Slovenian Entrepreneurship Observatory
2003
Findings of the Slovenian Entrepreneurship Observatory published in this publication represent partial research findings within the framework of basic research project J-5-3299-0585-0103 and target research projects CRP 3311-01-828-524 and CRP V5-0809 financed by the Ministry of Education, Science and Sport and the Ministry of the Economy. The dissemination of results is also supported by the Small Business Development Center.

© Copyright Faculty of Economics and Business, Maribor, 2004.

No part of this publication may be reproduced or transmitted, in any form, or by any means (electronic, mechanical, photocopying, recording), without prior permission of Faculty of Economics and Business Maribor.

This book falls within the group of products on which 8,5% VAT is paid (ZDDV, Ur. l. RS, No. 89/98, and ZIPRS0203, Ur. l. RS, No. 103-01/01).
EXECUTIVE SUMMARY

1

Miroslav Rebernik, Dijana Močnik, Matej Rus, Silvo Dajčman
THE BASIC CHARACTERISTICS OF SLOVENIAN ENTREPRENEURSHIP IN 2002

1.1 Number of enterprises, employees and the average size of enterprises
1.2 Value added
1.3 The average size of European and Slovenian enterprises
1.4 Some indicators of Slovenian SMEs in comparison with the EU-19

2

Silvo Dajčman
THE CHALLENGES OF FINANCING SMALL AND MEDIUM-SIZED ENTERPRISES IN SLOVENIA AND THE EU

2.1 Introduction
2.2 The nature of services offered by Slovenian banks to SMEs
2.3 The challenges of providing bank loans to SMEs

3

Polona Tominc, Karin Šinec Rantaša
ATTITUDES TOWARDS FEMALE ENTREPRENEURSHIP IN THE SLOVENIAN SOCIAL ENVIRONMENT

3.1 Introduction
3.2 Components of social support for female entrepreneurship
3.3 Conclusion

4

Tadej Krošlin, Matej Rus
THE CHALLENGES OF CLUSTER DEVELOPMENT INTO REGIONAL INNOVATION SYSTEMS IN SLOVENIA

4.1 Introduction
4.2 The analysis of Slovenian clusters from the point of view of basic developmental trends in cluster formation within the EU
4.3 Obstacles and opportunities for the development of clusters in Slovenia
4.4 The policy of clustering in Slovenia and the role of the state in eliminating identified obstacles
4.5 Conclusion
5
Jožica Knez-Riedl
ENVIRONMENTAL RESPONSIBILITY OF SLOVENIAN SMEs

5.1 Environmental responsibility as a component of social responsibility of enterprises
5.2 Motives/reasons for environmentally responsible activities
5.3 Obstacles for environmentally responsible activities in SMEs
5.4 Adopting environmental standards
5.5 The relationship between the environmental activities of Slovenian SMEs and company strategy
5.6 Indicators of environmental responsibility for Slovenian SMEs
5.7 Plans of Slovenian SMEs related to environmental protection within the next three years

6
Matej Rus, Tadej Krošlin
HOW DO SLOVENIAN AND EUROPEAN SMEs LEARN?

6.1 Introduction
6.2 Activities for the development of competences of Slovenian and European SMEs
6.3 Conclusion

APPENDIX 1: METHODOLOGICAL NOTE

LITERATURE
LIST OF FIGURES

Figure 1-1: Value added by size class, 2002 12
Figure 1-2: Value added per employee according to size class, 2002 13
Figure 1-3: Relative value added per employee according to industry, 2002 13
Figure 1-4: Relative labour productivity of SMEs by countries 16
Figure 2-1: Annual interest rates on loans to enterprises 17
Figure 2-2: Real interest rates of loans to enterprises in Slovenia 18
Figure 2-3: Different banking services used by Slovenian enterprises 19
Figure 2-4: Demand for financial services provided by non-banking institutions and on the black market 19
Figure 2-5: Banking services used by Slovenian enterprises 20
Figure 2-6: Criteria for assessing the quality of banking services 20
Figure 2-7: Obstacles preventing SMEs to get access to banking services 21
Figure 2-8: The number of banks Slovenian SMEs use the services of 22
Figure 2-9: Frequency of switching the main bank in Slovenian SMEs 22
Figure 2-10: Opinions of Slovenian enterprises about the influence of foreign banks (upon entering the EU, financial integration) on the range of banking services 23
Figure 6-1: The share of micro, small and medium-sized enterprises that are aware of the importance of knowledge and skills 42
Figure 6-2: The share of micro, small and medium-sized enterprises that believe that the government does not fully support the implementation of education and other activities in order to increase knowledge and skills in enterprises 44
LIST OF TABLES

Table 1-1: Key data by size class, 2002 12
Table 1-2: Size of non-primary sector according to country 14
Table 1-3: Some indicators of Slovenian SMEs in comparison with the EU-19 in 2002 15
Table 3-1: Components of social support for female entrepreneurship 26
Table 3-2: Average estimates of Slovenian experts, GEM 2002 27
Table 5-1: Motives/reasons of Slovenian SMEs for environmentally responsible activities 36
Table 5-2: Obstacles preventing Slovenian SMEs to take part in environmentally responsible activities 36
Table 5-3: Adopted environmental standards of Slovenian SMEs 37
Table 5-4: Connection of environmental activities of Slovenian SMEs with the company strategy 37
Table 5-5: Basic indicators of environmental responsibility of Slovenian SMEs 37
Table 5-6: Other indicators of Slovenian SMEs 38
Table 5-7: Plans of Slovenian SMEs related to environment protection within the next three years 38
Table 6-1: The share of Slovenian and European micro, small and medium-sized enterprises that participated in various activities in order to improve the level of knowledge, experience and skills in the enterprise, in Slovenia and Europe-19 42
Table 6-2: The share of micro, small and medium-sized enterprises that participated in various activities in order to improve the level of knowledge, experience and skills in the enterprise, in EU countries and Slovenia 43
EXECUTIVE SUMMARY

