency theory and resource-based perspectives (Aragon-Correa & Sharma, 2003; Chan, 2005; Sharma, Aragon-Correa, & Rueda-Manzanares, 2007). In sum, the future of PES research is to be found in applying combinations of theoretical lenses that take both internal and external aspects of PES into account. From my literature, I identify two important research gaps that may benefit from such an approach:

1. *PES in small businesses*. Although the evidence indicating a positive correlation between firm size and the adoption of PES is overwhelming, there is both anecdotal and more complex empirical contradictory evidence that suggests that other processes are at work. With the many influences that determine both PES adoption and its consequences, it remains unclear how a small firm size impacts both the willingness and the ability of firms to engage in PES. In addition, remarkably few studies exist that have explicitly taken a small business lens to look at PES. Not all studies that have been focused on "smaller firms" were talking about smaller firms in absolute terms (less than 50 employees and less than € 10 million turnover or balance sheet), which is reflected in the remarkably low share of studies that have been specifically interested in small firms. As a result, my first research question is:

RQ1: What is the impact of firm size on the adoption of PES in smaller firms?

The literature is adamant when it comes to differentiating between smaller and large firms. As Welsh and White said, "small firms are not little big firms" (Welsh & White, 1981); and small firms need their own theoretical developments (Dandridge, 1979; d'Amboise & Muldowney, 1988). As mentioned, the theoretical models and the empirical tests of their validity have been mostly focused on larger firms. In fact, some studies have used the low responsiveness of small firms to PES as a legitimation to focus their empirical work and theory development only on large firms (Andrews, 1998; Sharma, 2000). As a result, several authors have noticed this lack of small business specific research and have called for more theoretical and empirical inquiry to fill this void in theory (Hillary, 2000a; del Brío & Junquera, 2003; Clemens, 2006; Etzion, 2007; Aragon-Correa et al., 2008). In addition, most of the small business PES literature that has been developed to date has explored the antecedents of PES adoption. An inquiry into the processes and capabilities that influence the consequences of PES in small businesses, however, remains limited to date. As a notable exception of some preliminary recent results in this area, Aragon-Correa and colleagues were able to show that "size, a common proxy for organizational resources, is a relevant but not a deterministic condition for developing the most proactive environmental strategies" (Aragon-Correa et al., 2008: 98). Furthermore, their findings indicate that "even SMEs can adopt proactive environmental practices and that these practices can lead to superior financial performance via specific capabilities based on the unique strategic characteristics of SMEs" (Aragon-Correa et al., 2008: 98). An in-depth exploration of the capabilities that small businesses require to successfully improve their impact on the environment, however, is lacking to date. As a result,

RQ2: What are the resources and capabilities associated with successful PES execution in small businesses?

2. *PES in adverse conditions*. A second research gap lies with the inconclusive results with regards to the effect of mimetic pressures. To date, most of the literature has viewed proactive environmental strategies as a response to institutional pressures for more attention to the environment to which companies should conform. The slow and limited growth of organic farming, the slow and marginal investment of car manufacturers in reducing car CO₂ emissions and many more examples, however, are

evidence that proactive environmental strategies are still meeting considerable institutional inertia (Hoffman & Ventresca, 1999). Either this evidence should lead to the questioning of institutional theory, or the depiction of the institutional pressures is skewed. I argue that besides coercive and normative pressures present, most businesses encounter pressures which run counter to these societal forces and which are interested in a status-quo with a predominant focus on profits, exempt from the costs that environmental regulation or internalization would incur. Few contributions, however, have looked at how firms can realize a PES when the institutional conditions are against having one in the first place. As was mentioned before, these conditions are likely to be present especially in the institutional environment of small firms. As a result.

RQ3: How can small business be successful in PES when the (institutional) conditions are against having one?

Although chances are high that other research gaps are hidden in the literature review, this dissertation is dedicated to increasing the knowledge about the three research questions that were mentioned.

3.6. Overview of chapters addressing the research questions

The remainder of this dissertation presents three studies that aim to answers the research questions as presented above. In order to guide the writer through this process, Table 3.4 provides an overview of the research questions and methods used to answer them in the corresponding chapters. First, chapter 4 draws on a literature review to assess the impact of firm size on small business social responsibility, thereby including PES. Second, the focus of chapter 6 research question 2. By drawing upon a multi-case study in the Belgian ornamental horticulture sector, the methodology and context description of which is laid out in chapter 5, a set of capabilities are defined that helped small businesses in this context to realize proactive environmental strategies. Given that the particular context of the Belgian ornamental horticulture are against having such a PES, the findings of chapter 6 also provide an answer to research question 3. However, given that we found a number of theoretical inconsistencies in the institutional theory literature on how PES as an act of institutional non-conformity was possible among small firms, chapter 7 further analyses the results of chapter 6 within the context of institutional non-conformity.

Table 3.4 - Overview of research questions and corresponding chapters

Chapter	RQ1:	RQ2:	RQ3:
	What is the impact of firm size on the adoption of PES in smaller firms?	What are the resources and capabilities associated with successful PES execution in small businesses?	successful in PES when the
4. The impact of firm size on small business social responsibility: a critical review	Literature review		
5. Methodological and contextual introduction to the empirical studies			
6. Against all odds: Realizing proactive environmental strategies in small businesses		Multi-case study in Belgian ornamental horticulture	Multi-case study in Belgian ornamental horticulture
7. Fools breaking out: Explaining small business successful institutional non-conformity			Multi-case study in Belgian ornamental horticulture



Chapter 4

Investigating the Impact of Firm Size on Small Business Social Responsibility²

Abstract

The impact of smaller firm size on corporate social responsibility is ambiguous. Some contend that small businesses are socially responsible by nature, while others argue that a smaller firm size imposes barriers on small firms that constrain their ability to take responsible action. This paper critically analyzes recent theoretical and empirical contributions on the size – social responsibility relationship among small businesses. More specifically, it reviews the impact of firm size on four antecedents of business behaviour: issue characteristics, personal characteristics, organizational characteristics and context characteristics. It concludes that the small business context does impose barriers on social responsibility taking, but that the impact of the smaller firm size on social responsibility should be nuanced depending on a number of conditions. From a critical analysis of these conditions, opportunities for small businesses and their constituents to overcome the constraining barriers are suggested.

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² This chapter was published as "Lepoutre, J. & Heene, A. 2006. Investigating the impact of firm size on small business social responsibility: A critical review. Journal of Business Ethics, 67(3): 257-273." It was presented in an earlier version at the EABIS Conference on Small and Medium Sized Enterprises and Corporate Social Responsibility: Identifying the knowledge gaps, 15-16 December 2005, Durham Business School, UK.We wish to thank the participants of this conference, Bart Nooteboom, Mirjam Knockaert, Annick Willem, Geoff Moore, Laura Spence and two anonymous reviewers for their helpful comments and suggestions to improve this paper. The Policy Research Centre for Sustainable Agriculture is gratefully acknowledged for the opportunity to carry out this research.

Preface

The current chapter addresses the first research question in this dissertation, i.e. "What is the impact of firm size on the adoption of PES in smaller firms? Here, the goal is to refine the analysis that was presented in the former chapter and specifically focus on the interaction between the small scale of small firms and its impact on the ability and willingness of small firms to engage in PES. As became clear in chapter 3, however, extant literature on small business PES remains scarce to date. Hence, we decided to broaden the scope of the literature review, and include insights from the broader business and society scholarship. Given that the broader "corporate social responsibility" literature is dedicated to the investigation of organizational behavior that goes beyond legal expectations in addressing general social issues, of which the natural environment is a subset, the findings should be appropriate to PES as well. In addition, we also included reports and non Web of Science-papers and books in the review of this paper.

4. Investigating the Impact of Firm Size on Small Business Social Responsibility: A Critical Review

4.1. Introduction

Over the last decades, Corporate Social Responsibility (CSR) has gained salience in academic literature (de Bakker, Groenewegen, & den Hond, 2005). However, although CSR can be applied to all sorts of businesses, regardless their size or sector, it has been predominantly investigated at the level of the larger firm (Spence, 1999; Hillary, 2000a; Observatory of European SMEs, 2002; del Brío & Junquera, 2003; Werner & Spence, 2004). A specific investigation of CSR in a small business context is important for three reasons. The first argument is that small and medium-sized enterprises (SMEs) constitute 99% of all business in the EU and are responsible for 66% of total employment and around 40 % of the total value added in the EU (Observatory of European SMEs, 2003). Their impact on society is therefore underestimated and ignoring SMEs in research is "in fact totally inappropriate" (Spence & Lozano, 2000). Second, implementing CSR in large enterprises is not necessarily the same in SMEs. Small firms are not little big firms (Dandridge, 1979; Welsh & White, 1981) and have a number of specific characteristics which have an impact on what a small business social responsibility constitutes. Finally, large firms are becoming increasingly entrepreneurial in nature, implying that the research on small business social responsibility may yield valuable insights for larger enterprises as well (Quinn, 1997).

Although the literature on small business social responsibility (SBSR) has been growing over the last years, the knowledge on SBSR is still fragmented and has not yet developed into a coherent theory. A theory is important, as it provides an economic means to organize information in a way that is internally and externally consistent, verifiable, has generality and possesses scientific parsimony (d'Amboise & Muldowney, 1988). Such a slow theory development can be explained by the fact that, in general, it is difficult to integrate all small businesses in one general theoretical framework (d'Amboise & Muldowney, 1988; Curran & Blackburn, 2001). The small business community is very heterogeneous and behaviour is influenced by a number of factors. The same variety seems to exist in SBSR research. The influence of firm size on SBSR, for example, yields diverging results and opinions. On the one hand, a number of reports state that small firms are better positioned and equipped for socially responsible behaviour than large firms. Small businesses are often celebrated for such social benefits as creating jobs, inducing economic growth and introducing innovations (Wennekers & Thurik, 1999; Audretch, 2002; European Commission,

2003b). In addition, many small businesses attract clients and employees in the local community. As having a good reputation is of paramount importance to their competitiveness, small businesses would naturally engage in practices that are aligned with their stakeholders' wishes and behave socially responsible (Besser, 1999; BITC, 2002; European Commission, 2003c; EMSF, 2004). Furthermore, the entrepreneur, as a specific type of the small business owner-manager, is associated with personality traits that increase the likelihood of responsible behaviour (Teal & Carroll, 1999; Solymossy & Masters, 2002). For those reasons, it is often stated that due to their very nature, small businesses are socially responsible, but that they just do not know they are (BITC, 2002; EMSF, 2004).

Other researchers have found that small businesses experience more difficulty than larger firms to take their social responsibility. Many small business owner-managers have never thought about CSR or believe that their social and environmental impact is negligible (Petts et al., 1999; Hitchens, Thankappan, Trainor, Clausen, & De Marchi, 2005). Small business managers themselves argue that they have no time or resources to dedicate to social responsibility (Tilley, 2000; Observatory of European SMEs, 2002; BITC, 2002) and that obeying the law may be a problem to begin with (Tilley, 1999; Petts et al., 1999; Gerrans & Hutchinson, 2000). Empirically, these statements have been substantiated by a number of studies that have found a positive relationship between size and community involvement or environmental behaviour among SMEs (Murphy, Smith, & Daley, 1992; Besser, 1999; Observatory of European SMEs, 2002; BITC, 2002; Vives, Corral, & Isusi, 2005), and similar impacts of firm size on CSR have been found among larger enterprises as well (Greening & Gray, 1994; Adams & Hardwick, 1998; Sharma, 2000; Brammer & Millington, 2006).

These conflicting observations demonstrate that the question whether and how the small business context influences CSR remains unresolved. In this article, we therefore want to contribute to the development of SBSR theory by critically reviewing the relationship between firm size and small business social responsibility. We will do so by consecutively exploring the effects of size on four antecedents of managerial and organizational behaviour. Our analysis begins with issue characteristics, then personal characteristics, followed by organizational characteristics and finally context characteristics. We conclude our paper with a discussion on the implications of our model for practice and theory and suggest directions for future research.

4.2. Defining the Small Business and its Social Responsibility

Small businesses have been distinguished from larger companies by such criteria as financial turnover, assets, market share, numbers employed and ownership (Curran & Blackburn, 2001). The cut-off levels that are chosen along those dimensions, however, vary considerably between studies and are sometimes not even reported (Spence, 1999; Hillary, 2000a). We take the EU definition for small enterprises, with inclusion of micro-businesses, as a starting point. Small businesses are those that have less than 50 employees and have a turnover or balance sheet total that does not exceed € 10 million (European Commission, 2003a). Furthermore, Spence recommended that "small businesses should be defined as those with fewer than 50 employees, and that they should be owner-managed and independent" (Spence, 1999: p. 169). In this paper, we focus on those businesses that fall within the scope of both these definitions, because it allows a narrowed focus and increased possibility of finding patterns that are generalizable across companies. Although studies that also comprised medium-sized enterprises were not excluded, they were only included if their results were also valid for small business.

We base our definition for SBSR on the European Commission's publication on "Responsible Entrepreneurship", in which it defined the responsible entrepreneur as one that (1) treats customers, business partners and competitors with fairness and honesty; (2) cares about the health, safety and general well-being of employees and customers; (3) motivates his workforce by offering training and development opportunities; (4) acts as a 'good citizen' in the local community; and (5) is respectful of natural resources and the environment (European Commission, 2003c). In our review of SBSR literature, we have thus integrated contributions from "small business ethics" issues, "social responsibility" issues and "environmental" issues.

In order to cover the impact of size on all the contingent factors of SBSR behaviour, we follow a number of reviews that have classified the contingent factors of small business behaviour into four, more or less similar, dimensions (d'Amboise & Muldowney, 1988; Chau & Siu, 2000; Solymossy & Masters, 2002; Longenecker, Moore, Petty, Palich, & McKinney, 2006): issue, personal, organizational and context characteristics. Issue characteristics refer to the situation or the matter of concern to SBSR behaviour; personal characteristics relate to the values, competencies and actions of the owner-manager; organizational characteristics involve the tangible and intangible resources and structures of the firm; and context characteristics refer to the economic, social and institutional factors which are external to the organization.

4.3. Issue characteristics

In the literature on small business social responsibility, we find a number of instances where the "moral intensity" of social responsibility issues – the moral imperative that a certain situation generates – varies with firm size. In his landmark paper, Jones (1991) proposed a model that explains moral action on the basis of six dimensions of issue moral intensity. The higher the moral intensity of these dimensions, the more likely a person will (1) recognize the moral issue; (2) use sophisticated moral reasoning; (3) develop an intention to behave morally; and ultimately (4) behave ethically. Recent research suggested that these six dimensions can be reduced to three (McMahon & Harvey, 2006): Probable Magnitude of Consequences, Proximity and Social Consensus. Probable Magnitude of Consequences refers to the probability that an action will have a certain level of effect in time. Proximity relates to the feeling of social, cultural, psychological or physical closeness of the agent with the victim (or beneficiary) of the action. Social Consensus indicates the level of social agreement that the action is evil (or good).

Empirical research found that large and small enterprises are very similar with regard to the importance they attach to abstract normative ethical, social and environmental principles (Longenecker, McKinney, & Moore, 1989; Merritt, 1998; Bucar, Glas, & Hisrich, 2003). However, small and large businesses differ with regard to the responsibility issues recognized once these abstract principles are applied in specific situations in reality (Longenecker et al., 1989; Humphreys, Robin, Reidenbach, & Moak, 1993; Hornsby, Kuratko, Naffzigger, LaFollette, & Hodgetts, 1994; Lahdesmaki, 2005). Small business owner-managers are particularly sensitive to activities related to their immediate internal stakeholders (employees, customers and suppliers), involving loyalty in their (often close) relationship with customers and employees; openness, honesty and fairness in contracts, agreements, payments and (marketing) information; pricing issues among competitors; and the origin of resources (Humphreys et al., 1993; Hornsby et al., 1994; Vyakarnam et al., 1997; Vitell, Dickerson, & Festervand, 2000; Lahdesmaki, 2005). On the other hand, such unethical actions as padding expense accounts, often resulting in a higher income for the ownermanager, are experienced as less problematic (Longenecker et al., 1989; Murphy et al., 1992). Also, SBSR actions in domains external to the firm (e.g. community and the natural environment) are relatively limited and fragmented (Tilley, 1999; Tilley, 2000; BITC, 2002; Vives et al., 2005), predominantly because small business owner-managers "have never thought about it" (Observatory of European SMEs, 2002). In Latin America, for example, only 5% of small businesses remained idle with respect to internal SBSR activities. In contrast, inactivity concerning external stakeholders and the environment was much higher (39% and 52% respectively) (Vives et al., 2005). Moreover, the fact that compliance with labour legislation was much higher than with environmental legislation serves as additional evidence for this variety in issue perception. Although similar trends can be found among medium-sized and large firms, these larger firms nevertheless showed higher activity levels in environmental and external social issues (Observatory of European SMEs, 2002; Vives et al., 2005) and were also more prudent with regard to operational and tax issues than they had concerns about marketing issues (Murphy et al., 1992).

This empirical evidence indicating the differences in perception between smaller and larger firms can be explained by the moral imperative that is experienced along the three moral intensity dimensions as summarized by McMahon and Harvey (2006). First, size has an effect on the perceived Probable Magnitude of Consequences. Whereas the effects of unethical behaviour in marketing issues are often very visible and open to external scrutiny, financial issues are not as widely audited in small firms as they are by the formal controls in larger firms (Longenecker et al., 2006). Thus, the issue visibility – whether the behaviour can be noticed by constituents inside or outside the organization (Bowen, 2000) – is important, as it influences the magnitude of the consequences of irresponsible behaviour. Likewise, a number of researchers have demonstrated that many small businesses perceive their impact on the natural environment or their efforts to improve it to be negligible (Holland & Gibbon, 1997; Merritt, 1998; Petts et al., 1999; Ludevid Anglada, 2000; Observatory of European SMEs, 2002; Schaper, 2002; Hitchens et al., 2005; Vives et al., 2005). If individual behaviour does not result in immediately noticeable improved or worsened environmental outcomes in specific situations, then many people are not willing to engage in such behaviour despite their abstract concern with society or the environment (Sharma, 2000; Schaper, 2002), especially when "bad" behaviour is followed with only mild punishment (Trevino & Youngblood, 1990). However, when there is a perception that such an effort is part of a shared responsibility to work for environmental betterment, then small business owner-managers will be more willing to accept their own responsibility (Spence et al., 2000; Ludevid Anglada, 2000).

Second, size also influences the Proximity of the responsibility issues. After reviewing 22 studies on the stakeholder pressures related to small business environmental performance, Hillary found that few customers were interested in the environmental performance of small businesses, possibly because they also believe that the small business impact on the environment is negligible (Hillary, 2000b). Stakeholder pressures for environmentally

responsible behaviour are thus not always present (Holland & Gibbon, 1997; Gerrans & Hutchinson, 2000), partly explaining the reduced importance given to specific environmental actions. On the other hand, researchers have suggested and found higher employee commitment to the organization and job satisfaction when higher ethical values are present (Hunt, Wood, & Chonko, 1989; Turban & Greening, 1996; Schwepker, 2001; Valentine, Greller, & Richtermeyer, 2006). It is obvious that the Proximity of the effects of internal SBSR actions is therefore much higher than external issues such as community involvement and the natural environment.

Finally, Social Consensus also has a different impact on small businesses. Differences in SBSR have been found both in the same culture (Serwinek, 1992; Smith & Oakley, 1994; Teal & Carroll, 1999; Observatory of European SMEs, 2002) and between different cultures (Bucar et al., 2003; Vives et al., 2005). Small firms are influenced and affected by the general value systems which dominate their societal networks in their sector and in the rest of the value chain in which they operate (Arbuthnot, 1997; Tilley, 2000). Norms and pressures from community and peers constitute among the most important internal drivers for ethics (Brown & King, 1982; Petts et al., 1999). The influence of the local business community culture is so strong, that a small business owner-manager's personal values developed in youth are displaced by the values of this community (Brown & King, 1982). Based on focus group conversations with small business managers, Vyakarnam et al. could report that:

"one of the most strongly felt influences was the rules of the 'game' by which one operates in a given industry. There appear to be norms within the sub-culture of the industry which behoves an individual to conflict with it. (...) Other industries have norms around the way prices are set, deals are done and so on. These forces may be stronger influences on an individual than the national culture." (1997: 1633).

In summary, these empirical findings indicate that smaller firms do not necessarily recognize fewer issues, but recognize and experience different issues than larger firms. Small size results in different visibility of issues to both the business and its constituents, diminishes the sense of impact on society and the natural environment and increases the power of peer pressure within a certain industry. The imperative for socially responsible action is therefore mostly felt with regard to internal stakeholders and in a much lower level with regard to external stakeholders and the natural environment compared to larger firms.

4.4. Personal characteristics

As owner-managed small businesses depend on the owner-manager for their management, an analysis of the peculiarities of small business owner-managers is germane to understanding the size – SBSR relationship. Contributions on the relationship between personal characteristics and socially responsible behaviour are dominated by two substreams. The first associates some typical personality traits of entrepreneurs with responsible behaviour. The second relates the general position of the owner-managers in a small business with regard to his or her possibility to interpret and act upon SBSR issues.

4.4.1. Entrepreneurship and ethics

Recently, we have seen great theoretical advances on the relationship between entrepreneurship and ethics. Especially the works by Solymossy and Masters (2002), Morris et al. (2002) and Longenecker et al. (2006) have added insight to the theory on the entrepreneurial antecedents of SBSR decision-making. Although Solymossy and Masters postulated that "the similarities between the predictors of entrepreneurship and of ethical behaviour are striking" (Solymossy & Masters, 2002: 235), their analysis and that of Longenecker et al. (Longenecker et al., 2006) also indicate that entrepreneurial traits are not necessarily always associated with more ethical behaviour. While entrepreneurial act may also be allocated to such activities as rent seeking or even crime (Baumol, 1990), or may result in innovations that pose new ethical problems to society (Hannafey, 2003). The entrepreneurial traits that have been used to explain these contradictory results are locus of control, need for achievement, tolerance of ambiguity, Machiavellism and Cognitive Moral Development (Morris, Schindehutte, Walton, & Allen, 2002; Longenecker et al., 2006).

Entrepreneurs are said to have an internal locus of control, a high sense of control over the events in their environment (Shaver & Scott, 1991). Although a number of studies report a positive relationship between an internal locus of control and ethical behaviour (Zahra, 1989; McCuddy & Peery, 1996; Yurtsever, 2003), others were inconclusive (Hegarty & Sims, 1978). Similarly, a high need for achievement has been identified as a typical entrepreneurial trait (McClelland, 1961) and has been associated with ethical decision-making (McClelland, 1961), but only as far as the need for achievement does not involve a trade-off between ethical behaviour and some other entrepreneurial goal (Longenecker et al., 2006). As many ethical situations are ambiguous and ask for a careful balance of interests (Hannafey, 2003), tolerance for ambiguity, the ability to respond positively to ambiguous situations (Teoh & Foo, 1997),

has equally been related to ethical behaviour (Morris et al., 2002). Machiavellism, the act of influencing others to further a personal goal has only been found to have a negative influence on ethical decision-making aspects (Yurtsever, 2003). Finally, some evidence exists that the Cognitive Moral Development (Kohlberg, 1969), the level of cognitive skills that guide moral decision-making, is a fraction higher among entrepreneurs than among others (Teal & Carroll, 1999), which would suggest that entrepreneurs are more likely to have higher ethical standards to begin with. In summary, results on the links between entrepreneurship and ethical behaviour are rather inconclusive. Entrepreneurship may thus be a convenient machinery for those people wishing to act in ethical ways, but is no guarantee that ethical behaviour will be deployed.

Despite the interesting insights the works of Solymossy and Masters (2002) and Longenecker et al. (2006) have given, their focus is on entrepreneurs, a very specific type of small business owner-manager (Smith & Miner, 1983; Carland, Hoy, Boulton, & Carland, 1984). They fit the definition of the "opportunistic entrepreneur", who exhibits "breadth in education and training, high social awareness and involvement, confidence in their ability to deal with the social environment, and an awareness of, and orientation to, the future" (Smith & Miner, 1983: 326). At the other end of the spectrum is the "craftsman entrepreneur", characterized by "narrowness in education and training, low social awareness and involvement, a feeling of incompetence in dealing with the social environment, and a limited time orientation" (Smith & Miner, 1983: 326). As Deeks (1973) suggested, only maybe one out of ten small businesses owner-managers may be an entrepreneur of the former type. In reality, most owner-managers will show features that position them somewhere in between those two ends of the spectrum. Restricting personality characteristics of small business owner-managers to those of entrepreneurs would therefore be a mistake. In the following section, we will expand our analysis to the stereotypical characteristics of the small business owner-manager.

4.4.2. Characteristics of small business owner-managers

Small business owner-managers are often depicted as having a permanent lack of time and a lack of (specialized) knowledge.

"In small firms the entrepreneur often participates intensively in day to day production, on the shop floor. As a result, his time is extremely scarce. (...) Small firms will in majority have no specialized staff for finance, personnel or marketing, and certainly not for legal affairs." (Nooteboom, 1994: 288)

The results on the impact of time on SBSR are well documented and also unanimous: small businesses that experience a lack of time are less likely to engage in SBSR practices (Gerstenfeld & Roberts, 2000; Hunt, 2000; BITC, 2002; Schaper, 2002; Hitchens et al., 2005). Likewise, the lack of knowledge about SBSR issues among small business owner-managers has been described extensively (Holland & Gibbon, 1997; Tilley, 1999; Ludevid Anglada, 2000; Gerstenfeld & Roberts, 2000; Hunt, 2000; Observatory of European SMEs, 2002; del Brío & Junquera, 2003). However, those firms that delegate responsibilities and create an empowering and learning environment for SBSR seem to circumvent these time constraints (Petts et al., 1999). More networked firms also experience fewer problems with time and knowledge (Noci & Verganti, 1999; Hunt, 2000; Meredith, 2000; BITC, 2002).

4.4.2.1. Time

In the context of SBSR, a lack of time becomes a problem when it results in a deficiency of "discretionary slack" – the latitude for managerial discretion to reduce internal or external pressures, resulting from excess time and resources (Sharfman, Wolf, Chase, & Tansik, 1988; Spence, 1999; Sharma, 2000). Discretionary slack has been identified as an important antecedent for innovative and environmental behaviour (Bourgeois, 1981; Sharma, 2000; Bowen, 2002b). Slack discretionary resources allow firms to look for information that is not necessarily problem related, may allow firms to innovate in projects that do not require an immediate pay-off, may allow experimentation with new innovations or simply to reflect and learn on current processes (Bowen, 2002b). Those owner-managers that are occupied with "firefighting" operational problems or are reluctant to delegate discretionary responsibilities to employees are most likely characterized by lower levels of discretionary slack, often with an incomplete understanding of social responsibilities and its opportunities as a result.

4.4.2.2. Knowledge

Small business managers are often responsible for a wide variety of tasks in the company (from operational to strategic), with a lack of functional specialization and expertise as a result (Verhees & Meulenberg, 2004). Such knowledge, skills and experience are not only key to the performance of the firm in the short term (Barney, 1991), but they also have an impact on the absorptive capacity of the firm – the ability to recognize and exploit opportunities from outside the firm (Cohen & Levinthal, 1990). Many small business managers simply have no time to collect the large amounts of information that are available to them, scan the impact they might have on stakeholders or the environment in the long or the

short run, interpret this information and find the necessary business solutions (Smeltzer, Fann, & Nikolaisen, 1988; Shrader et al., 1989). Moreover, knowledge in organizations exists in both explicit (transmittable in formal, systemic language) and implicit (personal, hard to communicate or formalize) forms (Nonaka, 1994). In small businesses, knowledge is predominantly present in implicit ways, based on experience (learning by doing) and often only in the head of the owner-manager (Nooteboom, 2004). For such knowledge it is much harder to formulate and accept criticism and engage in "higher order learning" - to deploy corrective action that changes the norms and the underlying principles that guide organizational behaviour (Argyris & Schön, 1978). Interestingly, the lack of knowledge often exists despite abundance in information (Gerstenfeld & Roberts, 2000; Hunt, 2000; Hitchens et al., 2005), suggesting that the lack of knowledge is not only a contextual consequence, but also a result of the cognitive limitations of the human brain. Indeed, small business ownermanagers are typified by increased bounded rationality problems (Simon, 1982; Nooteboom, 1994) in three dimensions: width (fewer functional areas in employees), depth (lower overall level of education) and variety (dominance of the personal perspective of the ownermanager). This variety dimension relates to the strong relationship that an owner-manager has with his or her business. Such commitment may either result in a persevering or a stubborn way of dealing with SBSR issues, limiting the variety of knowledge inputs that are addressed. On the one hand, personal commitment gives the small business an advantage to deploy SBSR behaviour and act upon the knowledge and vision it stands for (Hannafey, 2003). However, it may put the small business in a less favourable position, when such commitment results in stubborn and self-centred behaviour, not allowing anyone in the firm to disagree or to be included in decision-making (Baron, 1998; Petts et al., 1999) or to be blind from their stakeholders' wishes or suggestions (Vandekerckhove & Dentchev, 2005).

However, businesses that are engaged in network structures increase their absorptive capacity (Meredith, 2000; Atherton, 2003). The mere effect of interacting with peers on production methods and business challenges is often a first step in externalizing implicit knowledge and organizational learning (Brown & Duguid, 1991). In addition, networks increase the availability of new information and knowledge to build the mental models that are potentially more in line with reality. As a result, networks have been cited as key media through which SMEs can learn on a wide variety of topics (Hoang & Antoncic, 2003), but also as the locus of new knowledge creation (Inkpen & Tsang, 2005).

We conclude that the specific position and personality characteristics of small business owner-managers do have an influence on SBSR behaviour. The effect and direction on SBSR behaviour, however, depends on the type of owner-manager. Small businesses owner managers characterized by low levels of discretionary slack, limited absorptive capacities and reduced network relationships will less likely recognize SBSR issues or act upon them. Conversely, in the case that small business owner-managers can develop capabilities that create discretionary slack, allow organizational learning and build network relationships, then time and knowledge constraints will be greatly reduced. Also, small business owner-managers that have established intent for SBSR behaviour, will be more effective in the case they possess such entrepreneurial traits as need for achievement, internal locus of control and tolerance for ambiguity.

4.5. Organizational characteristics

As was suggested by Dean et al. (1998), small and large firms possess fundamentally different resources and capabilities. Relative to their larger counterparts, management literature typically describe small businesses as having less access to resources and being less powerful (Welsh & White, 1981; Aldrich & Auster, 1986; Nooteboom, 1994; Carson et al., 1995; Chen & Hambrick, 1995; Dean et al., 1998). Although these characteristics have often lead researchers to conclude that small business would have a reduced possibility to engage in SBSR practices, our analysis will show that some caution is required. Again, contradictory evidence exists with regard to the relationship between the organizational characteristics of small businesses and SBSR.

4.5.1. Resource poverty

Besides the time and knowledge constraints that were mentioned before, small business owner-managers cite a lack of financial resources as one of the most important barriers for engaging in SBSR (Ludevid Anglada, 2000; Hillary, 2000b; Observatory of European SMEs, 2002; Hitchens et al., 2005; Vives et al., 2005). However, firms demonstrating a higher environmental performance were not always found with more internal financial resources (Schaper, 2002; Hitchens et al., 2005) or to experience financial constraints (BITC, 2002). Several reasons exist to explain these conflicting streams of evidence.

Evidence that confirms the financial resources barrier uses arguments related to cost considerations, investment prioritization and the burden of systemic innovations. First, in the minds of most small business owner-managers, SBSR activities are perceived as costs that will result in competitive disadvantage (Tilley, 1999; Ludevid Anglada, 2000; Gerstenfeld & Roberts, 2000). In addition, relative to their larger counterparts, small businesses have fewer

opportunities to reap the benefits of economies of scale, scope and learning (Nooteboom, 1994), increasing the relative burden of these costs. Second, small businesses often experience immediate cash needs that do not allow them to build up large financial reserves, with a lack of slack financial resources as a result. A small business owner-manager may want to invest in employee training, community development or environmental technologies, but postpone such investments because of other investments or business needs which pose a more important and immediate need in the strategic or operational activities of the firm (Ludevid Anglada, 2000). "Business is not bad, it is just difficult – and in difficult times, the first goal of a business is to survive" (Fassin, 2005). Larger firms, on the contrary, often possess slack financial resources or easier access to external resources to finance such investments, allow workflow buffers or to employ teams specialized in CSR issues (Bourgeois, 1981; Nohria & Gulati, 1996; Bowen, 2002b). Third, social or environmental problems sometimes require a systemic change either within a company or across a number of organizations to solve them. The costs and the risk for investing in solutions may consequently be too large for one firm to carry (Tilley, 1999; Fountain, 1999) and it might not be able to get loans or support from financial institutions because of this.

By contrast, several explanations exist that challenge the financial arguments used by small businesses to defend their low SBSR activity. First, cash limitations are only experienced when SBSR actions would require financial resources. Increased SBSR is not necessarily associated with higher costs. Higher financial performance has been found in association with green performance (Schaltegger & Synnestvedt, 2002; Clemens, 2006). Second, companies that integrate SBSR in their overall strategy may not experience SBSR as an "add-on" and therefore not perceive SBSR as an extra cost (Vives et al., 2005), but rather as a cost advantage (Christmann, 2000). This is in line with the small business management literature indicating that a single-minded focus in strategy and resilience positively influences performance (Nicholson, 1998; Ebben & Johnson, 2005). Finally, slack resources may also result in satisficing behaviour (Bourgeois, 1981; Simon, 1982), preferring for example existing routines above environmental and more cost-efficient strategies (Bowen, 2002b).

Although these streams of evidence present different opinions, they can nevertheless be integrated into one argument. Just as larger businesses, small business will experience limited financial constraints with those SBSR actions that have immediate returns or are strategically integrated in the management of the firm. However, due to a lack of (slack) financial resources, small businesses will experience more difficulty than larger firms to engage in SBSR actions that have no immediate return, require systemic changes or are

boundary spanning. As a result, even proactive small firms experience a lack of financial resources as a constraining factor (Palmer, 2000).

4.5.2. **Power**

Smaller size often results in lower negotiation power and leverage to modify environmental forces in the market, with their suppliers and in politics (Porter, 1980). In the context of SBSR, this lack of power is a problem when the small business depends on other actors to engage in SBSR activity itself.

First, besides the effect of peer pressure on the recognition of responsibility issues, the small size of a business may also hamper it to actively go against generally accepted norms in an industry. Small business owner-managers generally perceive themselves to be more ethical than their peers (Tilley, 2000; Vitell et al., 2000; Ludevid Anglada, 2000). In the situation that SBSR action would increase production costs, then going against this dominant culture in a sector, with the danger of free-riding behaviour by their competitors, might be a considerable hindrance in taking socially responsible action (Vyakarnam et al., 1997).

Similarly, the CSR behaviour of a small business's partners in the supply chain has a major impact on small business behaviour itself (Arbuthnot, 1997; Dawson, Breen, & Satyen, 2002). Clearly, this depends on the size and power of such constituents and whether they adopt a CSR strategy. The stimulating effect of large customers setting responsibility targets for their smaller suppliers has been widely acknowledged (Noci & Verganti, 1999; Gerstenfeld & Roberts, 2000; Hunt, 2000; BITC, 2002). Conversely, irresponsible behaviour by larger customers impedes small businesses to engage in SBSR practices themselves:

"Heroic resistance to an oppressive power is the province of the students at Tiananmen Square, not the businessfolk in the capitalist societies the students risk their lives to emulate. Businesspeople do not stand on principle when it comes to dealing with abusers of power and trust. You have to adjust, we were told. If we dealt only with customers who share our ethical values, we would be out of business." (Bhide & Stevenson, 1990)

The sustainability of a business's products may also depend on the characteristics of its resources, for which it may rely on suppliers in the market. If there are no players in the market that supply sustainable resources, this might be a situation that a small business cannot change by itself (Noci & Verganti, 1999). Likewise, when socially responsible action would require the cooperation of all players in the supply chain (e.g. closing material loops through waste recycling), SBSR action is only possible when parties up- and downstream of the supply chain are also willing to engage in such practices (Noci & Verganti, 1999). Larger

businesses then have more leverage to instigate socially responsible behaviour among their constituents.

