

Innovation in Creative SME's in Flanders: A Case Study Based Analysis*

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Abstract This chapter analyzes the innovative profile of the Flemish creative ‘design sector’ using data obtained from 51 companies, taking part in an Innovation Diagnostic of their enterprise. Flemish creative companies are typically very small, but highly innovative. Results clearly show that the Flemish creative industry faces a number of specific challenges, mostly related to risk assessment and financing constraints. Moreover, creative entrepreneurs often lack the necessary economic background required to successfully commercialize their innovations and manage their business in an optimal way. Finally, government support appears not to be very well adapted to the need of micro firms (employing less than ten employees) in general and to the requirements of the creative sector specifically.

Key words innovation, creative design sector, entrepreneurship, SME, Flemish case studies

1 Introduction

In this chapter, the innovative profile of a sample of 51 creative (design) companies in Belgium is analyzed. Since most of the firms active in this industry are small- to medium-sized, we will first briefly introduce the Belgian SME sector in general and discuss the importance of the creative industries within this sector. The companies that participated in the survey are typically very small, but highly innovative. Given the specific nature of the sector, combined with the small size of the firms, the design sector faces several specific challenges. First, it is very hard for these companies to acquire financial backing for their innovation projects and as a result it is virtually impossible to undertake market research prior to the introduction of their innovation(s). This is especially critical, considering that innovation is central to the survival and growth of these companies. The typical creative entrepreneur is entirely dependent on the continuous development of new products, processes, services or ideas in order to retain his competitive edge.

As a consequence, the industry faces specific issues relating to risk assessment and financing constraints when they want to introduce their innovation to the market. Moreover, most entrepreneurs that took part in our study are educated as designers (in fashion, jewelry, product development, web design, etc.) and are as such poorly prepared to undertake the full commercialization process of their innovations. Financing constraints also play an important role here, since most of the respondents lack the necessary financial means to hire a business manager for this part of the innovation process.

Finally, a clear point emerging from this study is that existing government support for innovation does not seem very well adapted to the specific needs of ‘micro firms’ (firms employing less than ten employees) in general and to those of the creative sector specifically. Nevertheless, it should be noted that most of the companies in the sample are highly successful in their respective sub-industries, although perhaps smaller in size than they could be, provided some of the issues mentioned above could be addressed.

This chapter is organized as follows. Section 2 sketches the general profile of the Belgian SME sector and section 3 summarizes the characteristics of the Flemish creative sector. Section 4 analyzes the

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data, collected from our sample of creative entrepreneurs. Section 5 discusses the case studies and gives an overview of the most salient findings of this study. Finally, section 6 formulates policy recommendations and concludes.

2 Brief Report on the Belgian SME Sector

Although our research focuses on the Flemish creative sector, a more general introduction into the Belgian SME-sector is required. Belgium is a federal state, divided into three communities (Flemish, French and German speaking) and three regions (Flanders, Wallonia and the Brussels Capital Area), each with different governmental responsibilities and organizational structures. While economic policy in general falls under the jurisdiction of the federal government, innovation policy is a defederalized/regionalized matter.

As can be seen in table 1, economic growth in Belgium has surpassed the euro zone average since 2002. The general government deficit (surplus) also tends to be stable, with the exception of 2004, and is consistently lower than the average for the Euro zone. On the other hand, Belgium's public debt remains high compared to the EU average.

Table 1 Belgium's Macro-Economic Performance

	2000	2001	2002	2003	2004	2005	2006
Real GDP growth (%)							
Belgium	3.7	0.8	1.5	1.0	3.0	1.7	2.8
Euro zone	3.8	1.9	0.9	0.8	2.0	1.5	2.8
Net capacity (+) or net financing needs (-) of governments (% of GSD)							
Belgium	0.1	0.6	0	0	0	-2.3	0.4
Euro zone	0.1	-1.8	-2.5	-3.1	-2.8	-2.5	-1.5
Gross government debt – public authorities (Maastricht definition in % of GDP)							
Belgium	107.8	106.5	103.4	98.6	94.2	92.2	88.2
Euro zone	68.7	68.3	68.1	69.3	69.7	70.5	68.8

Source: based on Eurostat data (2008)

In what follows, we will briefly characterize the Belgian SME environment, using data obtained from Eurostat. In the figures and tables below, all data are summarized by size class using the European SME definition¹.

Historically, Belgium has always perceived itself as an SME oriented economy. This claim is confirmed in table 2, which shows that in 2005; 99.77 percent of all Belgian firms were micro, small or medium-sized. In fact, as column 1 in table 2 shows, more than 92 percent of all enterprises are micro companies, employing less than ten employees. Within a European context, the Belgian profile is comparable to that of the Euro zone². On average, every Euro zone member has more than 99.50 percent SMEs. Compared to Belgium, only Italy, Sweden, Portugal and Spain have a slightly higher SME-ratio.

Table 2 Number of Enterprises Broken Down by Size Classes, Belgium, 1999 - 2005
(absolute figures and percentages) (1)

	SMEs			Subtotal	Large enterprises	Total
	Micro	Small	Medium			
1999	341,963 92.07%	25,047 6.74%	3,644 0.98%	370,654 99.80%	748 0.20%	371,402 100%
2000 (2)	210,957 90.79%	17,618 7.58%	3,136 1.35%	231,711 99.72%	656 0.28%	232,367 100%
2001	348,639 91.85%	26,188 6.90%	3,935 1.04%	378,762 99.79%	797 0.21%	379,559 100%

¹ Less than 10 employees: micro enterprises; 11 to 49 employees: small enterprises; 50 to 249 employees: medium enterprises; more than 250 employees: large enterprises. This definition differs from the OECD definition of SMEs (which was used for the purpose of this research project) in that the OECD definition specifies, in addition to the employment cut-off, an additional criterion based on annual turnover of the enterprise. Specifically for our sample however, both definitions are equivalent, all firms taking part in the survey are part of the SME sector, irrespective of the definition used.

² Belgian data are compared to either the euro zone average or to the EU-15 (EU-27) average, since these countries include Belgium's neighbors and main trading partners. Moreover, these are the countries that are most comparable to Belgium in economic terms.

2002	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2003	353,134	25,813	3,766	382,713	781	383,493
	92.08%	6.73%	0.98%	99.80%	0.20%	100%
2004	364,712	25,559	3,717	393,988	784	394,771
	92.39%	6.47%	0.94%	99.80%	0.20%	100%
2005	365,613	25,622	3,804	395,039	796	395,960
	92.34%	6.47%	0.96%	99.77%	0.20%	100%
EU-15	13,029,160	1,108,193	160,859	14,298,212	31,376	14,329,588
2004 (3)	90.93%	7.73%	1.12%	99.78%	0.22%	100%
EU-27	17,460,421	1,319,465	208,846	18,988,732	40,787	19,012,297
2004 (4)	91.84%	6.94%	1.10%	99.88%	0.21%	100%

Source: based on Eurostat data (2008)

(1) Nace D, E, F, G, H, I, K; (2) Nace D, E, F, H, I, K; (3) excl. Greece and Luxemburg, (4) expected.

In 2005, total employment in Belgium amounted to about 2.4 million (full-time equivalent) individuals of which 67.22 percent was employed within an SME. Table 3 shows that in recent years the share of micro enterprises increases while the overall amount of SME enterprises stabilizes; even decreases slightly in 2005.

Between 1999 and 2005 overall employment in Belgium grew with about 4.4 percent. Most of this increase was realized by SMEs, which documented a growth rate of 5.86 percent, compared to 0.59 percent for large enterprises. This growth can be explained by recent governmental start-up campaigns and specific public financing policies.