The development of entrepreneurship plays an important role in economic and social development. Understanding what is happening in Slovenian enterprises is important not only in order to pursue an appropriate economic policy but also in order to find the advantages and disadvantages of Slovenian companies in comparison with enterprises in other European countries. The goal of making Europe the most dynamic economy in the world by 2010 will be difficult to achieve. If Slovenia wishes to join the most developed European countries, it will have to speed up its economic growth. Without successful and high-growth enterprises and without the dynamic process of establishing new enterprises, it will not be possible to reach this target.

Slovenian Entrepreneurship Observatory 2003 consists of several research issues. In the first part, a short review of the current level of entrepreneurship is given, outlined on the basis of economic and statistical data. In the second part, a number of topics, based on a survey of a sample of 672 enterprises are dealt with. We studied the relationship between banks and small and medium-sized enterprises, female entrepreneurship, clustering, social responsibility of companies and the development of competences.

Lagging behind the average value added

Since one of the tasks of our analysis is to understand the economic situation in Slovenian entrepreneurship, reliable data used in the quantitative part of the research is of utmost importance. The main difference in this year’s research relates to the collection of data, which was so far acquired from the Agency of the Republic of Slovenia for Payments (APP) for companies, whereas data for sole proprietors were acquired from the Tax Administration of the RS (DURS). This year, our research is based on data exclusively collected and harmonised by AJPES. The same will be done in future. In order to ensure the reliability and accuracy of our data, we left out a small part of time series relating to the number of enterprises, which could be used in future research. When comparing the results from previous years it is thus necessary to take these changes in methodology into account.

The number of enterprises included in our research in 2002 was 91,250 (38,051 enterprises and 53,199 sole proprietors). In 2002, 93.4% of all enterprises were micro enterprises (with 0 to 9 employees). 99.7% companies in Slovenia had less than 250 employees. An average Slovenian company employed 6 people in 2002. Three fifths of employees worked in small and medium-sized enterprises. The Obalnokraška or Osrednjeslovenska regions had twice as many enterprises per 1000 people (60) than the Pomurska or Zasavska (30) regions. Small and medium-sized enterprises contributed 56% of all the value added of Slovenian companies.

The indicator of value added per employee shows that Slovenia is lagging behind the EU. The average value added per employee in the EU amounts to € 80,000, whereas in Slovenia it amounts to € 23,000.

“Small is not beautiful” in the banking services provided to small enterprises

Despite the lowering of real interest rates on loans in Slovenian banks, the demand for bank loans (provided by Slovenian banks) of Slovenian enterprises is decreasing in real terms, because companies are trying to find other sources of financing. Nevertheless, banks remain the most important financial institutions for small and medium-sized enterprises, which is why we dealt with the business relationships between banks and small and medium-sized enterprises. Research carried out among European and Slovenian small and medium-sized enterprises has revealed that companies have similar experience regarding their business relationships with banks. Extortionate interest rates on bank loans, high collateral costs, complicated and time-consuming procedures in order to obtain a loan, and the lack of understanding about what services MSEs really need represent the biggest obstacles facing Slovenian enterprises. The smaller the company, the bigger the obstacles. Slovenian banks find it difficult to understand the role and potential of small and medium-sized enterprises.

In Slovenia, the majority of SMEs take out loans and use other banking services from one bank. The number of banks a company deals with grows in relation to the size of the company. Small enterprises mainly do business with one bank (52% of small enterprises), large Slovenian enterprises use the services of three or more banks (64%), whereas the services of only one bank are used by only 14% of large enterprises.

The banking market is competitive if the users of banking services can quickly and inexpensively change banks. Companies rarely decide to change banks especially after a long history of business activities, which is probably due to the costs connected with the time lost on opening a new account, transferring data about the company to the new bank, changing the contact person, etc. Slovenian
companies, regardless of their size, rarely change banks, which is also the case elsewhere in Europe. Most frequently, the main reason for switching banks is dissatisfaction with banking services (banks react slowly to the needs of enterprises, mistakes, dissatisfaction with bank employees, etc). Less often, the reasons are business terms, pricing or the quality of services.

The majority of enterprises expect positive changes after entering the European Union. Mostly, companies believe that the services offered by domestic banks will improve due to competition and that new foreign banks will offer reasonably priced and quality banking services and thus enrich the banking services in Slovenia.

More incentive for female entrepreneurship

A detailed insight into female entrepreneurship in Slovenia showed considerable unexploited possibilities. Female entrepreneurs in Slovenia usually do not face prejudice against their entrepreneurial career. There are no legal obstacles that would limit women from owning an enterprise. Recently, appropriate legislation was adopted which grants equal opportunities for both sexes (the Equal Opportunities Act, the Employment Act and the Parental Protection and Family Benefits Act). But women less frequently decide to become entrepreneurially active than men. In the age group between 25 to 34 years, which is in Slovenia and world-wide the most entrepreneurially active group, men are, on average, four times more likely to be entrepreneurially active out of opportunity than women – among 1000 adults, 95 men and only 21 women became active.