Finally, due to their limited individual political significance in terms of job creation or general social power, influencing political decision-making is limited (Hillman & Hitt, 1999). Not only do larger firms have more leverage, but they also have more resources they can dedicate to actively contribute in the policy making process (Bourgeois, 1981; Meznar & Nigh, 1995). Such political power is important when small firms want to aid in public policy making, for example to establish a 'level playing field' among peers, but also among players in the supply chain. When it comes to resolving boundary spanning social problems, small businesses expect a considerable role from the government in setting a 'level playing field' for all business, giving indications on environmental standards or guidelines (Tilley, 2000; Ludevid Anglada, 2000), rather than relying on voluntary self-regulation (Petts et al., 1999; Tilley, 2000). Small business therefore often work through employers' organizations or branch organizations, that often do have an institutionalized place in the policy decision-making process (Hillman & Keim, 1995; Doh & Guay, 2006). As we will further argue, these organizations thus have a considerable responsibility for the SBSR of their members as well.

In summary, we therefore conclude that due to a lack of power, small businesses will be more dependent upon the social responsibility behaviour of their constituents than larger firms.

4.6. Context characteristics

Although context factors have been mentioned as important moderating factors of the size – SBSR relationship throughout our paper, there are three contextual factors that are of particular importance: external stakeholder pressures, the socio-economic context and the institutional environment.

4.6.1. External stakeholder pressures.

The importance of stakeholder pressures on SBSR behaviour has already been mentioned several times in this paper. It has been demonstrated that smaller firms face stakeholder pressures distinct from larger firms. However, the relationship between external stakeholder pressures and size has not been addressed yet. Due to their larger size, large enterprises would be more visible and experience more scrutiny from the general public, with increased institutional pressures as a result (Oliver, 1991; Greening & Gray, 1994; Meznar & Nigh, 1995; Henriques & Sadorsky, 1996; Brammer & Millington, 2006). Yet, findings on the

relationship between organizational size, visibility and SBSR behaviour yields diverging results. Bowen (2000) observed that the visibility of an organization – whether it can be seen by its relevant constituents or not – is not determined by organizational size alone. Rather, the size – visibility relationship is moderated by the community in which the business operates and the type of business it is in. Smith and Oakley (1994), for example, found that entrepreneurs in nonurban areas were less accepting of ethically questionable behaviours than those in urban areas. Businesses that were active in smaller communities were therefore found to develop more responsible behaviour (Bowen, 2000). By contrast, businesses that have no such relationship with the local community may choose to operate in stealth mode (Chen & Hambrick, 1995) and remain invisible to the general public as a competitive strategy or avoid institutional pressures from the public.

Yet, in the situation that a small business chooses to be visible and reap the benefits of a good market reputation (Fombrun & Shanley, 1990), it may lack the size to really capitalize on brand names or product reputation and "market" its environmental or social performance (Spence et al., 2000). Although it is often assumed that the small business maintains direct and dyadic relationships with its stakeholders, many stakeholder interests are not communicated directly to the individual firm but through a web of influences at different levels in society (Rowley, 1997). It is often only the branch organization that receives the demands and expectations from NGOs and other pressure groups in society. Reputation may thus not be formed at the level of the individual firm, but at sector or country level. As a result, small businesses may be saved from scrutiny and individual punishment when they refuse to take their social responsibility, but also be unable to reap the benefits of an improved reputation as a result.

In summary, whether smaller size results in diminished organizational visibility greatly depends on the context the business is operating in. Those small business that are characterized by higher levels of organizational visibility will receive more scrutiny and information from their stakeholders and will therefore engage more in SBSR. In addition, they will have more opportunities to capitalize on the benefits of being socially responsible.

4.6.2. Socio-economic context

Based on their comparative analysis of the external social responsibility activity of 7662 European and 1330 Latin American SMEs, Vives et al. (2005) suggested that a country's general welfare level has an impact on SBSR activity. Whereas Latin American small businesses demonstrated more SBSR activity in general, efforts were also

predominantly directed towards disfavoured groups in society, rather than sponsoring sports or cultural activities in Europe. Moreover, a lack of financial resources was a more important barrier than the lack of time. They found an explanation for these differences in the higher presence of poverty in Latin American societies. This is in contrast, however, with the results as found in the Observatory's study, showing that the highest involvement was found in Northern countries such as Finland, Denmark, Iceland and Norway. The lowest percentages of involvement were found in lower welfare countries such as Spain and Greece. Here, different public welfare traditions, the differing role businesses are attributed in society and different cultures were proposed as possible explanations (Observatory of European SMEs, 2002). However, except for a few exceptions, higher SBSR levels are consistently associated with larger size in both parts of the world. Based on these findings, we conclude that it is not possible yet to determine how the socio-economic context influences the way smaller business take SBSR action.

4.6.3. Institutional environment

The literature on SBSR is consistent on the peculiar institutional needs of small business on at least three aspects. First, small businesses want a government to set a 'level playing field' for all businesses with regard to SBSR issues and are sceptical towards selfregulatory mechanisms. Not only do they distrust the ethics of their peers (Tilley, 2000; Vitell et al., 2000; Ludevid Anglada, 2000), but they are also "vulnerably compliant" - compliance with the law is more good luck than good judgement (Petts et al., 1999). Such policies are, however, difficult to align with the emphasis that has been put on the voluntary nature of CSR (European Commission, 2001; EMSF, 2004). A second stream of literature has therefore suggested that any policy initiatives should be directed through existing channels that small businesses already know and trust (BITC, 2002; Grayson, 2003; EMSF, 2004; Castka, Balzarova, Bamber, & Sharp, 2004). Especially, the development of industry organization and small business supporting systems is critical in the level of socially responsible behaviour (Spence et al., 2000; de Bruijn & Lulofs, 2000). Finally, as was mentioned before, industry culture is a very important conditioning factor for SBSR. Industrial organizations therefore have a responsibility to create a sense of shared responsibility, joint institutions for collective responsibility taking and to steer "cowboys" to more SBSR behaviour (Spence et al., 2000; Ludevid Anglada, 2000; de Bruijn & Lulofs, 2000).

We conclude that industrial and branch organizations, by providing the information channels and meeting fora that small business trust and by creating a shared responsibility among peers, will be more important drivers for socially responsible action among small business than they will be among larger business.

4.7. Discussion and conclusion

Although there is both anecdotal evidence and theoretical logic to argue that being a small business does not necessarily impede SBSR behaviour, we cannot ignore the compelling evidence in the studies by Vives et al. (2005) and the European Observatory of SMEs (2002) that there is a relationship between size and socially responsible behaviour. What has become clear from our analysis is that the contradictory evidence does not negate the idiosyncratic difficulties of small businesses in taking their social responsibility, but it indicates that the size – SBSR relationship also depends on a large number of conditions. Such a conclusion is important, as the result of our critical assessment helps to identify ways for small business owner-managers and their constituents to overcome the problems they encounter in the context of SBSR. We see at least four areas where this is possible.

The first and most important conclusion we draw is that most small business do not recognize specific social responsibility issues. More important than the practical barriers to engage in SBSR activities are the cognitive processes that forego such actions. If an issue is not recognized, than the likelihood of SBSR action is very low. The SBSR literature identifies both differing issue characteristics and limited cognitive capabilities as the most important antecedents of this low issue recognition. Our analysis has shown, however, that those owner-managers who are able to increase their discretionary slack, absorptive capacity and their knowledge by engaging in networks and delegating responsibilities, are more likely to both recognize responsibility issues and ways to contribute in resolving them.

Second, the case for a culture of shared responsibility and the creation of institutions for joint responsibility taking is compelling. Not only does it increase the recognition of responsibility issues by giving small business owner-managers a sense that their contribution has a noticeable effect in the resolution of responsibility issues, but also provides opportunities for joint learning, risk sharing, overcoming scale disadvantages and getting access to resources.

Third, we have seen evidence that entrepreneurship itself is no guarantee for responsible behaviour. However, those small business owner-managers that have established intent to engage in SBSR activities will benefit from entrepreneurial features both in finding opportunities and engaging stakeholders.

Finally, due to a lack of (slack) financial resources, small businesses will experience more difficulty than larger firms to engage in SBSR actions that have no immediate return, require systemic changes or are boundary spanning. Likewise, due to a lack of power, small businesses will depend more on the social responsibility behaviour of their constituents than larger firms. However, those firms that are able to integrate SBSR in their strategic management, focus on win-win situations that result in returns, and increase their organizational visibility, will partly be able to overcome such constraints.

In summary, we conclude that small businesses, in general, will experience more difficulties than their larger counterparts when engaging in socially responsible action. Barriers will be especially experienced with regard to those issues involving external stakeholders or the natural environment. Such a conclusion is important, because it implies that small businesses will only partly be able to undertake their social responsibility in isolation. There are two ways of interpreting this conclusion. One way would be to conclude that we should not bother small businesses with CSR issues, because they are just not made up for the challenge. We should then reformulate our normative propositions on the social responsibility of the smaller firm and bring the locus of their responsibility to a different level, for example at the level of the government. Small businesses in the UK seem to be in favour of this approach, indicating that they consider it to be "the Government's responsibility to communicate environmental values, to establish a code of environmental conduct and to provide a benchmark of acceptable environmental standards for the business sector. The Government was expected to take a leadership role concerning the environment." (Tilley, 2000: 37)

A second interpretation would be that if small businesses have difficulty taking social responsibility by themselves, individual SBSR should be complemented with a culture of shared responsibility. Despite the clear responsibility this puts in the hands of industry organizations and government, shared responsibility thus still involves an individual business responsibility. The locus of responsibility is not only at the level of the government or industrial organizations, but remains at the level of the individual small business as well. In order to overcome the difficulties that a small business experiences in taking responsibility by itself, the owner-manager should become active on a level higher than the individual firm. Thus, in addition to creating jobs, economic growth and picking the 'low hanging fruit of SBSR', small business owner-managers can become more effective in SBSR action by actively seeking partners in the market, government, society or the entire supply chain and by developing the capabilities that will take away the barriers they experience for SBSR action.

As an implication for small business owner-managers, our analysis offers the opportunity to reconsider both descriptive and normative assessments of SBSR. As engaging effectively in social and environmental practices is difficult from the perspective of the small business and involves a collective effort from a wide range of stakeholders, small business are advised to seek cooperation or network contacts with stakeholders and peers to overcome these difficulties. A normative extension of SBSR theory could therefore be that, as in some situations a small business cannot take its responsibility by itself, it should take action on a collective level. More specifically, it relates to the question whether we accept or not that a small business uses its lack of resources as an excuse for its limited socially responsible action.

The results of our research provide direction for future study. Where the current research has primarily focused on the explanatory factors for small business social behaviour in a static way, there is a growing need to investigate the dynamics of SBSR. Particularly the factors internal and external to the small business that influence change processes towards more SBSR behaviour need further development. A priority in this regard is to research how managerial capabilities that increase networking, collaboration and responsibility delegation aid in the development of organizational slack and SBSR action. Also, those capabilities that allow small businesses to effectively address resources across the boundaries of their organization need further development. In addition, increasing the knowledge on the critical success factors of governmental or industrial organizational initiatives aimed at creating shared responsibilities would be beneficial to small business owner-managers, policy makers and academics. With regard to the latter, the findings of such research may also be useful to the wider CSR theory development. In summary, there are a number of interesting avenues for future research. We believe that our review can provide the basis on which such further research can build.

Chapter 5

Methodological and Contextual Introduction to the Empirical Studies³

³ While the research design and the data collection are the result of my own work, I collaborated with Dr. Michael Valente (University of Victoria, Canada) in the data analysis of the empirical study. In the text, Dr. Michael Valente is referred to as the "co-author".

5. Methodological and Contextual Introduction to the Empirical Studies

5.1. Introduction

The literature reviewed in chapter 4 suggested that small business models on proactive environmental strategies could benefit from a closer look at the dynamics involved in small businesses dealing with constraining internal and external factors. As such, it further emphasized the need to address the research questions defined in chapter 3:

RQ2: What are the resources and capabilities associated with successful PES execution in small businesses?

RQ3: How can small businesses be successful in PES when the (institutional conditions) are set against having one?

Given the dearth of empirical material and theoretical development to address these two research questions, I set up a research that was designed to provide answers through a qualitative multi-case study research. Whereas the findings of this research will be presented in the next two chapters, the current chapter serves two purposes. First, it explains and justifies the methodological approach that was used in designing and executing the research. It will therefore first discuss the research design, and then report the sources used in collecting the data and how they were analyzed. Secondly, the chapter provides the reader with a contextual introduction to the research setting: the Belgian ornamental horticulture industry. It will do so by first presenting a description of ornamental horticulture in general and how it is related to the natural environment. I then zoom in into the specific Belgian context, by first presenting an environmental organization with particular importance for this dissertation, VMS, and then describe the sector in general demographic and socio-economic terms, the general business environment and the external institutional environment.

5.2. Methods

5.2.1. Research design

This dissertation uses a multiple case design with the purpose of *elaborating* existing theory (Lee, Mitchell, & Sablynski, 1999). The particular nature of our research questions directed us to multiple case studies for two reasons. First, case studies are best for gathering rich descriptions of complex and multilevel social phenomena (Gephart, 2004; Weick, 2007) about which not much is known (Eisenhardt, 1989a). The specific purpose is to build theory

rather than to test it (Strauss & Corbin, 1998; Siggelkow, 2007) by using the cases as a series of experiments in which the emergent theory is replicated, extended and contrasted (Yin, 2003; Eisenhardt & Graebner, 2007). Given the inconsistent theoretical explanations on small business proactive environmental strategy (Hillary, 2000a; Lepoutre & Heene, 2006; Aragon-Correa et al., 2008), such an approach is not only appropriate, but also necessary. Second, small businesstegies are rarely explicit or consciously formalized in strategic documents or updated business plans, which precludes the access to large sources of secondary data (Curran & Blackburn, 2001). The lack of formalization of small business strategies is the result of the often tacit, implicit and even unconscious conceptions of organizational direction embedded in the mind of the owner-manager (Gibb & Scott, 1985; Johannisson, 1987). Probing small businesses for their strategies therefore requires uncovering the underlying intentions and patterns of actions that make up these strategies through in-depth inquiry and rich descriptions (Curran & Blackburn, 2001).

As the empirical setting for this multi-case study research, I chose the ornamental horticulture sector in Belgium. This setting was appropriate for the research questions in this dissertation for a number of reasons. First, the focus on a confined geographical area (Belgium) and sector allows minimizing variation in the environmental factors that a firm may be facing in terms of socio-cultural and political contexts, business climate and professional association representation, and focus on the focal variation of interest (Eisenhardt, 1989a), in this case small business PES. Second, the ornamental horticulture industry consists almost exclusively of small ventures, which are in the interest of this dissertation. Third, as we will further show, strong conservative forces in the sector were in place that discouraged the adoption of proactive environmental strategies. Fourth, and most importantly, the industry has a small member organization in place that allowed me to identify and select organizations that revealed a particular attention to the natural environment. This organization, VMS (Vlaams Milieuplan Sierteelt), has as its purpose "to position itself as a center for sustainable entrepreneurship that guides ornamental horticulture firms, by means of a phased plan, to more future oriented and socially responsible practices" (www.vmsvzw.com). Members voluntarily self-report data that allow VMS to calculate a firm-specific score that reflects the environmental performance of the firm. According to the performance score (points on 100), firms are subsequently assigned an A- (70-100), B- (55-70), C- (15-55) or D- (<15) label. Abuse of VMS is prevented through a series of independent audits. A more detailed description of VMS is provided below.

VMS membership presents an exceptional opportunity to objectively capture a firm's environmental intentions. In addition, the particular circumstances of VMS membership indicate that the institutional conditions are set against achieving high VMS scores. Although one could argue that firms become member of VMS only as a means to improve the firm's reputation or to get access to environmentally sensitive customers, the specific context of VMS in the ornamental horticulture makes such claims improbable. In fact, only 6% of the entire sector population has become member, and membership has been declining in recent years (MPS, 2006). This low penetration of VMS membership is generally attributed to four important factors: (1) VMS membership does not result in any added value in the market, (2) the registration activities which are required for VMS membership are perceived to take up too much time, (3) environmentally friendly practices are seen as too costly and risky in the highly competitive environment of the ornamental horticulture sector, and (4) the general individual and professional association dissatisfaction with environmental regulations endorse a conservative stance towards the natural environment. Given these adverse conditions and the particular objectives of VMS, the members of VMS clearly send out a signal that they have proactive environmental intentions. As a result, VMS is a good proxy for the proactive environmental intentions of a Belgian ornamental horticulture firm, despite discouraging institutional and market conditions. Furthermore, since VMS scores reflect the actual impact of firms based on its performance relative to best practices, they can be used as a proxy for VMS members' realized strategy. Firms that achieve higher scores in the VMS system have evidently been able to realize their intentions. In contrast, firms with lower scores represent unrealized strategies. As a result, we decided to sample firms that were member of VMS.

5.2.2. Data collection and analysis

Proponents of case study methodologies recommend researchers to "triangulate" multiple sources of data with the purpose of increasing the richness and quality of the findings (Eisenhardt, 1989a; Strauss & Corbin, 1998; Yin, 2003):

"any finding or conclusion in a case study is likely to be much more convincing and accurate if it is based on several different sources of information, following a corroboratory mode" (Yin, 2003).

In this dissertation, I therefore drew on five types of data. Data were collected through key informant interviews, grower interviews, observations, archival data and round table discussions. Importantly, not all data sources were used for the same level of analysis. Following the logic of an "embedded case study" (Yin, 2003), in which multiple embedded

levels are analyzed, I first set out to assess the general context of the ornamental horticulture industry in a pre-stage, before engaging in the actual case study research, which consisted of four stages in total. Table 5.1 provides an overview of these five data sources and the particular objective for which they were used. In the following subsections, I will provide an overview of each of these data sources.

Data source **Objective** Means Key informant interviews Context assessment 15 interviews Case study interviews Case study research 43 interviews Observations Context assessment 20 company visits Case study research 2 VMS meetings 1 Floraliën visit 1 Dutch auction visit Archival data Context assessment Newspapers Case study research Verbondsnieuws Websites Academic papers Reports Roundtable discussions Context assessment 7 roundtables + 3 reports

Table 5.1 - Data sources used in the empirical study

5.2.2.1. Context assessment

In the pre-stage, I explored the challenges and opportunities associated with PES in the ornamental horticulture industry. Capturing this information required drawing on key informant interviews, observations, archival data and roundtable discussions. Next, I will describe each of the data sources used in this process.

Key Informant Interviews. The goal of the interviews was to get an overview of the challenges and opportunities that the Belgian ornamental horticulture was facing, and to get a preliminary sense of the ways how growers could deal with them. Starting with a government consultant, responsible for extension services in the ornamental horticulture industry, and the director of VMS, I used a snowball sampling technique (Denzin & Lincoln, 2000) to get in touch with new key-informants. I asked each new informant to identify additional informants that would be valuable to speak to and that would give additional or contrasting insights. I continued interviews until the point of saturation, the moment at which no new information emerged from the interviews (Miles & Huberman, 1994; Denzin & Lincoln, 2000). As a result, a total of 15 key informants were interviewed between October 2005 and January 2006. Table 5.2 offers an overview of all key informants that were interviewed in this process.

Table 5.2 - Overview of key informants interviewed in sector analysis

Key	Job description	Expertise		
informant				
<i>K1</i>	Independent consultant	Pot plants, Azalea and		
		Arboriculture		
<i>K2</i>	Government consultant	General expertise		
<i>K3</i>	President of professional organisation	Mainly Azalea and Pot plants		
<i>K4</i>	President of professional organisation	Mainly Azalea and Pot plants		
K5	Independent consultant	Pot plants and Azalea		
<i>K6</i>	Professor in Agricultural / Horticultural	General expertise		
	Economics and Management	-		
<i>K7</i>	President of subsector professional	Arboriculture		
	organisation			
K8	President of subsector professional	Arboriculture		
	organisation			
K9	President of traders association	Pot plants		
K10	Quality manager in trade business	Pot plants and Azalea		
K11	Credit responsible for agricultural	General expertise		
	projects in a bank	-		
K12	Director of research institute in	General expertise		
	ornamental horticulture	-		
K13	Government official	General expertise		
K14	Professor in Agricultural / Horticultural	General expertise		
	Economics and Management	•		
K15	Director of professional association	General expertise		

An overview of the questions that were used to aid in the interview process is provided in appendix A1. After each interview, I made a contact summary form (Miles & Huberman, 1994), in which I listed all new and recurring findings that had emerged. I also made notes during the interview about impressions and details that would not be recorded in the interview. All interviews, lasting between 60 and 150 minutes were recorded, transcribed and subsequently manually analyzed using the Atlas.ti software package.

Observations. In addition to the interviews, I had the opportunity to visit a number of firms, meetings and market places, where I could see several aspects of the ornamental horticulture in action. Although I did not take any notes during these visits, the observations helped me to get a better understanding of ornamental horticulture, its culture and the nature of its activities.

Archival data. Besides the interviews, I collected and consulted several archival data sources. Table 5.3 provides an overview of these sources. The sources can be subdivided into three groups: databases, non-academic and academic sources. For the databases, I did a search of Mediargus, a database that collects all general Belgian newspaper and magazines, and of www.vilt.be, the Flemish Information centre for Agriculture and Horticulture, using key

words that probed the databases for information on the ornamental horticulture, its subsectors and their relationship with environmental and institutional issues. Furthermore, I scanned all issues of "Verbondsnieuws", the bi-weekly magazine of AVBS, the largest professional association in ornamental horticulture, that were published between 2003 and 2006, the period prior to the interviews. I scanned with similar key words as the other two databases, but specifically assessed the discourse developed towards members and towards societal and regulatory issues. The non-academic sources included a set of reports and statistics that were published as reports or documents from banks, professional associations, governments and related institutions. The academic sources consisted mostly of the studies executed at the former government research group, the Centre for Agricultural Economics and the present Institute for Agricultural and Fisheries Research. These studies are mostly based on data from the Farm Accountancy Data Network (FADN), a panel data set that is collected every year to supply information to the European Commission with regards to the economic impacts of its subsidies.

Roundtable discussions. A fourth and final data source for the sector analysis was derived from a series of roundtable discussions within a project called "Ornamental Horticultural Strategy 2020". The aim of this project was to develop a number of scenarios for the future of the Belgian ornamental horticulture industry, in order to then derive the implications for government, professional associations and all interested alike. The group consisted of 17 persons, with selection based on a good representation of the diverse subsectors (pot plants, cut flowers, azalea and arboriculture) and of all parties involved in the industry (production, trade, professional associations, government and services). The efforts put in by the members culminated to a scenario planning weekend in February 2008, which took the most important lessons from these sessions and of EROV (2004) to develop future scenarios of the sector. Prior to the weekend, the participants were asked to submit the way they envisioned the ornamental horticulture sector in 2020 in its most and least optimal presentation, and what factors they considered key in the development towards these scenarios. In order to analyze the roundtable discussions and the scenario planning weekend, I used the reports of the sessions, the submitted scenarios and my own notes.

5.2.2.2. Case study research

After the context assessment, I met again with the director of VMS and the government consultant. Since both were knowledgeable about VMS members, I engaged them in the processes of selecting appropriate firms for the research and gaining access to

Table 5.3 - Archival data sources used in sector analysis

Data source	References	Additional comments					
Databases	Mediargus: Database of general Flemish newspapers and magazines	Period: 2003- 2006					
	Verbondsnieuws	Key words ¹ included in search:					
		- "Ornamental horticulture"					
		- "Ornamental horticulture" + "Environment"					
		- "Ornamental horticulture" + "Tradition"					
		- "Ornamental horticulture" + "Responsible"					
		- "Azalea" + "Environment"					
		- "Arboriculture" + "Environment"					
		- "Pot plants" + "Environment"					
		- AVBS					
		- VTU					
		- VMS					
	www.vilt.be: Government sponsored website providing news and	Period: 2003-2006					
	information in the Agricultural sector	Key words ¹ included in search:					
		- "Ornamental horticulture"					
		- "Ornamental horticulture" + "Environment"					
		- "Ornamental horticulture" + "tradition"					
		- "Ornamental horticulture" + "responsible"					
		- "Azalea" + "environment"					
		- "Arboriculture" + "environment"					
		- "Pot plants" + "environment"					
		- AVBS					
		- VTU					
	"Verbondsnieuws": Bi-weekly professional association publication	Period: 2002-2005					
		Key words ¹ included in search:					
		- Environment					
		- Regulation					
		- VMS					
		- Interviews with growers					
		 Professional association opinions about environmental issues 					
		- Discourse towards society and government					
Academic papers	(Taragola, Van Huylenbroeck, & Van Lierde, 2000; Carels & Van Lierde, 2000; Paulitz & Belanger, 2001; Taragola, Van Huylenbroeck, & Van Lierde, 2002;						
	Saiyed et al., 2003; Korner, Bakker, & Heuvelink, 2004; Taragola, Van Lierde, & Van Huylenbroeck, 2004; Daughtrey & Benson, 2005; Rappe, 2005; Fravel,						
	2005; Wood, Burchett, Alquezar, Orwell, Tarran, & Torpy, 2006; Brethour, Watson, Sparling, Bucknell, & Moore, 2007)						
Non academic	(MPS, 2001; Taragola et al., 2002; MPS, 2002; Verspecht, Van Lierde, & Van den Bossche, 2003; MPS, 2003; EROV, 2004; MPS, 2004; KBC, 2005; MPS,						
reports and data	2005a; MPS, 2005b; EROV, 2006; MPS, 2006)						

¹original key words were in Dutch

individual firms. I thereby followed a structured approach of "theoretical sampling" (Eisenhardt, 1989a), with the particular goal to find the best possible sample that would capture the phenomenon of interest (for similar approaches in recent studies, see Uzzi, 1997; Graebner & Eisenhardt, 2004; Zott & Huy, 2007). After screening all 127 VMS members based on short descriptions of both informants, I asked them to select 20 firms that (1) together made a good representative sample of the diversity of firms within the sector, (2) included both very high performing firms and very low performing firms as polar types in the continuum of VMS scores, and (3) included some firms that had recently left VMS, to have exit as an alternative emergent strategy as well. Table 5.4 provides an overview of the firms that were included in phase. We used pseudonyms to ensure confidentiality. The data collection and analysis for the case study research then consisted of four consecutive stages.

Table 5.4 - Overview of firms in sample

ID	Type of firm	Firm's birth year	Number of employees	Score†	Number of interviews	
Panamarenko	Potplants	1999	6	99 (A)	4	
Magritte	Arboriculture	2000*	4	98 (A)	3	
Fabre	Arboriculture	1975	7	96 (A)	4	
Ensor	Azalea	2003*	5	95 (A)	4	
Memling	Azalea	1995*	5	92††(D)	1	
Bouts	Potplants	1970	7	90 (A)	1	
David	Potplants	1989	5	86 (A)	1	
Van Eyck	Arboriculture	1970*	19	84 (A)	1	
Permeke	Potplants	1988*	9	77 (A)	1	
De Corte	Azalea	1993	4	76 (A)	1	
Delvaux	Azalea	1990	5	74 (A)	1	
Broodthaers	Azalea	1993*	3	73††(D)	1	
De Boeck	Azalea	1974*	3	71 (A)	1	
Alechinsky	Arboriculture	1965	26	70 (B)	1	
Rombouts	Potplants	1965*	10	60 (B)	2	
Brueghel	Azalea	1985*	4	58 (C)	3	
Rubens	Potplants	2000*	4	57 (C)	3	
Minne	Arboriculture	1990*	9	49 (C)	3	
Jordaens	Potplants	2001*	4	32 (C)	3	
Van Dyck	Arboriculture	1970	7	- (D)	4	
Total					43	

Firms in bold are firms used in round 2

^{*=} acquisition or extension of family firm

t = scores after period 7 in 2005

 $[\]dagger \dagger = last \ available \ score \ if \ period \ 7 \ in \ 2005 \ was \ not \ registered$

Stage one involved semi-structured interviews, which consisted of a set of open-ended questions set out to understand the functioning of the firms and their approaches to social and environmental concerns. A list of the questions asked can be found in appendix A2. I conducted interviews carefully, and asked questions about "Why did you become member of VMS?", "How are you able to achieve your score?", and "What difficulties did you experience in obtaining your score?" In so doing, I was also able to identify firms for which VMS membership did not reflect the intention to have a high VMS score. In addition, detailed notes were taken during the interviews because, although the interview protocol was an important guide, each interview spawned emergent and interviewee-specific questions and topics (McCracken, 1988; Golden-Biddle & Locke, 1997; Strauss & Corbin, 1998). Interviews were taken on site with owner-managers between December 2005 and March 2006 and typically lasted 120 minutes, with extremes ranging between 60 and 160 minutes. All interviews were audio recorded and transcribed verbatim.

In stage two, I manually coded the transcripts for constructs that emerged as explanatory factors for the particular performance of the firm (Glaser & Strauss, 1967; Strauss & Corbin, 1998). Furthermore, I collected additional archival material for each of the firms by looking for firm references (1) on the internet, (2) in the biweekly magazine of the largest professional association (Verbondsnieuws) and (3) in www.vilt.be. I used the material collected in this process to merge it with the interview data. After the coding of each interview, I combined all data sources and wrote a firm-specific case summary. This case summary acted as an ongoing stream of consciousness commentary about what was happening in the research (Miles & Huberman, 1994) and tracked whatever impressions arose, given that it is often difficult to know what will and will not be useful in the future. Questions such as, "What am I learning?" and "How does this case differ from the last?" were asked to push thinking in these notes.

On the basis of this data analysis, stage three consisted of identifying eight extreme cases. These eight cases are highlighted in bold in Table 5.4. I focused on these eight firms for two reasons: (1) using restricted samples is in line with Eisenhardt's (1989a) recommendations that appropriate theory building based on case studies usually includes anywhere between 4 and 10 cases, and (2) the theoretical saturation achieved after the analysis of these 8 extreme cases obviated the need for further in-depth analysis of the other 12 cases. I selected these cases based on two criteria: that (1) having either extremely high or extremely low VMS scores within the sample of 20 firms, and (2) having made explicit references in the interview of striving for a high score within the VMS system, to be sure that

VMS membership reflected proactive environmental intentions. Based on this latter criterion, I excluded Minne, since it that had no intention to increase its performance and had only joined VMS to see whether the label could be used in the market. In order to diminish respondent bias by using only one interview for the case description, I did an additional exercise of triangulation of the interview data by interviewing multiple parties about one case firm. To this purpose, I used the case summaries of each of these eight firms and read them out loud to a number of people that were knowledgeable about the firm. In so doing, I was not only able to assess the accuracy of our report and correct it for misinterpretations, but I also encouraged the interviewees to provide new reflections and extra information to enrich my understanding of the cases. While I engaged the VMS director and the government representative for each firm in this process, I also interviewed employees or firm consultants whenever my search for archival material about a firm had yielded too little material. I used this information to revise the case summaries when necessary. With the corrected case summaries, I then went back to the owner-managers for final follow-up interviews, in which I asked again to verify the accuracy of the account and to supply additional material whenever possible. The case summaries where then written in their final version, to include the few corrections and additions that had emerged in the interviews. Again, all interviews lasted around 120 minutes and were gathered between May and November 2007. Table 5.5 provides an overview of the data sources that were available for the 8 investigated firms.

In the fourth and final stage, I set out to develop an organized interpretation of the data together with the co-author of chapters 6 and 7. To ensure accuracy and reliability of theory, that is, a theory with a close fit to the data, one tactic involved the selection of pairs or groups of cases to identify similarities and differences between cases (Eisenhardt, 1989a; Miles & Huberman, 1994). As a second tactic, given that my co-author was not able to understand the language of the interviews, he probed me for explicit and convincing quotes or examples that would substantiate the differences and similarities found. This process allowed me to diminish subjective researcher bias and make the findings as objective as possible. We began with our within-case analyses of each case to identify preliminary explanations of the phenomenon of interest. We then conducted cross-case analyses using pairs and groups of cases to further generalize these descriptors and enfolded extant perspectives in the literature to assess the external validity of our thinking. Our goal was to isolate a meaningful set of capabilities so that implications could be drawn for future theory testing. It was important, therefore, to identify a set of constructs that were theoretically meaningful, internally consistent, robust, and distinct. Reverting back and forth between the case analyses and the literature, we raised

Table 5.5 - Overview of data sources collected for case study companies

Firm	Emplo- yees	VMS score (label)	Inter- views	1st round	2 nd round	3rd round	Archival documents
Panamarenko	6	99 (A)	4	o/m	production manager, VMS representative, government consultant	o/m	Company website, magazine interview, published books, internet references, VMS registration
Magritte	4	98 (A)	3	o/m	VMS representative, government consultant	o/m	Magazine interviews, VMS registration
Fabre	7	97 (A)	3	o/m	VMS representative, government consultant	o/m (2)	Company website, VMS registration
Ensor	5	95 (A)	3	o/m	VMS representative, government consultant	o/m + wife	Magazine interviews, internet references, company website, VMS registration
Bruegel	4	58 (C)	4	o/m	VMS representative, government consultant, private consultant	o/m	VMS registration
Rubens	4	57 (C)	4	o/m	VMS representative, government consultant, private consultant	o/m	VMS registration
Jordaens	4	32 (C)	3	o/m	VMS representative, government consultant	o/m	Magazine interview, VMS registration
Van Dyck	7	(D)	3	o/m	VMS representative, government consultant	o/m	Magazine report, company website, VMS registration

the descriptive concepts up one level of abstraction to second order themes where each theme encapsulated a number of underlying subcategories. Each time that we identified a second-order theme, we went back through the cases to confirm that it was consistent across successful companies yet inconsistent across unsuccessful companies. From these analyses, we created tables to facilitate further comparisons and compared successive pairs of cases for similarities and differences in how these firms overcame constraints to develop the emerging constructs and theoretical logic.

Before presenting the findings of the case studies and discussing their contribution in providing answers to the research questions posed, I will first present a contextual description of the research setting.

5.3. Contextual description of the Belgian ornamental horticulture and its relation with the natural environment

In the following sections, my goal is to present the background against which the findings of chapters 6 and 7 should be interpreted. As such, this presentation and description of the research context addresses the recent concerns in the literature to ground empirical findings in a thorough description of the context in which they emerged (Weick, 2007; Zahra, 2007; Tsui, 2007):

"Contextualization is essentially adding one more level to theorization by accounting for the effect of contextual characteristics on the behaviour of and within organizations." (Tsui, 2007: 1358)

In order to present the context in a systematic way, this section first provides a general description of the activities of ornamental horticulture firms and its particular interaction with the natural environment. Given the importance of VMS for the methodology of this dissertation, the next section explains the principles and status of this organization in the Belgian ornamental horticulture industry. Finally, I will move to a description of the sector in terms of general demographic characteristics, the economic context, and the institutional context.

5.3.1. What is ornamental horticulture?

The ornamental horticulture is the sector that unites all firms that grow plants for mainly ornamental purposes (vs. edible human consumption purposes) and includes arboriculture (the production of trees and woody products), floriculture, pot plant nurseries (including azaleas and indoor plants), perennial plants nurseries and young plant nurseries (invitro propagation of new plants). The focus in this dissertation is on *production* firms in the ornamental horticultural sector. Whereas firms may be active in this sector for trading, consulting, research or other activities, our focus lies with firms that have at least part of their activities in the production of plants.

A typical ornamental horticulture firm or nursery starts with base plant material (a.o. seeds, cuttings or bulbs) which is either grown or propagated at the firm itself or bought from external firms. The plant base material is then grown to larger flowers, plants or trees, which are subsequently sold to end consumers or other firms that either continue the production in a new phase or market the plants further downstream in the value chain. The essential inputs for growth are soil (or another matrix in which the plant can root), nutrients (nitrogen, phosphorous and minerals), water, sun, heat and CO₂.