Table 3 Employment Broken Down by Size Classes, Belgium, 1996 - 2005
(absolute figures and percentages) (1)

	SMEs				Large enterprises	Total
	Micro	Small	Medium	Subtotal		
1996 (2)	661,464	456,743	319,010	1,437,217	718,336	2,155,553
	30.69%	21.19%	14.8%	66.68%	33.32%	100%
1997 (2)	630,092	463,962	331,155	1,425,209	729,369	2,154,578
	29.24%	21.53%	15.37%	66.15%	33.85%	100%
1998 (2)	654,206	476,508	337,533	1,468,247	751,891	2,220,138
	29.47%	21.46%	15.2%	66.13%	33.87%	100%
1999 (2)	665,173	490,124	355,624	1,510,921	775,370	2,286,291
	29.09%	21.44%	15.55%	66.09%	33.91%	100%
2000 (2)	670,405	507,552	377,019	1,554,976	837,367	2,392,343
	28.02%	21.22%	15.76%	65%	35%	100%
2001	681,265	514,812	392,775	1,588,852	826,810	2,415,662
	28.2%	21.31%	16.26%	65.77%	34.23%	100%
2002	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2003	685,707	513,433	375,943	1,575,083	787,160	2,362,245
	29.03%	21.73%	15.91%	66.68%	33.32%	100%
2004	704,257	508,409	368,378	1,581,044	798,577	2,379,621
	29.6%	21.37%	15.48%	66.44%	33.56%	100%
2005 (3)	715,702	509,633	374,119	1,599,454	779,923	2,379,377
	30.08%	21.42%	15.72%	67.22%	32.78%	100.00%
EU-15	28,327,485	21,240,545	15,981,463	65,549,493	33,290,353	98,839,846
2004 (4)	28,66	21,49	16,17	66,32	33,68	100
EU-27	36,870,700	25,432,300	20,800,800	83,103,800	40,741,800	123,914,000
2004 (5)	29.76%	20.52%	16.79%	67.07%	32.88%	100%

Source: based on Eurostat data (2008)

(1) Nace D, E, F, G, H, I, K; (2) Nace D, E, F, H, I, K; (3) Nace D, F, G, H, I, K; (4) excl. Greece and Luxemburg, (5) expected.

Although SMEs clearly contribute significantly to total employment generation in Belgium, their

share in value added is somewhat lower. Although large companies account for only 0.20 percent of all companies in Belgium and 32.78 percent of overall employment, their share in value added amounts to 41.29 percent. Nevertheless, SMEs represent in total a not unimportant share of 58 percent in the total Belgian value added. The share of micro and medium companies seems to decrease, while small and large companies increase their added value share slightly. The Belgian SME subtotal nevertheless stays in line with the averages for the EU-15.

Table 4 Added Value Broken Down by Size Classes, Belgium, 1996-2005
(volume * €1.000.000 and percentages) (1)

	SMEs				Large enterprises	Total
	Micro	Small	Medium	Subtotal		
1996 (2)	18,841.30 19.52%	20,348.00 21.08%	17,027.00 17.64%	56,216.30 58.24%	40,310.80 41.76%	96,527.10 100%
1997 (2)	17,806.40 18.53%	20,189.90 21.01%	17,757.70 18.48%	55,754.00 58.01%	40,360.90 41.99%	96,114.90 100%
1998 (2)	18,650.30 18.52%	20,846.10 20.70%	18,476.90 18.34%	57,973.30 57.56%	42,746.80 42.44%	100,720.10 100%
1999 (2)	20,349.50 18.97%	22,386.50 20.86%	20,118.00 18.75%	62,854.00 58.58%	44,443.20 41.42%	107,297.20 100%
2000 (2)	23,220.20 19.02%	23,966.50 19.63%	22,372.20 18.33%	69,558.90 56.99%	52,504.20 43.01%	122,063.10 100%
2001	24,484.90 19.45%	24,783.70 19.69%	24,208.10 19.23%	73,476.70 58.36%	52,416.90 41.64%	125,893.60 100%
2002	n.a. n.a.	n.a. n.a.	n.a. n.a.	n.a. n.a.	n.a. n.a.	n.a. n.a.
2003	25,570.8 19.29%	27,304.6 20.60%	25,173.7 18.99%	78,049.1 58.89%	54,492.2 41.11%	132,541.5 100%
2004	26,159.0 18.84%	27,579.8 19.87%	26,134.4 18.83%	79,873.2 57.54%	58,951.5 42.46%	138,824.8 100%
2005 (3)	26,525.6 19.26%	28,449.2 20.65%	25,898.4 18.80%	80,873.2 58.71%	56,885.5 41.29%	137,758.9 100%
EU-15 2004 (4)	951,237 20.38%	898,900 19.26%	828,799 17.75%	2,678,352 57.37%	1,990,430 42.64%	4,668,206 100%
EU-27 2004 (5)	1,027,773 20.46%	952,213 18.95%	952,213 17.92%	2,880,108 57.33%	2,151,447 42.82%	5,023,820 100%

Source: based on Eurostat data (2008)

(1) Nace D, E, F, G, H, I, K; (2) Nace D, E, F, H, I, K; (3) Nace D, F, G, H, I, K; (4) excl. Greece and Luxemburg, (5) expected.

Table 5 shows that Belgian enterprises are among the most productive in Europe; with average value added per employee amounting to 58.34 thousand euros in 2004, compared to 47.23 for the EU-15. Only Denmark, Finland and Ireland have a higher overall gross added value per person employed. Within each class size the Belgian productivity figures are above the EU-15 averages. Between 1999 and 2005, overall productivity of Belgian companies grew by 28.39 percent, and this figure was even higher for micro, medium and large companies at 30.35; 28.73 and 28.00 percent respectively. Only small companies couldn't follow this trend, their productivity grew with only 27.08 percent over the same period.

Table 5 Apparent Labor Productivity, Belgium, 1996-2005
(Gross value added per person employed * €1000) (1)

	SMEs				Large enterprises	Total
	Micro	Small	Medium	Subtotal		
1996 (2)	28.48	44.55	53.37	39.11	56.12	44.78
1997 (2)	28.26	43.52	53.62	39.12	55.34	44.61
1998 (2)	28.51	43.75	54.74	39.48	56.85	45.37
1999 (2)	30.59	45.68	56.57	41.60	57.32	46.93
2000 (2)	34.64	47.22	59.34	44.73	62.70	51.02
2001	35.94	48.14	61.63	46.25	63.40	52.12
2002	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2003	37.29	53.18	66.96	49.55	69.23	56.11
2004	37.14	54.25	70.94	50.52	73.82	58.34
2005 (3)	37.06	55.82	69.23	50.56	72.94	57.90
EU-15 2004 (4)	33.58	42.32	51.86	40.86	59.79	47.23
EU-27 2004 (5)	27.88	37.44	45.78	34.66	52.81	40.54

Source: based on Eurostat data (2008)

(1) Nace D, E, F, G, H, I, K; (2) Nace D, E, F, H, I, K; (3) Nace D, F, G, H, I, K; (4) excl. Greece and Luxemburg, (5) expected.

The sales show a similar evolution as the added value figures. Total turnover in Belgium expanded by 56.81 percent between 1996 and 2004. Medium and large companies managed to boost their business figure with 74.45 and 76.62 percent respectively, while micro and small companies achieved growth rates of 38.18 and 37.11 percent respectively over the same period. Large companies employ slightly less than a third of the Belgian labor force, but the average turnover per employee is almost twice as high as the turnover per person employed for the average SME.

Compared to the EU-15 average, Belgian SME companies employ almost the same percentage of the total labor force but they employed and achieve a significantly higher share of the overall turnover in 2004.

Table 6 Turnover Broken Down by Size Classes, Belgium, 1996-2005
(volume * €1.000.000 and percentages) (1)

	SMEs				Large enterprises	Total
	Micro	Small	Medium	Subtotal		
1996 (2)	110,157.2 25.39%	106,129.0 24.46%	77,490.9 17.86%	293,777.1 67.71%	140,083.3 32.29%	433,860.4 100%
1997 (2)	109,390.9 24.68%	106,601.6 24.05%	83,047.1 18.73%	299,039.6 67.46%	144,268.4 32.54%	443,308.0 100%
1998 (2)	114,754.8 24.33%	109,060.1 23.12%	90,838.3 19.26%	314,653.2 66.71%	157,015.5 33.29%	471,668.7 100%
1999 (2)	121,779.8 24.34%	114,491.9 22.88%	96,810.2 19.35%	333,081.9 66.57%	167,276.1 33.43%	500,358.0 100%
2000 (2)	140,167.0 23.76%	126,812.0 21.49%	110,490.9 18.73%	377,469.9 63.98%	212,551.7 36.02%	590,021.6 100%
2001	143,886.3 23.32%	127,643.9 20.68%	124,422.9 20.16%	395,953.1 64.16%	221,161.1 35.84%	617,114.2 100%
2002	n.a. n.a.	n.a. n.a.	n.a. n.a.	n.a. n.a.	n.a. n.a.	n.a. n.a.
2003	142,973.50 22.76%	134,165.20 21.36%	129,258.60 20.58%	406,397.30 64.69%	221,800.80 35.31%	628,198.10 100%
2004	152,217.90 22.37%	145,517.50 21.39%	135,184.20 19.87%	432,919.60 63.63%	247,419.20 36.37%	680,338.80 100%
2005 (3)	157,645.00 22.65%	150,893.20 21.68%	138,930.10 19.96%	447,468.30 64.29%	252,630.40 36.29%	696,055.80 100%
EU-15 2004 (4)	n.a. n.a.	n.a. n.a.	n.a. n.a.	n.a. n.a.	n.a. n.a.	n.a. n.a.
EU-27 2004 (5)	3,646,407,636 19.02%	3,735,291,302 19.48%	3,724,841,203 19.43%	11,106,540,140 57.93%	8,075,359,065 42.12%	19,172,514,850 100%

Source: based on Eurostat data (2008)

(1) Nace D, E, F, G, H, I, K; (2) Nace D, E, F, H, I, K; (3) Nace D, F, G, H, I, K; (4) excl. Greece and Luxemburg, (5) expected

When looking at the annual investments, two distinct evolutions are noticeable. Between 1998 and

2001 investments rose by 25.81 percent, while investments diminished by 14,62 percent between 2001 and 2005. A regression analysis shows that employment and investments are positively related for medium and large sized companies (i.e. net investments), while for micro and small companies it probably only implies replacement investments (Heirman, 2007). The SME sector still accounts for a high share (82,33percent) in total investments made by Belgian firms.