Women remain an unexploited source of entrepreneurship, thus setting up effective mechanisms for the promotion of female entrepreneurship could become an important source of entrepreneurial ideas in Slovenia. Support and development programmes in some European countries mainly focus on ensuring equality between sexes and do not focus on female entrepreneurship itself. Such programmes are rarely adopted to cater for the special needs of female entrepreneurs. The possibilities for setting up specialised programmes for financing start-ups set up by women should be studied, and the necessary infrastructure should be established (governmental and non-governmental bodies), which would help female entrepreneurs in various phases of their companies.

In the next ten to twenty years, Slovenia will face demographic difficulties, mainly due to the ageing population and decreased fertility rates, which represents an obstacle for the desired economic growth and for assuring the support of the elderly in the long run. A long-term developmental policy should include measures that would match population and demographic development. Dealing with the role of women that is so closely connected with both segments of our future, together with the endeavours related to equal opportunities between sexes should not be excluded from future political and economic policies.

Clustering

A short history of clustering and entrepreneurship in Slovenia only partly explains the reason for a relatively small number of sometimes underdeveloped clusters. The programmes carried out by the Ministry for the Economy can be compared with (and are sometimes even better than) programmes in more developed countries. On the other hand, our clusters, on their way to regional innovation systems, which is the direction of all comparable European clusters, face numerous obstacles. Almost 70% of surveyed enterprises – mostly micro enterprises – are not acquainted with tenders. Medium-sized enterprises are well informed, with 40% of them not acquainted with tenders. Almost 40% of all SMEs in Slovenia are not familiar with the concept of clustering; the majority of them are again micro enterprises. 25% of companies were acquainted with tenders but did not want, for various reasons, to apply.

The most frequent reason among companies for not joining a cluster is the lack of need (28%). Many companies, especially micro enterprises, are not familiar with the advantages of clustering. Lack of partners is the next reason (13%), followed by the complicated application procedure (8%). Only some 3% had bad experiences with previous tenders and were not prepared to invest their time and efforts into filling out applications.

Clusters are most often found in traditional industries. Only a tiny part of the economy belongs to the industries of the new economy. Despite this, there are research activities and ideas about how to connect Slovenian enterprises in the field of information and communication technology in clusters, integrate them into international networks and increase their competitiveness on the global market. SMEs do not prevail in Slovenian clusters. Their role is increasing, but the predominant force is still in the hands of large enterprises.

In response to the question of if they would like to join a cluster: 40% of companies answered negatively. This opinion was mainly expressed by micro (39%) and small (38%) enterprises, which is especially worrying. Foreign research shows that these companies profit the most from joining a cluster, as they neutralise their smallness and can at the same time preserve their flexibility and other advantages. There are many reasons why Slovenian micro and small enterprises do not want to join clusters: lack of necessary skills needed for cooperation, lack of trust and the fear of losing their independence, distrust for the concept of clustering and lack of other resources. On the
other hand, one fifth of SMEs would like to join a cluster, which is rather encouraging.

Slovenia lacks a systemic view on the development of clusters, since this development inevitably extends into other areas, which are not covered by the Ministry of the Economy. The best connections and strongest links are the result of market needs and do not stem from tempting financial aims offered by the state in different tenders. Many projects would not see their implementation without the help of the state, because entrepreneurs and managers still count too often on help provided by the state. The fact remains that decisions about the integration into a cluster and about the growth and development of their enterprises is not in the hands of the government, regional or municipal administration or political parties. Such decisions should be made by managers, or owners and their teams. Without the necessary knowledge about managing such systems, our clusters are unlikely to succeed.

Environmental (ir)responsibility of Slovenian enterprises

The majority of Slovenian enterprises are involved in environmentally responsible activities ad hoc, without any connection to their strategy. In the next three years, one third of surveyed enterprises will continue or start environmental activities, one third do not have any such plans and one third do not know what their enterprises are likely to do in the future with regard to environment protection.

To what extent are Slovenian enterprises environmentally responsible and what are the driving factors behind their environmentally responsible behaviour? The majority of enterprises ranked concerns for a healthy environment and human health as the most important reason for their environmentally responsible behaviour (65%), followed by compliance with legislative requirements (41%), concerns for the business reputation of the company and its image (32%) and business success (26%). Lack of time (36%) and high costs (28%) prevent companies from being environmentally active.

It can be expected that the same trends found in developed countries will also strengthen in Slovenia. It can be expected that the number of requirements demanded by socially responsible investors (SRI) will increase in Slovenia, which will, consequently, sharpen the selection on the market of environmental responsibility. In such circumstances, the question of various forms of support and tax relief is of importance in cases of environmentally innovative products, services and environmental investments.

The development of competences

Improving the level of competences and skills of human resources in enterprises is the key tool for enhancing the competitiveness of companies in general and especially SMEs. Approximately one half of European, and two thirds of Slovenian SMEs, stress that the activities for development represent the key element in their overall company strategy. Differences between size classes can be noticed among European enterprises. Relatively large companies are more often aware of the importance of the development of competences than small enterprises (micro 51%; small 53%; medium-sized 67%). In Slovenia, enterprises are, to a similar level, aware of the importance of the development of competencies in all size classes (micro 66%; small 64%; medium-sized 62%). Interestingly, Slovenian enterprises are more likely to be aware of the importance of the development of competencies than European companies. This is probably because of the awareness of Slovenian enterprises that their lagging behind their European counterparts is mainly due to a lack of knowledge and skills.

Visiting exhibitions and fairs, reading professional literature and meetings organised for the exchange of information are among the most important methods used by enterprises in order to increase the level of knowledge, experience and skills. Slovenian enterprises (between 70% and 80% of surveyed enterprises) use these methods more often than European companies (between 30 and 60% of surveyed enterprises). Both Slovenian and European large enterprises use these methods more frequently. After this comes cooperation with advisers, which is used by 59% of Slovenian and 33% European SMEs.