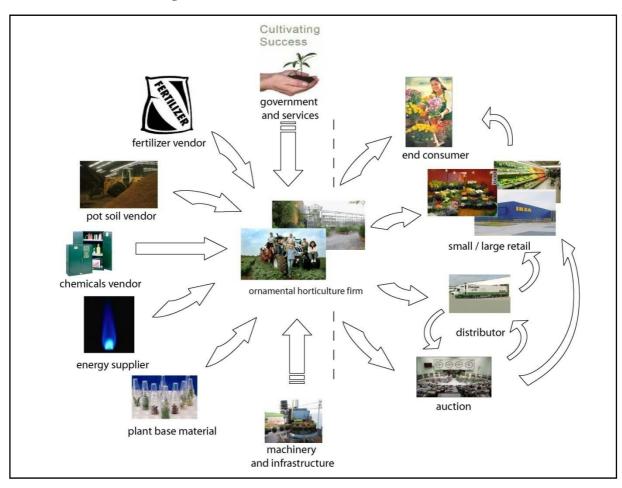


Figure 5.1 - The ornamental horticulture market structure

Diverse production methods can be used to nurture the plants. The plants are either grown outdoors or indoors. Outdoor production is carried out in fields or beds, on large containers that are filled with soil, lava or gravel and then covered with cloth (the "container" system) or the plants may be set into pots recessed into the ground. Indoor production takes place in greenhouses, which are made of glass, fibreglass or plastic poly film. The choice for either production method depends on the optimal thermal conditions for plant growth. Whereas outdoor production is the most natural type of production, greenhouses are used for plants that need a constant temperature or a higher supply of heat than outdoors. Greenhouses also allow for a more "controlled" environment (Paulitz & Belanger, 2001): the environmental conditions in the greenhouse (air temperature, humidity, insolation, CO₂-concentration and potential infections can be more or less controlled through technological means).

The market structure of the ornamental horticulture industry can essentially be divided into two sets of companies: those companies that operate upstream of the firm and those that operate off stream of the firm. Figure 5.1 depicts both parts of the ornamental horticulture market structure. Companies that operate upstream of an ornamental horticulture firm include all firms that provide the essential inputs to a firm. In addition, government and services (banks, consultants, research institutes, etc) provide the human, financial and institutional resources needed to be able to run the business. Finally, a number of businesses provide the machinery and infrastructure (durable goods such as greenhouses, cool cells, etc) used as physical means to run the business. Downstream, the plants leave the firm through a number of ways. A very small fraction of plants is sold directly to the consumer. In Belgium, only 5% of all plants that are bought by people are bought at the firm (VLAM, 2006). Usually, plants are transported to either auctions or other market places, sold to a distributor or directly to a small or large retailer (chain). In this process, the majority of plants leave the country for export to France, Germany and the UK (VLAM, 2006). Auction sales take place predominantly in the Netherlands, where the largest auctions in Europe are installed. As will become clear further in the analysis, the presence of these auctions is a very important factor in the functioning of the Belgian ornamental horticultural market as well. The majority of plants in Belgium, however, are sold to either a distributor or merchant or directly to smaller or larger retail shops or chains. Distributors and merchants, as intermediaries, add value in the market by taking care of exports and distributing the produce to either auctions or retailers.

5.3.2. The natural environment and ornamental horticultural production

In order to understand the environmental impact of ornamental horticultural production, it is necessary to understand the process of producing ornamental plants. The three most important issues which I will shortly develop in this context are:

- Plant nutrition
- Ensuring plant health and quality
- Energy

5.3.2.1. Plant nutrition

The metabolism of plants depends on the conversion of CO₂, water and sunlight energy, to chemical energy (carbohydrates) for growing and executing the basic functions of the plant. Oxygen is released as a result of this process. In order for plants to grow, however, plants not only need chemical energy, but also require proteins and fats, as new building components for DNA, cell material and other plant components. In order to build these proteins and fats, plants can use some of the carbohydrates from the photosynthesis, but they require nitrogen, phosphate, and spore elements like magnesium, potassium and sulphur as well. In natural conditions, these products are mostly available in the soil as the debris of decomposed organic material. In agricultural or horticultural systems, however, the natural replenishment of these nutrients is not ensured, since they are taken away from the soil in the form of harvest. Applying either organic or synthetic fertilizer is then necessary to replenish the soil with nutrients for new plant growth. In some production systems, "soil" is replaced by a rooting substrate that is drenched in a solution of water and synthetic fertilizer. It is often argued that the growth in agricultural production is largely due to such use of synthetic fertilizers (Tilman, Cassman, Matson, Naylor, & Polasky, 2002).

The problems of fertilizer application to the natural environment, however, are associated with excess nutrients leaching into the soil. In natural conditions, it is almost impossible to ensure horticultural production without loosing some fertilizer or nutrients through leaching or emissions. Over the last decades, however, the increased application of fertilizer has caused stress on the natural environment.

"a significant amount of the applied nitrogen and a smaller proportion of the applied phosphorous is lost from agricultural fields. (...) Such non-point nutrient losses harm off-site ecosystems, water quality and aquatic ecosystems, and contribute to changes in atmospheric composition. Nitrogen loading to estuaries and coastal waters and phosphorous loadings to lakes, rivers and streams are responsible for over-

enrichment, eutrophication and low-oxygen conditions that endanger fisheries" (Tilman et al., 2002: 673).

Ensuring an efficient and demand-based supply of fertilizer that minimizes excess losses of fertilizer to the environment is therefore a key objective for an environmentally friendly horticultural production.

A number of innovations have been introduced that can help growers in realizing this objective. Fertilizers that allow for a controlled release of nutrients over the growing season bring nutrient supply and demand in line in the soil, thereby decreasing the chance of leaching nutrients to the groundwater. The increasing knowledge on the necessity of organic material in the soil and its natural properties of slow nutrient release has also furthered the application of mulch and compost. Finally, "container fields" allows the leaching water to be captured in a tank, which can subsequently be treated in a reed bed before discharging in nature or even reused again in the production process. The application of these technologies, however, is often still new and not commonplace in the Belgian ornamental horticulture sector.

5.3.2.2. Ensuring plant health and quality

A typical characteristic of ornamental horticulture is a very strong emphasis on plant health and quality (Daughtrey & Benson, 2005). Although plant health is a concern for all agricultural producers, ornamental plants are mostly harvested and marketed as a whole, instead of cropping only its roots, vegetables, fruits or leaves. In addition, since price and saleability are directly related to the visual quality of the flowers, stems or leaves, carefully guarding ornamentals against any type of damage is a major concern for growers. Futhermore, chemical growth regulators can be used to promote, inhibit or modify physiological processes in plants that determine the physical aspect of the plant (Basra, 2000).

Growers use both preventive and curative treatments to ensure plant health (Daughtrey & Benson, 2005). Preventive measures include the treatment of seeds, the development of transgenic crops that are genetically resistant to certain pathogens, good management practices that keep the environment free from pathogens (environmental and cultural control) and the preventive application of chemical controls to destroy any potential infection from the outset. In the event of a disease infestation, either natural (beneficial insects) or chemical (herbicides, fungicides, insecticides) curative treatments are used to destroy the pathogens and to protect the plant from further disease or damage development resulting from bacteria, funguses or insects. Traditional practices, however, mostly rely on a system of "preventive calendar spraying", which is in fact the preventive application (in often excessive levels) of

curative treatments. Chemical pesticides are sprayed on plants on a regular time schedule, even when there is no threat of diseases, insects or other agents. Not only does this result in toxic emissions of chemicals in the natural environment, but such an injudicious use of pesticides also results in increasing resistance among harmful insects, resulting in the need for ever stronger products.

Over the last decade, environmental regulations have progressively taken the most polluting toxic chemical controls off the market. Reminiscent of the early advocates against effective, yet highly toxic and lasting effects of some pesticides like DDT on the natural environment (Carson, 1962), governments around the globe have grown concerned with the effects of certain pesticides. Pesticides may have detrimental effects to the environment because they may destroy biological life besides the target for which the pesticide is applied. For example, DDT was not only effective in capping the growth of insects; it also killed bird populations in the areas surrounding the locations where the DDT was applied. Pesticides may be toxic to humans as well. Studies have revealed the carcinogenic effects of DDT on humans, making it very toxic for both animals and humans. One other example is Endosulfan, a very popular product in ornamental horticulture which has only recently been taken of the market in Europe. Owing its popularity due to its low price and high effectiveness against aphids, leafhoppers and other pathogens, it proved very toxic to aquatic organisms life, caused autism with children born from women that were pregnant in areas where Endosulfan was often used and is known to interfere with oestrogen hormones in humans (EPA, 2002; Saiyed et al., 2003).

Minimizing the use of persistent chemicals or chemicals with broad biological impacts is therefore a major environmental objective for ornamental horticulture. Recently, over 90 countries ratified the Stockholm Convention in 2004, which outlawed several persistent chemicals used as pesticides. As a result, both regulatory and technical innovations have taken place over the last decade that either force or help the ornamental horticulture industry to decrease the unfavourable effects of their production on the environment. Regulatory initiatives have banned the most toxic and persistent pesticides, predominantly by not renewing the product licences in the market. Technological innovations include biological controls and container fields, among others. Biological controls allow the use of biological means to control insect and disease damages to plants (Paulitz & Belanger, 2001; Fravel, 2005). Container fields, concrete containers filled with equalised soil beds and covered with a heavy film, facilitate the drainage of water from the plant to a central collection point, which ensures that no water is leached into the environment and can be reused in the production

process (Van Lierde, 2000). In addition, plants are always in optimal draining conditions, reducing the chance of root fungus infestation.

5.3.2.3. Energy

Energy is needed in ornamental horticulture through both direct and indirect ways. Direct energy is usually only provided in greenhouses. Some plants require stable temperatures or certain minimal temperatures to warrant optimal growth, which is supplied through gas, petroleum or coal-based heating systems (Korner et al., 2004). Indirect energy is associated with the production of fertilizers and pesticides or other chemicals and the use of machines (Hulsbergen, Feil, Biermann, Rathke, Kalk, & Diepenbrock, 2001; Pervanchon, Bockstaller, & Girardin, 2002; Meul, Nevens, Reheul, & Hofman, 2007).

Heating and industrial energy consumption impact the environment through the emission of CO_2 and NO_x in the atmosphere, which has been related to an increase in global temperature rises and general climate change (IPCC, 2007). In addition, the supply of fossil fuels is not unlimited and concerns have been raised about the sustainable use of these energy sources for heating.

Minimizing energy consumption is by switching from heavy fuels to natural gas or biofuels, using energy screens in the greenhouses and by using climate computers that adapt the energy use to the specific energy requirements (Carels & Van Lierde, 2000; Taragola et al., 2002; Korner et al., 2004).

Besides these several concerns that ornamental horticulture production raises with regards to negative impacts on the natural environment, it is probably better known for the many good impacts it has for the social and natural environment. These beneficial impacts are the subject of the next subsection.

5.3.3. Beneficial impacts of ornamental horticultural production and products

From an environmental perspective, the application of fertilizer, chemicals and energy are the most important challenges to the ornamental horticultural industry. But representing the production of ornamental horticultural products only by means of its challenges would be inappropriate with regards to the beneficial value of ornamental horticulture, both in social and environmental perspectives. Specifically, the sector adds value in two major ways (for an excellent review of the beneficial effects of ornamentals, the reader is referred to Brethour et al., 2007):

- The photosynthesis process fixes CO₂ and produces oxygen. As such, it aids in the reduction of greenhouse gases and produces a fundamental resource for humans and other living systems. Besides our dependence on plants for consumption, we thus also need all the non-edible, ornamental plants for our basic provision of oxygen.
- The presence of plants adds to human well-being. Not only do people buy ornamental plants for their aesthetic value, but several studies have shown that people indirectly benefit from the presence of plants in their environment (Brethour et al., 2007). Through its influence on air quality and the general perception of the working environment, the presence of plants has been demonstrated, among other things, to improve the health and reduce symptoms of discomfort in office personnel (Fjeld, Veiersted, Sandvik, Riise, & Levy, 1998) and among elderly living in long-term care (Rappe, 2005). Recent surveys of the literature indicate that ornamental plants clean the air of toxic pollutants and discomforting chemical substances such as volatile organic compounds (VOCs) (Wood et al., 2006) and would also reduce noise levels. Other studies have shown how plants influence the well-being of people and their psychological and physiological stress levels through various underlying mechanisms (Brethour et al., 2007).

Given these contributions to society, the ornamental horticultural industry has a formidable value for the challenges of the world today. It is clear however, that a legitimate attempt of this kind requires nurseries and growers alike to take the environmental and social effects of their production methods into account as well. One organization that will play the most important role in this perspective is VMS, which I will describe next.

5.3.4. VMS – the Flemish Environmental Plan for Ornamental Horticulture

On the 6th of February 1995, the Dutch auctions and traders association consolidated a growing local initiative that was essentially designed to counter the increasingly "critical social attitude towards cultivation processes" (MPS, 2006: 17). The project in fact originated three years earlier in the Westland region, a Dutch area north of Rotterdam often mockingly referred to as "the Glass City" (see box "History of MPS in a nutshell"). With almost its entire surface covered with greenhouse buildings for horticulture (hence, "the Glass City"), concerns were raised about its high consumption of energy, fertilizers and pesticides and of polluting the nightly sky with a permanent orange glow emitted from the assimilation lighting in the greenhouses. Given the anticipated increasing public attention for the natural

environment in the Netherlands, it was also assumed that plants with a label that reflected specific efforts towards the natural environment would be able to interest environmentally sensitive market segments. As such, MPS (Milieuplan Sierteelt – Environmental Plan Ornamental Horticulture) was founded, with as its mission (www.my-mps.com):

- To reduce the environmental impact on participating companies;
- To improve or maintain the image of the floriculture industry;
- To provide a one-stop window for registration and certification.

History of MPS in a nutshell

MPS began as a regional project in the Westland region in 1993. Various pilot groups consisting of growers, information providers and researchers laid the foundations for the current MPS system. They developed a certification scheme to reduce the environmental impact of the floricultural sector and to improve the image of the sector. The founders looked at the registration method and the standards in order to give shape to the scheme. This led to the creation of a registration system based on everyday horticultural practice. At the end of 1994, around a thousand growers were already registering their environmental data. As of 1 January 1995, points were awarded regarding the use of crop protection agents, fertilizers, energy and the way in which waste is dealt with. These points were processed according to a calculation formula to convert them into a company qualification, namely MPS-A, -B or -C. In February 1995, MPS was transformed into a national foundation comprising all the Dutch flower auctions, LTO Nederland (the Dutch Organization for Agriculture and Horticulture) and LTO Glastuinbouw (the LTO branch for greenhouse horticulture). From that point, the number of participants outside the Westland region began to increase rapidly. Growers therefore played an important role right from the start of MPS, particularly due to their role in the pilot groups which served to set the standards per crop. This meant a high level of commitment and the mission of "small steps for a large group" was fulfilled.

(MPS, 2006: 18)

Two years later, in 1997, the Belgian traders association NAVEX, together with a number of proactive growers, realised that the Belgian market could not lag behind in this new initiative and founded VMS as a sister organization of MPS. VMS decided to use the administrative backing of MPS and use the same methodology as was designed by MPS. Since then, growers from all over the world have joined MPS, mostly as a result of their trade with Dutch auctions or traders. Table 5.6 displays the distribution of certificates per country and qualification within the MPS system. As is instantly visible, the Dutch membership figures exceed those of other countries by far. Although several explanations are possible, the

most important one is a covenant between the Dutch government and the greenhouse horticultural sector in 1997, which set a number of target objectives with regards to the impact of the sector on the natural environment. All Dutch horticultural growers are required to register their use of energy, fertilizer and pesticides and report them to the government. The registration requirements were designed such that growers could use MPS as a reporting tool. This is in contrast with the situation in Belgium and all other countries that have members in MPS, where such a registration is entirely voluntary.

Table 5.6 - MPS certificates per country and qualification in 2005. Source: MPS, 2006

Country/region	MPS-A		MPS-B		MPS-C		Total
Netherlands	2042	78%	321	12%	262	10%	2625
Belgium	70	73%	21	22%	5	5%	96
Denmark	34	76%	6	13%	5	11%	45
France	7	78%	1	11%	1	11%	9
Spain	8	42%	6	32%	5	26%	19
Kenya/Tanzania	21	64%	4	12%	8	24%	33
Central and South							
America*	25	68%	4	11%	8	22%	37
Other international	12	63%	5	26%	2	11%	19
Total	2219	77%	368	13%	296	10%	2883
4E 1 0 D	E1 C 1	1 **	1 0		1 0 1		

*Ecuador, Costa Rica, El Salvador, Honduras, Guatemala and Colombia

At the heart of MPS is the MPS-ABC certification. Firms that become a member of VMS/MPS are granted an A, B, or C label based on their relative performance with regards to environmental impacts (see below). Over time, MPS has created a number of additional labels that allow for more advanced criteria to be included in the registration and further develop new market segments. These labels include:

- MPS-GAP (a worldwide scheme for compliance with demands from the retail sector)
- MPS Socially Qualified (a scheme including social aspects, such as safety, health and working conditions)
- MPS Quality and ISO9001:2000 (quality focused certificates)
- MPS-Florimark ("a top certificate for top companies with top products")

In this dissertation, my focus remains with the MPS-ABC label. Given that only three Belgian firms had an MPS-GAP certificate and none of the other, I decided to focus only on environmental performance.

5.3.4.1. The MPS system

In order to assess firm specific environmental performance, each firm is required to collect information with regards to four elements: its waste treatment, energy use, fertilizer use and crop protection products use. Every four weeks, this information is to be submitted to MPS, who then apply specific calculation rules to attach a score to the products used and waste treated by the firm. The label is awarded every 4 weeks and takes the last 13 registration periods into account in its calculation. A minimum of 13 registration periods is thus needed in order to receive a label.

The calculation rules follow a scheme that compares the firm data with a firm-specific norm. This firm-specific norm is one of the most interesting characteristics of the MPS system, since it takes a number of contextual variables into account when assessing the firm's impact on the environment, which are the following:

- the environmental hazard of the product used (toxicity, degradation speed, ...);
- the spatial characteristics of the firm (distance to open surface water, depth of groundwater, soil type, annual rainfall, geographical location in the world...);
- the structural characteristics of the firm (greenhouse or open ground);
- the type of production cluster of which it is a part (potplants, azalea, ...).

The firm-specific norm serves as a benchmark of what can be expected from the best and the worst production methods (in environmental terms) within a specific production cluster and geographical location. The best production methods are indicated by a lower bound of product use, the worst production methods with an upper bound of product use. These upper and lower bounds are determined by a careful follow-up of a pilotgroup, an expert committee and a subsequent investigation of the best available practices. The environmental hazard of pesticides is determined by acute and chronic toxicity for both human and animal life, its decomposition rate and the mobility in terms of spreading by air and water. Based on the simultaneous assessment of these factors, MPS developed a colour code for pesticides, called MPS-Mind. The most toxic pesticides are assigned a red code, the least toxic a green code. Intermediate toxicity gets an amber code. Again, these codes are also made firm specific, depending on its location and product sector. The toxicity for aquatic life, for example, is punished less for firms that operate in areas where there is no aquatic life around. Similarly, energy use will be more important for firms with greenhouses than for firms that operate in open ground.

Firms that report product uses below or equal to the firm-specific lower bound get maximum points, product uses which are above the upper bound get minimum (zero) points. Between the upper and lower bounds, points are assigned in a linear relationship. In total, firms can earn a maximum of 100 points. Figure 5.2 and Table 5.7 show how the use of the same product can result in different scores depending on the sector in which the firm is active.

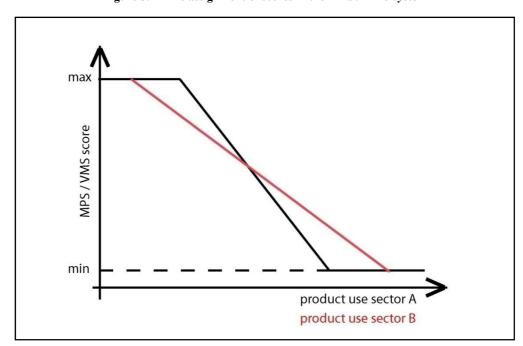


Figure 5.2 - The assignment of scores in the MPS / VMS system

Table 5.7 - Maximum point that can be acquired depending on cultivation type

	Covered cultivation	Outdoor cultivation		
Crop protection	maximum of 40 points	maximum of 50 points		
Green	max. of 12 points	max. of 15 points		
Amber	max. of 16 points	max. of 20 points		
Red	max. of 12 points	max. of 15 points		
Energy	maximum of 30 points	maximum of 10 points		
Fertilisers	maximum of 20 points	maximum of 30 points		
Nitrogen	max. of 10 points	max. of 15 points		
Phosphorus	max. of 10 points	max. of 15 points		
Waste	maximum of 10 points	maximum of 10 points		
Separation of paper/cardboard	max. of 2 points	max. of 2 points		
Separation of plastics	max. of 2 points	max. of 2 points		
Separation of organic waste	max. of 6 points	max. of 6 points		
Nitrogen Phosphorus Waste Separation of paper/cardboard Separation of plastics	max. of 10 points max. of 10 points maximum of 10 points max. of 2 points max. of 2 points	max. of 15 points max. of 15 points maximum of 10 points max. of 2 points max. of 2 points		

Subsequently, firms are assigned a qualification and a corresponding label, which is based on the total amount of points collected:

- MPS-A: points total of at least 70.0 and maximum of 100
- MPS-B: points total of at least 55.0 and maximum of 69.9
- MPS-C: points total of at least 10.0 and maximum of 54.9
- MPS-Participant: points total of at least 0 and maximum of 9.9

Figure 5.3 shows each of these labels.

Figure 5.3 - The MPS A, B, C and D-labels



In order to achieve credibility of the certification, independent audits are executed in three different situations:

- *Initial audit:* Similar to the desk audits, an initial audit is carried out as soon as the participant becomes eligible to receive a calculated qualification (MPS-A, -B, -C) for the first time. All new firms are subjected to this initial audit.
- Desk audit: In order to make sure that participants provide correct information, MPS randomly selects a group of participants and subjects them to a desk audit. The audit looks for extreme deviations, the use of prohibited pesticides and the (improper) use of products which are not allowed for specific environmental clusters.
- Company audit: Every year, MPS orders on-site audits on at least 30% of the participating firms. These 30% includes the companies which need to be audited as a result of the desk audit. The company audits are carried out by independent companies on the basis of a checklist. The company audits are conducted in the same way throughout the world.
- *Trademark audits*: Random checks are executed in order to trace fraud and improper or incorrect use of labels

Every three months, MPS members get their results sent to them by mail. Members can subsequently ask for a "group comparison" in which they get to compare their firm's product uses with similar firms in the same product cluster and environmental location type. This system allows the firm to use the MPS/VMS system as management tool and to learn from its registration.

In summary, the MPS rating system serves as an independently assessed proxy for the level of environmental proactivity that a firm deploys relative to firms that have a similar sensitivity to diseases/pests, temperature needs and use of fertilisers. Firms that achieve higher VMS rates reflect higher levels of environmental performance relative to what is considered possible for the firm.

5.3.5. The Belgian ornamental horticulture sector

The Belgian ornamental horticulture sector cannot be understood without taking its long tradition into account. Explaining this tradition is important for two reasons. First, the Belgian ornamental horticulture has always been associated with aristocracy and affluence. A well known botanist called Lobelius already wrote in the 16th century that the Flemish were among the best in Europe in growing both native and exotic plants (De Herdt, 1990). This prestigious reputation was the result of the special interests of a number of rich patricians and lords who employed botanists and "plant hunters" to find new and special plants in foreign countries and then grow them in their mansions. One effect of this evolution was the foundation of the Royal Agricultural and Botanic Society in Ghent in 1808, a prestigious and highly traditional organization which is still governed by an elite crowd and members of "old nobility" today. Until recently, ornamental plants were always perceived as a luxury, an expensive product for which there was always more demand than supply. As a result, markets were very predictable: growers only had to make sure that they grew their plants, because at the end of the growing season there would certainly be a customer willing to buy the firm's plants. As a result, business was good in ornamental horticulture, its population was affluent and this showed in their housing. Around these villages surrounding Ghent, one can still see the remainders of these "florist" villas.

Second, the ornamental horticulture sector consists mainly of family firms that have often been in families for centuries. Over the years, many of the original plant hunters and servants that worked for the aristocracy or on larger farms, "spun off" to begin their own little firms and sell their plants and flowers to markets and exports. These developments took place mostly around the city of Ghent, with a couple of villages specializing in pot plants (around

Merelbeke), azalea (around Lochristi) and arboriculture (around Wetteren). The firms were passed on from generation to generation, with several firms that still exist today going back over a century. The importance of tradition, the strong family firm characteristics and its connection to elite communities are still celebrated in the sector today.

Unfortunately for many ornamental horticulture firms, however, the world has changed over time, and so has the ornamental horticulture industry. From the beginning of the 1980's and especially the 1990's, increased competition from the Netherlands resulted in decreasing prices, shifts in market demand and a completely new market situation. Instead of a demand surplus, ornamental horticulture firms were suddenly facing a supply surplus, with tumbling prices as a result. Increased competition and decreasing margins pushed for restructuring of firms with more need for managerial skills, marketing, innovation, efficiency and scale enlargements than the traditional craftsman skills and small scale firm had (Taragola et al., 2000; Verspecht et al., 2003). Many of the firms, however, were passed on in the beginning of the 1980's or the beginning of the 1990s from father to son, without taking these changing market conditions into account. Several interviewees pointed at the impact of this path dependency on the structural characteristics of many firms today. Many firms are still working on the smaller patches and the aged greenhouses that they inherited from the previous generation.

"There are many firms like that. That had better never acquired their firm from their parents. (...) Too small, no space, badly structured. And then the father that says "well, I earned a living on this firm, so why wouldn't you be able to earn a living on it." So they ask a lot of money for the firm, because they think it's worth a lot of money. But that's simply not true." (K2)

The interviews made clear that the ornamental horticulture sector is a sector in transition, moving from a period of stability to a period of increasing competition, uncertainty and complexity. In the following subsections, we will show the most recent developments and characteristics of the Belgian ornamental horticulture industry as it has become today. More specifically, I will focus on the general demographic and socio-economic descriptives of the Belgian ornamental horticulture, the general business environment and the institutional environment in which it is embedded.

5.3.5.1. General demographic and socio-economic characteristics

The National Institute of Statistics (NIS) reported that in 2004, 2395 firms were active in the ornamental horticulture sector as producers. The entire Belgian ornamental horticulture sector generated an estimated total turnover of 552 million euros, which represents about 12%

of the total turnover in agriculture (€ 4,55 billion) (EROV, 2006). With this production, the ornamental horticulture sector realizes a net positive trade balance: while the imported value of ornamental horticulture products in Belgium amounted to 384 million euro in 2004, it assumes the third place (behind the Netherlands and Italy) as an exporter in Europe, with over 500 million euro exported value. In total, the sector employed 11 213 people in 2005. Figure 5.4 shows how, over the last decade, the ornamental horticulture in Flanders (representing 90% of the Belgian production) combined a strong decline in number of firms with a steady growth in turnover.

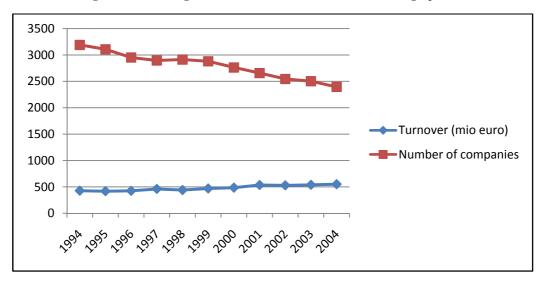


Figure 5.4 - The Belgian ornamental horticulture sector in demographic

The decreasing number of firms in the sector and the strong traditional features as were described before, lead to a number of additional demographic characteristics of the Belgian ornamental horticultural sector. Table 5.8 shows the high average age of owner-managers, the small general firm size and the low level of education of owner-managers and employees. Three things can be learned from this table. First, half of the owner-managers in the sector is over fifty years of age. This suggests a very high level of experience, yet also a very high level of potential inertia. The influx of new firms or the acquiescence of firms either within or from outside the family is very low. Both the increased financial capital requirements and the bad reputation of the agricultural sector as an unprofitable sector have deterred many young people from considering a career in ornamental horticulture. As a result, the remainder of owner-managers are members of an aging population, but are also stalling structural renewal and investments in the future. Unfortunately, this also has a negative impact on the general morale in the sector. Due to the increased competition and the low

investment in the future, the remaining owner-managers look back on the times when life was easier for them and hope that they will be able to survive with their firm until retirement.

Age category		Number of employees		Highest education*	Owner- manager	Employees	
	%		%		%	%	
20-29	1	0-1	25	Primary education	22	18	
30-39	19	1-3	51	Lower secondary	30	26	
40-49	30	3-5	12	Higher secondary	38	47	
50-59	29	5-10	9	Bachelors	7	6	
> 60	20	10-20	1	Masters	3	3	
		20-30	1				
		30-50	1				
		50-65	0				
All	100	All	100	All	100	100	

*data for agriculture, hunting, sylviculture and fisheries in general

"About 60 to 70 % of growers have a rough time these days. Those that have been able to save enough for their pension rather prefer to retire in the current conditions. (...) We are confronted with growers without a future every day, where the last spark of professional pride has been squeezed out. Almost no one has a successor." (K4)

Second, almost all firms are micro-enterprises, with most of them having less than 10 employees. In fact, the majority does not have more than 3 employees. This reflects a highly fragmented landscape of small, autonomous, mostly family owned firms. Although firms are experiencing a strong push to grow their firm size, with substantial financial capital requirements as a result, only a small group of firms is investing in expansion. In addition to the reasons of decreasing influxes of new people in the sector, a much heard influence is the general "individualism" of the Belgian grower:

"Some policy makers are dreaming of clusters like the Dutch model, where a number of facilities are shared. But the Flemish grower wants a piece of land with his own company on it and a shed around it. That is his territory where he makes a living." (Representative of professional association, 2006)

As a result, a 2004 study of the Centre for Agricultural Economics reported that only 5% of the firms were large enough to work in optimal circumstances (Verspecht et al., 2003). On the other hand, the smaller size and family based character is also mentioned as one of the major strengths of the Flemish firms. The dedication of a family to the firm is considered essential for the specific requirements of the ornamental horticulture industry. One consultant reported that:

"The fact that many firms are small to middle-sized family firms results in a tremendous flexibility with regards to commerce. If it's necessary, people will work weekends and nights during the commercial season." (Consultant in arboriculture)

Thirdly, the generally low education of both owner-managers and employees reduces the possibilities for innovation and absorption of new practices and technologies. Although the data on education in Table 5.8 reflect those of the primary sector in general, several sources confirmed that they are applicable to the ornamental horticulture sector as well. The generally low education of owner-managers has two main effects. First, several interviewees complained that they did not possess the skills and knowledge for management and marketing. One important hurdle in this perspective was the lack of language skills. Given that most of the plants were exported across Europe, many firms were unable to establish contacts across Europe and decrease their dependence on intermediaries. Second, many owner-managers encountered difficulties to understand new legal, technical and commercial requirements. As a result, they hold on to their traditional practices and follow the incremental changes that are introduced by peers. This mimetic behaviour is the strongest around the traditional epicentres and production clusters of specific products.

"A lot of growers still work like their parents did. We are working in a sector under heavy pressure, and the reasons for that are mostly to be found in a lack of dynamism, entrepreneurship and management competencies. Yet the supply of training about how to run a company, for example from the Economic Council of Eastern Flanders, is quite good. But people don't use it." (grower)

Together, these demographic and socio-economic characteristics indicate that (1) firms are generally small, (2) firms generally have low levels of human capital in terms of employees and (specialized) knowledge, and (3) the high competition and little potential to sell the firm results in reduced financial resources and willingness to invest in new infrastructure.

5.3.5.2. General business environment

Providing a description of the general business environment in quantitative terms is a complex task in the ornamental horticulture. Although a number of studies have investigated the ornamental horticulture industry from a public policy point of view, very few studies have made comprehensive overviews of the general attractiveness of the industry from a business point of view. From the multiple data sources that I collected, a general picture can nevertheless be sketched. For reasons of consistency with chapter 3, I will present the general business environment in terms of its *munificence*, *complexity* and *uncertainty*.

Munificence

Recall that the munificence of a business environment is determined by an abundant supply of resources that may facilitate organizations to achieve their objectives (Dess & Beard, 1984; Castrogiovanni, 1991). Ornamental horticulture firms, for example, may benefit from the research and dissemination activities that are done by the government sponsored research institute, the Proefcentrum voor Sierteelt (PCS). Furthermore, both government and independent consultants provide extension services that provide advice and disseminate knowledge throughout the ornamental horticulture community. The government also supports investments at the firm by providing capital subsidies if the investment meets certain criteria. Over the last years, environmentally friendly investments have thus been favoured in these subsidy schemes. Finally, the close presence of the Netherlands, a highly munificent business environment in terms of supporting institutions, consultants, machinery, construction and many more, is a great source of resources for many Belgian ornamental horticulture growers as well. Although the general business environment is thus not entirely devoid of supporting resources, the overall picture is nevertheless one of hostile competition and a decreased willingness of constituents to supply critical resources to cope with it.

A first indicator for the low munificence in the Belgian ornamental horticulture is the fierce price competition and decreasing margins. Instead of the several market regulation instruments (subsidies and production quota) that protect arable and dairy farmers from price competition, the ornamental horticulture industry has a free market in place which is no different from any other manufacturing industry. In recent decades, a number of (costly) technological innovations have allowed increasing levels of productivity and have also pushed firms to increase in size and to capitalize on the returns to scale that come with the costly technologies. Especially in the Netherlands, as a result of supportive government policies and the more collaborative nature of Dutch growers, this trend has facilitated the growth of firms to sizes that allow a cheap and standardized supply of products in larger volumes. Since market volumes subsequently grew faster than the increases in demand, prices have gone down over the years. With such decreasing prices, many firms that were unable to grow have stopped their activities, and the remaining firms have produced larger volumes (see Figure 5.4). In addition, the downstream markets have undergone substantial changes as well. Besides fast consolidation of the classical distribution and trade channels, ornamental plants are now increasingly sold in supermarkets and large retail chains. As a consequence of the increasing size and bargaining power of these downstream players, prices were driven further down. As one distributor explained:

We've got a customer, well we lost him now, our largest customer, that had been acquiring a couple other of our customers of the years (...) and they made one large tender, saying, (...) "that is the required price". So they tell us what the price needs to be and that price is 20% less than last year's price. 20%! While we have margins that are far from 20%! (K9)

Second, at the same time markets are pushing firms to grow and capitalize on scale advantages, Belgian firms face increasing difficulty in getting access to the critical resources to make this possible: financial resources and space. With the growing financial recourses in a competitive and unpredictable ornamental horticulture industry with decreasing margins, banks have become hesitant to provide financial resources. Furthermore, expansion and growth of the firm requires physical *space*. Over the last years, however, local spatial planning policies have tended to oppose the building of new glasshouses in new or existing firms out of fear of destroying valuable landscapes (Verspecht et al., 2003; EROV, 2004), but also because many spatial planning specialists lack the specific knowledge to assess the specific needs of the ornamental horticulture industry. This places the Belgian ornamental horticulture industry in a disadvantageous position compared to the Dutch industry, where spatial planning was designed in way that fostered larger scale and new glasshouse infrastructures.

A third factor decreasing the munificence of ornamental horticulture is that its too small as a market to influence public policies in their favour, or to interest the chemical industry to invest in products that satisfy their specific requirements (Daughtrey & Benson, 2005):

"owing to the small worldwide market size for greenhouse and nursery fungicides and the high costs of product introduction, new chemical control products are usually developed for agricultural uses and then trickle down to ornamental uses" (Daughtrey & Benson, 2005: 158).

Ornamental horticulture firms thus benefit from the R&D investments that are done for the entire agricultural sector, yet lack the clout to push the chemical industry for research and product development for their own specific needs.