Table 7 Investments Broken Down by Size Classes, Belgium, 1998-2005
(volume * €1.000.000 and percentages) (1)

	SMEs				Large enterprises	Total
	Micro	Small	Medium	Subtotal		
1998	5,879.50 39.35%	2,930.80 19.61%	2,475.30 16.57%	11,285.60 75.53%	3,656.70 24.47%	14,942.30 100.00%
1999	6,127.50 36.60%	3,212.30 19.19%	3,309.00 19.77%	12,648.80 75.55%	4,092.60 24.45%	16,741.40 100.00%
2000	6,363.80 35.20%	3,561.00 19.70%	3,430.00 18.97%	13,354.80 73.88%	4,722.10 26.12%	18,076.90 100.00%
2001	7,398.60 39.36%	3,386.80 18.02%	3,679.40 19.57%	14,464.80 76.95%	4,333.70 23.05%	18,798.50 100.00%
2002	n.a. n.a.	n.a. n.a.	n.a. n.a.	n.a. n.a.	n.a. n.a.	n.a. n.a.
2003	6,798.90 44.22%	3,280.40 21.33%	2,717.60 17.67%	12,796.90 83.22%	2,579.80 16.78%	15,376.70 100.00%
2004	6,473.90 40.34%	3,966.30 24.71%	3,109.20 19.37%	13,549.40 84.42%	2,500.90 15.58%	16,050.30 100.00%
2005	8,125.70 41.39%	4,752.30 24.21%	3,285.50 16.74%	16,163.50 82.33%	3,467.70 17.66%	19,631.40 100.00%
EU-15	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2004 (4)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
EU-27	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2004 (5)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Source: based on data from Eurostat (2008)

(1)Nace G, H, I, K.

The general performance indicators summarized above present a general overview of the Belgian SME sector. In what follows, we will briefly describe, in a similar fashion, the innovation activities of Belgian enterprises in somewhat more detail.

As a first innovation indicator we've compared the Belgian overall R&D expenditure expressed as a percentage of GDP with the European figures. Table 8 shows that relative R&D expenditure in Belgium is comparable to the EU average, although it has been somewhat below this average since 2003. A decrease in innovative efforts or investments might have important consequences for Belgium's current productivity advantage over its neighbors, which might be eroded over time in the absence of sufficient innovative stimuli.

Table 8 Total R&D Expenditure, Belgium, 2000-2006 (percentage of GDP)

	2000	2001	2002	2003	2004	2005	2006 (1)
Belgium	1.97	2.08	1.94	1.88	1.87	1.84	1.83
EU-15 (2)	1.92	1.93	1.94	1.93	1.90	1.91	1.91
EU-27 (2)	1.86	1.87	1.88	1.87	1.83	1.84	1.84

Source: based on data from Eurostat (2008)(1) expected, (2) estimation by Eurostat.

Table 10 shows intramural R&D expenditures, broken down by size classes and sources of funding. It's immediately noticeable that large companies fund their R&D activities mostly with private equity. Alternative research funding tends to spread its sources over all size classes. Some recent governmental campaigns have led to a significant shift in public research funding.

From 2002 to 2004 total annual intramural R&D expenditure rose by 3 percent. When divided into size classes these expenditures differ quite significantly. Whereas large companies invested just 4 percent more, SME expenditures on intramural R&D rose 4 times faster, even 8 times faster for small companies. Micro companies reduced their annual R&D investments by a third during this same period.

On the other hand, when related to annual turnover, small enterprises have the highest average R&D to sales ratio. The smaller the enterprise, the more flexible they are in investing in R&D, with the exception of micros who probably invest only in a less strategic and more ad hoc way (tables 9 and 10). As we will see below, small firms' innovation management tends to be more ad hoc in nature, causing these firms to underestimate their innovative effort in accounting terms. For instance, time spent by an

owner-manager on innovative activities is often not taken into account in reported R&D efforts.

Table 9 Enterprises with Innovation Activities Broken Down by Size Classes, Belgium 2004
(% total number of enterprises)

	Number of enterprises	Turnover	Employment
Small	46.55	49.73	49.00
Medium	65.97	51.51	67.42
SME (2)	50.03	50.89	58.30
Large	83.01	93.83	92.42
Total	51.30	72.65	77.19

Source: Heiman (2007) base don Eurostat (2006)

(1) NACE C, D, E, G51, I, J, K72, K742 and K743; (2) micro enterprises not included.

Table 10 Intramural R&D Expenditure Broken Down by Size Classes, Belgium, 2002-2006
(volume * €1.000.000 and percentages)

2002	SMEs				Subtotal	Large enterprises	Total
	Micro	Small	Medium				
Private funding	98.145 3.36%	286.441 9.82%	518.661 17.78%	903.247 30.97%	2,013.516 69.03%	2,916.763 100%	
Public funding	16.330 8.30%	48.028 24.41%	41.159 20.92%	105.517 53.63%	91.222 46.37%	196.739 100%	
Funding through higher education	0,181 41.04%	0,171 38.71%	0,019 4.40%	0,371 84.15%	0,070 15.85%	0,441 100%	
Private not for profit funding	0.071 14.92%	0.229 47.93%	0.076 15.91%	0.376 78.76%	0.101 21.24%	0.478 100%	
Foreign funding	19.330 3.53%	72.203 13.18%	206.325 37.66%	297.859 54.36%	250.067 45.64%	547.926 100%	
Total	134.058 3.66%	407.071 11.12%	766.241 20.92%	1,307.370 35.70%	2,354.977 64.30%	3,662.347 100%	
2003	SMEs				Subtotal	Large enterprises	Total
	Micro	Small	Medium				
Private funding	97.609 3.31%	314.296 10.66%	543.259 18.43%	955.164 32.41%	1,992.150 67.59%	2,947.314 100%	
Public funding	17.869 9.21%	51.527 26.56%	40.120 20.68%	109.516 56.44%	84.516 43.56%	194.032 100%	
Funding through higher education	0.179 40.90%	0.165 37.66%	0.022 5.09%	0.366 83.66%	0.072 16.34%	0.438 100%	
Private not for profit funding	0.072 17.11%	0.220 51.96%	0.045 10.63%	0.337 79.70%	0.086 20.30%	0.423 100%	
Foreign funding	20.765 4.46%	74.429 15.98%	210.131 45.12%	305.324 65.56%	160.362 34.44%	465.686 100%	
Total	136.494 3.78%	440.637 12.21%	793.577 22.00%	1,370.708 37.99%	2,237.185 62.01%	3,607.892 100%	
2004	SMEs				Subtotal	Large enterprises	Total
	Micro	Small	Medium				
Private funding	65.446 2.12%	360.621 11.70%	603.494 19.58%	1,029.560 33.41%	2,051.959 66.59%	3,081.519 100%	
Public funding	16.224 7.28%	76.513 34.35%	45.890 20.60%	138.627 62.23%	84.126 37.77%	222.753 100%	
Funding through higher education	0.512 48.05%	0.000 0.00%	0.352 33.05%	0.864 81.10%	0.201 18.90%	1.066 100%	
Private not for profit funding	0.077 26.91%	0.000 0.00%	0.195 68.14%	0.273 95.06%	0.014 4.87%	0.287 100%	
Foreign funding	7.962 1.87%	72.590 17.03%	205.701 48.27%	286.254 67.17%	139.935 32.83%	426.189 100%	
Total	90.222	509.724	855.633	1,455.579	2,276.235	3,731.814	