Slovenia belongs, together with Norway, Finland, Sweden, Iceland, Lichtenstein, Austria and Ireland to the group of countries that are most active in their efforts to improve knowledge, experience and skills. The second group of countries is their opposite and consists of Italy, Greece, Spain and Portugal, as well as France and Luxemburg, with the lowest degree of participation in activities to develop competences (both in formal and informal activities as well as with regard to the number of methods used).

Four out of ten European SMEs, regardless of their size, believe that investments in activities connected with the development of competences will bring quick economic returns. In this regard, Slovenian SMEs are more cautious, as only 32% of them expect quick economic returns. There are no substantial differences between companies of different sizes.

More than 45% of European and only 28% of Slovenian SMEs have a (special) person or a group of people employed in charge of developing knowledge, experience and skills of employees. An important obstacle in the
development of competences is that the owners of SMEs are often unable to identify missing knowledge or skills. Only a small number of SMEs acknowledge the problems related to the identification of professional needs and the finding of useful resources for the development of competences.

Numerous programmes carried out by individual countries in the European Union as well as by the Slovenian government show that countries are aware of the importance of knowledge and thus spend a lot of time in various activities for the development of knowledge, experience and skills in their SMEs. Despite this, research shows that 46% of European SMEs and 58% of Slovenian SMEs believe that support granted from the state in this area is not sufficient.

We should find a new, wider, definition of learning, which would represent the basis for different forms of education and training as well as for the majority of policy measures. Our research has also shown that a wider concept of learning should be adopted, which would include the relationship between formal education and education within enterprises (informal education), as well as the integration of education, training and the labour market.

Prof. dr. Miroslav Rebernik
Research group leader
The Basic Characteristics of Slovenian Entrepreneurship in 2002

1.1 Number of enterprises, employees and the average size of enterprises

It can be seen in Table 1-1 that there were 91,250 active enterprises in Slovenia in 2002, of which there were 9,912 enterprises with 0 employees, 75,346 micro enterprises with 1 to 9 employees, 4,522 small enterprises with 10 to 49 employees, 1,162 medium-sized enterprises with 50 to 249 employees and 308 large enterprises with 250 or more employees. There were 85,258 micro enterprises (0 to 9 employees) in 2002 in Slovenia, representing 93.4% of all enterprises. If small and medium-sized enterprises are added to micro enterprises, there were 90,942 micro-, small, and medium-sized enterprises (SMEs) (0 to 249 employees). They represented 99.7% of all enterprises in Slovenia in 2002.

Taken together, all Slovenian enterprises employed 561,843 people in 2002. This number also includes 28,184 individual entrepreneurs with no employees. In our research, this group of individual entrepreneurs was added to the group having between 1 and 9 employees. Micro enterprises employed 137,732 people (or 25% of all employees), small enterprises 90,171 people (or 16% of all employees), medium-sized enterprises 123,360 people (or 22% of all employees) and large enterprises 210,580 people (or 37% of all employees). All together, SMEs employed 351,263 people (or 63% of all employees). An average Slovenian enterprise employs six people.

On average, a Slovenian enterprise had a turnover\(^1\) of SIT 125 m (or € 554,000\(^3\)) in 2002. An average enterprise had a turnover of SIT 14.870 m (or € 65,697,000). An average medium-sized enterprise had a turnover of SIT 2.123 m (or € 9,378,000). An average small enterprise had a turnover of SIT 458 m (or € 2,025,000) and an average micro enterprise with 1 to 9 employees had a turnover of SIT 30 m (or 131,000), whereas an average micro enterprise with no employees had a turnover of SIT 10 m (or 46,000) (see Table 1-1).

The Slovenian economy ended 2002 with a profit. Each employee, on average, contributed SIT 607,576 of net profit. On average, the Slovenian economy had a five percent return on invested capital in 2002. Capital represented 47% of the value of assets of Slovenian active enterprises. Labour costs amounted to 60% of value added. If the value added is reduced by labour costs, the remaining value added (profit and depreciation of fixed assets) amounts to 40 percent (see Table 1-1).

---

1 All individual entrepreneurs who, according to the Agency of the RS for public and legal records and services (AJPES), formally have zero employees were put in the size class of enterprises with 1 to 9 employees. There were 28,184 such individual entrepreneurs in 2002 in Slovenia. Thus 9,912 of enterprises having no employees include only those enterprises, whose balance sheets and profit and loss accounts are collected by AJPES.

2 Turnover per enterprises: (net revenues from sales + value of capitalised own products, services, goods and materials + other revenues). Capital yield for individual entrepreneurs: sales revenues.

3 1 euro = SIT 226,34955 (average medium exchange rate of euro at the Bank of Slovenia in 2002. Source: the Bank of Slovenia).
1.2 Value added

The essence of entrepreneurial activity is to create added (i.e. new) value. In 2002, Slovenian economy created SIT 2,914,292 m of value added\(^4\) (which, at the average exchange rate of the euro, amounted to 12.875 m euros in 2002). The relative added value, according to the size class of enterprises, was as follows: in enterprises with 0 employees, the value added amounted to SIT 15.826 m (or 0.5% of total value added), in enterprises with 1-9 employees, the value added amounted to SIT 533.564 m (or 18.3% of total value added). In small enterprises, the value added created amounted to SIT 467.951 m (or 16.1% of total value added). The value added created in medium-sized enterprises amounted to SIT 618.968 m (or 21.2% of total value added). In large enterprises value added amounted to SIT 1,277.983 m (or 43.9% of total value added) (Figure 1-1).