A final factor inducing low munificence is the bad reputation and morale the ornamental horticulture sector has acquired. The traditional and old-fashioned reputation, together with the earlier mentioned high financial risks, hamper the access to human and financial resources for innovation and firm expansion and function as a high entry barrier for starters. In the longer term, this is described as a one of the main threats for the future. A critical mass of growers is needed to sustain the attractiveness of the sector towards customers

and suppliers and the current state of the sector does not give hopeful signals that this critical mass can be maintained in the future. Furthermore, increasing regulatory requirements and the diminishing returns have made many owner-managers pessimistic about the future. These complaints further discourage incumbents, as well as potential new entrants to invest in the future of ornamental horticulture:

"I have a problem with the eternal complaining of many colleagues. Those that inform themselves in a positive way and approach the sector in a flexible way, keep their heads above the water. What our sector lacks is a healthy dose of optimism." (grower)

In sum, the ornamental horticulture industry shows many of the characteristics of a declining industry (Grant, 2008): excess capacity, a declining number of competitors, a high average age of both physical and human resources and an aggressive price competition.

Complexity

Complexity is determined by the number and variety of factors that influence the general business environment (Smart & Vertinsky, 1984). As a result, the more factors owner-managers have to deal with in order to manage the success of their organization, the more complex the environment. The complexity of ornamental horticulture can best be described by highlighting the most important factors that were mentioned in the interviews: operational factors, market and management factors and regulatory factors.

First, in purely operational terms, ornamental horticulture growers have to deal with a number of factors that determine the success of their operations and which are very hard to predict. Plant growth and quality depend on natural conditions, such as weather conditions (temperature, precipitation, nutrients, sunlight, etc) and the presence of diseases. It is often said that growing plants requires a "green thumb": the specific skill to keep plants healthy and grow well. Acquiring such a skill entails learning-by-doing, which is a time consuming process given the slow growth of plants. Recently, however, the operational difficulties have been increasing. Imported base material and plants in general have brought new pests that require new techniques and solutions from growers. At the same time, however, several of the most effective, yet also most toxic, pesticides have been taken off the market. Whereas production was easily controlled by "broad spectrum" pesticides (killing several diseases at the same time), growers now have to be more aware of disease specificities and search for appropriate solutions. As a result, the technical complexity has increased substantially. In recent decades, however, a number of technologies have allowed to better control each of these factors. Within the confined setting of a greenhouse, for example, almost all of the

mentioned factors can be managed through computer-controlled heating, CO₂ provision, and monitoring-based plant control. In addition, many, although certainly not all, growers now hire independent consultants that help them in following up on these new products and technologies.

Second, a recent, yet substantial source of complexity relates to marketing and managerial factors. Several interviewees mentioned that, until the late 1980's, operational problems were the only worries owner-managers had. The same plants were grown every year and no particular efforts had to be made to sell the plants. From the beginning of the 1990's, however, the typical craftsman suddenly had to have management and marketing skills as well. Having a successful business now required him to follow up and anticipate new market demands, new technologies, new product requirements, internet retailing, managing personnel and the like:

"Everything has become too big now, large scale, depending on too many indicators and then you become vulnerable. (...) It's very difficult for these guys [growers], also for those that are making a good living. Why is it difficult? They constantly have to watch out, constantly look after their business, weekdays, Sundays, always, constantly calculating everything. Your greenhouse may become your prison at some point." (K4)

The complexity is further increased by shifts in consumer preferences and especially the changing requirements in the new market channels. Traders now have specific requirements related to size, packaging, presentation and delivery speed, which were completely absent in the past. Since it is becoming almost impossible for owner-managers to combine all these responsibilities, they also have to hire more employees. Yet planning, dealing with personnel and delegating responsibilities is an additional complexity that many owner-managers find hard to handle.

"The biggest problem is that these firms are used to work hard and that they find it difficult to take into account that new personnel still needs to learn. They are slower and they become nervous because of this" (K1)

Finally, owner-managers also increasingly have to deal with several regulatory requirements. The complexity not only results from the existence of these requirements, but also that they stem from different policy levels. For example, although regulatory requirements with regards to pesticides are decided at European Union level, differences may nevertheless exist between countries. Similar differences also exist with regards to the regulatory requirements for exporting plants. Whatever the country differences, however, the general trend is that firms need to take these regulatory requirements into account in their

production and marketing practices. For many owner-managers, these regulatory requirements are a problem, since they do not always know where to find the right information about them.

Uncertainty

The uncertainty is determined by perception of the owner-manager of the predictability of the future of the business environment in general, its impact on the firm, and the predictability of the outcomes of a firm's decisions (Milliken, 1987). Although this perception will differ between growers, the interviews and especially the roundtable discussions revealed that there are nevertheless some general conclusions to be drawn,

First, the two most important uncertainties that came out of a scenario-planning analysis were (1) the speed of consolidation of the downstream market, and (2) the "goodwill" from society to allow expansion and development possibilities in the market. If the consolidation speed would be too fast, and if public policies would not be willing to grant expansion possibilities to the firm, then the sector fears that only very few firms will be able to survive. Only firms with specific niche markets or firms that already have a sufficient scale in the market will be able to survive. However, it is feared that if the number of firms goes below a certain threshold level, there will no longer be enough to justify the research centres, independent consultants, traders and transport companies that currently still provide the low levels of munificence needed for the survival and growth of the existing firms. As such, the general business environment of the ornamental horticulture sector was considered very uncertain (EROV, 2004).

Second, most people in the ornamental horticulture industry are convinced that there will always be a demand for plants, Yet, determining which plants will be popular and/or profitable is an increasingly difficult task. Whereas particular flower colours can be very popular in one year, they can be almost impossible to sell in another. However, since the production cycles can sometimes take up several years (in the case of arboriculture, for example), this makes production decisions almost a gamble.

Thirdly, the requirements for environmentally friendly production remain uncertain to date. Whereas it has been suggested for the last ten years that environmental labels would become a necessity in the market, or would become a regulatory requirement through compulsory registration, such requirements still do not exist.

Taken together, the current business environment is characterized with low munificence, increasing complexity and high uncertainty. Given that high levels of

munificence, and low levels of complexity and uncertainty are associated with higher probabilities of finding proactive environmental strategies among firms (Aragon-Correa & Sharma, 2003), it is no surprise that only a small amount of firms have become member of VMS. In order to have a complete picture of all the contextual factors that could impact the adoption of proactive environmental strategies in the ornamental horticulture, the next section is dedicated to describing the external institutional environment.

5.3.5.3. External institutional environment

DiMaggio and Powell defined an organizational field as a set of organizations that "in the aggregate, constitute a recognized area of institutional life: key suppliers, resource and product consumers, regulatory agencies, and other organizations that produce similar services or products." (1983:148). Organizations in an organizational field share unilateral or multilateral influences that guide their behaviour through regulative (formal rules), normative (social obligations) or cognitive (taken-for-granted assumptions and behaviours) pressures (Scott, 2001) and which centre around a particular issue (Hoffman, 1999). Both Scott and DiMaggio and Powell warn anyone interested in investigating an organizational field that "the structure of an organizational field cannot be determined a priori but must be defined on the basis of empirical investigation." (DiMaggio & Powell, 1983: 148). More specifically, it is important to assess how the organizational field is structured around one particular issue through each of these three "pillars" of institutional order (Scott, 2001). To this purpose, Table 5.9 provides a summary of the institutional pressures with regards to environmentally friendly "green" production in the Belgian ornamental horticulture sector. In contrast to earlier studies on organizational reactions to natural environmental issues (Henriques & Sadorsky, 1996; Henriques & Sadorsky, 1999; Buysse & Verbeke, 2003; Bansal, 2005), proactive environmental strategies in the Belgian ornamental horticulture industry represent an act of non-conformity, rather than one of conformity. More specifically, we found that the dominant institutional logic in the ornamental horticulture sector discourages proactive environmental strategies, and acts in favour of maintaining the status quo. Table 5.9 shows how the institutional pressures are distributed in favour of and against environmental strategies in the Belgian ornamental horticulture sector by drawing upon the three pillars of institutions: regulative, normative and cognitive.

1. *Regulative pressures.* Since we are looking at environmental practices that go *beyond* legal requirements (Sharma & Vredenburg, 1998; Aragon-Correa & Sharma, 2003),

regulative pressures are only of interest as far as they inform firms to go beyond them. As such, the growing trend of environmental regulatory requirements could act as an implicit regulative pressure for firms to go beyond current legal expectations and anticipate future ones. However, it conflicts with the explicit regulatory requirements that exported plants should be pest-free when they are sold for export. As such, the use of pesticides on exported plants is essentially required by law.

2. Normative pressures. Whereas it is generally expected that firms are under normative social and market pressure to improve their environmental performance, this does not seem to be the case in the ornamental horticulture sector. On the one hand, individual neighbours, civil society organizations and end-consumers display little interest in ornamental horticulture firms and complaints are therefore rare. On the other hand, the conservative and reactive discourse of professional associations conveys normative messages that discourage green production. Like most agricultural sectors around the globe, the ornamental horticulture sector is embedded in a highly institutionalized environment, with strong forces for within-industry isomorphism and resistance to external pressures (Coleman, 1998; Montpetit, 2000). Given that environmental regulation increasingly constrains the discretion growers have in their regular use of fertilizer and crop protection products, the general feeling is that the government is making it impossible to have a profitable business. The professional associations thus react by stating that environmental regulation is too fast and that it does not take the economic reality of growers into account.

"Give the sector the space where firms can further expand. This is our most important priority, and it shouldn't be immersed in an amalgam of concurrent priorities for sustainability, optimal energy use, registration systems, ... An owner-manager first has to be able to start a company, before he can speak about sustainable production, or before optimizing pesticides, nutrients and energy." (professional association representative, 2003)

Such resistance exists among individual firms as well, and in particular with regards to initiatives like VMS. Since VMS discloses the use of pesticides and fertilizers, some growers worry that this would encourage the government to establish new laws and requirements. For example, one grower told me:

I get criticized sometimes and then other people tell me "you just disclose all those things! They [the government] don't have to know all that. You just show it to them and next thing you know they'll be putting taxes on that!". (Ensor)

In addition, many firms are relying on independent advisors that guide the production, who are paid first and foremost to secure the quality and maximize yields. As a result, environmental criteria are rarely on their radar screen and advice is thus rarely given in these terms.

"If there are products available in Belgium that are not on the VMS list, then I'll say: "guys, go ahead and take those products, please, what is the problem!" VMS is not going to determine your profitability, right?" (K5)

3. *Cognitive pressures.* Given the increasingly hostile environment and the few new entrants in the sector, the remaining firms rely on traditional practices that evade the risk and uncertainty of new techniques and technologies. For example, the traditional production methods favour a system of "calendar spraying", which involves the preventive application of pesticides not based on necessity, but based on predefined calendar planning. It is generally accepted in the sector that doing otherwise would unnecessarily increase the risk of having plant damage. Even with the capital subsidies that favour environmentally friendly production methods, the additional (perceived) costs and risks that are associated with environmentally friendly production techniques or investing in more environmentally friendly technologies are attributed a low priority in the growers' decisions making:

"Growers work according to a system of preventive calendar spraying.(...) Among ornamental horticulture growers, it [guided protection] still encounters a lot of resistance. They don't know what it's about, their knowledge of parasites is inadequate, they fear the system will be too expensive because it is rather labor intensive." (government official)

One other typical characteristic for the Belgian ornamental horticulture is the strong individualism of growers. Whereas collaboration between firms and their various constituencies is very common in the Netherlands, the Belgian owner-manager wants to remain in charge of his own operations and is very reluctant to let anyone intervene.

"Some policy makers are dreaming of industrial clusters like the Dutch model, where a number of facilities are shared. But the Flemish grower wants a piece of land with his own company on it and a shed around it. That is his territory where he makes a living." (professional association representative)

Table 5.9 - Institutional pressures regarding environmental production in the Belgian ornamental horticulture sector

Institutional pressure	Organizations involved	Pressure against green production and registration	Illustration
Regulative	Legislative bodies	- All plants for export should be pest-free	- European Council Directive 2000/29/EC
Normative	Society Professional associations Independent advisors Consumers VMS Media	 No pressure or interest from neighbors or societal organizations regarding production methods Professional associations taking conservative positions on environmental regulation proposals There is no market demand for green products Few distributors are interested in green products or promote them Independent advisors focus on plant quality and yields and are hesitant to provide advice on more risky environmentally friendly production 	 "If there would be one objective for professional associations, it would be to make sure () that you embrace sustainability. But I have never heard them say anything about it"(trader) The consumer does not know VMS. Despite my efforts and registration, I never get a request what VMS certificate my plants have. Registering with VMS does not lead to financial added value." (grower) "When we ask the owner-managers why they don't innovate, they answer that it's because the market doesn't ask them to innovate. The traders themselves aren't really open to innovations either." (government official) "But fertilizers, if you want to produce decent products you have to make sure that you use enough, that you use good and appropriate proportions. And pesticides: you're obliged to keep the plants free of pests." (independent advisor)
Cognitive	Peers Cultural tradition	 Environmental regulation makes production more difficult. Not following a system of preventive calendar spraying results in higher risks of plant damage Multiple sprays of less polluting products seem more polluting than a single spray of effective, but toxic product. Green production requires more time and financial resources Investing in new, greener production methods is pointless since there are no successors that would be interested in buying a profitable firm 	- "Everything is becoming impossible, what we have to face. We are unable to grow anymore. It is made impossible for us to produce, with all these laws and" (VMS representative on growers - "Growers work according to a system of preventive calendar spraying.() Among ornamental horticulture growers, it[guided protection] still encounters a lot of resistance. They don't know what it's about, their knowledge of parasites is inadequate, they fear the system will be too expensive because it is rather labor intensive." (government official) - "There are a lot of small businesses here with an owner-manager of about 50 years that don't have a successor. They're not going to enter VMS anymore. Their calculus really is 'it'll last my time'" (traders association president)

Table 1 (continued) - Institutional pressures regarding environmental production in the Belgian ornamental horticulture sector

Institutional	Organizations	Pressure in favor of green production and	Illustration
pressure	involved	registration	
Regulative	Legislative bodies at EU, Belgian and regional level	 (Indirect: toxicity based license requirements for chemical products) Increasing environmental requirements in regulation 	- European Commission Regulation 1095/2007
Normative	Society Professional associations Independent advisors Consumers VMS Media	 Increasing general social attention for the natural environment Possibility that environmental production will improve the reputation of the sector VMS as a sector initiative to promote environmentally friendly production in the ornamental horticulture sector 	- "Attention for the environment in general is necessary for the environment and good for the reputation of the sector. Commercially, however, it does not have any added value whatsoever." (grower) - "Miss Dua [Flemish Minister of Agriculture between 1999 and 2003] () made the impression () that she wanted to take action to urge ornamental horticulture growers to start environmental registration. We responded to the administration that our profession, by establishing VMS, has clearly taken the initiative itself. (professional association representative)
Cognitive	Peers Cultural tradition	- Signalling function from governmental subsidies favouring environmentally friendly production technologies	- "Growers can receive subsidies from the Flemish government if they engage in VMS. This is a clear signal that the government believes in VMS." (VMS representative)

In sum, these institutional pressures show how the organizational field is not in favour of environmental strategies that go beyond legal requirements. Table 5.9 summarizes these institutional pressures with illustrations from the data.

A proof of the institutional inertia that exists with regards to green production in the Belgian ornamental horticulture sector is the limited membership of VMS. Only 127 growers were members of this organization at the time of the interviews, amounting to only 6% of the entire sector (MPS, 2006). This limited membership shows that neither proactive environmental strategies, nor disclosure about organizational impact on the environment has become institutionalized in the sector. As such, VMS can be considered to have achieved the level of a "proto-institution": new practices, rules and technologies that question the dominant institutional logics in an industry, but have not been diffused sufficiently to become institutionalized (Lawrence, Hardy, & Phillips, 2002).

5.4. Conclusion

The objective of this chapter was to provide a comprehensive overview of methodological and contextual choices that were made in this dissertation. The striking conclusion that can be drawn from the contextual analysis is that neither of the factors that were reviewed in chapter 3 and that predicted the adoption of PES are present in the Belgian ornamental horticulture. As a result, it should come at no surprise that so few firms have become member of VMS. Whereas VMS has the potential to change some of the rules in the industry, the current institutional and general business environment is in fact more against than in favour of its principles. This has important implications for the analyses that will follow in chapters 6 and 7. First, a comparison between firms with higher VMS scores and firms with lower VMS scores will allow determining whether particular resources and capabilities facilitate small firms to realize proactive environmental strategies. Second, the very presence of firms that have become member of VMS already presents an anomaly to some of the theoretical predictions in chapter 3. Although it has mostly been suggested that small firm size inhibits proactive environmental strategies, the high performing VMS firms clearly demonstrate that this is nevertheless possible. Furthermore, these same firms realize these strategies, despite the institutional and general business conditions that were set against having one. As such, the Belgian ornamental horticulture, and in particular VMS members, presents an appropriate setting to do the research needed for answering research questions 2 and 3 of this dissertation.

Chapter 6

Against All Odds: Realizing Proactive Environmental Strategies in Small Businesses⁴

"Del dicho al hecho hay mucho trecho"
(Spanish proverb)
"There's many a slip 'twixt cup and lip"
(English proverb)
"Want tussen droom en daad staan wetten in de weg en praktische bezwaren"
(Willem Elsschot)

Abstract

While the literature finds that small businesses have positive attitudes towards the natural environment, proactive environmental strategies are rarely found among them. Although contributions embedded in the resource-based view of the firm have therefore related the realization of proactive environmental strategies with larger firm size, anecdotal evidence of small firms that have realized their proactive environmental intentions nevertheless exist. Using case study data of 8 small businesses, we develop a model that explains this theoretical inconsistency by identifying "organicity" and "munification" as two composite and interacting dynamic capabilities that enable small businesses to create the conditions that foster the realization of proactive environmental strategies.

⁴ This paper is the product of a collaborative effort of myself and Dr. Michael Valente. Earlier versions of this paper were published as "Lepoutre. J. and Valente, M. 2007. *Overcoming Calimero Complexes in Small Business Social Responsibility*. Proceedings of the conference of the International Association for Business in Society, May 1-June 3, 2007, Florence, Italy", and presented as "Lepoutre, J. and Valente, M. 2007. *A resource-based perspective on small business proactive social and environmental strategies*." at the Ivey School of Business Research Seminar Series 2007-2008, 1 November 2007, Ivey School of Business, London, Ontario, Canada. The authors wish to thank Aimé Heene, Erik Mathijs, Bart Nooteboom, Johan Lambrecht, Annick Willem, Tima Bansal, Oana Branzei, Eileen Fisher, Jessica De Boeck, the anonymous reviewers and participants of the IABS conference and the participants of the Ivey School of Business Research Seminar Series for their helpful comments in improving this paper.

6. Against All Odds: Realizing Proactive Environmental Strategies in Small Businesses

6.1. Introduction

The natural environment is high on the public and corporate agenda. A recent study reported that "environmental issues, including climate change" have soared to the top of the agenda of CEOs (McKinsey, 2007). Almost 50% of the surveyed CEOs believe that the natural environment will be the most important issue to impact shareholder value over the next 5 years. The same study, however, also sheds light on a gap between what CEOs think should be done and what they actually do. Whereas CEOs indicate that they should be investing in the development and implementation of corporate social responsibility policies and increasing the transparency of a firm's impact on the environment, they reported that public relations and media campaigns, along with lobbying regulators and governments are still the most commonly used tactics instead. Although environmental concerns have been on the radar screen of CEOs for some time, studies as these indicate that many constraints remain in place that inhibit good intentions from turning into noble achievements.

One context where the problem of unrealized environmental intentions seems particularly pervasive is among small businesses. A plethora of studies have demonstrated that although small business owner-managers have positive attitudes towards the natural environment, their good intentions are lost somewhere along the way and do not result in actual practice (Merritt, 1998; Tilley, 1999; Petts et al., 1999; Tilley, 2000; Schaper, 2002; Hitchens et al., 2005; Worthington & Patton, 2005; McKeiver & Gadenne, 2005). Despite concerns with the natural environment, small business owner-managers refer to a lack of internal resources and external support that constrain them to realize their environmental intentions (Merritt, 1998; Tilley, 2000; Ludevid Anglada, 2000; Gerstenfeld & Roberts, 2000; Schaper, 2002; Vernon et al., 2003; Lepoutre & Heene, 2006; Elsayed, 2006; Revell & Blackburn, 2007). As a result, research grounded in the resource-based view of the firm (Dierickx & Cool, 1989; Barney, 1991; Amit & Schoemaker, 1993) has consistently found that the smaller the firm, the lower the likelihood of it having a proactive environmental strategy (e.g., Russo & Fouts, 1997; Aragon-Correa, 1998; Judge & Douglas, 1998; Sharma, 2000; King & Lenox, 2002; Chan, 2005; Bansal, 2005; Elsayed, 2006). Such a finding is perplexing, since it is often argued that the likelihood of finding realized strategies that reflect the intentions of the firm can be particularly found among small ventures (Mintzberg &

Waters, 1982; Mintzberg & Waters, 1985). Given that firms build on the visions of their owner-managers and that these same owner-managers are fully in control of their firm and highly committed to the implementation of that vision, it is argued that small businesses are especially equipped to realize their intended strategies. As it seems, the internal and external constraining factors seem to inhibit owner-managers to realize their intentions, even though there are theoretical reasons to believe that the small business context would be particularly suited to this purpose. Although anecdotal evidence exists that shows that some firms seem to overcome these constraints and are able to realize proactive environmental strategies (BITC, 2002; UNIDO, 2002; European Commission, 2003c), it remains unexplored how small ventures can overcome internal and external inhibiting factors and realize their intended proactive environmental strategies.

This paper takes a descriptive view of proactive environmental strategies in the tradition that realized strategies do not always reflect intended strategies (Mintzberg, 1979; Mintzberg & Waters, 1985). Proactive environmental strategies are systematic patterns of voluntary environmental practices, not required to be undertaken "in fulfillment of environmental regulations or in response to isomorphic pressures within the industry as standard business practice" (Sharma & Vredenburg, 1998: 776). The current literature on proactive environmental strategies (PES) has been mainly focused on the antecedents (Sharma, 2000; Bansal & Roth, 2000; Aragon-Correa & Sharma, 2003) and economic consequences of PES (Russo & Fouts, 1997; Sharma & Vredenburg, 1998; Aragon-Correa & Sharma, 2003). Few studies, however, have examined how intended PES are enacted and how firms with intended PES actually realize their objectives. Acquiring such knowledge is important, since it would provide insight into how businesses can be prevented from deviating from their well intended objectives and end-up with often pragmatic yet ineffective solutions.

This paper addresses the research question how small businesses are able to realize their intended PES when the odds are set against having one. In particular, we are interested in the capabilities that enable them to deal with the constraining factors and realize their intentions. We drew on a qualitative study of a unique sample of small firms in the Belgian ornamental horticulture that signal both their proactive environmental intentions and their actually realized strategies in a setting that constrained firms to realize PES. By exploring the differences between a group of firms with unrealized PES and a group with realized PES, we found that firms with realized PES possessed two composite and interacting dynamic capabilities, munification and organicity, which enabled them to change the odds in their favor.

We structured our paper as follows. We first review theories on intended and realized strategies and the current knowledge on proactive environmental strategies in small firms. After discussing the methods used in this paper, we then move to present our findings. We conclude the paper with a discussion of these findings and indicate the implications for theory.

6.2. Theoretical background

6.2.1. Between intended and realized strategies

Opposing the assumption that strategies are solely the result of the cognitive exercises of CEOs planning and formulating the future trajectory of steps to be implemented by the firm, the descriptive work of Mintzberg and colleagues offered a more nuanced perspective (Mintzberg, 1978; Mintzberg & Waters, 1982; Mintzberg & Mchugh, 1985; Mintzberg & Waters, 1985). These studies endorsed a perspective of strategy where there may be a disconnect between the strategic intentions of a firm – the *intended* strategy – and what the firm actually does – the *realized* strategy. In the event that the intended objectives actually result in the desired pattern of actions, strategies are called *deliberate*, as opposed to *unrealized* strategies where the firm is unable to enact its intentions in the desired way. Realized strategies, however, may also be *emergent*, meaning that they reflect a pattern of actions that deviates from the intentions or has emerged as a result of a lack of intentions (Mintzberg & Waters, 1985). Figure 6.1 shows a summary of these different types of strategies.

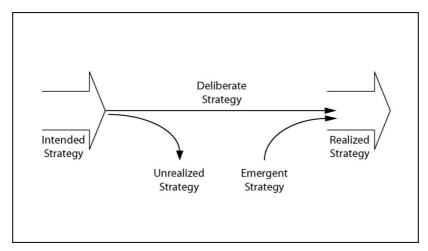


Figure 6.1 - Mintzberg's strategy types. (Based on Mintzberg, 1978)

The notion of emergent strategies was important to the field of strategy, since it questioned the usefulness of strategic planning in the firm and advocated for strategists to be

more careful "readers of the environment" and to adapt to the demands that emerge from it (Sarasvathy, 2001; Farjoun, 2002). In addition, it also raised the question when and how firms can be successful in achieving their intended objectives. Mintzberg and Waters (1985) argued that in order for strategies to be deliberate, three conditions have to be met: (1) clear and precise definition of intentions; (2) a shared acceptance or conception of the intentions among all members of the organization; and (3) no intervening factors that hinder the implementation of the intentions. Although they argued that occasions where these three conditions would be met are rare, one type of organization stood out in its potential for deliberate strategies: small and new entrepreneurial ventures under the tight control of their owners.

The main argument in support of the hypothesis that deliberate strategies will be found more frequently among small and new firms can be brought back to two of the earlier mentioned conditions for deliberate strategies. First, although the intentions of the firm may not always be articulated or formalized – in fact, more often than not, they remain concealed in the mind of the owner-manager – and that they may or may not be shared by the employees, the vision of the owner-manager and his or her control over the organization makes the likelihood of deliberate strategies in small organizations particularly high. Second, since he or she is the owner of the firm, the owner-manager has "a strong, long term commitment to his organization (knowing that, barring a natural disaster, it is he who will be there in the long run)" (Mintzberg & Waters, 1982: 496). As a result, the owner-manager is more likely to engage his employees in realizing the strategy he has envisioned for the firm:

"so long as the business is simple and concentrated enough to be comprehended in one brain, (...) no other mode of strategy making can provide the degree of deliberateness and of integration of strategies with each other and with the environment." (Mintzberg & Waters, 1982: 496)

These assertions by Mintzberg and Waters were made, however, on a third condition: the environment needs to "cooperate" and should not intervene with the strategy. In other words, as long as the environmental conditions are in favor of the firm's particular intentions, the likelihood of deliberate strategies in small firms is high. As soon as the firm is faced with changing environmental circumstances, it may have to adapt to these new circumstances.

Furthermore, the previous studies have all assumed that the firm was able to draw on a resource base that enabled the firm to implement its intended strategy. Firms that encounter constraining internal or external conditions to implement their intended strategies, however, may also give up their intentions and adopt an alternative emergent strategy instead, even in

small entrepreneurial ventures. One field where this seems to be the case is the field of proactive environmental strategies.

6.3. Proactive environmental strategies and small businesses

Studies have found a number of factors that "cooperate" well with realizing proactive environmental strategies. More specifically, the likelihood that firms realize proactive environmental strategies increases with the presence of abundant organizational capital (Russo & Fouts, 1997; Sharma, 2000; Bowen, 2000; Bansal, 2005), a resource-abundant, predictable and simple external resource environment (Russo & Fouts, 1997; Aragon-Correa & Sharma, 2003; Sharma et al., 2007) and institutional pressures that foster organizational attention to the environment (Henriques & Sadorsky, 1996; Henriques & Sadorsky, 1999; Buysse & Verbeke, 2003; Bansal, 2005). Figure 6.2 provides a schematic overview of these theoretical predictions.

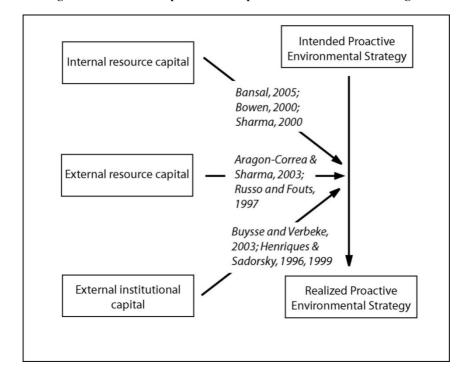


Figure 6.2 - Theoretical predictions on proactive environmental strategies

Although a number of studies indicate that small firms have a positive attitude towards the natural environment (Holland & Gibbon, 1997; Merritt, 1998; Tilley, 1999; Petts et al., 1999; Tilley, 2000; Schaper, 2002; Hitchens et al., 2005; Worthington & Patton, 2005; McKeiver & Gadenne, 2005), the most common finding is nevertheless that smaller firms rarely have a proactive environmental strategy in place (Russo & Fouts, 1997; Aragon-

Correa, 1998; Merritt, 1998; Tilley, 1999; Petts et al., 1999; Tilley, 2000; Sharma, 2000; Schaper, 2002; Hitchens et al., 2005; Bansal, 2005; Worthington & Patton, 2005; McKeiver & Gadenne, 2005). The recurring explanation for such a lack of PES among small businesses seems to be that small businesses are unable to realize PES because of a lack of internal resource capital and external facilitating factors from the general business environment and society. First, small businesses lack the internal resource capital. Several studies have demonstrated that owner-managers succumb to the pressures of their everyday survival and lose their good intentions somewhere along the way (Tilley, 1999; Schaper, 2002; Vernon et al., 2003; Hitchens et al., 2005; Revell & Blackburn, 2007). More specifically, the lack of available time, knowledge, (financial) resources and power in the firm seem to be the most important inhibitors of PES in small businesses (Tilley, 1999; Tilley, 2000; Hillary, 2000a; Observatory of European SMEs, 2002; Lepoutre & Heene, 2006; Elsayed, 2006; Revell & Blackburn, 2007). The abundance of resources in excess of what is needed in the firm – slack resources (Bourgeois, 1981; Sharfman et al., 1988) - has been identified as an important predictor of PES (Sharma, 2000; Bowen, 2000; Bansal, 2005), but are usually not available in smaller firms (Sharfman et al., 1988). As a result, a small firm constrained by a lack of slack resources will have shorter time horizons (Van der Stede, 2000) and will typically be "firefighting" problems that require immediate solutions to maintain firm survival. As a result, small business owner-managers argue that little time remains to think about appropriate environmental strategies (Revell & Blackburn, 2007). Furthermore, it is said that small business owner-managers lack "eco-literacy", the knowledge to absorb and identify potential environmental practices for their firm (Tilley, 2000; Gerstenfeld & Roberts, 2000). Sometimes this may even make them "vulnerably compliant": due to a lack of awareness and empathy with environmental regulations, non-compliance is often more a result of bad luck than bad intentions (Petts et al., 1999).

Second, small businesses lack a supportive market environment for PES. Small business owner-managers frequently lament the lack of market incentives that would compensate the financial burden PES would place on their firm (Merritt, 1998; Tilley, 1999; Ludevid Anglada, 2000; Gerstenfeld & Roberts, 2000; Hillary, 2000a; Observatory of European SMEs, 2002; Hitchens et al., 2005; Revell & Blackburn, 2007). Small business often lack the clout to impose their intentions on the very supply chain partners on whom they depend, or to lobby with the government for new regulatory requirements (Hillman & Hitt, 1999; Revell & Blackburn, 2007). Since tackling environmental pollution is often a systemic and shared responsibility in the supply chain, small firms depend on the willingness of their

constituents to go along in their intentions (Spence et al., 2000). In addition, given that many small businesses already operate in uncertain and complex environments (Chen & Hambrick, 1995; Merz & Sauber, 1995; Stone & Brush, 1996), they are hesitant to take up the additional uncertainty that comes with considering the natural environment (Lewis & Harvey, 2001).

Third, small businesses lack the institutional support for PES. Small businesses rarely attract the same levels of scrutiny from stakeholders as larger firms (Greening & Gray, 1994; Meznar & Nigh, 1995; Bansal, 2005) and often do not receive any institutional pressures that drive them towards PES. Although the cumulative impact of small businesses on the environment is estimated to be higher than that of larger businesses (Hillary, 2000a), small business owner-managers and stakeholders alike consider the individual small business impact negligible (Merritt, 1998; Revell & Blackburn, 2007). Small firms may thus remain invisible to public scrutiny and only experience institutional pressure through legislation (Worthington & Patton, 2005; McKeiver & Gadenne, 2005). As a result, the adoption of environmental initiatives beyond legal expectations is more the result of a sense of environmental responsibility, than it is for reasons of competitiveness or legitimacy (Bansal & Roth, 2000).

Taken together, these theoretical and empirical findings predict that finding realized PES in small firms is highly unlikely, even when the intentions to have them are there. A number of case studies, however, offer the contrasting perspective that PES are not impossible in smaller firms. In fact, in some instances, small businesses have championed PES well ahead of larger firms in their industry (BITC, 2002; UNIDO, 2002; European Commission, 2003c; Jenkins, 2006). What remains unexplored, however, is how such businesses were able to realize their strategies, while the majority of firms were not.

One explanation could be that these anecdotal firms did not have any of these constraints and that Mintzberg and Water's three conditions for deliberate strategies were met as a result. The descriptive accounts of the PES champions in these studies, however, mention that these firms did experience constraints. Yet the firms "did not see them as an obstacle, merely a challenge to be overcome" (Jenkins, 2006: 252). As a result, another explanation could be that the theoretical model as depicted in Figure 6.2 needs to be adapted to the specific context of small businesses. It has been argued before that "small businesses are not little big businesses" (Dandridge, 1979; Welsh & White, 1981) and that theories in large businesses will not necessarily apply to small businesses (d'Amboise & Muldowney, 1988). However, in a recent study on PES in small businesses, Aragon-Correa et al. (2008) took a number of capabilities that were found in larger firms and tested them among small

businesses, and found that very similar capabilities were needed in small firms and in large firms to successfully execute a PES. In sum, perhaps as a result of a general neglect of small businesses in the organizations and the natural environment literature (Worthington & Patton, 2005; Clemens, 2006; Lepoutre & Heene, 2006; Revell & Blackburn, 2007), the current literature does not provide convincing theoretical perspectives to explain the phenomenon of small businesses successfully realizing seemingly elusive proactive environmental strategies. This observation, together with the idiosyncratic challenges to empirically capture strategies in small businesses, led us to the inductive approach used in this study.

6.4. Methods

This article draws on a qualitative multi-case inductive study in the tradition of theory elaboration (Lee et al., 1999), the purpose of which is to extend existing theory by contrasting it with observed events or conflicting findings (Gilbert, 2005; Greenwood & Suddaby, 2006). Although the reader is referred to chapter 5 for a full overview of the methodology used in this study, I will briefly reiterate the most important choices made and how they connect with the research question at hand in this paper.

The particular nature of our research question directed us to multiple case studies for two reasons. First, multi-case studies are an appropriate methodology for studies that have as their goal to build or elaborate theory when theory is absent or yields conflicting explanations (Eisenhardt, 1989a; Yin, 2003; Siggelkow, 2007), as in our case. In particular, case studies are appropriate when the research question involves a "why" or "how" question, such as "how can small businesses realize PES when the odds are against having one?" Second, the particular research context of small businesses yields little secondary sources which could be used to build theory from larger samples of qualitative data sources. In addition, many of the behaviors and choices are unconsciously hidden even to the owner-manager. Assessing why and how a small business develops a certain strategy can thus best be observed by assessing it through various angles (Curran & Blackburn, 2001).

We theoretically sampled firms among VMS members in the Belgian ornamental horticulture sector. Within the context of this paper, we used VMS membership as a proxy for a firm's proactive environmental *intentions*. As described in chapter 5, we excluded firms from our analysis when VMS membership did not reflect a firm's proactive environmental intentions. Furthermore, we used the independently assessed VMS score as a proxy for whether the firm's intentions were actually *realized* or *unrealized*. Table 5.4 provides an overview of the firms that were used in the multi-case study.