	2.42%	13.66%	22.93%	39.00%	61.00%	100%
	SMEs				Large enterprises	Total
	Micro	Small	Medium	Subtotal		
2005						
Private funding	62.826 2.01%	374.804 12.00%	639.774 20.48%	1,077.403 34.48%	2,046.987 65.52%	3,124.389 100%
Public funding	19.917 8.51%	84.604 36.15%	47.732 20.40%	152.253 65.06%	81.769 34.94%	234.022 100%
Funding through higher education	0.516 47.20%	0.000 0.00%	0.358 32.77%	0.875 79.97%	0.219 20.03%	1.094 100%
Private not for profit funding	0.079 26.47%	0.000 0.00%	0.203 68.28%	0.282 94.76%	0.015 5.17%	0.298 100%
Foreign funding	8.925 2.15%	77.109 18.54%	200.854 48.30%	286.888 68.99%	128.934 31.01%	415.822 100%
Total	92.263 2.44%	536.517 14.21%	888.920 23.54%	1,517.700 40.20%	2,257.924 59.80%	3,775.624 100%
2006 (expected)						
	SMEs				Large enterprises	Total
	Micro	Small	Medium	Subtotal		
Private funding	67.646 2.08%	392.415 12.08%	674.109 20.76%	1,134.170 34.93%	2,113.070 65.07%	3,247.240 100%
Public funding	21.529 8.44%	92.688 36.36%	51.796 20.32%	166.012 65.12%	88.922 34.88%	254.934 100%
Funding through higher education	0.530 47.37%	0.000 0.00%	0.364 32.54%	0.894 79.91%	0.225 20.09%	1.118 100%
Private not for profit funding	0.083 27.10%	0.000 0.00%	0.206 67.43%	0.288 94.53%	0.016 5.39%	0.305 100%
Foreign funding	9.893 2.30%	77.702 18.04%	210.221 48.80%	297.816 69.13%	132.982 30.87%	430.798 100%
Total	99.680 2.53%	562.805 14.30%	936.696 23.81%	1,599.181 40.65%	2,335.215 59.35%	3,934.396 100%
2006 (expected)						
	SMEs				Large enterprises	Total
	Micro	Small	Medium	Subtotal		
Total EU-15	99.680 2.53%	562.805 14.30%	936.696 23.81%	1,599.181 40.65%	2,335.215 59.35%	3,934.396 100%

Source: based on data from Federaal Wetenschapsbeleid (2008) and Eurostat (2008)

From the performance indicators presented in this section, it is clear that Belgium has an SME oriented economy. The number of enterprises and the employment figures are somewhat higher than the overall EU-15 averages. When divided into different size classes, the differences with respect to the EU-15 average become more noticeable. For example, only Mediterranean countries have more micro enterprises than Belgium. In terms of turnover and added value, the Belgian SME share nevertheless seems to be decreasing as a result of a significantly lower productivity. Within a European context, these parameters still remain slightly higher than average, with only Denmark, Finland and Ireland showing even higher productivity per employee (on average).

3 The Flemish Creative Sector

The object of this study is to assess the innovative profile of the Flemish creative or *design* sectors. In the context of this chapter we will assume that both terms are referring to the same sector, although in international publications the term *creative sectors* is used as a broader label that can refer to almost all economic sectors that imply creativity in their product portfolio, processes or services.

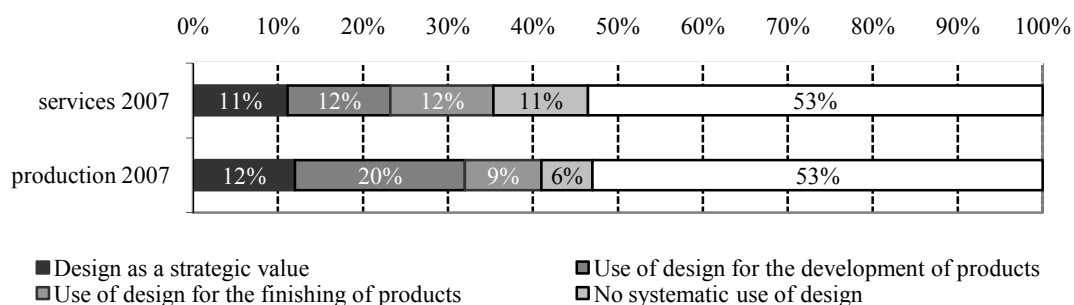
The Bureau of European Design Associations (BEDA)¹ describes *design* as a broadly transferable

¹ BEDA units and represents approximately 40 public and private design institutions across Europe. BEDA was founded to communicate the importance and added value of design and innovation within the European economy to the European institutions.

process that gives physical shape to people's needs and desires for the future using the designer's creativity and intuition, often assisted by more formal external research, generating future vision. According to BEDA, design is a process that leads to an actual marketable product (BEDA, 2001). The Flemish Ministry of Economy defines design as: ... *a holistic dealing with matters, that besides the (re-) styling of products, extends to the application of innovative and alternative materials, ergonomics, engineering, ecology and ethics, psychology, culture and last but not least management* (ESOMAR¹, 2004).

Quantifying this sector is quite difficult. There is no specific Nace²-code for design companies. In fact, we've even noticed that often Flemish creative entrepreneurs and enterprises are registered with an incorrect nace-code (i.e. because of altered, broadened or shifted activities or simply non-availability of a suitable activity code). Similarly and partly as a consequence of this classification problem, European surveys lack common comparable statistics. Nevertheless BEDA estimates that the 410.000 European designers generate a consolidated annual turnover of € 35 billion. (BEDA; 2006).

The lack of reliable data is surprising, especially since both academics and decision makers agree that creativity and the design of new products, processes and services are important success factors in present-day business. In 2007 Flanders Design presented the results of a survey about the use of design in a representative sample of 400 production and 100 services companies. Figure 1 shows that 47 percent of both production and services companies integrate design aspects in their business strategy from time to time. Some 11-12 percent considers design as a strategic value (Flanders Design, 2007).



Source: Flanders Design (2007)

Figure 1 The Use of Design in 400 Production and 100 Services Companies in Flanders, 2007

Although half of the companies indicate not to implement design as such, close to all of them apply activities that can be considered as design activities (branding, corporate styling, patent applications,...). Profitability is higher for frequent implementers of design than for those who implement design rarely (Design, 2007). Companies in the creative industries tend to have a significantly different business profile. They innovate more often, pay more attention to strategic and marketing issues, and seem to be more advanced in their use of human resources practices (de Jong, et al., 2007).

In international literature the creative industries are ever more identified as a principal accelerator of the economy. On the one hand they contribute to overall knowledge generation, while on the other hand the creative industries as such contribute to employment and the total added value of their region.

Moreover, Dutch empirical research has shown that the presence of creative industries have strong positive indirect effects on regional employment, growth, firm entry and startups (de Jong, et al., 2007). The elevated awareness for design, creativity and outward appearance of products, processes and services, is the result of, among others, a highly funded creativity policy by the Flemish regional and urban governments (as illustrated by table 11).

¹ ESOMAR is a World Association of Opinion and Marketing Research Professionals (formerly known as the European Society for Opinion and Marketing Research).

² The Nace classification is the official nomenclature of economic activities used by Eurostat. The classification can be downloaded from the Eurostat Ramon server at <http://ec.europa.eu/eurostat/ramon/>.

Table 11 Flemish Governmentally Funded Organizations in Design and Creativity Related Matters, Flanders, 2007

	Target group	Activities	Budget
Cultuurinvest	Enterprises in creative industries	Specific financial instruments for projects, growth and loans	€ 36 - 53 million (2006 - 2018)
Flanders DC	Policy makers, entrepreneurs & general public	Creative talks, international forums, research, creating international awareness, international collaboration	€ 2.3 million yearly
Design Flanders	Designers and design companies	Promoting Flemish design, gallery, (inter-)national design fairs, subsidizing role models, publications	€ 1.5 million yearly
Flanders Inshape	General production companies	Diffusing and generating design related knowledge, education/industry/policy platform, research	€ 1.25 million yearly
CONCreaS	Designers and design companies	Education, research and network activities in business topics	€ 300,000 yearly
Examples of Regional or urban initiatives and clustering:			
<i>Design platform Limburg</i>	<i>Designers in the province of Limburg</i>	<i>Promotion of regional design</i>	€ 30,000
<i>Kortrijk Design</i>	<i>Design scene in the city of Kortrijk</i>	<i>Promotion of regional design</i>	N.a.
<i>Designcenter Winkelhaak</i>	<i>De Designers in Antwerp</i>	<i>Subsidized housing of startup design firms</i>	N.a.
...
Examples of sector initiatives and clustering			
<i>Optimo</i>	<i>Innovation and design cluster of Flemish textile and construction sector</i>	<i>Innovation and design promotion</i>	N.a.
...