In large enterprises, the value added amounted to SIT 6.069 m per employee. The relatively highest productivity was observed in large enterprises, which, on average, had a 17% higher value added per employee than the Slovenian average. The productivity of Slovenian SMEs was 90% of the Slovenian average (Figure 1-2).

\[\text{Value added for enterprises: gross income (net sales revenues +/- value of stocks and unfinished products + value of capitalised own products, services, goods and materials + other revenues) – costs of goods, materials and services - other expenditures; Value added for individual entrepreneurs: revenues + other revenues – expenditures for materials and goods sold (purchases of materials and goods +/- value of stocks, materials and goods) – expenditures for services – other expenses and expenditures.}\]

---

\(4\) Value added for enterprises: gross income (net sales revenues +/- value of stocks and unfinished products + value of capitalised own products, services, goods and materials + other revenues) – costs of goods, materials and services - other expenditures; Value added for individual entrepreneurs: revenues + other revenues – expenditures for materials and goods sold (purchases of materials and goods +/- value of stocks, materials and goods) – expenditures for services – other expenses and expenditures.
The productivity of the Slovenian economy is further supplemented by data on the average value added per employee according to industry (Figure 1-3). Relative value added per employee in an industry is given as a percentage of the average value added in all size classes in different industries.

Above the average value added, the following industries could be found: J – financial intermediation (value added per employee in this industry is 268.8% of the average Slovenian value added per employee), E – electricity, gas and water supply (which amounted to 194.8% of the Slovenian average), L – public administration, defence, social insurance (129.5% of Slovenian average), I – transport, storage and communications (121.9% of Slovenian average), C – mining (118.6% of Slovenian average), N – health and social security (115.0% of Slovenian average), K – real estate, renting and business services (103.4% of Slovenian average), industry G – wholesale trade, repair of motor vehicles and consumer goods (101.8% of Slovenian average), and O – other public, community and personal services (101.6% of Slovenian average).

Below-average value added per employee could be found in the following industries: D – manufacturing (98.3% of Slovenian average value added per employee), A – agriculture, hunting and forestry (74.7% of Slovenian average), F – construction (71.2% of Slovenian average), M – education (69.1%), H – catering (66.7%). On average, the least productive were enterprises in industry B – fishing (58.3% of Slovenian value added per employee).

Figure 1-2: Value added per employee according to size class, 2002

Figure 1-3: Relative value added per employee according to industry, 2002
1.3 The Average size of European and Slovenian enterprises

This comparison is for the non-primary private sector, with the exclusion of agriculture, hunting and forestry (NACE A), fishing (NACE B), public administration, defence and social insurance (NACE L) and education (NACE M).

Noticeable differences appear among European countries regarding the average size of an enterprise (Table 1-2). In Greece, Italy, Portugal, Spain and Iceland, the average size of an enterprise is relatively small (2 to 5 employees). In Austria, Ireland, Luxemburg, and the Netherlands, enterprises are substantially larger, employing, on average, 10 people. A larger average size of an enterprise, according to the number of employees per enterprise, can also be found in Switzerland and Germany (8 people). In 2000, six people per enterprise was the most common average size of enterprises in Finland, the United Kingdom, Liechtenstein, Norway and Slovenia (data from Slovenia are for 2002). The average size of enterprises providing employment to six people can be found in the European Union as well as in EU-19. Countries not belonging to the European Union (non-EU), have, on average, seven employees.

In the Slovenian non-primary sector, micro enterprises predominate (93.5%), followed by small enterprises (4.9%) and medium-sized enterprises (1.3%). SMEs amount to as much as 99.7% of all enterprises (Table 1-3). Large companies amount to only 0.3%. The structure is similar to that of the European Union.