Table 6.1 - Overview of firms in sample

ID	Type of firm	Firm's birth year	Number of	Score†	Number of
			employees		interviews
Panamarenko	Potplants	1999	6	99 (A)	4
Magritte	Arboriculture	2000*	4	98 (A)	3
Fabre	Arboriculture	1975	7	96 (A)	4
Ensor	Azalea	2003*	5	95 (A)	4
Brueghel	Azalea	1985*	4	58 (C)	3
Rubens	Potplants	2000*	4	57 (C)	3
Jordaens	Potplants	2001*	4	32 (C)	3
Van Dyck	Arboriculture	1970	7	- (D)	4
Total					28

^{*=} acquisition or extension of family firm

Confining the research setting within the geographical and sector limits of the Belgian ornamental horticulture allows controlling for potential alternative influencing factors besides organizational capabilities and resources (Eisenhardt, 1989a). Furthermore, as reviewed in chapter 5, the Belgian ornamental horticulture sector presents a particularly interesting setting to investigate PES, since none of the factors that have been associated with finding PES among firms (see Figure 6.2) are present. For convenience, these conditions are summarized again in Table 6.2.

6.5. Findings

In order to explain the theoretically aberrant finding that some small businesses in the Belgian ornamental horticulture sector were effectively realizing a proactive environmental strategy when the odds were against having one, we explored the differences between the higher and lower performing VMS firms. Foreshadowing our conclusions, we found that the higher performing firms were able to change their resource base and create a microenvironment that mimicked the conditions that normally foster a firm's successful realization of a PES. As such, our findings contradict the assumption that small businesses merely accept their internally or externally imposed constraints. Rather, by leveraging the complex interaction between two dynamic capabilities, *munification* and *organicity*, they were able to create the theoretical conditions that foster the realization of proactive environmental intentions. Munification and organicity are dynamic capabilities, since they enable the firm to change their resource base and to adapt their organization the dynamic processes that realizing a PES may present (Teece et al., 1997; Eisenhardt & Martin, 2000). In the following sections

 $[\]dagger$ = scores after period 7 in 2005

Table 6.2 - Promoting factors of PES in theory and in the ornamental horticulture industry

Theoretical	References	Situation in	Evidence
requirement for PES adoption		ornamental horticulture industry	
Internal business environment			
Large firm size (high levels of slack resources and visibility)	(Florida, 1996; Aragon-Correa, 1998; Sharma, 2000; Chan, 2005; Bansal, 2005)	Small firm size	 Average firm has less than 10 employees Report indicating that only 5% of all firms were operating at sufficient firm size (Verspecht et al., 2003)
External business env			
High munificence	Russo and Fouts, 1997; Aragon-Correa and Sharma, 2003; Halma, 2002	Low munificence	 Decreasing margins, due to fierce price competition and oversupplied markets. Increasing numbers of failures downstream the supply chain Consolidation of supply chain increases dependence on less players with larger market power Market is too small for R&D in chemical industry to cater specifically to ornamental horticulture (Daughtrey & Benson, 2005) Long payment delays from customers Societal willingness to grant expansion possibilities (new greenhouses, new land) to ornamental horticulture is low due to high competition for land in Belgium
Low complexity	(Aragon-Correa & Sharma, 2003; Matos & Hall, 2007)	Increasing complexity	 Globalizing markets with new players and interests Multiple levels of government decisions impacting production possibilities Transport between countries brings in new diseases, while regulation takes traditional pesticides of the market Questioned role of agriculture in Western societies Skills required as owner/manager in firm shift from craftsman skills to general management skills
Low uncertainty	(Aragon-Correa & Sharma, 2003; Sharma et al., 2007)	High uncertainty	 Long production cycles (anywhere between several months and several years), together with unpredictable consumer demands make it impossible to predict returns. Market information and trends are not shared between producers and retailers or traders, making many production decisions a gamble.
External institutional			
High levels of institutional pressures for environmental strategies	(Henriques & Sadorsky, 1996; Buysse & Verbeke, 2003; Bansal, 2005)	Low levels of institutional pressures promoting environmental strategies	 Generally low stakeholder interest due to low visibility of individual firms Little market demand for environmental products and difficulty to establish brands in fragmented production markets.

we will first describe each of these dynamic capabilities and then develop how their interactive effect enabled firms to realize their proactive environmental strategies.

6.5.1. Munification

Despite the lack of a generally munificent and institutionally supportive environment, the high scoring VMS members had been engaged in a set of activities that, together, had resulted in a micro-environment that was more conducive to higher VMS scores. The capability through which this was possible, and which we have come to call "munification", involved the development, exploration and exploitation of an organizational environment from which necessary resource and institutional capital could be derived. This high level umbrella construct encapsulated a set of three underlying themes that together composed the building blocks of munification: (1) "building and attracting networks rich with complementary resources and capabilities", (2) "collaborating for the joint development of lacking resources and knowledge", and (3) "institutional agency". Table 6.3 and Table 6.4 show how we coded these underlying themes in the data and how they varied across the sample firms.

Building and attracting networks rich with complementary resources and capabilities. The success of small businesses has often been associated with the ability to tap into the resources and capabilities that exist in their networks (Donckels & Lambrecht, 1997; Davidsson & Honig, 2003; Greve & Salaff, 2003; Nooteboom, 2004). Yet one constraint that all firms in our sample experienced was that the traditional networks in the ornamental horticulture sector were inadequate to find the necessary means and institutional support to increase their environmental performance. For example, in order to get advice on which products to spray against certain pests, Jordaens relied on his local chemicals vendor. Given the little awareness of VMS requirements among his suppliers and advisors, however, he felt he did not get the proper advice:

"For example, you're stuck with a severe aphid infection and you call and ask "I've got an aphid infection here, what should I spray?" DDVP! Of course, what does the chemicals vendor know about VMS? Nothing! He just says "DDVP is the best product". (owner/manager Jordaens)

This finding is in line with Adler and Kwon's observation that "in life, we cannot expect to derive any value from social ties to actors who lack the ability to help us" (2002: 26).

Table 6.3 – Illustrations of high and low munification along its three constitutive dimensions

Construct	• Subcategories	Example	Counterexapmle
Munification:	Building and attracting networks rich with complementary resources and capabilities	"My two biggest competitors [in the Netherlands], I get along with them very well! () Because in the end you can learn a lot from them, you know."(o/m Panamarenko)	"In the past, they [traders] came to our company twice a year and now it's all by phone or email (). You don't see anybody anymore. It's the same everywhere. If you ask them "you should come and visit us", they answer "no time". (o/m Rubens)
	Collaboration for the joint development of lacking resources and knowledge	There's a new project with a number of firms, with a focus on advice for when you've got problems with your plants. () Ghent University is also in it. () I'm very very small compared to the other firms. But you learn from that. When you stay home, then you don't learn, you know. (o/m Panamarenko)	"Collaboration in the Belgian ornamental horticulture sector is impossible"(o/m Rubens)
	Institutional agency	"I get criticized sometimes [about VMS membership] and then other people tell me 'you just disclose all those things! They [the government] don't have to know all that. You just show it to them and next thing you know they'll be giving us more taxes!'. Well I say, if you don't do it, then maybe they'll give us something we don't want." (o/m Ensor) "He'll try to motivate people to join [VMS]. He'll	"I'm aware that, also towards customers and other people, I'll be more inclined to just listen to them, rather than to take steps Yeah, I guess that's how I am."(o/m Brueghel)
		say: 'Endosulfan, that's crap, you can grow your plants without it! I'm doing it without it!' (Government official on o/m Ensor)	

Table 6.4 - Variation of munification across sample firms

	Panamarenko	Magritte	Ensor	Fabre	Brueghel	Rubens	Jordaens	Van Dyck
Network-building								
Professional association membership and activities	√√	V V	V V	√√	///	✓	√	√√
SME professional association membership and activities	V V		///	V V V				
Innovation network membership	√√√	///	V V V	✓	✓	✓		✓
Meet customers	√√√	√√	V V V	///		✓		√ √
Visit international trade fairs	√√√	V V V	V V V	V V V		✓		✓
Visit local peers	✓	✓	√ √	√ √	✓	✓		
Visit international peers	√√√	V V V	V V V	V V V		✓	✓	✓
Civil organizations	√√	✓		V V V				
Connected to most innovative firms	V V V	///	V V V	V V V	✓			✓
Top advisor at the firm	V V V	√ √	V V V	✓	√ √	√ √		✓
Others		✓	V V	V V	✓			✓
Collaboration activities								
Joint development of production technologies	\ \ \ \ \		V V	V V		√		
Joint development of commercial practices	√√ √		///					
Institutional agency								
Voicing dissatisfaction	√√√	√√√	V V V	✓	✓			
Crafting alternative institutional arrangements	√ √	///	V V V	V V				
Insensitive to prevailing institutional pressures	V V	V V V	///	///				
$\checkmark\checkmark\checkmark$ = multiple illustrations, $\checkmark\checkmark$ = for	ew illustrations, v	/ = singular i	llustration					

As a result, we found that the higher performing engaged in an active and open search for both deliberate and unintended relationships that did possess the complementary capabilities they were looking for (Teece, 1986; Adler & Kwon, 2002). To do so, it was necessary to reach out to partners that were outside the usual arenas in which the Belgian ornamental firms are traditionally active. In other words, "networking" by itself was not sufficient. Typical for learning patterns that involve innovative organizational trajectories, we found that it was necessary to find and establish heterogeneous network relationships (Rodan & Galunic, 2004) that bridged "structural holes", the gaps between normally disconnect clusters of organizations (Burt, 1992; Burt, 1997; Nooteboom, 2004; Zaheer & Bell, 2005). For example, when asked where they found their innovative equipment that allowed eradicating weeds with mechanical instead of toxic chemical means, Fabre's owner-manager answered

"In terms of mechanization, there's not much too see around here. You can see those things in Germany, those modern companies, but not around here". (owner/manager Fabre)

They attributed such a lack of munificence of innovative solutions in their immediate environment to the fact that "here, everyone just copies everyone else". Although this active search for innovative solutions in a broader network often necessitated going abroad, the higher performing firms also knew who to contact in their immediate surroundings. They did so by leveraging their connections with other innovative organizations in the sector, such as top advisors, emerging initiatives with the frontrunners in the industry and likeminded peers. For Panamarenko, who was particularly new in the sector, these connections were key:

And when I'm looking for something, then I have to find it. Sometimes that can be quite annoying, my wife says that too, but when something has gotten in my head, then it has to happen. And connections are always interesting. Especially in the plant world. It's only in [two innovation network initiatives in the sector], if you want to build something, that you meet people that work on the same level as you are. (owner/manager Panamarenko)

In contrast, the four lower performing VMS firms displayed a far more passive approach to building relationships, resulting in a network that was limited to those contacts with which the firm had necessary direct relationships (peers, suppliers, customers, government). "It's just that I don't have the time for it" was an often mentioned constraint when we asked the firms about the reasons why they did not build contacts more actively. In addition, they complained that it was difficult altogether to maintain their existing networks because their traditional contacts no longer visited their firms. Whereas trading companies used to inspect the plants before they were bought at the firm, the increasing digitalization and

on-line retail chains resulted in decreasing face-to-face transactions that used to facilitate informal information exchange. The perceived need to always be present at the firm, and the perception that "a day without having had your hands in the soil is a day not worked" made firms reluctant to leave the firm and establish new contacts.

Besides the active building of networks, the higher performing firms were also successful in efficiently exploiting them. Whereas the lower performing firms were reluctant to disclose information about the firm and feared that their practices would be copied by other firms, the higher performing firms experienced that they were able to substantially speed up the exchange of information, and in particular the type of information they were looking for. For example, Panamarenko argued that the reason why he was able to get information from competitors and international contacts was:

"because I'm always open. I'll always do that. I can never hold something back. And then you get reaction." (owner-manager Panamarenko).

Another beneficial consequence of this general tendency to be open to new contacts, exchanges and practices was that it made them attractive partners for other actors as well. As such, they were often approached by suppliers to test new products, by other innovative firms to discuss ideas or by customers to try out new products or business concepts.

In sum, whereas the lower performing firms could only draw on the scarce knowledge and resources that were available in their direct contacts, the higher performing firms were able to increase the pool of external resources and capabilities that could be drawn from. By reaching out to alternative and complementary sources of knowledge and resources, the network of the higher performing firms mimicked a munificent environment, an environment that generated more resources and knowledge that was potentially valuable to realizing the PES.

Collaborating for the joint development of lacking resources and knowledge.

Through their networks, the higher performing firms were able to access the resources and knowledge whenever they were readily available. As such, they could passively derive value from their micro-munificent environment. However, we found several instances where the high performing VMS firms actively engaged in the joint development of resources and knowledge when these were generally nonexistent. Building on the results of an enlarged network, they transcended their network ties and accomplished an organizational end that

could be better achieved collectively (Dyer & Singh, 1998; Hardy, Lawrence, & Grant, 2005; Lavie, 2006).

In our data, we mainly found instances of collaboration for the creation of new technologies and the joint creation of new market opportunities. For example, in line with the findings of McEvily and Marcus (2005), Panamarenko was able to build new resources for pollution prevention by engaging in joint-problem solving together with suppliers. For example, after having had multiple problems with pests in his plants and having discussed this with his advisor, Panamarenko's owner-manager realized that they needed a specific type of pot soil which they could not find on the market. Committed to finding a solution, the ownermanager decided to set up a meeting together with their pot soil supplier, their fertilizer supplier, the advisor and one of his employees. Together, they developed a new kind of pot soil that enabled Panamarenko to substantially reduce their pesticide use, even though this came at a great cost. Ensor shows a particular example of a collaborative endeavor to create new technologies through institutional support. Since he found himself unable to test a new and upcoming technology because the investments and risk were too large for one firm to carry, the owner-manager collaborated with peers in negotiating government-sponsored research on these technologies. Although there had not been any results from this research project, they were nevertheless kept informed on new potential production technologies that could provide breakthroughs in the future without having to pay the costs of doing the actual research themselves.

In addition to such direct effects of collaboration on reducing the organizational impact on the environment, both Ensor and Panamarenko had developed collaborations that also had indirect effects. More specifically, they had established collaborative commercial relationships that took away some of the competitive disadvantages of realizing a PES. Whereas it was often mentioned that it was "impossible to collaborate in the traditional and conservative Belgian ornamental horticulture sector", both firms had bridged this insurmountable cognitive barrier and had succeeded in establishing partnerships with competitors. For example, Ensor had engaged in a joint venture with a number of big trading companies and other top-quality competitors, to market an exclusive top-quality flower in a niche segment with a limited supply and premium prices. Since the goal of the joint venture was already to position the product as being unique, new and exclusive, they decided together that only VMS-A labeled plants would be sold in the joint venture. As a result, Ensor was one of the very few firms that had been able to capitalize on its efforts to achieve a high

environmental performance. Although the label by itself did not result in higher prices, it was a necessary requirement for membership in the joint venture.

These data show that, in the event neither the firm itself, nor a broadened network can yield the means that enable it to realize its proactive environmental strategy, a joint investment with network partners creates a new pool of market or institutionally based supportive resources the firm can draw from.

Institutional agency. Institutional agency refers to the agility of the firms to defy or change the norms, beliefs and institutions in which they operate (Dimaggio, 1988; Rao, Morrill, & Zald, 2000). According to institutional theory, firms adjust their behavior according to prevailing norms and values (DiMaggio and Powell, 1983). They do so to acquire a level of legitimacy in their organizational field for access to resources and for alignment with governing power structures (Suchman, 1995; Oliver, 1997; Lounsbury & Glynn, 2001; Zimmerman & Zeitz, 2002; Maguire, Hardy, & Lawrence, 2004). Whereas conforming to institutional forces has been identified as an important factor explaining environmental responsiveness (Bansal & Roth, 2000; Buysse & Verbeke, 2003), we found in our cases that the institutional forces were more often hindering than promoting such behavior. The burden of being proactive is that it may go beyond or against these dominant institutional forces and require institutional structures which are not always compatible with prevailing beliefs and behaviors (Dean & McMullen, 2007; Cohen & Winn, 2007). Firms may thus need to create support and legitimacy for their business model or beliefs in order to gain access to resources and to ensure the viability of these proactive business goals (Zimmerman & Zeitz, 2002). In other words, they need to develop institutional agency to find or create the institutions that support their intentions (Lounsbury & Glynn, 2001; Zimmerman & Zeitz, 2002). It was quite apparent in the data that those firms experiencing hindering institutional forces engaged in this process.

Although all firms experienced dissatisfaction with institutional forces, more successful firms had the sense that they could do something about it and acted accordingly. While Jordaens and Rubens were quite disappointed with the fact that their customers only wanted cheap products and did not care about whether they were environmentally friendly produced or not, they remained resigned about it. "What can we do about it?" was the reaction heard in these lower performing firms. The owner-manager of Panamarenko, on the contrary, criticized the farmer's association (which has its own plant store chain) for not being consistent with their own policies to promote VMS and selling non-VMS plants in their

stores. "Such things I resist with tooth and nail". As a result, he engaged in several discussions with the farmers' union to change their buying policies and to give preference to plants from VMS members. Such voicing of dissatisfaction was often complemented with making suggestions and trying to get buy-in from stakeholders to collaboratively endorse the institutional support. Fabre, for example, advocated in an important symposium attended by a large majority of their peers that the professional association had to push local municipalities to buy trees only from growers with VMS-A labels. By endorsing governmental purchasing requirements he hoped to encourage more firms to adopt environmental practices, and thereby the production of new resources and knowledge that would be valuable to all VMS firms.

Yet at the same time they were initiating changes within their institutional context, the four high performing firms seemed to have become "immune" to the institutionalized practices and expectations in the sector. By adopting nonconventional business models that created value in alternative ways, they were less dependent on traditional transactional relationships and therefore able to see beyond the traditional opinions that "environmentally friendly production does not pay off". In contrast, the four lower performing firms followed the traditional business models that were often indeed incompatible with the sometimes costly and risky practices that would lower the impact on the environment. As a result, they remained highly embedded in the conservative cognitive logics of their organizational field.

These examples show that the higher performing firms built further on their network-building and collaboration capabilities to foster a micro-institutional environment that was more conducive to achieving higher VMS performance. Although their current VMS performance had not necessarily depended on this process, it reflected an investment in resource and institutional capital that would continue to spawn solutions and support for environmentally friendly production in the future.

In sum, our data revealed that the process of munification through network-building, collaboration and institutional agency enabled the firms to create micro-munificent environments that mimicked the conditions which foster the realization of PES. Whereas each subtheme has its own specific impact in this process, our analysis nevertheless revealed that each subtheme is affected and reinforced by the presence of the other. For example, the greater the network of the firm, the greater its potential to collaborate or impact the institutional environment of the firm. Similarly, the more agents are involved in a collaborative effort of institutional agency, the greater the likelihood of generating a supportive institutional context. Taken together, these notions lead us to propose:

Proposition 1a: Organizations that are able to create external resource capital through the interdependent capability of network-building, collaboration and institutional agency will be more able to achieve their intended proactive environmental strategies than those that do not.

Proposition 1b: Organizations that are able to create external institutional capital through the interdependent capability of network-building, collaboration and institutional agency will be more able to achieve their intended proactive environmental strategies than those that do not.

Our data also revealed that both the development and appropriation of the benefits of munification hinged upon the presence of *organicity* in the firm. That is, the firm was only able to engage in the complex process of munification when it was flexible enough to dedicate managerial time and resources to its development, and remained prudent in how its precious resources were dedicated in this process. In addition, the firm needed to be flexible enough to adapt the firm to the valuable resources and knowledge that could subsequently be derived from the environment, while remaining particularly obstinate in achieving its objectives.

6.5.2. Organicity

We identified "organicity" as the ability of the firm to maintain cognitive and practical flexibility and to invest in an open, yet prudent development of the appropriate means to relentlessly achieve its objectives (Burns & Stalker, 1961; Mintzberg, 1978; Covin & Slevin, 1988; Kickull & Gundry, 2002; Farjoun, 2002). In our data, the construct of organicity emerged as the interplay between "bootstrapping", (2) "focused adaptability", and (3) "disciplined scrutiny". Table 6.5 and Table 6.6 show an overview of how we coded these individual subconstructs in the data and how they vary across the sample firms.

Bootstrapping. As mentioned before, small businesses are generally associated with the presence of lower levels of slack resources. Yet, recent studies have indicated how small businesses can develop "bootstrapping" capabilities that enable them to create higher levels of resources (Bhide, 1992; Winborg & Landstrom, 2001; Ebben & Johnson, 2006). By such practices as delaying payments to suppliers, minimizing stock or using subsidy finance, firms are able to reduce the financial pressures on the firm and create more slack resources. Although this process has been mostly investigated in the context of financial resources, we found a number of practices that resulted in bootstrapping human resources as well. Although all owner-managers spoke about long workdays and a general lack of time, the higher performing firms were able to find pockets of time and resources that enabled them to

Table 6.5 - Illustrations of high and low organicity along its three constitutive dimensions

Construct	Subcategories	Example	Counterexample
Organicity	Bootstrapping	"We meet every Friday, drink a beer or two and then we'll go over everything that has happened during the week () I don't know any other firm where they do this. () They [employees] think it's so useful, that they ask "show us" [the VMS results] and then we see what we can do to improve. () We already did the weekly meetings, but it's VMS that has made them more conscious about the products we use." (o/m Fabre)	polluting]. But when I'm really in the busy season, then I skip that, then I'll just take what I'm used to spray and if
	Focused adaptability	"Use endosulfan once a year or three to four other products? I use the three or four other ones, which costs me more. But I've chosen for the system, so I stick to it." (o/m Ensor)	"In winter times, the plants are covered with plastic for six weeks. () Well, in that time you can have a full grown population [of pests] underneath that. That's why we say: we spray it preventively. I don't dare to give that up. There's too much at stake." (o/m Rubens)
	Disciplined scrutiny	"it requires a lot of discipline, you know. VMS requires us to follow up on those things. But we learn a lot from that, we really do, it's the most valuable source of information we have now." (o/m Fabre)	"We're growers, not accountants"(o/m Van Dyck)

Table 6.6 - Variation of organicity across sample firms

	Panamarenko	Magritte	Ensor	Fabre	Brueghel	Rubens	Jordaens	Van Dyck
Bootstrapping								
Ability to delegate key responsibilities to employees	√√√	///	V V V	V V	✓		✓	√ √
Engaging third party support in acquiring resources	√√√	√ √	V V V	V V V	✓	√ √	✓	√ √
Dedicating time to strategic reflection	V V	///	V V V	V V V	√ √	√		
Focused adaptability								
Obstinate commitment to achieving excellence in VMS	√√√	√ √	V V V	V V V		√		
Detaching from habitual practices and assumptions	/ / /	///	V V V	///				
Flexibility to integrate alternative and novel solutions	/ / /	///	V V V	///	✓	/ /		V V
Disciplined scrutiny								
Achieving control over the firm by careful monitoring	√√√	√ √	V V V	V V V	√ √	///		
Critical reflection on internally or externally acquired information	V V	V V V	V V V	V V V		√ √		
Using knowledge-management to facilitate learning and improvement	*	√√	V V V	V V V	✓	√ √		
Experimenting with novel solutions to acquire proficiency		///	V V V	V V V		√		√ √
$\checkmark\checkmark\checkmark$ = multiple illustrations, $\checkmark\checkmark$	= few illustration	ns, ✓ = sing	ular illust	ration				

nevertheless dedicate time and effort to both munification, as well as assessing the possibilities for improvement of their environmental performance. The lower performing firms, instead, were locked in their daily practices of everyday survival and only acknowledged that they would spend more time in munification practices "if there would be more time". The most important way to build up human resources slack was by making sure that several people in the firm were able to temporarily take up the responsibilities of the owner-manager. Sometimes this was fairly easy, for example when the owner-manager could fall back on family to follow-up the firm during his absence. In other instances, this required the training of employees and the confidence of the owner-manager to delegate responsibilities to them. What we found in our data, however, was that the lower performing firms either did not want or were not able to delegate responsibilities. The same commitment an owner-manager has to his firm may constrain his mental ability to leave it in the hands of someone else. Rubens, for example, found it impossible to delegate tasks to his peers, convinced that the work would always be done better if he did it himself. He explained this by referring to the incompetence of his employees.

I just can't get away from here, that's the problem. (...) That one kid that is permanent here, he's nineteen or twenty years old, works a year and a half, two years here. That's still young you know. And the motivation simple isn't there. The other is Turkish, has been working here for twelve years or so, or even longer, but she still doesn't speak Flemish. She can understand you, but she doesn't learn you know.(owner-manager Rubens)

When we asked the higher performing firms about this, they argued that finding good personnel was indeed difficult, but it was possible by paying higher wages than peers. As a result, Fabre, Panamarenko and Ensor all had been able to attract or maintain well-trained and dedicated employees they could trust the firm to. In addition, the higher performing firms had technologies or practices in place that enabled them to be confident enough to leave the firm. Panamarenko, for example, visited trade fairs or international colleagues because he could leave the firm to one of his employees and used the VMS system itself as a means to organize this type of slack. For him, the registration of product use for the VMS system acted as a log file that he could use in the event that the employee in charge of production would become ill.

"I'm often away to trade fairs. And [with MPS] you always have an overview of what's happened. And if [employee name] is ill, then I'll know what has to be done. Everything is registered." (o/m Panamarenko).

Through these bootstrapping methods, the higher performing firms had been able not only to build internal resources, but also to increase the potential of the firm to use its munification capabilities for the creation of external resource and institutional capital.

Focused adaptability. While they are determined to stick with their objectives, firms with organicity are able to harness more alternatives to achieve them. This "focused adaptability" is thus both a cognitive and practical flexibility to detach from habitual behavior and network contacts and to challenge the "taken for granted". Despite the high levels of flexibility small firms are often attributed, their lower levels of slack sometimes results in cognitive myopia that makes them less flexible than they could potentially be (Van der Stede, 2000; Minniti & Bygrave, 2001; Atherton, 2003; Ebben & Johnson, 2005). In contrast, the higher performing firms saw more potential uses for the resources and knowledge they had within the firm or were able to draw from their networks (Ward, 2004; Baker & Nelson, 2005). For example, Fabre argued that everyone knew that the preventive calendar spraying of pesticides, a traditional and polluting production method, was useless, but said that most growers "just follow the user instructions that tell you to "repeat every fourteen days" instead. Rather, he argued, one could greatly reduce pesticide use by spraying based on temporary needs and careful monitoring. Interestingly, all lower performing firms stuck consciously to this method of preventive calendar spraying and were very reluctant to abandon it. Given Rubens's extremely busy schedule, he lacked the time to really follow-up carefully and was too afraid of the risks of plant damage he could potentially have:

"In winter times, the plants are covered with plastic for six weeks. (...) Well, in that time you can have a full grown population [of pests] underneath that. That's why we say: we spray it preventively. I don't dare to give that up. There's too much at stake."

Fabre, on the other hand, had been open to experiment with some unusual alternatives to toxic practices. For example, they had acquired a machine from one of their foreign colleagues that allowed them to mechanically weed out herbs instead of using pesticides. Although this machine was widely used in French vineyards, their use of it in the arboriculture was unique. Similarly, while discussing with one of their customers, they had stumbled upon using harmless hot pepper sauce as a game repellant instead of toxic pesticides. While other firms had laughed at both practices in the beginning, it was such openness to use the solutions that were provided in their micro-munificent environment that had enabled them to reduce their impact on the environment.

We saw the openness to alternative perspectives often reflected in the experiments that all successful growers engaged in when they found new techniques that became available through their networks. Magritte, for example, attributed most of his ability to lower the impact of his operations on the environment to his "integrated" pest control. When he started out, he had pushed the limits of what was possible and had eagerly accepted the offer of a government consultant to help him with this innovative technique. By combining the complex use of specific and less toxic pesticides, together with the natural pest control of beneficent insects, he had greatly reduced his pesticide use.

"You only use those products that kill the bad insects and let live the good ones. That's been quite a learning path. The first years, I was like... we have to spray as little as possible. But in the end that was at the expense of the quality. Because you do get infections from some insects, if you spray too little or intervene too little, you get damage. It's been a learning path and now the last five years after an almost integrated production, I know what's possible and what's not. (owner/manager Magritte)

It appears that this focused adaptability increased the internal resource capital because they saw more applications for the resources that were available both within and outside the firm. As such, the presence of focused adaptability also increased the value of munification: it acted as an increased "absorptive capacity" (Cohen & Levinthal, 1990; Zahra & George, 2002) to detect opportunities in their network and the applicability of products derived from it.

Disciplined scrutiny. A consistent finding across our cases was also that, although the higher performing businesses developed broad levels of slack and adaptability, they were very punctual and strict in monitoring the dynamics of the firm and its environment. Flexibility was complemented with disciplined scrutiny to prevent the flexible form to turn into a chaotic form (Volberda, 1996). This finding is in line with some of the more pessimistic views on organizational slack that too much resources may result in managerial complacency, inefficiency and the pursuit of bad projects because of politics or lack of discernment (Bourgeois, 1981; Jensen, 1986). In addition, it resonates with the notion in entrepreneurship that risk-taking is not equivalent to foolhardiness (Schumpeter, 1934; Mintzberg & Waters, 1982; Timmons & Spinelli, 2004). Rather, entrepreneurs tend to follow a "test-the-water" approach, always sensing an environment with minor probes before plunging in" (Mintzberg & Waters, 1982: 495).

The disciplined scrutiny was thus manifested as a frequent analysis of organizational performance, the strict follow-up of what was going on in the firm, but also the careful assessment and comparison of opinions that were drawn from their network. The owner-managers of Fabre, for example, organized weekly reflection moments, another deliberate moment of slack time, to check on the past week and seek ways to improve on a matter of topics, including environmental issues:

"In the past, I had to be very strict about [VMS], because I knew that they were going to come and check us. Now I don't have to do that anymore. They [the personnel] think it is so useful, that they will say "show us" [the VMS-score] and then we try to think about ways to improve and set goals for the next year. We meet every Friday, drink a beer or two and then we'll go over everything that has happened during the week, what has gone wrong and what the plans are for the next week. That's very good. And fun. I don't know any other firm where they do this. We've been doing this for years! (...) We already did the weekly meetings, but it's MPS that has made them more conscious about the products we use." (o/m Fabre)

Also, although most firms had advisors, the higher performing firms were more prudent in following their advice. Since advisors were paid in the first place to maximize yield and plant quality, they were not always inclined to give advice on the risky methods of using less fertilizer and pesticides. Ensor, for example, considered his advisor "A second opinion on your business. It's still me that has to do it." In contrast, Van Dyck argued

"It's not my job to say "you have to spray with this or that". They [advisors] know perfectly with what product you can spray against funguses, against pests, against insects. They have to present us the environmentally friendly products." (o/m Van Dyck)

Besides its role in scrutinizing and monitoring the firm and its environment, disciplined scrutiny created confidence and additional resources in its own way as well. Careful control and monitoring of the firm increased the knowledge about the firm and decreased the likelihood of having to jump from one problem to another. As such, there was more room for strategic assessment of the firm's challenges and opportunities. As Ensor's owner-manager put it:

"It's the same as in school. Why is one better than the other? You have to do your homework and you have to do good exams. Otherwise you don't get your degree. So if you're not disciplined as a grower and don't monitor and assess everything carefully... (...) If you just say "we'll see, maybe next week..." Well yeah, that's how it [problems in the firm] starts. You have to be really disciplined. That's what you see in all top firms, they're all very disciplined. It's because you're disciplined that you have better quality, better sales and more room to do whatever." (o/m Ensor)

As our data shows, the disciplined scrutiny allowed the firm to increase time and knowledge in the firm, and be more aware of the value of how to dedicate its resources and time to munification and the improvement of VMS performance.

In sum, we found that the combined subconstructs of "bootstrapping", "focused adaptability" and "disciplined scrutiny" allowed the higher performing firms to build up the internal resources that fostered the realization of their proactive environmental intentions. The data also showed how each subtheme complemented the other two in making the firm organic. For example, the focused adaptability allowed the cognitive stretch that was needed to engage in the bootstrapping of internal resources and rethink responsibilities within the firm. The disciplined scrutiny, in turn, resulted in the monitoring that was shown to be key for the owner-managers confidence to leave the firm in the hands of his employees and helped to identify the necessary and appropriate complementary capabilities and resources in the external environment. As a result, we propose:

Proposition 2: Organizations that are able to increase their internal resource capital through the interdependent capability of bootstrapping, focused adaptability and disciplined scrutiny will be more able to achieve their intended proactive environmental strategies than those that do not.

6.5.3. Interaction effects

Throughout the analysis of both the organicity and the munification constructs, it was clear that the higher performing firms were proficient in *both* capabilities while the lower performing firms were not. Given that the specific context predicted low presence of internal resource capital, external resource capital and institutional capital, one could expect that a concerted effort was needed on all three aspects to create the appropriate conditions for proactive environmental strategies. Yet, emerging from our data, we found that the presence of organicity had a positive effect on the effectiveness of munification in creating external resource and institutional capital. Similarly, we found that the presence of external resource capital had a positive effect on the effectiveness of organicity in creating internal resource capital. We explore these interaction effects in more detail below.

We have mentioned several instances where the effectiveness of munification capabilities hinged on the presence of organicity. The firm was able to leverage its munification abilities when it was flexible enough to dedicate managerial time and resources

to its development, and remained prudent in how its precious resources were dedicated in this process. In addition, the critical scrutinizing of the resources and knowledge that could be derived from the environment, along with the flexibility to absorb them in the firm made the environment itself a more interesting source of opportunities and ideas. Similarly, the creativity and institutional detachment of the higher performing firms to envision alternative institutional spaces greatly increased the effectiveness of institutional agency in creating institutional capital. Therefore, we propose:

Proposition 3a: A firm will be more effective in leveraging its munification capabilities for the creation of external resource capital when it also possesses organicity capabilities.

Proposition 3b: A firm will be more effective in leveraging its munification capabilities for the creation of external institutional capital when it also possesses organicity capabilities.

As far as the influence of external resources on organicity is concerned, we see at least two effects. First, external resources create possibilities for developing externalized versions of slack. Earlier studies have hinted at the interplay between munificence in the environment of an organization and organizational slack (Bourgeois & Singh, 1983; Dess & Beard, 1984). In fact, Bourgeois and Singh (1983) conceptualized organizational slack as consisting of both internal as well as external sources. The latter type of slack, which they called "potential slack", was defined as "the capacity of the organization to generate extra resources from the environment" (Bourgeois & Singh, 1983: 43). As such, munification itself can become a source of bootstrapping, in the sense that it invests in the creation of such potential slack resources in the external environment to maintain flexibility and adaptability (Boons & Berends, 2001). A good example in our data was the firm's reliance on external advisors. Given that these advisors visited many firms, they acted as a source of "outsourced networking". The knowledge that this advisor could acquire by visiting many firms was a valuable source of slack to individual firms as well. Second, a firm will be more able to use its ability to harness multiple perspectives and to assess potential alternatives when there are more perspectives and alternatives to consider. For example, it was only because a government consultant with integrated production experience existed, that Magritte was able to consider involving him in his production. The more diverse a firm's network becomes in terms of valuable resources and knowledge that the firm can tap into (Van Wijk, Van Den Bosch, & Volberda, 2003; Rodan & Galunic, 2004), the more it can be expected it will cognitively detach from taken-for-granted assumptions and behaviors (Brown & Duguid,

1991) and create more value in the firm's internal resource capital (Zaheer & Bell, 2005). We therefore propose:

Proposition 3c: The greater the external resource capital of the firm, the more effective a firm will be in leveraging its organicity capabilities for the creation of internal resource capital.