BEDA's mapping of the European design industry shows that close to 16 percent (about 67,000) of Belgian companies think that design provides an added value to their activities (even 29 percent in the construction industry). About 200,000 jobs in Belgian companies can be directly or indirectly attributed to the design sector. For the Flemish region BEDA estimates these figures to be 18 percent of the total amount of enterprises and 80,000 direct and indirect jobs (BEDA, 2006).

In 2007, the Vlerick Leuven Gent Management School was asked by FlandersDC¹ to determine the economic value of the core creative and cultural sector² in Flanders, according to scientific standards. For the period 1995-2003, De Voldere et al. concluded that the sector grew annually by 3 percent in terms of total employment and number of enterprises. Tables 12 and 13 clearly show that this

¹ Flanders DC (short for Flanders District of Creativity) is the Flemish governmental organization that promotes entrepreneurial creativity throughout the region in order to make Flanders a more creative, more prosperous and more ambitious place to live and work (FlandersDC, 2008).

² De Voldere et al. define the core creative industry as a gathering of the entire market oriented business sectors that provide a 'symbolic added value'.

growth was not only mainly generated in Flanders compared to Brussels. This growth was far more rapid when compared to the total Belgian economy, where the average growth of employment was only 1.6 %, only half of the growth in the creative sector. With an average employment of about 8.53 full-time-equivalent staff members in 2003, the majority of these enterprises is situated within the micro and small size class (De Voldere et al., 2007).

Table 12 Core Creative and Cultural Sector in Flanders and Brussels, 1995-2003 (volume & growth)

		1995	2003	Δ	Annual growth
Employment	Flanders	26,255	33,156	26.30%	3.00%
	Brussels	23,014	22,401	-2.70%	-0.30%
	Flanders & Brussels	49,269	55,557	12.80%	1.50%
Number of enterprises	Flanders	3,076	3,888	26.40%	3.00%
	Brussels	1,629	1,831	12.40%	1.50%
	Flanders & Brussels	4,705	5,719	21.60%	2.50%

Source: Maenhout, De Voldere, Onkelinx (2006)

Table 13 Annual Growth of Core Creative and Cultural Sector in Flanders and Brussels, compared the total Belgian economy, 1995-2003

	SMEs				Large enterprises	Total
	Micro	Small	Medium	Subtotal		
Annual growth in number of enterprises of the total Belgian economy (1999-2003)	0.82%	0.76%	0.84%	0.81%	1.10%	0.81%
Annual growth in number of enterprises of the core creative and cultural sector in Flanders (1995-2003)	n.a.	n.a.	n.a.	n.a.	n.a.	3,00%
Annual growth in employment of the total Belgian economy (1996-2003)	0.61%	2.07%	2.97%	1.60%	1.60%	1.60%
Annual growth in employment of the core creative and cultural sector in Flanders. (1995-2003)	n.a.	n.a.	n.a.	n.a.	n.a.	3,00%

Source: Based on De Voldere e.a. (2007) and Eurostat (2008)

Quite obviously, the Flemish core creative and cultural sector is an emerging and fast growing segment of the economy. In order to measure the impact of the creative sector on the Flemish economy in a realistic way, the Vlerick researchers omitted the formally subsidized cultural sub sector¹ from their analysis and identified the core creative sector as follows: the audiovisual industry; the music industry; fashion industry; architecture and design; the printed media and publishing sector. (De Voldere, et al., 2006)².

Unfortunately, detailed figures of the defined sub-sectors are not available. In table 13 the main findings of the Vlerick Management School research team are summarized.

¹ The subsidized cultural sector is, despite its symbolic added value, evidently a non-market oriented industry, i.e. museums, authors, theaters, etc (De Voldere et al., 2006)

² For more a detailed definition of these sub-sectors we refer to De Voldere et al. (2006)

Table 14 Core Creative Sector in Flanders and Brussels, 2003
(volume and percentages of total core creative industry)

		Volume	% of core creative industry	Composed annual growth 1995-2003
Audiovisual industry	Number of enterprises	477	16,40%	2%
	Total employment	3.747	12,02%	n.a
	Paid employment	3.747	16,52%	5%
	Self employed	n.a	n.a	n.a
	Value added	€ 273 million	17,59%	15%
Music industry	Number of enterprises	122	4,20%	8,48%
	Total employment	1.595	5,11%	n.a
	Paid employment	1.595	7,03%	11,75%
	Self employed	n.a	n.a	n.a
	Value added	€ 66 million	4,25%	35,58%
Fashion industry	Number of enterprises	65	2,24%	n.a
	Total employment	1.524	4,89%	n.a
	Paid employment	1.459	6,43%	n.a
	Self employed	65	0,76%	n.a
	Value added	€ 105,8 million	6,82%	n.a
Architecture and design	Number of enterprises	1.702	58,53%	n.a
	Total employment	15.826	50,75%	n.a
	Paid employment	7.952	35,07%	n.a
	Self employed	7.874	92,54%	n.a
	Value added	€ 495 million	31,90%	n.a
Printed media	Number of enterprises	525	18,05%	6,18%
	Total employment	8.464	27,14%	n.a
	Paid employment	7.899	34,83%	1,52%
	Self employed	565	6,64%	n.a
	Value added	€ 609 million	39,24%	6,53%
Podium arts	Number of enterprises	17	0,58%	n.a
	Total employment	30	0,10%	n.a
	Paid employment	25	0,11%	n.a
	Self employed	5	0,06%	n.a
	Value added	€ 3 million	0,19%	n.a
Total	Number of enterprises	2.9087	100%	n.a
	Total employment	31.186	100%	n.a
	Paid employment	22.677	100%	n.a
	Self employed	n.a.	100%	n.a
	Value added	€ 1.551,8 billion	100%	n.a

Source: Maenhout, De Voldere, Onkelinx (2006)

We calculated that the apparent labor productivity in the Flemish core creative sectors differs significantly from the average Belgian ratios. Although table 14 gives the impression that productivity in the total creative sector is somewhat lower than average, this is in fact not correct. Roughly all of the economic activity is situated within the micro (or small) size class (-s). In general terms, the creative sector productivity per person is somewhat 30 percent higher than the average for Belgian SMEs. The architecture and design sub-sector scores lower than the other sub-sectors, but this can be explained by the high level of self-employment prevalent in this segment.

Hence, the Flemish creative or design sector is a small but rapidly growing and highly productive sector with a high rate of self-employment, a growing market potential and backed up by large amounts of governmental support. The growth in value added and employment surpasses the Belgian SME average.

Table 15 Apparent Labor Productivity of the Core Creative Sectors in Flanders, compared the total Belgian economy, 2003 (* €1.000)

	SMEs				Large enterprises	Total
	Micro	Small	Medium	Subtotal		
Apparent labor productivity in the Belgian Economy (2003)	37,29	53,18	66,96	49,55	69,23	56,11
Apparent labor productivity in the Flemish Core Creative sector (2003)						49,76
Audiovisual industry						72,86
Music industry						41,38
Fashion industry						69,42
Architecture and design						31,28
Printed media						71,95
Podium arts						100,00

Source: Based on De Voldere e.a. (2007) and Eurostat (2008)

4 Data Analysis

4.1 Sampling

In October 2006, an invitation was distributed by the Flemish Centre for Entrepreneurship in the Creative Sectors (CONCreaS) to all creative entrepreneurs listed in their combined databases; to participate in the Innovation Diagnostic¹. This invitation was sent by mail to 432 small firms active in the creative sector. A number of firms responded directly to the invitation, while others were contacted by telephone in the following weeks to encourage participation in the survey.

The final sample consists of 51 firms, for which the data were collected between October and December 2006. While the majority of the participants preferred to fill in the questionnaire together with a member of the Lessius team² during an interview (which usually took place at the firm), six firms preferred to fill in the diagnostic alone and to send it to us directly by e-mail. Although the sample is relatively small, it is more or less representative for the firms in the original database.

It should be noted at the outset that our sample differs significantly from the data collected by other participants in this international study in a number of important ways (Mazzarol, 2007). Most of these differences are related to our sample selection, i.e. all firms in the sample are active in the creative industries (for a detailed description of the sample selection in the other countries discussed in this volume, we refer to chapter 3).

Moreover, firms active in the creative sector in Belgium are typically micro-firms, with few or even no employees. The majority of firms is led by the owner-manager (who also answered the questionnaire in most cases), typically without any support of other senior managerial staff or a board of directors. We will discuss these and other characteristics related to the data in what follows.