<table>
<thead>
<tr>
<th>Enterprises (1.000s)</th>
<th>Employees per enterprise</th>
<th>Size-class dominance</th>
<th>Relative labour productivity</th>
<th>Relative profitability</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>SME</td>
<td>SME Large</td>
<td>SME Large</td>
</tr>
<tr>
<td>Austria</td>
<td>225</td>
<td>10</td>
<td>SME</td>
<td>78 142</td>
</tr>
<tr>
<td>Belgium</td>
<td>545</td>
<td>6</td>
<td>Micro</td>
<td>94 114</td>
</tr>
<tr>
<td>Denmark</td>
<td>180</td>
<td>9</td>
<td>SME</td>
<td>85 132</td>
</tr>
<tr>
<td>Finland</td>
<td>210</td>
<td>6</td>
<td>Large</td>
<td>75 136</td>
</tr>
<tr>
<td>France</td>
<td>2.490</td>
<td>7</td>
<td>Micro</td>
<td>68 164</td>
</tr>
<tr>
<td>Germany</td>
<td>3.550</td>
<td>8</td>
<td>Large</td>
<td>101 99</td>
</tr>
<tr>
<td>Greece</td>
<td>800</td>
<td>2</td>
<td>Micro</td>
<td>96 129</td>
</tr>
<tr>
<td>Ireland</td>
<td>95</td>
<td>10</td>
<td>SME</td>
<td>47 220</td>
</tr>
<tr>
<td>Italy</td>
<td>4.125</td>
<td>3</td>
<td>Micro</td>
<td>89 146</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>20</td>
<td>10</td>
<td>SME</td>
<td>103 93</td>
</tr>
<tr>
<td>The Netherlands</td>
<td>555</td>
<td>10</td>
<td>SME</td>
<td>90 117</td>
</tr>
<tr>
<td>Portugal</td>
<td>685</td>
<td>5</td>
<td>SME</td>
<td>85 157</td>
</tr>
<tr>
<td>Spain</td>
<td>2.700</td>
<td>5</td>
<td>Micro</td>
<td>70 218</td>
</tr>
<tr>
<td>Sweden</td>
<td>270</td>
<td>8</td>
<td>Large</td>
<td>84 126</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>3.490</td>
<td>6</td>
<td>Large</td>
<td>69 138</td>
</tr>
<tr>
<td>EU</td>
<td>19.930</td>
<td>6</td>
<td>Micro</td>
<td>78 143</td>
</tr>
<tr>
<td>Iceland</td>
<td>25</td>
<td>4</td>
<td>Large</td>
<td>23 186</td>
</tr>
<tr>
<td>Liechtenstein</td>
<td>3</td>
<td>6</td>
<td>Micro</td>
<td>89 133</td>
</tr>
<tr>
<td>Norway</td>
<td>175</td>
<td>6</td>
<td>SME</td>
<td>73 164</td>
</tr>
<tr>
<td>Switzerland</td>
<td>320</td>
<td>8</td>
<td>SME</td>
<td>72 137</td>
</tr>
<tr>
<td>Non-EU</td>
<td>525</td>
<td>7</td>
<td>SME</td>
<td>68 166</td>
</tr>
<tr>
<td>Europe-19</td>
<td>20.455</td>
<td>6</td>
<td>Micro</td>
<td>78 144</td>
</tr>
<tr>
<td>SLOVENIA^3</td>
<td>90</td>
<td>6</td>
<td>SME</td>
<td>90 117</td>
</tr>
</tbody>
</table>

Source: For Slovenia: Institute for Entrepreneurship and Small Business Management (IPMMP), according to data provided by the Agency of the RS for public and legal records and services (AJPES) (in 2002), for Europe-19: Observatory of European SMEs 2002/No. 2, European Commission, page 17 (in 2000).

1 A country is said to be micro, small and medium-sized, or LSE dominant if either micro enterprises, small and medium-sized enterprises (taken together) or large scale enterprises have the largest share in total employment.
2 Labour productivity (value-added per employee) in SME or large enterprise is index, country total = 100.
3 NACE A – agriculture, hunting and forestry, B – fishing, L – public administration, defense, social insurance, M – education, are excluded.
4 Relative profitability (the difference between value added and labour costs, divided by value added) in SME or large enterprise is the difference between the share of the ratio of the size class and the country average.

Table 1-2: Size of non-primary sector according to country

^5 EU-19 is EU member countries + Liechtenstein, Island, Switzerland, Norway.
In 2002, the employment share of SMEs was almost 66% (micro enterprises 34%, small enterprises 19% and medium-sized enterprises 13%), which is more than the employment share of large enterprises, which amounted to 34% of all employees. When comparing the employment structure in Slovenia to that of the EU, it can be noticed that both structures are rather similar (see Table 1-3).

Another way of determining the size of the non-primary private sector according to country is to note the »predominant size class«. Micro-, small and medium-sized enterprises (taken together) or large enterprises predominate in countries where the share of employees in a certain size class is highest. In EU-19 countries, for example, micro enterprises prevail, with the employment share of 34.3%. The employment share in large enterprises is 33.6%, in small and medium-sized enterprises it amounts to 32.1%. In the Slovenian non-primary sector, large companies predominated in 2002, as they gave employment to 38% of employees. These are followed by small and medium-sized enterprises (37.5%) and micro enterprises with 24.5% of employees.

### Table 1-3: Some indicators of Slovenian SMEs in comparison with the EU-19 in 2002

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Micro</th>
<th>Small</th>
<th>Medium</th>
<th>SMEs Total</th>
<th>Large enterprises</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of enterprises (in 1000s)</td>
<td>SLO</td>
<td>EU</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>853,61</td>
<td>1,200</td>
<td>1,11</td>
<td>89,14</td>
<td>0,30</td>
<td>89,45</td>
</tr>
<tr>
<td>Share of enterprises (%)</td>
<td>SLO</td>
<td>EU</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>93,47</td>
<td>95,1</td>
<td>1,25</td>
<td>99,66</td>
<td>0,34</td>
<td>100,00</td>
</tr>
<tr>
<td>Employment (in 1000s)</td>
<td>SLO</td>
<td>EU</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>135,15</td>
<td>87,78</td>
<td>118,56</td>
<td>341,49</td>
<td>208,96</td>
<td>550,44</td>
</tr>
<tr>
<td>Employment share (%)</td>
<td>SLO</td>
<td>EU</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>24,55</td>
<td>15,95</td>
<td>21,54</td>
<td>62,04</td>
<td>37,96</td>
<td>100,00</td>
</tr>
</tbody>
</table>

**Average enterprise size:**

- Employees per enterprise
  - SLO: 1,62
  - EU: 2
- Turnover per enterprise (in million euro)
  - SLO: 0,1369
  - EU: 0,2
- Value added per employee (in thousand euro)
  - SLO: 17,720
  - EU: 40
- Share of labour costs in value added (in %)
  - SLO: 46,14
  - EU: 66

| Remarks: Data for Slovenia (excluding: A – agriculture, hunting and forestry, B - fishing, L – public administration, defence, social insurance and M - education). |

1.4 Some indicators of Slovenian SMEs in comparison with the EU-19

In Table 1-2, data on the relative labour productivity in SMEs and large enterprises in different countries are also given. For EU-19 countries, labour productivity in SMEs is lower than the average of all enterprises, amounting to 78% of value added per employee calculated for all enterprises. Table 1-2 shows that this also holds true for other countries, where SMEs are unlikely to reach the average of national labour productivity. Only in Germany (101%) and Luxembourg (103%) is labour productivity slightly higher. In Austria, Finland, France, and Ireland, labour productivity in SMEs is below average (47%), as is the case in Spain, Great Britain and Iceland (only 23%), in Norway and in Switzerland.