6.6. Discussion

We began our paper by noting that many small businesses experience difficulty in enacting their proactive environmental strategies. More specifically, despite their generally positive attitude towards environmental strategies, small businesses point to the lack of internal resource capital and lower levels of external resource and institutional capital both in general and in support of PES to explain the generally low penetration of environmental strategies (Merritt, 1998; Petts et al., 1999; Tilley, 2000; Gerstenfeld & Roberts, 2000; Hillary, 2000a; Schaper, 2002; Vernon et al., 2003; Worthington & Patton, 2005; Elsayed, 2006). While the emerging literature on small business PES has mainly focused on the reasons why small businesses are unable to realize the positive intentions towards the natural environment, we found little research that looked at how small firms are able to realize PES, especially when the odds are against having one. In our empirical research, we exploited a unique data set that not only allowed capturing the proactive environmental intentions of a number of small businesses, but also showed whether these firms had been able to realize their intentions or not. Our findings show that those firms that had realized a PES, despite theoretical predictions, had been able to do so because they had developed and employed two interacting capabilities – munification and organicity – to create a micro-environment that mimicked the theoretical conditions fostering PES. Our data suggested that munification entailed a composite endeavor of building and attracting networks rich with existing complementary resources and capabilities, collaborating for the joint development of *lacking* market and institutional capital, and institutional agency to create an institutionally enabling context. This process was fostered and reinforced by the presence of organicity, the combined process of bootstrapping, focused adaptability and disciplined scrutiny. As such, we were able to reconfirm the theoretical model as laid out in Figure 6.2, and extend it with a set of propositions that help to better explain how small businesses can realize proactive environmental strategies. Figure 6.3 summarizes these findings.

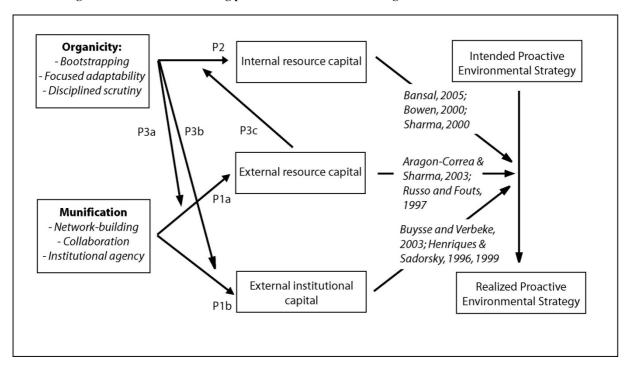


Figure 6.3 - A model of realizing proactive environmental strategies in constrained environments

Our study confirms the necessary presence of internal resource capital, external resource capital and institutional capital for firms to realize PES. It was clear in our data that the firms who had not been able to realize their intended PES had surrendered to the pressures that came with a lack of internal and external resource capital and institutional capital. Slack resources and the cognitive and practical flexibility to use it are necessary to "adapt successfully to internal pressures for adjustment or to external pressures for change in policy as well as to initiate changes in strategy with respect to the external environment." (Bourgeois, 1981: 3). In particular, they give the firm the latitude to think longer term and to engage in the time-intensive search for resources and capital which are not readily available (Sharfman et al., 1988; Van der Stede, 2000) and to subsequently absorb the potential solutions derived from the environment (Volberda, 1997). Also, the abundance of resources in the environment is particularly important for small firms, since it enables them to compensate for the resources not possessed internally in the firm. Furthermore, munificent environments attract the investment of ever more organizations and supportive institutions with the objective of capturing some of the profit that is generated in such environments (Dess & Beard, 1984; Castrogiovanni, 1991; Tallman, Jenkins, Henry, & Pinch, 2004). Finally, institutional capital is needed to provide legitimacy to the firm's endeavours (Suchman, 1995). Institutions are important because they infuse resources and strategies with particular symbolic value which are needed to acquire resources (Lounsbury & Glynn, 2001; Zott &

Huy, 2007) but also to maintain survival (Meyer & Rowan, 1977; Zimmerman & Zeitz, 2002).

6.7. Contributions and future research

In this paper, we were concerned with extending theoretical predictions about proactive environmental strategies. More specifically, we identified a gap between the theoretical predictions that small businesses would be unable to realize proactive environmental strategies and the anecdotal findings that such phenomena are nevertheless taking place, including in our own data. By going through the interactive process of data gathering, data analysis and enfolding literature, we were able to identify the two composite dynamic capabilities of munificence and organicity. These findings contribute to a better understanding of resource-based perspectives on proactive environmental strategies and the understanding of entrepreneurial processes in constrained environments.

First, our findings invite researchers to question the current resource-based perspectives on proactive environmental strategies that assume and have found that firm size has a positive effect on the adoption of PES. Resource-based perspectives assume that a firm's above average performance depends on the possession of resources and capabilities that are rare, valuable, nonsubstitutable, and difficult to imitate (Dierickx & Cool, 1989; Barney, 1991; Amit & Schoemaker, 1993). In the literature to date, it has been assumed that small businesses lack such resources that allow it to successfully achieve environmental performance (Russo & Fouts, 1997; Sharma, 2000; Bansal, 2005). This assumption has even led scholars to exclude small businesses from PES research:

"smaller companies, which were revealed in exploratory research to have neither the resources nor the motivation to go beyond minimum regulatory compliance, were excluded." (Sharma, 2000: 686).

More importantly, our findings require reconsidering the assumption that small existing businesses will merely accept their situation and adapt to it as a result. Instead, our findings are in line with the critiques that the resource-based view "has focused only on those resources that are housed within the firm", whereas "a firm's critical resources may extend beyond firm boundaries" (Dyer & Singh, 1998: 660). Indeed, the firms in our study that were able to realize their proactive environmental strategies had a set of capabilities in place that allowed them to shape their environment in a way that they could derive the necessary external resources from it. The critical interplay between organicity and munification shows how these firms refused to enact the limitations of their environment and were able to exploit

the pockets of internal and external resources they created in this process. Taking this back to the theoretical predictions that small firm size inhibits the realization of proactive environmental strategies, our model suggest that the resource base of the firm, in terms of munification and organicity, is a better predictor of proactive environmental strategies than "firm size", which may in fact cover up for a set of underlying processes.

Second, our findings also contribute to the emerging literature on entrepreneurial processes in resource constrained environments (Thong, 2001; Kodithuwakku & Rosa, 2002; Baker & Nelson, 2005; Zott & Huy, 2007). Although we found fragments of our model reflected in the findings of each of these studies, we have found no model that has articulated the interactive process of both munification and organicity. For example, the study of Baker and Nelson (2005) among 29 small resource constrained firms showed how the process of bricolage – "making do by applying combinations of the resources at hand to new problems and opportunities" (Baker & Nelson, 2005: 333) – helps to "create something from nothing". Resonating with "focused adaptability" in our study, they developed the notion that bricoleurs are able to do so, because they question institutionalized conceptions of the resource environment and came up with alternative perspectives for the resources at hand. However, while they make a short reference to the processes that bricolage may set in motion in terms of "social and network skills" (Baker & Nelson, 2005: 354), Baker and Nelson did not consider how the development of external resource capital may enable firms to create something from nothing as well. Furthermore, the study by Kodithuwakku and Rosa (2002) of resource constrained Sri Lankan small farmers found other explanatory factors for firm success in resource constrained environments. More specifically, a combination of prudent consumption and managerial functions, which would speak to "disciplined scrutiny", and the mobilization of resources and social value through social networks, which would speak to "building and attracting networks", were the main differentiating factors between successful and unsuccessful farms. Despite their very rich accounts, no reference is made of how these separate constructs are related and how they influence each other in explaining the performance of the firm. With our model, we contribute to a more comprehensive understanding of how firms are able to achieve their objectives in situations where the odds are against them.

Although we were careful to ensure a rigorous collection and analysis of the data, our research is limited in some ways. While confining our research setting to the Belgian ornamental horticulture industry allowed us to control for external sources of variation, this may have concealed other influences impacting the realization of proactive environmental

strategies in small businesses. For example, whereas the environmental problems most of the ornamental horticulture firms were struggling with were related to the production *process*, the environmental value of ornamental plant *products* is generally considered very positive. Ornamental plants contribute to the health and visual pleasure in work environments, help in fixing greenhouse gases from the air and have an important social function in signaling gratitude, joy or contempt (Brethour et al., 2007). As such, it was difficult for the growers to create a market that valued their proactive environmental efforts. Things might be different for firms that produce cleaning products, cosmetics, furniture, food or other products where markets have been shown to be more sensitive to environmental issues. For such firms, munification may require the typical processes required for gaining legitimacy in the market (Teece, 1986; Aldrich & Fiol, 1994; Zimmerman & Zeitz, 2002).

The specific context also raises new questions related to the debate between commitment and flexibility (Ghemawat & Del Sol, 1998). Our model suggests a dynamic interplay between the obstinate commitment to certain objectives and the flexible adaptability to emerging solutions. This resonates with Mintzberg and Waters' contention that "strategy formation walks on two feet, one deliberate, the other emergent" (1985: 271). In this study we have found examples where some were able to remain on both feet, absorbing emergent solutions to realize deliberate intentions. Yet the question emerges when commitment can be too obstinate and require too much flexibility from the firm to the point that no choices are made anymore. In such a situation, the firm may lose track of its ability to stay in the market and to survive in the first place. Given that environmental strategies are still embedded in a context of market failures (Dean & McMullen, 2007; Cohen & Winn, 2007), with many incentives for other firms too free-ride the benevolent moral strategies of proactive firms, the risk of losing the firm's rent generating possibilities remains imminent. A question that could be addressed in further research is therefore: how far can the firm go in being committed to its proactive environmental intentions? In other words, how proactive can a firm be given its particular circumstances? One potential answer may lie in the value that both organicity and munification can bring in terms of competitive advantage. Although our research design did not allow making inferences about the competitive value of either construct or its subconstructs, it was mentioned several times in the interviews that the higher scoring firms were also among the top performing firms in their industry. In line with the insights from the natural resource-based view of the firm (Hart, 1995), future research could therefore address how the abilities identified in our data helped to increase the competitive position of the firm.

A final thought relates to the institutional position of PES. To date, the literature has mostly assumed that the adoption of PES would bring a firm more in line with stakeholder and general institutional expectations (Henriques & Sadorsky, 1996; Fineman & Clarke, 1996; Sharma & Vredenburg, 1998; Henriques & Sadorsky, 1999; Buysse & Verbeke, 2003). Our findings indicate, however, that ornamental horticulture firms did not experience any stakeholder claims, and within-industry pressures normative pressures were certainly not in favor of PES. As such, PES were rather an act of institutional non-conformity than of conformity. Yet, since institutions grant a firm legitimacy and lead it to well accepted behaviors to deal with uncertainty (Meyer & Rowan, 1977; DiMaggio & Powell, 1983), institutional non-conformity represents an act of considerable risk. Successful institutional non-conformity has therefore been mostly associated with larger firms (Haveman, 1993b; Miller & Chen, 1996; Sherer & Lee, 2002; Greenwood & Suddaby, 2006), that can use their clout to legitimize their deviant behavior. As a result, future research could further explore how the findings in this paper may help to explain institutional non-conformity in small businesses.

This article offers researchers and small business owner-managers alike a more refined understanding of realizing proactive environmental strategies when the odds are against having one. Given that a lack of time and market appreciation is the most common justification for not having a PES in small businesses, we can expect many small business owner managers will be familiar with this situation. Yet the remarkable results of the higher performing firms in our study show that firms can overcome these strategic hurdles. By recognizing that small businesses can change their environment too and create the conditions that are more conducive to having a PES, we hope that more small businesses will be able to go against all odds in realizing their proactive environmental intentions.

Chapter 7

Fools Breaking Out: Explaining Successful Small Business Institutional Non-Conformity⁵

The reasonable man adapts himself to the world; the unreasonable one persists in trying to adapt the world to himself.

Therefore, all progress depends on the unreasonable man.

(George Bernard Shaw)

Abstract

This paper discusses how small businesses implement strategies that do not conform to established institutionalized practices. The institutional non-conformity examined is the adoption of proactive environmental practices in an industry where institutional pressures exist against these practices. Using a qualitative multi-case study approach, we find that (1) the interaction scope with the organizational field, (2) the cognitive approach towards institutional non-conformity, and (3) the organizational conduciveness to institutional non-conformity were associated with successful resistance to institutional practices. Furthermore, we identify underlying mechanisms that contribute to institutional theory, the resource-based view and the organizations and the natural environment literature.

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⁵ This paper is the product of a collaborative effort of myself and Dr. Michael Valente. The authors wish to thank Aimé Heene, Erik Mathijs, Bart Nooteboom, Johan Lambrecht, Johan Bruneel, Marc Buelens, Seth Maenen, the participants of the Faculty of Economics and Business Administration Working Paper Series and three anonymous reviewers of the 2008 Academy of Management Conference for their helpful comments in improving this paper.

Preface

The current chapter presents a further exploration of chapter 6, yet it is particularly focused on exploring the small businesses PES from an institutional theory perspective. While going through the iterative cycle of analyzing the cases, enfolding insights from existing literature and then back to analyzing the data in chapter 6, one finding that emerged as particularly inconsistent with earlier literature was that the proactive environmental strategies of the investigated firms presented an act of institutional *non*-conformity. Furthermore, we found no conclusive explanations in the institutional theory literature about the abilities of small businesses to negate the very institutions that grant them legitimacy or that provide predictable guidelines in uncertain realities. The current chapter therefore further probes the findings of chapter 6 and explores how they can contribute to better understand small business institutional non-conformity.

7. Fools Breaking Out: Explaining Successful Small Business Institutional Non-Conformity

7.1. Introduction

In 2006, Muhammad Yunus, founder of Grameen Bank, was awarded the Nobel Peace Prize for a business model that revolutionized the financial services sector by providing loans to the poor in Bangladesh. Today, a flurry of microfinance banks has emerged in developing and emerging economies adopting a similar model to the point where micro-finance is considered a global phenomenon. Thousands of miles away in Egypt in 1977, Ibrahim Abouleish instituted biodynamic farming in the desert outside Cairo. The firm, SEKEM, has revolutionized farming practices in Egypt and is now one of the leading producers of organic cotton worldwide, supplying directly from hundreds of small Egyptian farmers now adopting a biodynamic farming model.

Stories like these have grown in number across a range of industries over the last decade. An important and rather prevalent characteristic common to these anecdotes is the entrepreneur's ability to resist institutional forces that conflict with, or in some cases challenge, their strategic trajectory and personal ambitions. However, given that institutional theory predicts that firms deviating from institutional requirements will lose their legitimacy and may threaten the future survival of the firm (Meyer & Rowan, 1977; Baum & Oliver, 1991; Suchman, 1995), such risky non-conforming behaviors appear "foolish" (Aldrich & Fiol, 1994). This is especially so for small businesses who are typically not equipped to challenge the institutional pressures of their given sector (Haveman, 1993b; Miller & Chen, 1996; Dewald, Hall, Chrisman, & Kellermanns, 2007). Because of the many constraints inherited by small businesses, it would seem in their best interests to conform to existing practices (Lounsbury & Glynn, 2001; Zimmerman & Zeitz, 2002). Yet there is growing evidence that small businesses are resisting these institutional norms and subsequently cracking the institutional code of their sector by creating new routines and practices. The most heroic examples of disruptive institutional change are often the exponents of very small ventures. Michael Dell of Dell computers, Richard Branson of Virgin, Ben Cohen and Jerry Greenfield of Ben & Jerry's Home Made Ice Cream and Muhammad Yunus's Grameen Bank all started their ventures as small enterprises that went completely against normative expectations and cognitive habits of the service they were providing. Although this phenomenon has surfaced in a range of contexts, few researchers have examined how small businesses overcome the institutional constraints inhibiting the implementation of particular strategies that isolate them from the rest of the sector. How these seemingly powerless small entrepreneurs have been able to accomplish this feat is presently understudied, yet represents an important area of study related to the role of small business in the early stages of institutional change (Aldrich & Fiol, 1994; Rao, Monin, & Durand, 2005; Cliff, Jennings, & Greenwood, 2006). Therefore, the research question guiding this paper is as follows: "How do small businesses successfully implement strategies that do not conform to seemingly insurmountable institutional forces?"

This paper explores small business institutional non-conformity using a qualitative study of 8 small businesses in the ornamental horticulture industry in Belgium, all of which have committed to proactive environmental strategies that are clearly at odds with the predominant institutional norm of the ornamental horticulture sector. Proactive environmental strategies are systematic patterns of voluntary environmental practices not required to be undertaken "in fulfillment of environmental regulations or in response to isomorphic pressures within the industry as standard business practice" (Sharma & Vredenburg, 1998: 776). Proactive environmental strategies act as an effective medium through which we can examine small business institutional non-conformity, because of the well-recognized inertial forces associated with an economic paradigm that discourage this approach to business (Gladwin et al., 1995; Newton & Harte, 1997; Margolis & Walsh, 2003; Prasad & Elmes, 2005), and more specifically in the highly institutionalized context of the ornamental horticulture industry. As environmental issues are increasingly finding their way onto public policy agendas, understanding how small businesses, as agents of social change, can disrupt institutional surroundings not favorable to the incorporation of environmental issues in business practice represents an important research agenda.

The results reported here are a set of propositions that contribute to a better understanding of small business institutional non-conformity in a mature setting. The evidence suggests that small businesses are successful in such endeavors of institutional non-conformity as a result of (1) their multiple roles in the organizational field and alternative institutional logic exposure, (2) their cognitive framing of the institutional non-conformity as an envisioned future and the resulting goal inflexibility and means flexibility, and (3) their non-conformity-conducive business model and multiple experiences with institutional non-conformity. In addition, we find that these factors feed into a number of facilitating mechanisms which have implications for institutional theory, the resource-based view and the organizations and the natural environment literature.

This paper is structured as follows. We first review institutional theory and its implications for small business non-conformity and explain how we conducted our research. We then present our findings and conclude with a discussion on the implications for current and future theoretical and practical work.

7.2. The problem of institutional non-conformity

One central research question of institutional theory is to explain how organizational behaviors are institutionalized and how organizations and actors behave in response to the institutional environment in which they are embedded. Institutions are rules, norms, values, beliefs, and taken-for-granted assumptions surrounding economic activity that define or enforce socially acceptable economic behaviour (DiMaggio & Powell, 1983; Jepperson, 1991; Scott, 2001). The basic assumption of institutional theory is that organizations need to conform to institutional pressures because "organizations that (...) lack acceptable legitimated accounts of their activities (...) are more vulnerable to claims that they are negligent, irrational or unnecessary" (Meyer & Rowan, 1977: 349 - 350). Without legitimacy, organizations will have difficulty gaining access to resources, making profits or even maintaining survival (Scott, 1987; Baum & Oliver, 1991; Suchman, 1995; Miller & Chen, 1996). Consequently, institutional theorists argue that organizational forms and behaviour will tend to converge to common standards, following the strong pressures for isomorphism (Meyer & Rowan, 1977; DiMaggio & Powell, 1983; Scott, 1987), even when this leads to suboptimal behaviour from a purely economic point of view (DiMaggio & Powell, 1983; Oliver, 1991). Although some variation in organizational practices and forms is admitted, especially in the initial stages of organizational fields when there are hardly any dominant patterns or leaders to mimic (Haveman, 1993a; Maguire et al., 2004), this variation will be lost as the organizational field grows to more mature and established stages (DiMaggio & Powell, 1983; Scott, 2001).

Institutional theory has been criticized, however, for being overly deterministic and static in its conception of institutions. Specifically, it has been oblivious in the past to the impact of managerial discretion and self-interest in explaining organizational behavior and the way economic agents can also influence their institutional contexts, even in mature fields (DiMaggio, 1988; Oliver, 1991; Leblebici et al., 1991; Barley & Tolbert, 1997). In response, a number of scholars have developed theoretical explanations and empirical accounts of organizational strategies that involve non-conforming behavior. For example, organizations may resist institutional pressures because of pressures for competitive diversification (Miller

& Chen, 1996; Deephouse, 1999; Greenwood & Suddaby, 2006; Norman, Kendall, & Martinez, 2007), especially when the institutionalized practice constrains the access to important resources on which the organization is dependent (Oliver, 1991; Leblebici et al., 1991; Ingram & Simons, 1995; Sherer & Lee, 2002). Non-conformity also often occurs as a result of "institutional contradictions" (Seo & Creed, 2002): the "various ruptures and inconsistencies both among and within the established social arrangements" (Seo & Creed, 2002: 225). As a result of disruptive events (Hoffman, 1999), changing social, economic or political conditions (Oliver, 1992; Kraatz & Zajac, 1996), or existing incompatibilities between institutional pressures, organizations may receive conflicting incentives that drive them to non-conforming behaviors. In the occurrence of such events, Oliver (1991) expanded the reactions that organizations can develop with respect to institutional pressures beyond mere conformity. Besides conforming entirely (acquiescence), organizations may balance the pressures of several institutional influences (compromise), disguise or escape them (avoidance), ignore or contest them (defiance) or influence and control (manipulate) the institutional environment in which they operate (Oliver, 1991; Goodstein, 1994; Etherington & Richardson, 1994; Ingram & Simons, 1995; Clemens & Douglas, 2005).

Given the risk and uncertainty associated with these latter non-conforming strategies, how and when firms can be successful institutional non-conformists arise as important questions. These questions are all the more pertinent for small firms, given that some of the literature expects path-breaking behaviors to emanate most likely from smaller firms (Schumpeter, 1934; Leblebici et al., 1991). However, whereas there is a growing literature on the conditions that lead organizations to non-conformity or that instigate institutional change, there is little and inconclusive research on the conditions that foster organizational success in this feat. In addition, the emerging literature has mostly focused on institutional non-conformity among larger firms. Less fully explored is institutional non-conformity among small firms, an area where the extant literature has produced inconsistent findings to date as well.

7.2.1. Small business institutional non-conformity

In his "Theory of Economic Development", Schumpeter (1934) proposed that the driving force in capitalism comes from small ventures that crack the codes of the institutions in which they operate. Although Schumpeter's work has spawned a new school of inquiry into the conditions that facilitate organizational founding and the sources of innovation in new firms (Shane & Venkataraman, 2000; Davidsson et al., 2006; Cliff et al., 2006), the literature

remains inconclusive on whether existing small businesses possess the tools to engage in the complex social process of deviating from established institutional practices (Damanpour, 1991; Haveman, 1993b; Camison-Zornoza, Lapiedra-Alcami, Segarra-Cipres, & Boronat-Navarro, 2004; Barnett & McKendrick, 2004). A number of elements argue in favor of small firms. First, in the event that institutional non-conformity would require abandoning extant practices, strategies or organizational forms, small businesses are often not as committed (Ghemawat & Del Sol, 1998) as larger organizations to existing technological regimes and business models (Hannan & Freeman, 1977; Tushman & Anderson, 1986; Hinings & Greenwood, 1988) and are more flexible in adapting to environmental changes (Fiegenbaum & Karnani, 1991; Chen & Hambrick, 1995). In its most extreme form, the small business as a new venture can even start without any commitment towards or association with the prevailing institutional context (Schumpeter, 1934; Cliff et al., 2006). Second, since smallbusiness managers are very often also the owners of the firm, they do not depend on the decisions and interests of stockholders. As a result, they have more discretion to enact their own envisioned reality (Johannisson, 1987) and are more committed to doing so as well (Gibb & Scott, 1985; Thompson et al., 1992). Third, small businesses are not as visible as large firms, and often operate at the fringe of an organizational field, which decreases the likelihood that they will be subjected to the same scrutiny as larger firms in the industry (Hinings & Greenwood, 1988; Leblebici et al., 1991; Greening & Gray, 1994). As a result, small firms have been found sometimes to act as the "bandwagons" for novel practices, which are subsequently adopted by larger firms (Haveman, 1993a; Aldrich & Fiol, 1994; Terlaak & King, 2007).

In contrast, however, studies of institutional non-conformity in larger firms have found that successful institutional non-conformity depends on a number of factors that small businesses are generally not associated with (Haveman, 1993b; Miller & Chen, 1996; Sherer & Lee, 2002). For example, Greenwood and Suddaby (2006) suggested that successful institutional non-conformity depends on the political, financial and organizational resources and power to influence a firm's environment. Small firms are often dependent on more powerful customers and suppliers, who constrain them in the options that can be developed to challenge institutional pressures (Meyer & Rowan, 1977; Pfeffer & Salancik, 1978; Fligstein, 1991; Frooman, 1999; Davidsson et al., 2006; Dewald et al., 2007). Furthermore, small businesses often lack slack time and resources which would be needed in the event that institutional non-conformity requires the development of new practices, contacts, business models and the like (Bourgeois, 1981; Sharfman et al., 1988; Damanpour, 1992). Specifically,

the introduction of novel and deviating practices and products requires "complementary assets" to ensure acceptance in the market and society (Sherer & Lee, 2002), which are often lacking in small businesses (Schumpeter, 1942; Teece, 1986). But most importantly, small businesses depend on networks to acquire information and exchange experiences (McEvily & Zaheer, 1999; Atherton, 2003; Nooteboom, 2004), which may be the same networks that impose and support the institutional logic they want to challenge (Johannisson, Ramirez-Pasillas, & Karlsson, 2002). As a result, small business owner-managers have a tendency to get locked into path-dependent behaviors based on previously successful patterns of activity (Baron, 1998; Minniti & Bygrave, 2001), and thus continue their practices more based on cognitive habits and traditions, rather than on thoughtful and strategic reflection.

Even though owner-managers may have the internal impetus to engage in institutional non-conformity, the literature is inconclusive about whether small businesses actually possess the means to be successful in this feat. The contradictory streams of evidence highlight the need for more explorative work on the factors that explain the success of small firm institutional non-conformity. In this study, we therefore move beyond the debate on whether small businesses have the organizational features to support institutional non-conformity, to ask more importantly about the factors that distinguish successful and unsuccessful institutional non-conformity in small firms.

7.3. Methods

As mentioned, the theoretical inconsistencies about the organizational features a business must possess for successful institutional non-conformity emerged as a result of the iterative process of analyzing the data and enfolding existing literature in chapter 6. In order to contribute to resolving these inconsistencies, the goal here is to further probe our data on the eight VMS cases and explore how the categories that emerged in chapter 6 may help to explain these theoretical inconsistencies uncovered in the introduction. Again, the reader is referred to chapter 5 for a full introduction to the Belgian ornamental horticulture sector as a research setting and the methodological choices made. That we can use the same methodology is justified for two reasons. First, the empirical research in this chapter remains an exercise of theory elaboration (Lee et al., 1999) with the aim of resolving a theoretical inconsistency (Siggelkow, 2007). In this perspective, also the use of case studies is appropriate, since these are best for addressing 'how' and 'why' questions (Yin, 2003), such as "how do small businesses successfully implement strategies that resist conformance to seemingly insurmountable institutional forces in mature fields?" Second, perhaps even more

than strategies and practices, the particular nature of institutions and their influence are unconsciously engrained in the assumptions and perceptions of the owner-manager (Jepperson, 1991). Revisiting the perceptions of an owner-manager through various data sources and multiple angles was therefore a necessary prerequisite to uncover the complex phenomenon of institutional non-conformity.

Before engaging in a further analysis of the eight VMS cases, however, it is necessary to connect the research setting of VMS in the Belgian ornamental horticulture to the particular constructs of institutional non-conformity: (1) the choice of organizational field, and (2) the act of institutional non-conformity. First, institutional theorists argue that the institutions are enacted within an organizational field. An organizational field is a set of organizations that "in the aggregate, constitute a recognized area of institutional life: key suppliers, resource and product consumers, regulatory agencies, and other organizations that produce similar services or products." (DiMaggio & Powell, 1983:148). In addition, the boundaries of an organizational field depend on a particular issue that elicits regulative, normative and cognitive expectations (Hoffman, 1999; Scott, 2001). Previous studies have used a combination of sector, geographical territory and issues to delineate organization fields. Greenwood et al. (2002) used the changes of organizational form in the accounting services sector in Alberta (Canada) from strict accounting firms towards multidisciplinary practice firms as their institutional field. Hoffman (1999) used the US chemical industry and the actors revolving this industry with regards to environmental issues. Maguire et al. (2004) chose the emerging practices of HIV/AIDS treatment advocacy in Canada as the dynamic boundary of their organizational field. In the current study, we use the Belgian ornamental horticulture industry and how it deals with the organizational impact on the natural environment.

Second, the phenomenon of interest in this study is the presence of proactive environmental strategies among firms in the Belgian ornamental horticulture industry. As mentioned before (see Table 5.9), in contrast to earlier studies on organizational reactions to natural environmental issues (Henriques & Sadorsky, 1996; Henriques & Sadorsky, 1999; Buysse & Verbeke, 2003; Bansal, 2005), PES in the Belgian ornamental horticulture industry represent an act of non-conformity, rather than one of conformity. More specifically, the dominant institutional logic in the ornamental horticulture sector discourages PES, and acts in favour of maintaining the status quo. As a result, by becoming member of VMS, Belgian ornamental horticulture firms not only reveal their proactive environmental intentions, but also their institutional non-conformity for several reasons. Since the goal of VMS is to stimulate firms to voluntarily disclose information on their environmental impact and to go

beyond legal requirements in green production, it runs counter to the strong regulative, normative and cognitive resistance to do so. Members that strive to minimize their environmental impact and be transparent about it, receive criticism for being too open, and for stimulating the government to install additional constraining regulations. Also, given that there are neither external stakeholder pressures, nor market incentives to adopt PES, such organizational postures represent a substantial deviation from the isomorphic pressures in the sector. Finally, the limited and decreasing membership of VMS in the sector shows that neither proactive environmental strategies, nor disclosure about organizational impact on the environment has become institutionalized in the sector. As a result, we used VMS membership as a proxy for institutional non-conformity. Furthermore, we used the VMS score as a proxy for whether the firm not only had the intention to go against the institutional non-conformity into actual activities.

When analyzing the cases, we first compared matched-pair polar types, one successful and one unsuccessful, and then used a replication logic to see whether the emerging findings were confirmed or refuted by the rest of the cases (Eisenhardt, 1989a; Yin, 2003). We looked for similar constructs emerging from the data, using tables and charts to facilitate comparison (Miles & Huberman, 1994). The iterative process between data analysis, literature enfolding and writing resulted in a number of propositions that explain successful institutional non-conformity in small businesses.

7.4. Findings

7.4.1. Interaction Scope with the Organizational Field

In chapter 6, we identified "the building and attracting of networks rich with complementary resources and capabilities" as an important predictor for a better ability to realize the proactive environmental intentions of the firm. In this section, we will further explore the specific function that these networks played in enabling the firm to go against the institutional expectations of the ornamental horticulture sector. Emerging from the reflection of our findings with the literature in this perspective was the particular interaction scope with the organizational field that a firm's network yielded.

Institutional theory assumes that organizations operating at the fringe location of an organizational field have fewer connections to other organizations in the field and will therefore experience fewer barriers for non-conformity than organizations operating centrally

Table 7.1 – Interaction Scope with the Organizational Field

Company	Field location	Roles in the organizational field	# Roles	Alternative Institutional Logic Exposure
Panamarenko	Peripheral	 - Producer - Salesman - Retailer - Developer of new IP protected plant varieties 	4	 Education as translator, no education in horticulture Started as hobbyist while being a police officer Took over a firm at later age Various international contacts through international trading Member of many organizations outside traditional bodies Geographically isolated
Magritte	Central	 Producer Local guild leadership Professional association top representative Sector representative in large government sponsored agricultural marketing service Involved as jury member for education projects 	5	 Started business alongside his father's Father is Dutch, considers himself Dutch as well Education in ornamental horticulture Sector representative in government body for product promotion Emotionally detached: wouldn't mind quitting his firm and do something entirely different
Ensor	Central	 Producer Ex-trader Ex-Salesman Professional association top representative Leadership role in new sector initiative 	5	 University college education as car mechanic Used to be a plant trader in family business of his wife Travelled throughout Europe as a trader, visiting production firms Has followed a number of business management courses Active in many organizations within ornamental horticulture Active in many organizations outside ornamental horticulture
Fabre	Peripheral	 Producer Salesman Trader Politician	4	 Took over father's business at young age, when father died Travelled throughout Europe as traders, visiting production firms Active in local politics Are described as quite isolated, do their own thing
Bruegel	Central	ProducerLocal guild leadershipRepresented in board of new sector initiative	3	 Took over his father's business High school education in ornamental horticulture Spent 3 months in Germany before starting in father's business
Rubens	Central	- Producer	1	Took over his father's businessEducation in ornamental horticulture
Jordaens	Peripheral	- Producer	1	 Took over his father's business Education in ornamental horticulture Spent 3 months in the Netherlands before starting in father's business Geographically isolated
Van Dyck	Central	- Producer - Local guild leadership	2	- Took over his father's agriculture business - Education through professional organization meetings

in the field (DiMaggio & Powell, 1983; Leblebici et al., 1991; Haveman & Rao, 1997; Kraatz & Moore, 2002). On the other hand, centrally located organizations would be able to use their legitimacy to sell the deviance of the institutionalized practice to the stakeholders in their field (Sherer & Lee, 2002; Greenwood & Suddaby, 2006). Consistent with Greenwood and Suddaby (2006), our findings indicate, however, that it was not network location that determined the organization's ability to go against institutional norms, but a lower *embeddedness* of the organizations in the organizational field. We found that both the adoption of multiple roles in the organizational field and the exposure to alternative institutional logics were important in this perspective.

Table 7.1 summarizes the firm's field location, their positions in the organizational field and its exposure to alternative institutional logics. We determined field location as "Central" when the firm was highly connected to, active or represented in the bodies that sustained and reinforced the institutional logic of the ornamental horticulture industry (especially traders and professional associations). In contrast, a firm was labelled "Peripheral" when it was – either deliberately or not – isolated from the core actors of the organizational field. We coded the interviews for the positions the owner-managers assumed in their organizational field by looking at the type of connections they had and with whom. Subsequently, we quantitatively measured the number of roles assumed by recording each unique role that was mentioned by the respondent. Similarly, we probed the interviews for exposure to alternative institutional logics, by looking at the firm's history in the organizational field and with specific focus on how and when they had entered the institutional field.

Multiple roles. As Table 7.1 indicates, the data suggest that the adoption of multiple roles in the organizational field was associated with higher VMS scores and therefore with successful institutional non-conformity. For example, the Panamarenko case illustrates the link between the adoption of multiple organizational field roles and successful institutional non-conformity in a peripheral field location. Panamarenko's owner-manager was not only a producer of plants, but he also took up positions in the organizational field as retailer, salesman and product developer. Since part of the production was sold on site in the firm's own garden center, he took up the position of a business-to-end-consumer retailer. Such a widened interaction scope was important to Panamarenko because a strict barrier is usually maintained between traders and producers, and information about consumer preferences and sensitivities is kept secret by traders and retailers in the industry. By acting as a retailer, however, Panamarenko had access to different perspectives on his product. For example, by

selling part of his plants directly to the end-consumer, he was exempt from the export obligation to chemically clean plants from any potential pest or insect. As a result, he could experiment with selling plants to customers that were not treated in this way, and with success. In addition, he served as the company's own salesman for the part of the production that was exported from the firm to international customers and larger retailers. To this purpose, he developed the same practices as large trade businesses, by renting costly promotion booths on large trade fairs, looking for customers in the international market. Panamarenko's owner-manager said that this was necessary due to the institutional tendencies of traditional traders: "they can sell an Azalea or a pot plant, but they don't go further than that", and "those people don't get my plants sold, so I have to do it myself!" (owner/manager Panamarenko) As a result, he was a lot less dependent on the larger traders like most businesses in the industry and less constrained by their expectations. Importantly, although he encountered the same institutional resistance to green production in his various roles, he seemed insensitive to them:

"when I go to [a famous trade fair], then I talk about it [about VMS], because I bring my sign, my VMS-sign. And then sometimes they say, 'well, well, are you into that ... it's so much work and this and that. We just spray and we win a lot of time with it.' But I don't listen to them, because I'm convinced that that is the future." (owner-manager Panamarenko).

Finally, he was involved in a program to support young plant businesses in their R&D for the production of new plant innovations with license protected varieties. The exposure to this multitude of roles in the organizational field made Panamarenko aware of how to position the firm in ways of which other companies were not aware.

In contrast, the less successful firms were only active in a limited number of roles in the organizational field. Rubens, for example, was only active in the sector as a producer. All the plants that were grown at the firm were bought from larger suppliers and plant propagators, to whom he sometimes had to pay a license fee in return for the ability to grow the plant. Furthermore, the owner-manager of Rubens was very reluctant to assume multiple roles in the sector. He explained this by referring to his late father, who had been an active leader within the professional associations: "he put so much time into that, and when he got [terminally] ill, he didn't get anything in return" (owner-manager Rubens). This made the existing owner very reluctant to take on leadership roles in local guilds and act more on his own.