4.2 General Summary Statistics

Although all firms in the sample are active in the creative sector, they are active in a range of different activities, as can be seen in table 16. From the table, it is clear that the majority of the participating firms are active in “Interior design and architecture”, “Product development and industrial design” or “Web design and ICT”; together these three activities account for 55 percent of the firms in the sample.

¹ For a more detailed description of the diagnostic tool, we refer to chapter 1 in this volume.

² The Lessius team consisted of Ysabel Nauwelaerts, Frederik Van Assche and Ilke Van Beveren, together with the students who participated in the seminar “Strategic Innovation in the Belgian SME sector” in the Fall of 2006.

Table 16 Distribution of Sample by Activity

Activity	#
Interior design / architecture	10
Product development / Industrial design	10
Web design / ICT	8
Jewelry design / goldsmith	7
Landscape architecture	5
Photography	5
Ceramics / Pottery	3
Visual artist / Graphic artist	2
Fashion design	1
Total	51

As was already noted in the previous section, most firms in our sample are micro-firms. According to the OECD (2004) definition, which was employed for the purpose of this research project, micro firms are enterprises employing less than 9 employees and generating an annual turnover of less than € 2 million. In fact, only four firms in our sample employ more than 9 employees and only two firms report an annual turnover of more than € 2 million. Moreover, 25 (39) firms report no full-time (part-time) employment in the current year; while 26 firms have an annual turnover below € 250,000. Table 17 summarizes these and other general characteristics of the data set.

Table 17 Summary Statistics (N = 51)

Variable	Mean	Stdev	Min	Max
Age of the firm	16.75	18.24	1.00	100.00
Current Full-Time Employment	1.94	3.19	0.00	13.00
Growth in Full-Time Employment compared to three years ago	7.05 %	48.77 %	-100.00 %	200.00 %
Current Part-Time Employment	0.47	0.99	0.00	4.00
Growth in Part-Time Employment compared to three years ago	1.96 %	31.56 %	-100.00 %	200.00 %
Current Annual Turnover (€)	402,439	537,579	2,000	2,300,000
Growth in Turnover compared to three years ago	74.67 %	163.73 %	-65.63 %	900.00 %

The growth figures in table 17 should be interpreted with caution. If a firm only employed one full-time employee three years ago and has no employees in the current year, this implies a growth rate of -100 percent. The maximum growth in turnover of 900 percent is realized by a firm that has introduced a major innovation in the last three years. The same firm has also doubled its employment over the same period. It is also one of the very few firms in our sample who have applied for a patent for their innovation, the commercialization of which has been highly successful.

From table 17, it is clear that the firms in our sample grow on average in terms of employment and turnover, although not at a very high rate in terms of employment, especially when their average size is taken into account. As was noted in the previous section, the average firm in our data set is small compared to the other samples in this book. Overall, average employment in the “international” data set, which comprises of the samples for all countries; amounts to 66.6 full-time employees and 23.9 part-time employees (Mazzarol, 2007). Average growth rates for employment and turnover in the global data set equal 22 and 29 percent respectively. This implies that the firms in our sample show a higher growth rate in terms of turnover compared to the sample average, but a much lower growth rate in terms of employment. This most likely has to do with the high costs associated with hiring employees and the uncertain (risky) environment in which creative entrepreneurs operate. We will come back to some of these issues in what follows.

4.3 Innovation in the Creative Sector: Summary of Findings

As was already noted in chapter 3 of this volume, creative entrepreneurs in Belgium differ from other firms in the global sample in terms of their strategic decision making process. Since most firms have no or only a few employees and no senior managerial staff or board of directors, the owner-managers attach more value to the advice of family, friends, lawyers and accountants than firms in other countries (Mazzarol, 2007). Customers and suppliers are perceived as influential in the commercialization of innovations, although not as critical. The entrepreneurs in our sample share the need to retain their creative edge and uniqueness and as such the relative influence of all persons other than the designers themselves is perceived of lesser importance.

Given the highly innovative character of the sector, it is not surprising that only two firms in our sample did not realize any innovations during the past three years. Of the other 49 firms, 21 introduced between 1 and 5 innovations; 8 firms introduced between 6 and 10 innovations and 20 entrepreneurs commercialized more than 10 innovations over the same period. On average, the firms in our sample spent 32.17 percent of their annual turnover on the development and commercialization of their innovations.

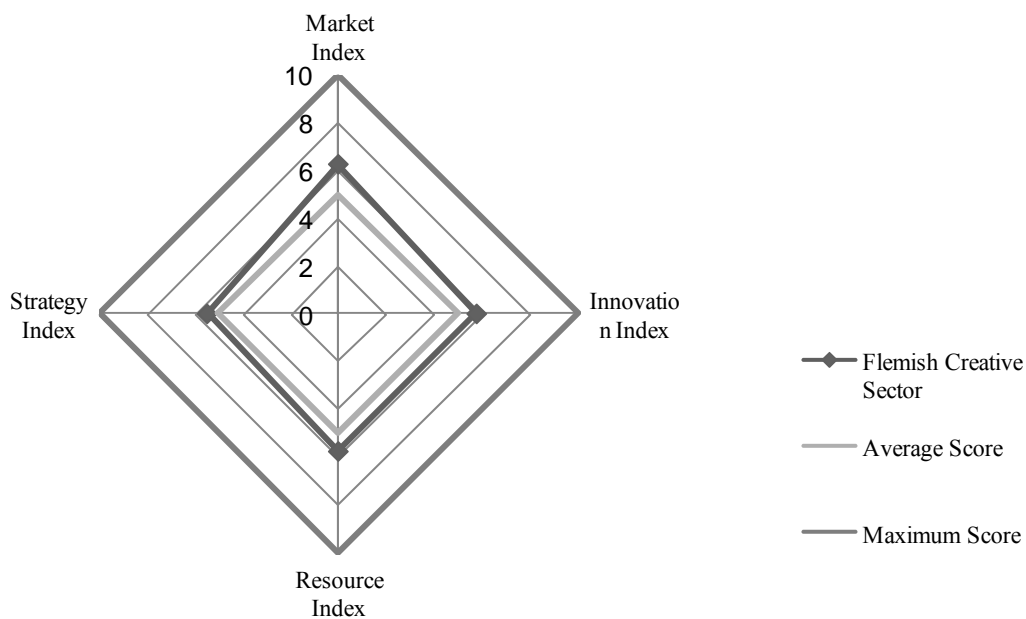
As was explained in detail in chapter 1, entrepreneurs were asked to evaluate a particular innovation in terms of its volume (total annual sales generated by the innovation), rate (rate of profit associated with the innovation) and length (duration of the innovation's lifetime). On the basis of these three characteristics, eight rent profiles were identified. The results for the Flemish sample are given in table 18. Compared to the global sample of firms, our sample has a significantly higher frequency of "Shrimp" and "Oasis B" profiles (Mazzarol, 2007).

Although the "Shrimp" profile might at first sight seem undesirable, this is not necessarily the case for creative entrepreneurs, who often develop many innovations per year. From the 11 "Shrimp" profiles in our sample, seven firms realized more than 10 innovations during the past three years. This implies that these establishments are much less dependent on a single innovation, but rather on their long-term success in commercializing multiple innovations. The "Oasis B" profile is an attractive profile for micro firms, given its low requirements in terms of production volume. As we will see below, creative micro firms face serious difficulties in acquiring sufficient funding for their innovations, rendering high investments virtually impossible. Hence, the Oasis B profile, which combines low volume with a high rate and high length is a highly attractive rent configuration for the firms in our sample.

Table 18 Rent Profiles for Innovative Firms (N = 49)

Rent profile	Definition	N
Shrimp	Low volume, low rate, low length	11
Champion	High volume, high rate, high length	9
Gadget	Low volume, high rate, low length	3
Joker	High volume, low rate, high length	3
Flash in the pan A	High volume, low rate, low length	6
Flash in the pan B	High volume, high rate, low length	3
Oasis A	Low volume, low rate, high length	4
Oasis B	Low volume, high rate, high length	10

Figure 2 shows the average market, innovation, resources and strategy index for the sample of Flemish creative entrepreneurs. In spite of the highly innovative nature of the sector, the average indices are only slightly higher than 5. The highest score is obtained for the market index (6.24), which (as was explained in chapter 1) relates to the way firms manage the introduction of their innovations to the market.



Source: authors' own calculations.

Figure 2 Average Innovation Index of the Creative Sector in Flanders

In what follows, we will discuss the potential causes for these relatively low scores in somewhat more detail.