It can be seen that labour productivity in SMEs in Slovenia is also below average, since it amounts to only 90% of the average value added per employee.

Relative labour productivity of large enterprises exceeds the average productivity in all countries except in Luxemburg (93%) and in Germany (99%). In the EU, the productivity of a large enterprise in comparison with all size classes in the EU is higher by 43 index points; in the EU-19 it is higher by 44 index points, in non-EU countries by 66 index points and in Slovenia by 17 index points. The relative labour productivity of SMEs is given in Figure1-4.
The value added per employee indicator shows that Slovenia is lagging behind the EU. The average value added per employee in the EU (in 2000) amounted to €80,000; in Slovenia (in 2002) it amounted to only €23,023. A huge difference can also be observed in data on the turnover per enterprise, which is also one of the indicators of the average enterprise size. The ratio between an average European enterprise (in 2000) and a Slovenian enterprise (in 2002) was €1,100,000 to €556,400. In micro enterprises the ratio was €200,000 (EU) to €136,900 (Slovenia). In medium-sized enterprises the ratio was €24,000,000 (EU) to €9,463,000 (Slovenia). The difference is most obvious in large enterprises where the ratio was €255,000,000 (EU) to €66,422,000 (Slovenia). The ratio for SMEs was €600,000 (EU) to €372,800 (Slovenia).

It can be said that Slovenian entrepreneurial demography with regard to the number of enterprises, the number of employees and the average number of employees per enterprise seems to be similar to European figures. On the other hand, Slovenia lags behind with respect to categories like turnover per enterprise and value added per employee. A deviation can be noticed in the share of labour costs in value added, which is, to some extent, the result of the methodology used. Our research included 28,184 self-employed persons in the category of micro enterprises with 1 to 9 employees, without taking into account the increase in labour costs for this size class. Deviations can also be due to the average exchange rate of the euro, which was used to convert Slovene tolaris into euros.

Figure 1-4: Relative labour productivity of SMEs by countries
The Challenges of Financing Small and Medium-sized Enterprises in Slovenia and the EU

2.1 Introduction

Our contribution deals with the basic features of services offered by banks to Slovenian enterprises and analyses the possibilities of raising money for small and medium-sized enterprises (SMEs). The results are directly comparable with the research carried out by the European Commission (2003) on the access of SMEs to financial resources provided by the banking sector.

Empirical research has shown that loans provided by banks are the most important external source of financing European as well as Slovenian enterprises, but their role has been diminishing in Slovenia lately (Figure 2-1).

Despite the fact that interest rates on loans to companies offered by banks have been decreasing, enterprises (Figure 2-2) are trying to find other sources of financing.

---

Figure 2-1: Annual interest rates on loans to enterprises


3 In the EU, nominal interest rates on loans to industries range from 6 to 9% (European Commission 2003).
4 As an external source for raising money, leasing has become an attractive source of financing. In 2002, leasing companies saw a 38% rise in demand for customers seeking their services. A survey carried out by the Slovenian Institute for Auditors on the implementation of financial functions in Slovenian enterprises (SIR-SPF 2002) showed that the majority of companies consider long-term leasing to be the most expensive source of financing. On this scale, leasing was followed by equity capital, short-term loans and long-term loans. Small companies rate the expenses of external financing higher than large enterprises.
2.2 The nature of services offered by Slovenian banks to SMEs

Slovenian enterprises enquire after numerous banking services (Figure 2-3). Almost all enterprises have a transactional account open at a domestic bank (95% of large enterprises, 97% of medium-sized enterprises and 99% of small enterprises), they use home payment transaction services (81% of large enterprises, 74% of medium-sized enterprises and 66% of small enterprises) as well as for foreign payment transactions (76.9% of large enterprises, 63% of medium-sized enterprises and 57% of small enterprises), they take out loans (short-term tolar loans: 60% of large, 43% of medium-sized and 35% of small enterprises; overdrafts: 53% of large, 32% of medium-sized and 32% of small enterprises; long-term tolar loans 47% of large, 30% medium-sized and 25% of small enterprises; foreign currency loans 30% of large, 12% of medium-sized and 7% of small enterprises), domestic loan guarantees, and to a smaller extent, they invest surplus financial assets or use other financial services (letters of credit, bills of exchange, encashment deals, etc.). The size of an enterprise plays an important role, as small enterprises rarely take the opportunity to use many different banking services.

The role of banks in the banking market is also revealed in Figure 2-4, which shows the share of enterprises which use the services of non-banking institutions, specialised companies or the black market. These segments of the Slovenian financial market provide the following services to Slovenian enterprises: financial advice, the issuing and trading of equities, short-term loans and leasing. Small and medium-sized enterprises, in particular, use the services of leasing, loans provided by non-banking institutions and on the black market, but the share of demand for these services is smaller than the share of loans provided by banks.

There are no significant differences with regard to the banking services used between the various size classes of Slovenian enterprises. The majority of enterprises use e-banking services; medium-sized and small enterprises visit banks more often than large enterprises (Figure 2-5).