Alternative institutional logic exposure. The exposure to alternative institutional logics emerged as a distinct, yet related feature from our data. Whereas the adoption of multiple roles acted as an exposure to multiple perspectives within the Belgian ornamental horticulture, the alternative institutional logic exposure brought firms into contact with alternative perspectives outside the Belgian ornamental horticulture. Table 7.1 shows that the alternative institutional logic exposure was an important factor in yielding the ability to successfully execute non-conformity. Again, Panamarenko is a particular example where the alternative institutional exposure made him less sensitive to institutionalized behaviors and expectations. Having essentially no training in the ornamental horticulture, and having acquired the firm at later age, he was not "born" in the sector as many other owner-managers in the sector that had acquired their firms from their family.

"in the plant world, I'm sort of a maverick. (...) most here are generation to generation. (...) I'm glad that I have a neutral view on those things. (...) VMS, for example, they were not 100% in favor of it. Whereas I am all for it! And that I think to myself: environmentally friendly ornamental horticulture is so important! You have an overview of what you're doing, and how you're dealing with things. And you have a totally different view of this whole world."

Yet the owner-managers from Fabre, who did acquire the firm from their parents, are an example that alternative institutional exposure was possible in many other ways. Through their contacts with companies all over Europe, they were exposed to alternative technologies and practices that other firms did not see and therefore question the local institutionalized practices.

In contrast, the unsuccessful firms mostly stayed within their own organizational field. As a result, they found little technical and technological support that could enable them to achieve their proactive environmental strategies. For example, Jordaens was aware himself of the limits of his embeddedness.

"For example, you're stuck with a severe aphid infection and you call and ask 'I've got an aphid infection here, what should I spray?' DDVP! Of course, what does the pesticide vendor know about MPS? Nothing! He just says 'DDVP is the best product'. And there you go! (...) It's something else when that pesticide vendor lives in the Netherlands, he'll know 'I can't sell this product to florists, because it results in bad points for them.' The whole system there works on MPS, so everybody has experience with it, same with suppliers and all..." (owner/manager Jordaens)

Together, we propose:

Proposition 1a: Small businesses that assume multiple roles which are normally structurally separated in the organizational field will decrease the institutional embeddness that inhibits successful institutional non-conformity.

Propostion 1b: Small businesses that are exposed to alternative institutional logics will decrease the institutional embeddness that inhibits successful institutional non-conformity

Why do the adoption of multiple roles in the organizational field and the exposure to different institutional logics enable firms to go against institutional pressures? We argue that both the development of absorptive capacity and the bridging of structural roles underlie these processes. First, the multiple roles and the exposure to alternative institutional logics uncover multiple ways of thinking and heterogeneous perspectives to the same problem, detaching them from the dominant logic in the field and opening the owner/managers up to different logics (Seo & Creed, 2002; Greenwood & Suddaby, 2006). Although the taken-for-granted assumptions are consistent across institutional roles, the exposure to alternative viewpoints increases the firm's absorptive capacity (Cohen & Levinthal, 1990; Zahra & George, 2002) to absorb and discover new solutions and perspectives. Whereas institutional exposure has been used to provide the reasons why a firm would engage in institutional change, our findings show that it also exposes them to the tools to go against the institutional pressures in their own organizational field. Consistent with earlier findings that well-networked and central actors are more effective challengers of institutional logics when they have an unusual background (Palmer & Barber, 2001), and that knowledge heterogeneity in networks impacts managerial performance and innovativeness (Rodan & Galunic, 2004), we argue that the ownermanager's awareness of multiple logics and viewpoints enhances the organizational ability for effective institutional non-conformity.

Secondly, both processes help to bridge structural holes that constrain unsuccessful firms in finding alternative perspectives and solutions (Burt, 1992). Structural holes are voids between organizational clusters in social networks where density of ties is low. Actors that can bridge these gaps in networks may benefit from preferential access to various resources and capabilities, thereby increasing their social capital (Burt, 1997). Institutional theorists have been looking mostly at firms as atomistic players in the organizational field, bridging structural holes mostly by establishing network *ties* between members of different organizational clusters. As there were abundant ties between the multiple clusters within the organizational field (e.g., growers and traders), the successful firms in our sample did not bridge the structural holes through network ties *between* them. Instead, by assuming different roles within the organizational field, they bridged the structural holes by overlapping the

clusters *within* the firm. As such, they bridged, within the boundaries of their own firm, the connections which are normally characterized by cognitive structural holes. Although intuitively one would expect that the adoption of several roles would increase the embeddedness in the field (Uzzi, 1997), our findings show in fact the opposite. Not only can organizations lower their embeddedness by bridging boundaries to alternative institutional arenas (Greenwood & Suddaby, 2006), as is also the case in our sample, yet this also happens as a result of bridging disconnected roles in the organizational field.

Together, our findings reinforce the finding that it is not network position, but the lower embeddness of the firm as a result of its interaction scope with the organizational field that explains how firms can successfully go against institutional pressures. Negating institutional expectations and prescriptions requires the firm to become detached from them in the first place. Our findings indicate that the adoption of different roles within the organizational field and the exposure to alternative institutional logics were important in this perspective.

7.4.2. Cognitive Approach Towards the Institutional Non-conformity

Besides the role of the firm's network interaction scope in enabling institutional non-conformity, we also found that a further exploration of "focused adaptability" helped to explain small business institutional non-conformity. In particular, we were interested in whether a more fine-grained analysis of the firm's cognitive approach towards the institutional non-conformity would shed light on why some firms had been able to develop the flexibility to realize their objectives and others not. To this purpose, we probed the data for the underlying reasons why the firms had wanted to become member of VMS and what they were willing to do in order to get a high VMS score.

Table 4 summarizes the firm's cognitive approach to the institutional non-conformity. We assessed the cognitive approach by coding the interviews for responses indicating the reasons each firm had to become a member of VMS and the sacrifices they were willing to make to achieve a high VMS score. We then followed a logic of "data reduction" (Lee et al., 1999) to summarize our findings in three constructs that reflected the way the owner-managers had framed VMS membership: "institutional theorizing", "goal flexibility" and "means flexibility". An institutional theorizing was called "Envisioned Future" when the owner-manager believed that green production should be the norm for ornamental horticulture firms in the future; "Inevitable Future" when the owner-manager expected that ornamental horticulture firms would be forced to use environmentally friendly practices in the future; and

Table 7.2 – Cognitive Approach to Institutional Non-conformity

Company	Personal motivation for VMS membership	Institutional theorizing	Example	Goal flexibility	Examples	Means flexibility	Examples
Panamarenko	- Pollution is irresponsible - Health of employees and customers - Independent assessment of environmental impact - Passion for nature	Envisioned future	"I think it's really important, the environment. Especially towards the plant, in first instance towards the plant. And the people that work here, that is also very important. And towards the future, for the children that may one day take over the firm, I think it's very important that we pay attention to the environment. Because you can just spray and" (owner-manager)	Persistent	Abandoned calendar-spraying, no chemical plant growth control (low fertilizer and no growth retardant use), limited chemical pesticide use	Proactive	Integrated pest control, focus on plant health, developed their own special custom made pot soil mix, strict monitoring
Magritte	- Modern management takes care of the environment - Independent assessment of environmental impact - Anticipating regulation - Attractiveness of newness	Envisioned future	"I also think there's a future for ornamental horticulture. And also how, in the future, ornamental horticulture will deal with the things that are jumping towards it. The fact that we're there is not because of nothing. () Still trying to secure that there will be some kind of a future in Belgium.(owner/manager)	Persistent	Abandoned calendar -spraying, limited chemical pesticide use	Proactive	Monitoring-based spraying, use integrated pest control and have pushed it to test its limits, use of cocodisks to replace herbicides, strict monitoring
Ensor	- Openness to the	Envisioned future	"In the azaleasector, the climate is often to screen off	Persistent	Abandoned calendar-spraying,	Proactive	Use of less toxic, yet more expensive

	government - Independent assessment of environmental impact - Pollution is irresponsible - Anticipating regulation		as much as possible. These days, a sector that is hiding, will sooner or later end up in marginality. And that would be undeserved. I am convinced that a lot of companies, with the appropriate efforts and discipline, can get an Alabel with these new norms." (owner/manager)		no use of endosulfan (widely used cheap and effective, but toxic pesticide)		alternatives for endosulfan, monitoring- based spraying, experimenting with less pest sensitive varieties, pushing research in more environmentally friendly technologies, strict monitoring
Fabre	- Modern management takes care of the environment - Independent assessment of environmental impact - Potential future market opportunity	Envisioned future	"I think it's the way to go for everybody, it's useless to keep resisting and to say 'I am not joining that'." (owner/manager)	Persistent	Abandoned calendar-spraying, limited use of chemical pesticides, no use of toxic game repellents	Proactive	Monitoring-based spraying, use exotic machines for mechanical weeding, Tabasco as game repellant, strict monitoring
Bruegel	- Anticipating regulation - Independent assessment of environmental impact	Inevitable future	"There are also colleagues that used to be a member and that have quitted, but I am convinced. Now with our new minister of agriculture, there's going to be one, such a system of registration, but if we can show that there is already a good system, then we don't have to make a new one." (owner/manager)	Relenting	Persistent and even above average use of calendar and preventive spraying, keep using endosulfan	Reluctant	Have tried alternatives of endosulfan in combination with endosulfan

Rubens	- Anticipating regulation - Independent assessment of environmental impact - Potential future market opportunity	Inevitable future	"I did it, actually out of curiosity, to keep up. Because I expect that registration will become compulsory sooner or later and then I hope they recognize VMS for that. I thinks so. I think it's an organization that is well organized. And then we're fine! Then we're already used to it, up-to-date." (owner/manager)	Relenting	Continued use of preventive and calendar spraying, dependent on toxic growth retardants and high fertilizer use	Active	Has tried a new externally created pot soil mix, increased monitoring
Jordaens	- Group comparison - Potential future market opportunity	Potential trend	"So you read about it, The Netherlands, you go to a seminar. Yeah, you like it and you get started with it. () I thought, it might be interesting to keep track of everything and then to compare or something" (owner/manager)	Relenting	Continued use of preventive and calendar spraying, uses toxic growth retardants, little follow-up of new	Reluctant	None
Van Dyck	- Potential future market opportunity - Attractiveness of newness	Potential trend	"[We became member] to follow along, to follow the pace of the frontrunners, so to speak. (owner/manager)	Relenting	Greatly reduced pesticide use in part of production, persistent use of chemicals for part of the production	Active	Have discussed with pesticide vendor about the possibilities for alternatives, use bark in part of the production

"Potential Trend", when they believed that environmentally friendly production was a novelty that could be beneficial to the firm. In addition, we paid attention to the firm's efforts and sacrifices to bring their actions in line with their aspirations. We therefore assessed the firm's flexibility in their goals and the means to achieve these goals. The goal flexibility was considered "Persistent" when the firm followed through on its goals in a principled and obstinate manner. Goal flexibility was considered "Relenting" when the firm dropped its objectives as soon as hurdles or difficulties were experienced. We assessed means flexibility as "Proactive" when the firm proactively looked for or developed new practices themselves and tried alternatives when they were presented to them; "Active" when they mostly tried alternative practices presented to them, or "Reluctant", when they were conservative in their practices.

By further exploring the construct of "focused adaptability", we found that it comprised a flexibility in the means how the firm achieved its objectives, but a resilient perseverance to achieve the goal of reducing the impact on the environment. Interestingly, firms that combined such means flexibility with goal inflexibility had theorized VMS as an idealized and envisioned future. All successful firms theorized VMS membership as part of a desired and envisioned future, were inflexible about their objectives, but flexible in the means to achieve them. Although nearly all firms were interested in the independent assessment service that the VMS system provided, the successful firms attached a higher goal to VMS. In fact, they considered the traditional production methods as outdated and had a strong desire that the entire sector, not just their own firm, would engage in more modern and socially legitimate production methods. For all four successful firms, VMS was an intrinsic and necessary element in that endeavour. Accordingly, they persistently refrained from environmentally polluting practices in line with their objectives and were either proactively engaged in a continuous active search for alternative production methods or experimenting with new practices when they were presented to them.

An interesting comparison is the difference in behaviour between Ensor and Bruegel. Both companies grow the same plants and face the same type of pest risks. Both firms differ in particular in their approach of dealing with aphid infestations. The general practice in the sector is to use Endosulfan, a very effective, cheap, yet very toxic product that results in low VMS scores or even withdrawal of a firm's label. A comparison of both firms shows how the approach towards VMS and the use of Endosulfan is very different. To Ensor, VMS was part of an envisioned future in which the sector would become more transparent to their various stakeholders, and to the government in particular:

"I also want to show the government, because we're seen a bit by the world as 'those poison sprayers, look at them again, how it stinks here'; Look! This is what I'm using, all registered, all official things, sometimes toxic, others less. I've got an A, for example, in VMS, because I comply with those things. I believe in it." (owner-manager Ensor)

Ensor also showed persistent goal inflexibility and proactive means flexibility. Given that the use of Endosulfan would result in a lower VMS score, he stopped using the product despite the substantial benefits in terms of cost and labour:

"Use endosulfan once a year or three to four other products? I use the three or four other ones, which costs me more. But I've chosen for the system, so I stick to it." (owner-manager Ensor)

As a result, he was described as one of only three people in the entire industry that did not use Endosulfan and used a combination of intensive crop monitoring, with a number of alternative, but more expensive products. Although even experts reported the risks of these practices in terms of plant quality deterioration, Ensor pushed the limits of what was possible and explained his success as follows:

"I began dealing with pesticides a lot more consciously now. Sometimes in a very extreme way, that I wait too long to spray, (...) until I get an attack from something (...) but I think it's important."

In contrast, Bruegel's VMS membership reflected the anticipation of an inevitable future in which registration of fertilizer and pesticides would be made compulsory. "Now with our new minister of agriculture, I'm sure it's going to happen one day, such a [compulsory] system of registration". In the event of this happening, he hoped that VMS would be recognized as a legitimate registration system. Yet, Bruegel's owner-manager was described as very risk-averse and reluctant to reduce the traditional practices of preventive calendar-based pesticide spraying, including Endosulfan, out of fear for having quality losses or plant damage. Whereas Ensor involved his independent advisor in the flexible improvement of his practices, Bruegel's advisor reported a far more conservative and inflexible approach towards production methods. "I have to say that he sprays relatively more than I let other businesses do, also in Azalea. The question mostly comes from him." (independent advisor of Bruegel) As a result of this inflexibility in adopting new means to achieve a high VMS score, he had to compromise his goal of lowering pesticide use and of achieving an A score in the VMS system. Recurring in the successful cases was a similar perseverance to question the taken-for-granted and to find innovative solutions to their problems. Taken together, we propose:

Proposition 2a: Small business owner-managers who theorize institutionally non-conforming practices as part of an envisioned future will develop the means flexibility to adapt their practices in a way that enables them to persistently realize their non-conformist objectives.

Proposition 2b: Small business owner-managers who theorize institutionally non-conforming practices as part of an inevitable future or a potential trend will relent their non-conformist objectives to continue conforming practices.

Why does the framing of VMS as an envisioned future, and the resulting combination of goal inflexibility with means flexibility increase the ability of small businesses to successfully engage in non-conformity? First, by framing VMS within a future perspective that was part of their vision or desire, the owner-managers seemed impelled to following through their engagement with VMS. As the owner/manager of Panamarenko stated, "passion is the key word for those who want to go for the non-conventional", or like the owner/manager of Ensor expressed it:

"It's like quitting smoking. You have to be conscious first that you really want to quit smoking. If you say 'yeah, I'd better quit', yet are not really conscious of it, then it's just not going to work."

Recent studies in psychology have shown that motivations which are framed as "ideals" induce a particular disposition in individuals which is called a "promotion" focus (Higgins, 1998; Liberman, Idson, Camacho, & Higgins, 1999). Within regulatory focus theory (Crowe & Higgins, 1997; Higgins, 1998), such a promotion focus induces a need among individuals to accomplish an idealized and desired state. Interestingly, experiments have shown that people with such a promotion focus will be more willing to abandon practices-inuse and to switch to new ones (Liberman et al., 1999; Brockner, Higgins, & Low, 2004). In other words, by theorizing the proactive reduction of environmental impact as part of an idealized state, VMS induced a promotion focus among the successful firms, which enabled them to really engage in the institutional non-conformity that achieving a high VMS score required. In contrast, regulatory focus theory states that motivations which are framed as "oughts" induce a "prevention" focus. Such prevention-focused individuals are driven by security and safety to realize their duties and obligations (Higgins, 1998), and are less likely to abandon safe and secure known practices. As such, the theorizing of VMS as an inevitable future or a potential trend the firm "ought" to follow induced a prevention focus among the unsuccessful firms which made them unable to really follow through on the institutional nonconformity that achieving a high VMS score required.

Secondly, besides the effect of the institutional theorizing on the disposition of the owner-manager, the flexibility of the owner-manager to consider alternative solutions in the face of institutional pressures may indicate the presence of bricolage capabilities in the firm. Bricolage is the process by which a person is "making do by applying combinations of the resources at hand to new problems and opportunities" (Baker & Nelson, 2005: 333). In their summary of the bricolage literature, Baker and Nelson found that a bricoleur is characterized by "a bias toward action and active engagement with problems or opportunities, rather than lingering over questions of whether a workable outcome can be created from what is at hand." (Baker & Nelson, 2005: 333), and that "bricolage typically appeared to involve a general awareness of existing practices and norms and a conscious willingness to abrogate them." (Baker & Nelson, 2005: 342). A commitment to question the taken-for-granted assumptions and a belief that one's goals can be realized through the creative recombination of resources inside or outside the firm is central to the notion of bricolage. The owner/manager of Fabre reveals a striking example of bricolage in the way they dealt with game damage in their plants.

"It sounds a bit stupid maybe, but game repellent, you know that right, plants are sometimes eaten by rabbits and all. Others will then spray with a product that is in fact totally forbidden or doesn't look red [VMS indication for high toxicity], but purple of toxicity. And what do we spray our fruit trees with against game? Tabasco! Everybody laughs at you, you know, but it does give you the results, it's environmentally friendly and it doesn't cost you anything! It's just, when a rabbit tastes it, you know yourself that it's very hot. And what we do is adding a product that makes it stick to the leaves and the little trees." (owner/manager Fabre)

Taken together, the goal inflexibility and means flexibility fit the description of bricolage as Baker and Nelson found in their own research: "a conscious and frequently wilful tendency for firms in our sample to disregard the limitations of commonly accepted definitions of material inputs, practices, and definitions and standards, insisting instead on trying out solutions, observing, and dealing with the results." (Baker & Nelson, 2005: 333).

Overall, our findings indicate that the perseverance that results from theorizing the institutional non-conformity as a desired future was an important predictor for successful institutional non-conformity in the industry. As such, our findings may shed a new light on earlier studies where institutional non-conformity was the result of institutions constraining a firm's access to necessary resources (Leblebici et al., 1991; Sherer & Lee, 2002). Based on our findings, we would argue that firms that successful firms theorized an alternative future in which these constraints were absent. Accordingly, they were driven to accomplish their

objectives and flexibly look for emerging solutions to their resource scarcities. However, whereas the large law firms in Sherer and Lee's (2002) could subsequently diminish the legitimacy risk of their deviant practices by using the clout that came with their larger size, this was impossible among our small firms. The successful firms nevertheless possessed other organizational characteristics that helped to manage the risks of their institutional non-conformity, which are the focus of the next section.

7.4.3. Organizational Conduciveness to Institutional Non-conformity

Even though the former two paragraphs uncovered how the firm's embeddness and perseverance enabled it to detach from institutionalized practices and persistently find solutions that enabled them to follow through on their objectives, the question remains how the firms were able to deal with the risks in terms of lower certainty and legitimacy that generally come with such deviant behavior. In particular, we wondered why they were so insensitive to these risks and were even able to develop "institutional agency" to express their discontent with the current institutions. To this purpose, we honed in on how the institutional non-conformity related to other domains of the firm's business model and how sensitive it was to the prevailing institutional practices.

Given that institutional non-conformity incurs risks of reduced access to resources (Zimmerman & Zeitz, 2002) or even decreasing financial returns (Haveman, 1993b; Chen & Hambrick, 1995; Miller & Chen, 1996; Deephouse, 1999; Norman et al., 2007), we expected a small business's non-conformity to be a singular and exceptional endeavor. Our data suggest, however, that the institutional non-conformity with regards to green production methods was often not the only part of the business model that deviated from prevailing practice in the industry. A business model reflects how the firm will create value in the market through "an interrelated set of decision variables in the areas of venture strategy, architecture, and economics" (Morris, Schindehutte, & Allen, 2005). Venture strategy refers to the overall direction in the firm's market positioning, the architecture includes the internal processes and decision of infrastructure that enables the firm to create value, and the economic model is the firm's logic of profit generation. By comparing the firms' business models, we found that the successful firms were not only different in terms of their proactive environmental strategies, but that they also deviated in other dimensions of the business model. Furthermore, we found that most of the firms had a track-record of non-conformist behavior, which seemed to desensitize them from the institutional risks as well.

Table 5 highlights the differences between the firm's business models, their deviance from prevailing business models, and their conduciveness to high VMS performance. We assessed multiple non-conformity by probing the data for features in the business model that indicated firm deviation from practices other than green production. A business model was categorized as "Radically different" when it involved a strategy, architecture or economic model unique to the sector and in ways that questioned other institutional forces besides green production; "Moderately different" when the strategy, architecture or economic model deviated from the general practice in the sector, but other firms with similar business models could be found; and "Conform" when business model followed standard practice as defined by established institutional norms. We determined the conduciveness of a business model as "Conducive", when the business model stimulated green production methods, "Neutral", when the business model did not stimulate or discourage green production methods, and "Incompatible", when the business model inhibited green production methods.

As indicated in Table 7.3, successful non-conformity was associated with a business model that differed, at least moderately, in other perspectives than merely the proactive environmental strategy. However, the case of Van Dyck shows that this was not enough: the entire business model also needed to be compatible with the institutional non-conformity. Whereas Van Dyck's profit generation logic through a cost leadership strategy and technological leadership deviated from most other arboriculture firms, their large scale and cost leadership was incompatible with the requirements for achieving higher scores in VMS. For example, for their large scale operations, they needed large amounts of land, which was not easily available in their surroundings. As a result, they increased the number of plants on the land and continued working on their own overexploited lands. Since the risk of pest infestation increases with the exploitation of land, they needed to spray pesticides more frequently. Given the high density of plants, they were also unable to use mechanical weeding and were therefore obliged to toxic chemical pesticides for pest control. Furthermore, the owner-manager of Van Dyck ridiculed the monitoring needs associated with VMS by saying that "we're growers, not accountants!" In contrast, although growing similar plants and working in almost the same village, the owner-managers of Fabre had a business model that was far more conducive to achieving high VMS scores. Although they equally focused on eradicating costs in their business, they used a series of monitoring and measurement techniques to this purpose, including VMS. In fact, they found VMS to be "the most important source of information we have now". In addition, they possessed enough land on their own, which allowed some parts to lay fallow and to reduce the risk of pest infestation.

Table 7.3 – Organizational Conduciveness to Institutional Non-conformity

Company	Business model	Conformity	Conducive- ness	Example
Panamarenko	 Combine niche strategy with differentiation strategy. Niche involves on-site selling to hobbyists and plant-lovers with broad assortment, hobbyist courses and exhibitions and a generally inviting environment for enjoying plants and nature. Differentiation strategy is based on the production of a rare and difficult plant. Unique plant varieties are obtained through hobbyists, plant-lovers and their own R&D Experience little competition in their niche 	Radically different	Conducive	 Polluting production methods would seem illogical for customers Safety of customers wandering in greenhouses conflicts with pesticide use Local sales are not required to be pest-free Less growth retardant need due to focus on plant strength, rather than speedy growth Want strict fact-based monitoring of plant health
Magritte	 Niche strategy based on labour intensive production of specialized base material for international larger customers Have created their own plant varieties Best price/quality ratio in the market Experience little competition in their niche 	Moderately different	Neutral	 Wanted to have organic pest control anyway Do as they please in their niche with stable customer base Want strict fact-based monitoring of plant health Modern infrastructure reduces pest infestation
Ensor	 Combines differentiation strategy (50%) with a niche strategy (50%) Top quality Azalea producer ("top 5 in the industry"), sells to traders in the mainstream competitive industry Niche involves production of limitedly licensed innovative Azalea variety within joint venture with 5 traders and 1 other production company. VMS-A label is required for the joint venture production companies. The plants are sold at premium prices to a niche of specific top quality small retail shops. No competition in this niche 	Radically different	Conducive	 VMS-A is required in joint venture they helped to set up Want strict fact-based monitoring of plant health Modern infrastructure reduces pest infestation
Fabre	- Differentiation strategy through their vertical	Moderately different	Neutral	- Want strict fact-based monitoring of plant

	 integration: are both producers and traders Are very focussed on eradicating costs through incessant monitoring Have their own land for their own production, rest is bought Focus on more labour intensive crops with added value Experience increasing competition 			health - Aim for cost reductions through pesticide use reductions - Have land they can use as fallow, to restore soil condition, leading to reduced pest infestation
Bruegel	 Differentiation strategy by being the first in the season with Calluna and producing medium quality Azalea in pyramid and tree shapes which are sold to mainstream traders No clear distinction from competitors, experience fierce competition 	Conform	Incompatible	 Outdated infrastructure results in increased pest infestation VMS-A increases costs and risk of quality deterioration
Rubens	 Differentiation strategy involving a great variety of plants with high quality Very tough competition in the industry 	Conform	Incompatible	 VMS-A incurs risk of quality deterioration Business model is based on speedy plant growth (to maximize yield) and visual quality, requiring high levels of toxic products Structural characteristics of the firm are suboptimal, taking up all extra investment and time to get the firm up-to-date
Jordaens	 Try to combine differentiation and cost leadership strategy, but strategy is lacking Produce Chrysanths and pot plants, sold to traders Very tough competition in the industry 	Conform	Incompatible	 VMS-A incurs costs and risk of quality deterioration Monitoring takes too much time
Van Dyck	 Have a cost leadership strategy, involving the production of roses, buxus and taxus in large volumes to retailers Need to rent land for large volume production Very tough competition in the industry 	Moderately different	Incompatible	 VMS-A incurs costs and risk of quality deterioration Monitoring takes too much time: "we're not accountants, we're growers" Have to use overexploited land that yields easy pest infestation Bulk production makes it very difficult to use environmentally friendly products

The case of Ensor presents a particularly telling example of how the high VMS-score resulted from a radically different business model that was also conducive to green production. At the time VMS was launched, Ensor was involved in a radically innovative project in the Azalea sector to set up a joint venture together with 2 growers, 5 international traders and an R&D/production advisor. The unique economic model of the joint venture was to market a license-protected and unique Azalea variety that was to be grown only by topquality growers and then sold at premium prices in limited amounts to a niche of carefully chosen retail shops. As such, the business model itself presented a radical departure in multiple perspectives. First, it deviated from the usual production that differentiates only in plant size, shape or color and caters to bulk trade markets. Second, it involved a collaboration with trade companies that was deemed impossible in the sector. Third, the mission statement of the joint venture reads "only top varieties that can stand the severest quality controls and that are grown with respect for the environment are granted the [top quality label]". In the process of setting up this radically innovative joint venture, the individual members had also decided that a VMS-A rating was required for the joint venture membership. Ensor's business model was thus in fact more conducive to green production, than it was to conforming to the institutional pressures in the sector. As a result, Ensor bore no risks with achieving a high score in VMS.

In contrast, the business models of Bruegel, Rubens, Jordaens and Van Dyck were incompatible with obtaining a high score in the VMS. Neither of them had a mechanism in place that would return a value for their efforts in VMS, either internally (cost reduction or control perception) or externally (commercially). The owner-manager of Jordaens, for example, had a rather intuitive and gut-feel type of strategy, and generally lacked the time to consider VMS related issues in his decision-making. He considered the registration a time consuming practice that took too much effort besides his everyday traditional practice, which made it difficult for him to adopt the monitoring and requirements of VMS. As a consequence of the time requirements, he also asked his pesticide vendor for products that had quick and lasting results:

"when I'm really in the busy season, then I'll just take what I'm used to spray and if that is an orange product [indication for medium toxicity in VMS] then, well yeah...".

In addition, he had outsourced part of his crop control to an external firm, that didn't want to disclose what products were used for crop control. Given the time constraints and the lack of

financial compensation for green production, the efforts needed for achieving a high VMS score were in no way beneficial to Jordaens. As a consequence, we propose:

Proposition 3a: Small businesses that have a business model that is conducive or neutral to institutional non-conformity will be more successful in institutional non-conformity than those small businesses that do not.

Proposition 3b: Small businesses that engage in institutional non-conformity in one domain of their business model will more likely have a business model that is conducive to this non-conformity when their business model is non-conforming in other domains as well.

Why are multiple non-conformity and business model conduciveness important for successful institutional non-conformity? First, one reason may be that the institutionalized practices are embedded in more than just the practice, but have interdependent effects in the entire business model. Indeed, it is part of the particular nature of a business model that its various domains are *interrelated* (Morris et al., 2005). As a result, the isomorphism is active not only at the level of particular practices or strategies, but also results in certain expectations that relate to the profit generation logic behind them and the particular architecture that supports it. Deviating in one domain of the business model is therefore almost impossible without also changing part of the business model of the firm. The Grameen Bank could only successfully realize its elusive objective to lend money to the poor in Bangladesh because it adopted an entirely different business model of "banking". Similarly, Virgin Airlines could only provide cheaper airline tickets to customers by rethinking the business model of how an airline makes money.

Second, the effect of engaging in institutional non-conformity in multiple instances may make the owner-manager accustomed to resisting pressures for conformity. Instead of worrying whether non-conformity will result in a reduction of legitimacy, multiple institutional non-conformity acts as a mechanism of learning-by-doing. Each of the four successful companies seemed to be aware of their multiple non-conformity. "I'm sort of maverick in the sector", "I always get into trouble", "maybe they think I'm strange" was an often heard comment in the interviews with the successful companies. This even extended beyond behavior related to the firm. Magritte's owner-manager, for example, had written a column in the weekly farmer's union magazine, in which he came out and openly said he was gay. Within the highly traditional and conservative farmers' environment, this reflected considerable institutional non-conformity.

Building on these explanations, we introduce the concept of "institutional immunity" as a facilitating mechanism for successful institutional non-conformity. Institutional immunity is the quality of an organization to challenge institutional pressures, as a result of its multiple exposures to institutional non-conformity or a business model which is more conducive to non-conformity than to conformity. Similar to the immunity to disease, this may or may not be the result of earlier exposures to non-conformity. Both the business model conduciveness and the multiple institutional non-conformity may make the owner-managers immune to the pressures for conformity.

7.5. Discussion

We started our introduction by highlighting the growing phenomenon of small businesses resisting institutional pressures for conformity despite predictions of existing literature that this jeopardizes the legitimacy of the firm. Using an in-depth investigation of 8 small businesses in the ornamental horticulture industry in Belgium, we identified a number of factors that offer a more refined explanation of small business non-conformity. More specifically, we highlight the importance of occupying multiple roles and gaining exposure to alternative institutional logics. Doing so places the owner manager in a frame of mind that begins to recognize that there are alternative approaches through which firms in the ornamental horticulture sector could operate. But this needed to be combined with a degree of persistence resulting from owner-managers theorizing the proactive reduction of their environmental impact as part of an envisioned future. As a result, successful firms exhibited the persistence to uncompromisingly realize this aspiration by remaining flexible to the means how they did this. A persistent approach to the institutional non-conformity was integral to exercising the alternative logics presented to the owner-founder. Finally, owner-managers needed business models that were at odds with standardized business practice in multiple perspectives, and also aligned with the expectations of VMS. This finding implies that, while cognitive awareness of alternative logics and effort in the form of perseverance are pivotal owner-manager characteristics, full institutional non-conformance hinges on firm level structure and culture immune to the risks of negating existing institutions. In addition, it lays bare the formidable role that the individual owner-manager plays in this respect. Since the owner-manager not only bares the risk, but also all the responsibility for his company, he or she has the latitude to shape the business according to his or her own aspirations in return. While a process model is beyond the scope of this paper, it is clear from the data that firms must engage in a radical strategic reorientation (Tushman & Romanelli, 1984) whereby their

business model provides the stimulant and legitimacy to follow through on the individual owner's cognitive and personal ambitions. Together, these conditions make the "foolish" act of breaking out of the institutional structure of the industry a viable trajectory for small businesses. These findings have important implications for institutional theory, the resource-based view of the firm and the organizations and the natural environment literature.

7.5.1. Institutional theory

As mentioned before, there has been disagreement about the extent to which organizations are able to go against the very institutions that grant them legitimacy. With our findings, we contribute to the notion that, under certain conditions, organizations are able to deviate from the pressures for isomorphism in their organizational field. However, whereas empirical investigations of Oliver's (1991) model of responsiveness to institutional processes have assumed that conformance to social pressures is an inevitable task to maintain legitimacy (Goodstein, 1994; Etherington & Richardson, 1994; Ingram & Simons, 1995; Clemens & Douglas, 2005), our study highlights that normative and coercive social pressures may run counter to even stronger cognitive pressures. As a result, organizational strategies may be acquiescent to normative pressures on one side, but defiant or avoiding on another.

Our study also sheds light on the internal histories and features that enable firms to achieve success once a strategy of institutional non-conformity is chosen or emerges. Whereas most of the literature has focused on the antecedents to institutional non-conformity (Oliver, 1991; Seo & Creed, 2002; Greenwood et al., 2002; Greenwood & Suddaby, 2006) and its implications on organizational performance (Baum & Oliver, 1991; Haveman, 1993b; Miller & Chen, 1996; Kraatz & Zajac, 1996; D'Aunno, Succi, & Alexander, 2000; Durand, Rao, & Monin, 2007), this study adds to the more recent work that is focused on the factors that moderate and mediate the relationship between institutional non-conformity and organizational performance (Rao et al., 2005). However, our study is positioned beside an alternative stream within institutional theory that has investigated the processes of institution creation in institutional voids (Aldrich & Fiol, 1994; Maguire et al., 2004). Since the deviation from institutional logics may hold the seeds for the creation of new institutional arrangements, future work may investigate how the processes of institutional non-conformity can lead to or are akin to the processes at work in institution creation. The findings of such studies may be of particular relevance for social enterprises in developing countries. Deviating from corrupted and illegal practices may require the development of a new institutional fabric to support the survival of the social enterprise.

7.5.2. Resource-based view of the firm

The resource-based view of the firm states that organizations achieve superior performance by exploiting complex resources and capabilities that are not easily duplicated by competitors, provided that they can produce value for the organization (Wernerfelt, 1984; Dierickx & Cool, 1989; Barney, 1991; Amit & Schoemaker, 1993). Such resources and capabilities are characterized especially by their limited availability or the difficult and ambiguous processes of acquiring them (Dierickx & Cool, 1989; Barney, 1991). Our findings have pointed to a number of such capabilities that have been previously identified as important predictors of competitive advantage. For example, absorptive capacity depends on the path-dependent acquiescence of knowledge, and is an important source of future opportunity recognition (Cohen & Levinthal, 1990; Zahra & George, 2002). The bridging of structural holes allows firms to acquire preferential access to rare and new information, resources and capabilities (Burt, 1992). Bricolage capabilities facilitate the creative recombination of available resources in the face of resource scarcity (Ward, 2004; Baker & Nelson, 2005). The resulting bootstrapping has been identified before as a major asset for the resource constraints small businesses are often confronted with (Winborg & Landstrom, 2001; Ebben & Johnson, 2006). Although the relationship between regulatory focus and entrepreneurial success remains unclear, it has been suggested that a promotion focus aids small business owner managers in the generation of novel ideas and opportunity recognition (Brockner et al., 2004). Finally, as a result of the demonstrated path-dependency of multiple non-conformity, and the success it seems to accrue to institutional non-conformity among the viable and more than successful firms in our sample, one can imagine that small firms may also benefit from institutional immunity. Given that it is in the nature of proactive firms to stay in the uncertain and risky space ahead of the curve, firms may thus avail of the experience in dealing with this uncertainty in different arenas. The findings presented in this study not only shed further light on how each of these valuable resources can be acquired, yet may also point institution challengers towards ways to capitalize on the byproducts of their followed strategies.