4.4 Summary of Findings and Implications

In addition to the questions relating to the strategic decision making process and innovation rent profile at the firm level; the participants were also asked to give their opinion with respect to the general innovation climate in Belgium. Several factors emerged as particularly important to the majority of entrepreneurs from this analysis; they are summarized in table 19.

Table 19 Innovation Climate in Flanders: Overview of Findings

Positive influence	±	Negative influence
Geographic proximity to key markets	Access to (external) financing to fund future growth	Difficult access to workforce with necessary skills and education
Lifestyle in Flanders	Access to high quality (local) research centres (eg. Universities)	Cost of doing business (wages, resources, other costs and regulation)
(Communications) Infrastructure (roads, electricity, ICT)		Limited government support for local (small) innovators

As can be seen in table 19, the Flemish region is generally perceived as positive by firms with respect to the geographic distance to their market, the lifestyle (and standard of living) and infrastructure. However, since many firms in the creative sector sell luxury goods or services, they are necessarily heavily influenced by the economic climate.

All factors related to supporting staff, government support and the cost of doing business are considered to be factors hampering the innovation climate in Flanders. Government support is often not directed specifically at the design sector and is often reserved for new start-ups. Firms that have been active for a longer period of time, often do not qualify for any form of government funding. Even if they might, it is often not feasible for the single owner-manager of micro firms with little or no employees to keep track of all the possibilities and meet all the requirements to obtain government support.

Although access to external finance is not perceived as a negative factor, it can certainly not be considered a positive factor either. Since most firms in our sample started their activities several years ago and are still active today, they have obviously been successful in obtaining the necessary starting capital. However, both traditional banks and venture capital funds generally respond negatively to financing requests made by the creative sector. The main cause for the attitude of both bankers and

venture capitalists or business angels can be found in the volatile character of these firms' investments and returns. Furthermore, financial institutions tend to require detailed business and financial plans when firms apply for financial support. Given the specific nature of the design sector, it is often very hard for the entrepreneur to estimate future profits and costs, a task for which they often lack sufficient (economic) training as well. Moreover, commercialization of innovations typically takes a long time, hence the return on investment does not necessarily come immediately. We will come back to this issue below.

Moreover, acquiring advice from sector organizations such as UNIZO¹ or from external advisors such as accountants or lawyers, often proves to be hard, given their lack of specialization in and knowledge of the design sector. Similarly, access to external networks, such as local research centers and universities merits improvement. Of the 51 entrepreneurs in our sample, only one firm was engaged in an active collaboration project with a university.

For each of the four innovation indices discussed briefly in the previous section (market, innovation, resources and strategy), respondents were asked to sum up the three most important challenges their business faces. Table 20 summarizes the most frequently stated obstacles for each of the indices. Again, a number of these difficulties are undoubtedly related to the small size of the firms in our sample, but given the highly innovative character of the sector, we feel they are too easily overlooked by policy makers.

Table 20 Innovation Index: Challenges Facing the Flemish Design Sector

Market	Innovation	Resources	Strategy
Small size of the local market	Effective and affordable IPR protection	Lack of financial resources	Lack of strategic expertise
Competition (local, imports and imitation)	Imitation	Finding qualified personnel	Drawing up a financial / business plan
Economic climate (consumer confidence)	Lack of official recognition of profession	Lack of management and specific external expertise	Securing sufficient capital provision
Branding	Lack of innovation resources	Lack of government support for incumbent innovators	Lack of formal innovation management

The most notable challenges facing creative entrepreneurs in Flanders are clearly related to a lack of resources. Given the high costs associated with intellectual property protection, it is virtually impossible for the firms in our sample (with a few notable exceptions) to apply for patents for their innovations. This lack of protection makes them highly vulnerable to outside competition, including cheap imitations. Similarly, the absence of the required knowledge to draw up a financial and business plan, required to secure sufficient financing for their firm, is related to the lack of resources to hire a qualified manager or external expert.

Other challenges are more related to a lack of support by the government, which spends a lot of resources on supporting new start-ups, but offers less opportunities for small incumbent firms that require financial and other support. Some entrepreneurs (eg. goldsmiths) mentioned the lack of recognition of their profession (as opposed to retail jewelry stores), which could help to limit competition and imitation issues. The small size of the local market is also mentioned as a hampering factor in bringing innovations to the market, a factor that is also related to the lack of available resources to expand the business internationally.

Despite the many challenges and difficulties the design sector in Flanders continues to face, most participants in our survey evaluated their own innovations as positive. Although they lack formal innovation management processes and managerial and strategic expertise in some respects, the majority of the entrepreneurs we interviewed was very much aware of their strengths and limitations and employed at least some form of (ad-hoc) strategic management. Nevertheless, it can not be ignored that the growth potential of the sector can, under the current conditions, not be fully realized.

5 Interpretation of Results and Discussion of Cases

5.1 Presentation of Six Cases

The second stage of the research consisted of an in depth study of the innovation process of six creative firms, selected from the list of the 51 respondents. The six creative firms, chosen for the more

¹ UNIZO is the Flemish representative Organisation for the Self-Employed and SMEs (<http://www.unizo.be/eu/index.jsp>).

extended case studies are different in a number of important respects. They are active in quite different sub-sectors within the creative industry and their revealed innovation profiles are also quite different.

In what follows, we first describe very briefly the six firms selected for the case studies. For reasons of confidentiality, we will replace the names of the firms by an imaginary name, referring to the firm's main activities. Table 21 summarizes the six case studies.

Table 11 Summary of Cases

Name	Activity	Rent profile
Furniture	Interior design	Champion
Jewels	Goldsmith	Oasis
Mobile	Product design	Oasis
Alumat	Industrial design	Flash in the pan
Informat	Web design	Flash in the pan
Luxe	Product design	Joker

Our first case study focuses on a producer of furniture which revealed an innovation profile '*champion*'. This rent profile combines a high volume, rate and length. The firm '**Furniture**' develops original design-furniture, which is sold in exclusive shops around the world from Europe and USA to Japan and Hong Kong. Next to this, 'Furniture', whose entrepreneur started as interior architect, still fulfils tailor-made projects of interior design. Gross sales have been growing in the last years.

Second, two case studies have a revealed '*Oasis*' profile with typically low sales volumes. This seems to be a quite common profile for many creative firms since they have generally unique products or services which can not be sold in large volumes. The first oasis is a firm named '**Jewels**', active in the design and production of exclusive jewelry. Apart from the design and production of custom made jewelry, this firm also opened a second shop with more commercial jewelry, which are imported and sold without adding new value to the product. The main reason to start this more commercial activity, was to assure a more stable income, which ensures better financing opportunities as well as to attract more new people to the shop.

The second oasis was found in an all-round product design firm, mainly active in relatively larger and unique projects such as the design of a mobile day-care centre, a reclining bicycle, a mobile 'Cointreau' bar but also garden furniture and company logo's,... . This company is further identified as the '**Mobile**'.

Next, two case studies had innovation profiles identified as '*flash in the pan*' with relatively high volumes but limited lengths. These two firms are a bit different from most of the creative firms because they succeeded in realizing higher sales-volumes of their products. The higher sales-volumes are explained by the fact that these two firms do not only sell unique products, but they also include some more standardized products. This factor will later be shown to matter for the financial strength and independence of these firms. One firm, called '**Alumat**' is a supplier of aluminium products, mainly used for the interior design of shops and restaurants. Alumat is different from most other firms studied since it is a big company with a larger sales volume of about € 2.3 million and very high fixed capital investments.

The other firm '**Informat**' is a web designer, providing such services as website development and web hosting. Apart from this, the firm also sells case-tuning components and specialized cooling equipment but for these articles 'Informat' only operates as a distributor, i.e. these components are acquired from third parties.

Finally we studied a firm active in the design of consumer articles for the luxury sector such as cutlery or a teapot for luxury houses such as Christoffle. This very small firm, hereafter called '**Luxe**' consists of one person who generally works on project basis. The firms' profile appeared to be a '*joker*', which is relatively rare in the creative sector; only three of the 51 respondent firms have a joker profile

5.2 Study of the Most Important Weaknesses of Innovative, Creative SMEs

In what follows, we study in a more in depth way the main problems and remarkable points related to the innovation process of creative SMEs in Belgium. The case studies allow us to obtain better insights into both the causes of challenges the entrepreneurs face as well as into the key factors to success. Moreover, using the information obtained from the cases, it is possible to illustrate the salient observations resulting from the study. Naturally, it is not possible to describe all six cases in-depth here, hence we will focus on the most remarkable and typical points resulting from them.