7.5.3. Organizations and the natural environment

Finally, our findings also have implications for the field of organizations and the natural environment. Specifically, it follows the criticism on the "evangelic" nature of much theoretical and empirical work on proactive environmental strategies (Newton & Harte, 1997) that is based on the "myth" that external stakeholder sensitivity is all pervasive and acts upon

all firms (Aragon-Correa & Rubio-Lopez, 2007). Our research shows that instead of institutional pressures driving firms towards more environmental proactivity, the dominant logic was in fact counter to such strategies. In addition, the general market conditions were not in favor of green products either. Given that both stakeholder pressures (Henriques & Sadorsky, 1996; Fineman & Clarke, 1996; Henriques & Sadorsky, 1999) and economic opportunities (Bansal & Roth, 2000; Banerjee, 2001; Bansal, 2005) are the main initial drivers for early environmental strategy adoption, our findings are an important account of organizational practices when neither of these external conditions are present. More importantly, they invite the organizations and the natural environment literature to look at the institutional context from a more dynamic perspective and to look at the capabilities that organizations develop to bring the external environment in line with their own aspirations.

One reason why these findings have emerged so strongly, is that up until now, there has been very little research that has examined proactive environmental strategies of small business (Hillary, 2000a; del Brío & Junquera, 2003; McKeiver & Gadenne, 2005; Clemens, 2006; Aragon-Correa et al., 2008). As such, our findings draw attention to the different microprocesses that may be involved in small business proactive environmental strategies. Small businesses have often been associated with lower visibility and lower stakeholder scrutiny (Greening & Gray, 1994; Meznar & Nigh, 1995; Bowen, 2000). As a result, the within-industry normative and cognitive pressures may be far more important than has been investigated to date. Whereas a capability of stakeholder integration may therefore be vital in larger firms, the development of practices of institutional non-conformity may be more important in small business contexts.

We also contribute to the ongoing debate about whether the perception of the natural environment as a threat or an opportunity facilitates the adoption of a proactive environmental strategy (Sharma, 2000; Andersson & Bateman, 2000). Although all 8 firms in our sample had proactive environmental strategies, both threat-based and opportunity-based reasons were underlying their motivation. However, our findings show that a promotion focus was necessary to persistently follow through on their strategy and to develop the flexibility in finding the appropriate means for success.

7.6. Limitations and research implications

Despite our vigilant care on the rigor of the research process, our findings are not without limitations. Given that we chose to limit our study to one single industry, our findings may lack the power to be generally applicable to small businesses in general. One avenue for

future research may be to test whether our propositions hold in the entire sector, as well as in different contexts and organizational fields. However, the small business literature has identified the disparity of research outcomes as an inherent feature of its domain (d'Amboise & Muldowney, 1988; Curran & Blackburn, 2001) and has therefore asked for more contextualized research in theory building (Zahra, 2007). In this regard, we determine a number of contextual factors as important to our findings, opening up opportunities for related research. First, the ornamental horticulture sector in Belgium is experiencing high levels of competition and even hostility, and has a very traditional population. It may be interesting to see whether the same capabilities we identified will emerge in sectors where the business-asusual is in fact very profitable and does have interesting future perspectives. Second, the institutional logics that were surrounding the Belgian ornamental horticulture sector were able to provide the necessary tools that the proactive businesses were looking for. It might have been completely different if the institutional context surrounding the organizational field was less munificent in solutions or had similar institutional logics. In such contexts, the importance of collaborative efforts to create inexistent resources may become more important, similar to the creation of new markets or institutions (Aldrich & Fiol, 1994; Lounsbury & Glynn, 2001; Greenwood et al., 2002; Maguire et al., 2004). Third, the institutional nonconformity that was used as a context here, involves mostly normative and cognitive pressures for non-conformity. This means that a deviance of the institutional requirements does not lead to illegal behavior as would be the case with institutional non-conformity against regulative (legal) pressures. Future research may want to investigate whether legal rule-bending as a result of an envisioned future may require different capabilities than the ones identified in the present study.

PART IV

Chapter 8

Concluding Remarks

8. Concluding Remarks

Small businesses attract a growing interest from policy makers. Unfortunately, their beneficial role in society as the engine of economic growth and employment creation seems to come with substantial impact on the natural environment. In this dissertation, I therefore investigated how small businesses can successfully realize strategies that go beyond legal requirements in reducing their impact on the natural environment. Based on the finding that their small scale induces constraints that inhibit small firms to engage in PES (chapter 3 and chapter 4), I set out to assess how small businesses can overcome these constraining factors. To this purpose, chapters 6 and 7 report the findings of an empirical study in the ornamental horticulture industry that combine both resource-based and institutional theoretical lenses in the processes that are involved to this purpose.

In this concluding chapter, I discuss the conclusions and limitations of the research. I will present this discussion in four sections. First, I offer a brief synthesis of the answers that this dissertation provided to the research questions identified in chapter 3. Second, I discuss the overall theoretical implications of this dissertation. Third, I discuss the methodological and theoretical limitations that derive from the choices made during the research process. Finally, I close this dissertation with avenues for future research and some brief concluding remarks.

8.1. Conclusions

8.1.1. RQ1: What is the impact of firm size on the adoption of PES in smaller firms?

The literature reviewed in chapter 3 yielded an inconsistent picture on the impact of small scale on the willingness and ability of small firms to engage in PES. Whereas positive correlations between firm size and PES are almost consistently found on the one hand, anecdotal case studies demonstrating small businesses socially responsive strategies are reported on the other. This dissertation has provided new insights that clarify this inconsistency in two perspectives: (1) an in-depth literature review, and (2) a rich account of the phenomenon at work in an empirical setting.

First, in order to resolve the inconsistent findings on the impact of small scale in the PES literature, chapter 4 was dedicated to a further fine-grained exploration of extant findings in the literature. Given the scarcity of studies on small business PES, we decided to use a broader, though still relatively limited, literature base and draw on contributions on small

business social responsibility in general. By distinguishing between the impact of firm size on (1) issue, (2) personal, (3) organizational and (4) context characteristics, three important conclusions could be made.

- 1. The lack of proactive environmental (and social) strategies among small businesses is not the result of bad attitudes. Rather, the reduced visibility and perceived impact, and the resulting lack of scrutiny, makes that small business owner-managers simply do not recognize environmental issues. As a result, more attention is given to responsibilities towards employees and colleagues, with whom they encounter most social issues and responsibility dilemmas.
- 2. In addition to the lack of recognition, a lack of time, knowledge, financial resources and power stands between a small firm's positive attitudes and the realization of proactive environmental (and social) strategies. However, the literature also hinted at a number of factors that could mitigate these constraints and which were further empirically explored in this dissertation. More specifically, it was argued that a more dynamic and systemic view of small businesses could shed light on the capabilities and contextual factors that enable small firms to adopt proactive social and environmental strategies.
- 3. Finally, more than larger firms will small firms depend on a supportive institutional and business environment. A culture of shared responsibility, installed by professional associations, peers, governments and partners in the value chain, and an abundant availability of resources in the environment of the firm will facilitate the realization of proactive environmental and social strategies.

Second, chapters 6 and 7 were specifically designed to provide a richer, dynamic and systemic exploration of small business social responsibility, or more specifically proactive environmental strategy. Our findings indicate that a small business context provides constraints, but that they can also be managed. Whereas all firms in our empirical study in the Belgian ornamental horticulture industry had the intentions to go beyond legal expectations in reducing their impact on the natural environment, we found that those firms that had been able to deal with their specific constraints had also been able to realize their PES. In this respect, the impact of small firm size can be reinterpreted as a set of contingency factors that a firm has to deal with in order to realize its objectives. Furthermore, the findings led us to

identify the capabilities that were needed to this purpose, which was necessary to answer the remaining research questions in this dissertation.

8.1.2. RQ2: What are the resources and capabilities associated with successful PES execution in small businesses?

Building on the suggestions of chapter 4, we drew on an empirical study of 8 case studies in the Belgian ornamental horticulture sector that were member of VMS, a voluntary member organization of firms with proactive environmental intentions, to identify the capabilities that differentiated between firms that had been successful and unsuccessful in realizing these intentions. Since VMS members receive ratings of environmental performance, we were able to compare high performing with low performing firms. First of all, our findings reinforced the theoretical importance of internal resource capital, external resource capital and institutional capital as enabling factors for realizing PES. Interestingly, however, none of these facilitating factors were generally present in the ornamental horticulture industry, and realizing a PES was thus "against all odds".

We found that a successful realization of the firm's environmental intentions depended on the ability of the firm to create a micro-environment for the firm that mimicked the theoretical conditions favouring PES. More specifically, we identified munification and organicity as the two interacting and composite dynamic capabilities that enabled the firm to change its internal and external resource base. Munification entailed the building and attracting of networks rich with existing complementary resources and capabilities; collaborating for the joint development of lacking external resource and institutional capital; and the institutional agency to create an institutionally enabling context. Organicity consisted of bootstrapping, focused adaptability and disciplined scrutiny, together increasing the internal resource capital in the firm. In addition, we also found that both dynamic capabilities interacted with each other and further reinforced the potential of the firm to realize its objectives. The presence of organicity increased the effectiveness of munification in the firm, while the external resource conditions further increased the effectiveness of organicity in building internal resource capital.

8.1.3. RQ3: How can small business be successful in PES when the (institutional) conditions are against having one?

Given that organicity and munification helped the firm to realize its proactive environmental intentions when not only the institutional but all conditions were set against having one, chapter 6 helped to explain the third research question as well. Yet one striking

observation in chapter 6 was that the firm's PES went against institutionalized practices and prescriptions in their industry. Whereas PES are generally seen as an act of conforming to institutional pressures, the dominant institutional pressures in our study were strongly discouraging PES. As a result, achieving high VMS scores reflected an act of institutional non-conformity. Since current explanations in institutional theory offer contradictory explanations about how institutional non-conformity was possible in the small firms of our study, we therefore further explored how of the capabilities as identified in chapter 6 helped to explain institutional non-conformity in small business contexts. As such, chapter 7 took an institutional theoretical lens to zoom in on how small businesses can be successful in PES when the institutional conditions were against having one.

Our findings uncovered three features that distinguished between successful and unsuccessful institutional non-conformity. First, the successful firms' particular network characteristics lowered their embeddness in the organizational field. By assuming multiple roles within the organizational field and by being exposed alternative institutional logics they were able to detach from institutionalized prescriptions in the Belgian ornamental horticulture sector. Second, whereas successful firms theorized the institutional non-conformity as an envisioned future, the unsuccessful firms saw the institutional non-conformity as an inevitable future or a potential trend. Importantly, the cognitive approach of the institutional non-conformity as a desired future resulted in flexibility to adopt alternative solutions to persistently realize their aspirations. Third, the successful firms seemed "immune" to the negative effects other firms would experience with institutional non-conformity. By drawing upon a business model that was not only deviating with regards to the PES, but was non-conforming in different perspectives and in a way that was conducive to realizing a PES, they became insensitive to the uncertainty and legitimacy risks that other firms perceived.

8.2. Discussion of the findings

To what extent do the findings in this dissertation invite a reconsideration of previously accepted perspectives? Besides the theoretical reflections and contributions that were already discussed in each of the previous chapters of part III, I believe the theoretical contribution of this dissertation can be summarized around three features.

1. Advancing PES research in small businesses requires a translation of PES in its underlying processes. Although it would be unwise to ignore the compelling and consistent positive correlation between firm size and PES, the research in this dissertation warrants caution with deterministic predictions stating that PES would be

impossible in small firms. In particular, the evidence from both our literature review and empirical studies invites researchers to not just copy large business perspectives to small business PES. In order to understand the ability and inability of small business PES, it is necessary to look under the hood of PES and uncover the underlying processes that inhibit small firms from adopting them. For example, we found evidence both in the literature (Merritt, 1998; Hillary, 2000a; Worthington & Patton, 2005; Revell & Blackburn, 2007) and in our own research that, in general, small businesses experience completely different institutional influences with regards to environmental issues. A large firm, as a result of its large absolute impact on the natural environment and its greater visibility, may receive normative institutional pressures from civil society that support a proactive reduction of the environmental impact of the firm. As a result, it is no surprise that PES induced the need for integrating stakeholder perspectives in the strategy of the firm (Hart, 1995; Sharma & Vredenburg, 1998). In contrast, our review in chapter 4 demonstrated that most small firms hardly recognize issues related to the natural environment as a result of their low visibility and (perceived) impact. As a result, normative pressures and opportunities are rarely received from the market or civil society. What we found in the literature, and especially in the research presented in chapters 6 and 7, is that firms may in fact experience within-industry conservative pressures that even discourages firms to stray away from the general industry approach to the natural environment. In our research, PES were thus manifested as underlying processes of institutional non-conformity, and therefore required different capabilities to tackle the challenges this presented. This conclusion is important, since it could inspire owner-managers, business associations and governments alike to redirect their attention from vague messages and "mythical" half-truths about the business case of PES (Porter & Kramer, 2006; Aragon-Correa & Rubio-Lopez, 2007) to the actual barriers and processes that small businesses experience for realizing their already present intentions. For example, governments could focus especially on ensuring that the most *proactive* firms within an industry can be successful in their PES. If the proactive firms are successful in their endeavours, they will act as bandwagons for both other small firms in the industry mimicking leading companies (Haveman, 1993a; Aldrich & Fiol, 1994), as well as large firms that interpret the success of small firms as a reduced uncertainty for their success (Terlaak & King, 2007). However, whereas many policy initiatives hope to instigate this mimetic behavior through conveying messages about the positive consequences of

- PES, it may be more important to disclose best practices on the mitigation of constraints that small businesses may experience.
- 2. The need for combined outside-in and inside-out perspectives on proactive environmental strategies. Although my review of the strategy literature in chapter 1 advanced a view that combines both outside-in and inside-out perspectives to strategy, most of the literature on PES has focused on only one from either of these perspectives. For example, some have used only resource-based perspectives (Hart, 1995; Aragon-Correa, 1998; Sharma & Vredenburg, 1998; Sharma, 2000; Christmann, 2000), whereas others have only used an industrial organization (Porter & van der Linde, 1995a; Nehrt, 1996; Reinhardt, 1998) or institutional theory (King & Lenox, 2000; Clemens & Douglas, 2005) and stakeholder theory (Henriques & Sadorsky, 1996; Rugman & Verbeke, 1998; Henriques & Sadorsky, 1999; Buysse & Verbeke, 2003) lens. Only recently have studies begun to explore a combined inside-out and outside-in perspective on PES (Aragon-Correa & Sharma, 2003; Chan, 2005; Bansal, 2005; Sharma & Henriques, 2005). The findings in this dissertation further reconfirm the need to analyse PES from a combined inside-out and outside-in perspective, and most importantly, their interactive influence (Bansal, 2005). For example, both chapters 6 and 7 present findings that resonate well with resource-based and dynamic capability perspectives, since we found that the proficiency of firms to realize their PES depended on the dynamic capabilities they were able to develop and employ and change their resource-base according to their needs. The results in chapter 6 even demonstrated that these dynamic capabilities enabled the firm to change the external environment in such a way that it would mimic the characteristics necessary to foster their realization of PES. However, explaining how these dynamic capabilities worked required the integration of institutional theory and contingency perspectives. For example, the capabilities in the successful firms were also necessary because the environment was not conducive to the firms having a PES. As soon as the proactive environmental intentions met the contextual constraints of implementing them, the firms had to engage in the dynamic search for a fit between their aspirations, the environmental conditions and their organizational resource base. As a result, one of the conclusions of chapter 6 was that our findings reconfirmed the necessity of having the contingency factors in place that foster a PES. Taken together, both chapters 6 and 7 show how the internal and external resource-base of the firm and the institutional context interacted with each other to explain the ability of the firm to realize a PES. In

particular, chapter 7 showed how the resource base of the firm influenced the way the institutional context was experienced. The type of connections the firm had, its persistent commitment to an envisioned future, the resulting flexibility to incorporate emerging solutions, and the institutional immunity of the firm and its business model enabled it to ignore institutional boundaries other firms considered insurmountable. In sum, these findings reinforce the need for using an interactive institutional and resource-based perspective to understand PES (Bansal, 2005).

3. Obstinate commitment towards goals, flexible towards means. The view that small businesses lack the resources, time and knowledge to engage in PES is a somber one. Yet, emerging in several places in this dissertation was a feature unique to many small businesses that acts in their favour. Small firm owner-managers have the unique potential to shape their organization according to their own visions and aspirations. Since it is really their organization and since a small size allows substantial control of what happens inside it, small firms may have more potential to engage in the pathbreaking changes needed for reducing business impact on the environment. Whereas this is not a new finding (Gibb & Scott, 1985; Gibb, 2000; Curran & Blackburn, 2001), both chapters 6 and 7 shed light on the underlying processes that are involved. Firms achieving excellence in realizing their PES – despite conditions discouraging this feat – were able to do so because they visualized PES as part of a desired future and were therefore committed to accomplishing their aspirations. Furthermore, this commitment to shape the world according to their own aspirations does not restrict itself to the boundaries of their organization. In fact, where the firm's resources and sphere of influence end, and where the outside world begins, becomes a difficult question to answer. Rather, the firm integrates resources and solutions emerging from both inside and outside the firm to obstinately shape the world within its sphere of influence. Such a finding is important, as it should inform small businesses ownermanagers about how to manage the risk associated with the uncertainty of natural environmental issues. Indeed, it has been shown before that firms should be wary of proactive environmental strategies that reduce the resource flexibility of the firm (Rugman & Verbeke, 1998). Yet it is only by balancing commitment to strategic objectives with a flexibility to integrate and abandon emerging solutions in the shorter term that most firms are successful in realizing their objectives (Ghemawat & Del Sol, 1998). In particular, it requires the firm to adopt its business model to the institutional non-conformity and make it conducive to be institutionally non-conforming. Given

that business models consist of various interrelated domains, institutional nonconformity may therefore require deviating in other domains of the business model as well.

Together, the findings of this dissertation contribute to a better understanding of an underdeveloped domain of empirical inquiry: small business proactive environmental strategies. Given the formidable influence small businesses have on various domains of social life, and in particular on the natural environment, more fine-grained analyses of small firms are necessary to inform small business owner- managers, policy makers, professional associations and researchers alike on how small businesses can be better engaged in the quest for sustainable development.

8.3. Limitations

Having the goal to answer the generic question how small businesses successfully execute proactive environmental strategies, this dissertation reported a literature review and two empirical studies that drew on one empirical multi-case study database. Whereas the first empirical study explored how firms in the Belgian ornamental horticulture sector were able to execute proactive environmental strategies when the odds were against having one, the second further explored how the firms had interacted with their institutional context in particular. Despite vigilant care on the design, execution, analysis and reporting of these two empirical studies, some choices inevitably had to be made that present limitations to our research findings.

8.3.1. Methodological limitations

The quality of case study research depends on the level of richness it can bring in the account of the phenomenon of interest (Eisenhardt & Graebner, 2007; Siggelkow, 2007; Weick, 2007). As such, case studies ideally assure a triangulation of multiple data sources and perspectives of the case (Yin, 2003). Earlier studies have therefore engaged in a process of combining interviews with the firm's CEOs, board members, employees and external stakeholders knowledgeable about the firm or the phenomenon of interest (Eisenhardt, 1989b; Isabella, 1990; Gilbert, 2005; Eisenhardt & Graebner, 2007; Zott & Huy, 2007). In our cases, however, sources for data triangulation were very limited. First, often only the owner-manager was aware of the firm's strategic decisions with regards to the natural environment. Employees are frequently low-skilled laborers that are not included in the strategy making

process. Second, little or no valuable archival material could be found that would further be useful for understanding the firm's PES. Third, the profession of ornamental horticulture is rather solitary. As a result, the only constituents that are knowledgeable about a firm's strategies and practices would be the independent advisors, supplier advisors and input vendors, government advisors that have frequent contacts with firms and, in the case of VMS members, the VMS directors. In order to maximize the number of perspectives and data sources of the firm, we employed four strategies. First, whenever archival material was necessary through internet or professional magazines, we included them in our case study analyses. Furthermore, when more people were in fact knowledgeable about a firm, we did additional interviews as long as this was needed to reach theoretical saturation. Second, we interviewed the owner-managers twice about their firms, with at least one year between each interview. Whereas we could have used these interviews for a longitudinal analysis of the cases, we maintained focus during the second interview on the time of the first interview. This process allowed not only to increase the depth of the data collected (by adding additional and new details that emerged on the discussions of the first interview), but also to assess whether the stories presented by the owner-managers had remained consistent over time. As a third means to increase depth of the data, I deliberately ended the formal part of the interview before really stopping to ask questions. During this time, the firms often gave additional impressions that had been left out of the interview, gave reflections on my approach or asked about other firms. Since there is a lot of information "out there" about the firm, these additional 15 minutes often yielded the most interesting and unexpected leads for new reflections about the data and the interview.

8.3.2. Contextual limitations

The empirical research of this dissertation took place in the confined setting of the Belgian ornamental horticulture, and reflects the dealings of a small sample of firms active in this industry prior to the winter of 2005-2006. Besides reasons of a purely practical nature, confining the research to this sector and geographic area also presented theoretical advantages. First, establishing access to small business population is often a difficult task (Curran & Blackburn, 2001). As a researcher of a government-sponsored, yet independent university-based think tank, the Policy Research Centre for Sustainable Agriculture, I had been able to establish quick and trust-based access to a number of key informants in the sector. It was only with the help of these key informants that easy access with the interviewed firms could be established. Second, the restricted study area yielded a *ceteris paribus*

situation, holding the factors beyond the phenomenon of interest constant. In so doing, I was able to focus on developing the depth and richness required to generate some important research findings. Unfortunately, this contextual bias raises some relevant questions with regards to the generalizability of the study's findings. In particular, our study was executed in a mature and traditional Belgian production sector that has mainly business-to-business transactions. Furthermore, the sector was clearly in a state of decline with many firms going out of business and producing in an increasingly uncertain environment. As a result, traditional practices and expectations not only had had a long time to settle in as taken-forgranted assumptions, yet were also strongly embraced in the uncertain conditions the firms were operating in. These contextual factors inform to what extent our findings may be generalized to other contexts as well.

First, since the study was executed in Belgium, a Western and developed country, the implications of this study may be limited only to this specific context. However, we have strong indications that the validity of our findings may extend to other developed and developing country contexts as well. Firstly, the market for ornamental plants is a European and very integrated market. As such, the firms in this research do not experience any different market opportunities for environmentally friendly plants than those in most other European countries. Secondly, the regulatory requirement to keep exported plants free of pests is a European regulation and is therefore no different in Belgium than in any other European country. The only potential difference that may exist between countries is the national institutional support for environmentally friendly production. For example, MPS, the Dutch mother organization of VMS, has a far larger membership base in the Netherlands than in any other country in Europe. Interviewees and information we found in reports related this success to the Dutch regulatory requirement of having a registration system on the firm. Although growers are free to choose which registration system they wish to apply, the MPS system is accepted as an appropriate solution. As a result, the MPS system could have moved from a status of proto-institution to a well established institution in the Dutch sector. How this has had an impact on the capability requirements of the industry, however, is an interesting research question that would require further research. Thirdly, the findings in this dissertation may also be relevant for small firms in developing countries. Given that resources and institutional support in developing countries is lower in general, this should not come at a surprise. Yet, whereas the companies in our study had been able to engage in munification by tapping into networks that were available within Belgium or in the neighboring countries, companies in developing contexts may have to reach out to networks at much further distance

to realize the same result. As such, even though the same processes may apply in both developing and developed country contexts, additional research would be required to fully investigate the impact of the contextual differences.

Second, questions can be raised with regards to the generalizability of this research across other *industry* contexts. The industry context was peculiar in nature as a result of the strong forces for isomorphism, institutional inertia and few opportunities for capitalizing on PES. Therefore, the findings of this dissertation will be particularly applicable to companies that find themselves in contexts with similar features. Although the cases in our own study may represent extreme cases, merely engaging in the uncertain process of questioning established practices for the sole improvement of a non-financial objective will encounter healthy skepticism from any investor or fellow owner-manager. As a result, it can be expected that the relative importance of organicity, munification and the multiple processes of institutional non-conformity may be different across industries - depending on the relative presence of internal resource capital, external resource capital and institutional capital – but will nevertheless be present in some way another.

Third, the latter remark also presents a last contextual condition of our findings. The present study was focused on those types of environmental strategies that were proactive in nature. As soon as certain environmental practices and expectations become mainstream and become a kind of new Olympic minimum, we can expect entirely new capabilities to become important. As it has been shown in earlier research, environmental strategies require the policing and peer-pressure to keep firms from free-riding other colleagues' environmental practices (Olson, 1965; Ostrom, 1990) and will require communal strategies (Barnett, 2006) to keep firms from defecting to the established standards. Furthermore, given that it is not in their interest to be ahead of legal or normative expectations, firms without PES will not need to engage in the complex and intensive processes of developing alternative institutional logic exposure, engaging in multiple roles in the institutional field, collaborating with peers to create inexistent resources and the like. Rather, resources will have to be dedicated more to following up what the legal requirements are, and assessing solutions how proactive firms went about dealing with new environmental challenges. As such, the late adopters can benefit from the high risks that the proactive firms were ready to take (Rugman & Verbeke, 1998), yet they will also probably be too late to capture the early mover advantages that proactive firms could potentially have reaped (Nehrt, 1998).

8.4. Future research

Before concluding this dissertation, this section takes the opportunity to highlight some potential avenues for future research. Although I hope the research in this dissertation has contributed to answering some pertinent questions, it has also uncovered some new research questions.

First, I repeat the call as made in chapter 5 to investigate the fine line between obstinacy and foolhardiness. For every company that has succeeded in persistenly wanting to realize its objectives, one can imagine that others have failed. Future research could therefore ask the question: how far can a firm go in being committed to its proactive environmental intentions? Are there any indications in the external environment firms can follow up to assess the likelihood of finding emerging solutions? In a similar vein, research may ask the question: how much non-conformity can a firm get away with when realizing a proactive environmental strategy? For example, the genetic modification of crops has been promoted as a beneficial environmental technology due to lower toxic pesticide need as a result of genetic pest resistance. However, since genetically modified crops remain mostly illegal in Europe, there are legal barriers to the institutional non-conformity a firm could develop in this perspective. Even if a firm has the best intentions to reduce the impact of pesticides on the natural environment by using genetically modified plants, the law requires the firm's obstinate commitment to stop at some point. Yet the most path-breaking knowledge breakthroughs have come some obstinate non-conformists (e.g. Copernicus, Darwin and Vesalius). How firms may go about regulative institutional non-conformity (in other words, breaking the law) in order to realize their good intentions remains a question for future research.

A second avenue for future research relates to the question how small businesses deal with environmental issues that require *systemic* changes. In chapter 5, we identified collaboration as the mechanism that enabled firms to create inexistent resources or capabilities. Yet in the event that a substantial reduction of a firm's environmental impact would depend on the changes, or even replacement, of an entire system, then small firms may run into constraints that are truly insurmountable. The type of collaboration or influence processes required in this situation may then be of an entirely different kind (Bilimoria et al., 1995). For example, small transport firms wishing to decrease their impact on the environment depend on the R&D efforts of truck constructors developing hybrid or hydrogen engines. Without the efforts of these truck drivers, transport companies are severely constrained in the way they can diminish their own impact on the environment. Researchers may therefore want to address the questions *whether and how small businesses can effectively*

set the processes in motion that result in the systemic changes that enable them to be more effective in realizing their own proactive environmental intentions.

Third, how can governments and professional associations exploit the uncovered mechanisms to increase the probability that firms will realize environmental strategies beyond what is legally required? To date, most articles discussing environmental responsiveness among small firms have encouraged governments to take the lead and set a level playing field for requirements related to the natural environment. Furthermore, they advance the view that small firms should be informed about the potential benefits environmental strategies may have for the firm especially through very direct information initiatives (Palmer & France, 1998). The research in this dissertation, however, would argue more in favor of initiatives that enable firms to develop munification and organicity, and that would support firms when their PES would entail institutional non-conformity. In particular, bringing information about different organizational fields and organizing network structures that enable exchanges between proactive firms may be particularly effective in this perspective. How such practices may effectively be organized, however, is open to further research.

Finally, the former question hinged on the assumption that the higher the ability of firms is to engage in PES, the more likely they will be inclined to enact their proactive environmental intentions. Yet an additional research question is also whether firms that have the ability to successfully realize PES would be more likely to also be motivated to have one, and therefore also realize it. Future research could therefore investigate whether PES capabilities influence the motivation and intentions for having one as well.

8.5. General conclusion

How can small firms be successful in realizing PES? Our results reinforce the view that understanding PES requires looking at both the resources inside and outside of the firm, as well the institutional context that infuses these resources with value. Whether or not small firms will be able to realize their PES depends on how they can manage the interacting influence of both resources and institutions. In our data, for example, PES were manifested as processes of resource scarcity and institutional non-conformity. The research in this dissertation shows that, when firms combine an obstinate, yet prudent commitment to realizing their PES with the flexibility to creatively find and employ pockets of internal and outside resources, they will be able to engage in the process of building resources and institutional support that foster their realization of PES. Such an ability emerged in particular among those firms that framed the PES as part of a desired future, and who had a business

model that was both non-conformist in multiple perspectives and conducive to executing a PES. Yet such a capability of organicity needed to be combined with munification, the proficiency to create the micro-environment that mimics the theoretical external conditions that foster PES. By employing specific network contacts and positions rich with complementary resources and capabilities and that lowered the embeddness in the organizational field, by collaborating with external stakeholders to create inexisting resources and by actively managing their institutional environment, even small firms can be freed from the inhibiting resource and institutional pressures that would normally constrain their successful realization of PES. In this respect, small firms that effectively realize PES have to face the combined challenges of institutional non-conformity and the realization of a strategy in a resource constrained environment. We must be fortunate that some small businesses have the courage to engage in this complex and risky endeavour.

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Appendix

Appendix

A.1. Interview guidelines with key informants

Introduction of the interview:

- Presentation of the interviewer:
 - o Presentation Policy Research Centre for Sustainable Agriculture
 - o Background
 - o Why this research?
- Sketch objectives to the interviewee
 - o Part 1: Presentation of the expert: (why are you considered an expert?)
 - Part 2: Exploration of the context in the ornamental horticulture industry, past, present and future.
 - Part 3: Exploration of capability requirements for proactive environmental strategies in the ornamental horticulture industry in Flanders.

Part 1: Presentation of the expert

- Who are you?
 - o What is your domain of expertise?
 - o In what subsector?
 - o Production? Management? Financial?
 - What is the nature of contacts you have in the sector?
- How many years do you know the sector?
- What is your education?

Part 2: Exploration of the context in the ornamental horticulture industry, past, present and future

- What does the market expect from a good entrepreneur: short term, longer term?
 - o How would you describe the dynamics in the sector?
 - o How innovative do you consider the sector?
 - What is your assesstment of the competitive rivalry in the sector?
 - What is the importance of quality, price, speed, ...?
 - o How do you envision the longer term viability of the sector?
- Where is the sector heading?
- What are the problems and challenges that growers are facing?
 - o Technical
 - o Technological
 - o Financial
 - o Governmental
 - Neighbours
 - o Environmental organisations
 - Customers

- o Suppliers
- Distribution / Trade
- What are the most pressing issues? What issues can be dealt with by the sector, what issues are beyond their control?

Part 3: Exploration of competence requirements for sustainable business strategies in the ornamental horticulture industry in Flanders

- According to you, what are the characteristics of a good, sustainable nursery with a future?
- What do proactive environmental growers do different than other companies to deal with the requirements as set out above?
- What do they have to do?
 - Stakeholder management
 - o Organizational Learning:
 - o Innovate?
 - o Be informed, read?
 - o Experiment?
 - o Negotiate?
 - o Take initiative at sector level?
 - o Take risks? Wanting daring do?
- What do they need to be able to do so?
 - o What do you have to know?
 - O What do you need to want?
 - What do you need to be able to do?
- What is the value of education?
- Communication?
- Collaboration?
- Discussions at the firm?

A.2. Interview guidelines for grower interviews

Dwggg-4-4: C	
Presentation of	
person and	
company	
Personal data	- profession of father and mother?
	- how did you acquire this firm?
	- what is your education?
	- membership and participation in associations, councils, boards,
	religious groups, politics, policy?You? Your family?
Firm	- products?
	- history of the firm (large investments, changes in production,
	distribution channels used, etc)
Strategie	- If you look at decisions in the past, what did you use as a basis to
	make those decisions?
	- Do you have a vision where you want to take the company?
	- Have you written this vision down? Do you have a business plan?
	Do you have explicit targets / budgets?
	- If yes: what are the targets about? Only financial or others as well?
	- Where do you want to be with your company within 5 years?
	- Why did you become member of VMS
	- Why are you still a member / no longer member?
	- Do you employ any other quality systems?
	- How important is the environment for your company? Why?
	- Do you make more money because of VMS?
	- Are you stimulated by the market to become member of VMS? Is it
	important to have an A label?
	- Do you experience social pressures to produce sustainably /
	environmentally friendly or to be more socially responsible in your
	management?
	- What is a sustainable company to you?
	- What are the responsibilities of a ornamental horticulture company?
	- Do you actively look for sustainable methods for growing?
Performance	- In what perspectives have you improved over the last years? Do
	you have evidence for that? Do you know why you have improved?
	(Why are you so good?)
	- In what perspectives have you worsened over the last years? Do
	you have evidence for that? Do you know why you have worsened?
	- What VMS score do you have? How is it evolving?
	, and the second
	- If you would have to scale yourself with respect to financial
	performance, how would you score yourself on a scale from 1 to 7,
	with 1 the top and 7 very loss-making?
	- Do you have a good reputation in the sector?
Capabilities	
	- What to you is a paragon of an ornamental horticulture grower? Do

Higher Order Learning, systems thinking	you know people that fit that model? Do you fit that model? What do you then? What should you be able to do? - What will a grower need to know / be able to do in the future? - What are the strongest hurdles that you have to bridge as a grower? - Is it important to have a good education? Or to be born in the ornamental horticulture sector? - Are there any things that you learned specifically because you are a member of VMS? By trying to produce more environmentally friendly? Skills? Knowledge? - Do you look differently at ornamental horticulture since you have become a member of VMS / started to produce more
Gathering information	 environmentally friendly? Do you acquire a lot of information? Formally / informally? External consultants? Professional magazines? Network organizations? What do you do with your accounting information? What do you do with VMS information? Do you assess customer satisfaction? Supplier satisfaction? Neighbors? Personnel? Know-why? Do you know why the environment is important? Do you know why it would be necessary to have a good relationship with your neighbors? Do you know why it is important to have a good relationship with your personnel? Do you know how to deal with that?
Spreading information	 Do you have an open culture in your firm? What communication do you have? Labels? Website? Newsletters? Customer letters? Meeting days for customers, neighbors, suppliers? Commercials? Do you talk about the information that you collect? With whom?
Changes	 Do you come back to decisions and change radically? What type of changes do you find while looking for sustainability? What is the hardest thing to resolve? How do you resolve this?
Innovation Innovation	 Do you experiment with new products? New technologies? (water, light, energy, pesticides, closed greenhouses?) Have you brought new products to the market? Are you mostly the first to try new things or do you wait until something has been tried by other companies? Do you take risks? How does your environment think about this? Do you look for new business opportunities that are explicitly environmentally friendly or socially promoting?
Stakeholder management Network	- Do you use your network to collect information?
	- Do you know many people outside the sector? Entrepreneurs / non-

	entrepreneurs? - Do you try to check with governments how they can help you? - How do neighbors, family, etc react to the way you work?		
Collaboration	 Do you try to work together with other firms? Why? Do you take initiatives at sector level? Are you engaged in ensuring a future for the sector as a whole? 		
Leadership	- Are you among the first to comply with new legislations? Measures?		
Time			
management			
	 Do you take the time to think about your company and the future? Do you have time to go to trade fairs, professional association meetings, read? 		