A first important problem that we identified in almost every case is the difficult *access to financial resources*. This problem for creative SMEs has been confirmed by other studies such as Nauwelaer

and Frank (2007). It seems very hard for creative SMEs to gather financial resources, especially in the form of bank loans but also subsidies or other sources of financial support. The distrust and suspicion of financial providers towards creative SMEs is generally very high. The main reasons for the difficult access to financial resources seem to be related to the nature of the 'creative activities' themselves. In general, creative firms dispose of only a *small amount of tangible fixed assets or fixed capital*. The main part of their capital is incorporated in their creative and innovative capabilities which are generally considered as 'human capital' or 'intangible assets'. The problem with these intangible assets is that, although they might contain or lead to some very important and extraordinary value, their actual value is very often hard to prove, especially in the earlier stages of a project. Many small / micro creative companies' tangible assets are limited to a computer, some software and a small, often rented office. Companies such as 'Mobile' and 'Luxe' work mostly on a project basis which entails that they have no production activities (apart from the development of prototypes). Above that, their work requires a long period of time before realizing any financial return and their income can be quite volatile. This represents a first major set of problems in convincing banks to obtain a loan.

The project of the mobile daycare centre can perfectly illustrate these elements. The 'Mobile' has been working on the development of the mobile daycare centre for some years. This concept is relatively new and requires not only a lot of adjustments over time (after pre-testing,...) but it also takes time to convince the customers of the value of this new concept. Since the mobile designer is not a producer of the product, but only the developer of the concept, he has very little tangible assets to prove the value of his creation or to use as a guarantee (collateral) for his loans. He has to convince financial supporters by his persuasive talk and his drawings. This is a very painful problem that a number of the creative SMEs face, particularly those firms whose activities are limited to the design and do not entail (m)any production or sales.

Those creative entrepreneurs that do have substantial production or sales activities, clearly seem to have much fewer problems in finding sufficient financial resources. Companies such as 'Alumat' who sell and (partly) produce finished products, dispose of enough tangible assets to guarantee their value towards financial providers or partners. Also their strong financial results from the past in terms of sales and return offer them a strong bargaining position towards banks and other financial providers. 'Alumat' is therefore also one of the few creative firms admitting to having no substantial problems in acquiring sufficient financial resources.

Another aspect, related to this issue, is the fact that banks and other financial institutions request detailed financial or investment plans from the entrepreneur before allowing / allocating financial support. Many creative SMEs admit they do not have the appropriate *personnel and knowledge to set up a detailed and realistic financial plan*. The cost as well as the search for the appropriate person for this job causes problems. Companies like 'Jewels' or 'Luxe' confirm the strong mistrust of banks and other financial supporters and they indicate their personal lack of knowledge in financial and management related topics as a major weakness. Above this, it seems hard to find a good financial adviser who can provide them with the necessary management and financial advice.

A final, typical weakness of the creative SMEs in our study is related to the very *small production series* they are generally confronted with. The nature of their products or services which are mostly 'unique, innovative, creative and exclusive' entails that production is limited to very small series. The small production batches are generally very costly and block any possibility to realize scale economies. This weakness is also apparent from the results of the innovation profiles where most of the creative SMEs seem to have a 'small volume'. Their small sales volumes clearly restrict their financial and operational capabilities as well as their bargaining position towards investors etc. Nevertheless, a few exceptional creative SMEs such as 'Alumat' and 'Informat' succeeded in realizing higher sales-volumes because they do not only sell unique products, but they also offer more standardized products. Also the firm 'Jewels' recognized the importance of realizing higher sales volumes. Therefore, 'Jewels' added a collection of more commercial, imported jewels to their portfolio which provides them with larger and more stable sales volume and income, needed to guarantee the survival of their exclusive, tailor made jewel collection.

6 Conclusion

On the basis of the previous 51 innovation profiles and 6 case studies on creative SMEs in Belgium, we conclude this chapter by formulating some suggestions and policy implications which could help to improve their innovation process. The suggestions which are formulated here, try to give a solution or

an answer to the most relevant problems revealed in the study. They are presented in two points. First we formulate a set of advices for the SMEs themselves in order to overcome or avoid the most important weaknesses or traps. Next we present a number of policy implications or suggestions for governments and other public institutions to help creative SMEs in their innovation process.

6.1 Suggestions for the SMEs

One first important conclusion from our study is that most of the weaknesses and problems identified in the creative SME sector seem to be quite general and related to one another. This means that the problems should be tackled together but also that, once a firm can overcome one or two of these problems, it will generally be easier to solve the others. Some of the most frequent problems which seem to be very much interrelated are : the difficult access to financial resources, the relatively small sales volumes, the small production series / batches, the limited fixed assets (as collateral) and the lack of managerial and financial knowledge (for example to set up a financial or investment plan). It is clear that most of these weaknesses are related to one another and it also appears from our study that the more successful creative SMEs show no important problems for any of these points. Two of the case study firms for example succeeded to **raise their sales volume by adding a more commercial product line to their exclusive 'small series'**. This allowed them to convince financial suppliers more easily thanks to the stronger financial basis they could lean on.

A first important suggestion to overcome the typical 'financial' and 'volume' problems could be to enlarge sales volumes for example by extending the exclusive, innovative and unique, small product lines with some more commercial, standardized products. This could be realized through imports of more commercial goods from inside or outside the country. In general, creative firms are not too excited to sell commercial products since they are often considered as a competitive threat. Nevertheless, SMEs like the jewel designer or 'Alumat' prove that this enlargement of their product lines with more commercial products has a positive effect on the financial and general state of the firm. This larger and more stable revenue, resulting from the commercial product line can guarantee a stronger financial basis and helps in convincing external investors. This offers the creative entrepreneur more space to develop and commercialize its more exclusive and more capital requiring innovations on a longer term.

Second, a set of creative SMEs we studied seem to realize limited margins because they mainly create, but do not produce nor commercialize their innovations in their own name. The production and commercialization is often taken over by larger firms, claiming the largest part of the revenue. One solution to this problem would be for the creative SMEs **to incorporate the production and / or commercialization** of their innovative products in their own firm since these activities offer a larger share of the value added and margins. Firms like 'Luxe' should try to commercialize their own creations in order to retain a larger share of the profits and realize a higher margin or rate. Nevertheless, this is not always a possible or realistic path to follow by the micro firms because of their limited financial resources. An alternative solution could be found in a 'take over', merger or acquisition of the SME by a larger / stronger firm. Some of our studied micro-firms admitted openly that they had no negative feelings towards (or were even in search of) larger firms to take over their assets and financial responsibility. Of course, the creative freedom should be agreed upon the contract, in order to guarantee the innovative impulse.

6.2 Suggestions for Public Support to Creative SMEs

Some of the public policy implications we suggest hereafter, could sound more traditional than others but they all result clearly from our study of Belgian creative SMEs.

First, the important problem of difficult access to financial resources could be tackled in different direct or indirect ways. If the government is convinced of the importance of innovation in a dynamic society, it could help directly by offering **financial support in the form of subsidies, grants, fiscal advantages, guarantees or warrants**. Especially in the first five years of a new business, some external, public financial support seems to be almost indispensable for creative SMEs to survive in a competitive environment. The typical weaknesses mentioned above, which are inherent to creative and innovative firms (high fixed costs, limited fixed assets, longer period before the innovation yields return,...) justify the need for some public financial support in the early years of innovative entrepreneurship. The financial support should not necessarily be directly offered through subsidies,... but can also be granted by some kind of guarantee to facilitate entrepreneurs' access to external loans from private financial institutions. One important detail is that these means of public financial support should be well communicated and easily accessible, also for the very small firms which seemed not always to be the case.

Second, there seems to be a crucial need for **practical education and training in managerial,**

financial, administrative and marketing related issues. This gap could be perfectly fulfilled by organizing practical training programs or workshops helping the creative entrepreneurs in their managerial or financial issues. These programs should be very well focused on the specific needs of the creative entrepreneurs, for example focusing on how to set up a business plan and a financial or cash plan, how to tackle the (inter-)national markets, how to follow up or solve administrative issues and so on. CONCreaS, ‘the Centre for Entrepreneurship in the Creative Sectors’, is a good example of such an initiative for the Flemish creative entrepreneurs. Another solution could be found in providing some professional, public assistance for young innovative firms who want professional support in one of these issues.

Finally, we think the government has an important role to play in *stimulating networks* where creative entrepreneurs can gather and meet in order to share information, knowledge and best practices. These networks seem to play an important role also in finding financial and professional support. They can also lead to some joint initiatives in terms of sharing production capacity for example for the production of prototypes or sharing commercial and logistic networks.

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