Enterprises assess the quality of banking services on the basis of speed, flexibility and the bank’s approach towards satisfying the special needs of companies. A long business history is also considered important, as further business activities usually depend on satisfaction with previous services provided by the bank. The cost of services, the quality of performed services and the bank’s location are less important (Figure 2-6).
Figure 2-3: Different banking services used by Slovenian enterprises

Figure 2-4: Demand for financial services provided by non-banking institutions and on the black market

Figure 2-5: Banking services used by Slovenian enterprises

Figure 2-6: Criteria for assessing the quality of banking services
Extortionate interest rates, required collateral, complicated and time-consuming procedures for obtaining loans, and a lack of understanding about what services enterprises really need, all pose a problem for the majority of Slovenian SMEs (Figure 2-7). Also seen from Figure 2-7 is that obstacles increase with the smallness of enterprises.

![Figure 2-7: Obstacles preventing SMEs to get access to banking services](image)

Remark: The importance of the factor increases with the value based on the interval from 0 to 5.

2.3 The challenges of providing bank loans to SMEs

Literature on banking cites asymmetric information as the basic problem for SMEs in accessing financial resources. In comparison with large enterprises, financial institutions (banks) often lack information about companies. Thus, they find it difficult to create financial instruments that would decrease the risks of financing. The result of asymmetric information is that loans to small and medium-sized enterprises appear more risky than loans to large enterprises. As a consequence, it is more difficult for SMEs to get loans, even if they are prepared to pay all pricing and non-pricing elements in a loan agreement. Banks partly cover the higher risks involved in providing loans to SMEs by higher interest rates and partly by higher collateral costs (offering collateral in the form of real estate or movable assets, purchasing insurance for debt, collateral securities, offset with money on the business account, the surety of legal persons or private individuals, pledge of claims). If banks could make exact estimates of the risks involved in concluded agreements, collateral would not be necessary, because high-risk loans would be excluded by high interest rates. The identification of credit risk is preconditioned by the quality of information about the bank customer, as well as its quality processing and the drawing up of the risk assessment for the loan, thus the problem of collateral is due to the lack of (asymmetricity) information. According to data from research carried out on a sample of European enterprises (European Commission 2003), the quality and scope of information tends to grow with the size of the company. New information and communication technology, regulations and the higher requirements of enterprises and banks improve the quality of information.

---

1 Taking into account individual loans, loans to SMEs are usually more risky, but the portfolio of loans to SMEs is not necessarily more risky than the portfolio of loans to large enterprises (Dietsch 2003). In the event of a recession, large enterprises are “locked” into existing technologies and organisational structures, whereas small enterprises are more flexible, thus systematic risk is greater in the portfolio of loans to large enterprises than the systematic risk related to loans to SMEs.

2 Milinić (2003) found out that, on average, SMEs in Slovenia pay up to 1.5% higher interest rates on short-term domestic loans and approximately 5% higher interest rates on foreign loans. The difference in interest rates on long-term loans between domestic and foreign loans amount to approximately 1%.

3 Because of the greater risks involved in loans to SMEs, banks require more collateral, which can amount to 150% of the borrowed amount (See European Commission 2001).
The banking market is competitive if the users of banking services can quickly, and inexpensively, change banks. Companies rarely decide to change banks, especially after a long history of business activities (Figure 2-9). This is probably connected with the costs connected with lost time spent for opening a new account, the transfer of data about the company to the new bank, the change of the contact person, etc.

Some research findings confirm our intuitive judgment that, shortly after forming, enterprises take out loans from one bank and start taking out loans at other banks after their debts have increased (Farinha and Santos 2000). Nevertheless companies usually concentrate their borrowing activities to one bank. In Slovenia, the majority of small enterprises (52%) use the services of one bank only, medium-sized and large enterprises usually use the services of at least two banks (Figure 2-8). 92% of large enterprises, 97% medium-sized enterprises and 98% of small enterprises say that they use the services of one primary bank.

Some challenges related to banking and entrepreneurial business relations are connected with the accession of Slovenia to the EU. The following can be mentioned:

• Joining the EU, adopting banking regulations and later adopting the Financial Services Action Plan and euro, will increase the chances of SMEs in accessing financial resources and strengthen the competition among companies offering financial services in Slovenia.

• After the accession of Slovenia to the EU, foreign banks will boost competition in the domestic market, and for both small and large enterprises the market for raising finances will become Europe-wide.

• Experience from other EU countries shows that entering the EU does not necessarily increase competition in the EU banking markets with regard to providing services to the general public and SMEs ("retail market"). Competition increased only on the interbanking market and with regard to services provided to large enterprises ("wholesale" market). Foreign banks do not enter new markets by building new premises, but prefer to make acquisitions of existing banks. The concentration in Slovenian banking, which started after 1997, will probably continue also after our accession into the EU. The influence on the competition (and thus on the market power of banks, which determines the availability of services and the price of loans) depends on the distribution of market shares in the future. A more even distribution of market shares will ensure greater competition in the banking market.

---

Footnotes:

1. This is also stated in the Code of Conduct between banks and SMEs), which defines the future business activities between banks and small and medium-sized enterprises in the European Union. The code was initiated by the Industry Council and is being prepared by representative entrepreneurial organisations: Eurochamber, UEAPME - Union européenne de l’artisanat et des petites et moyennes entreprises and by the UNICE – The Union of Industrial and Employers’ Confederations of Europe, together with banks: FEB – Federation of Banks of European Union, EACB – European Association of Cooperative Banks and ESBG – European Savings Bank Group.

2. See the following web page http://europa.eu.int/comm/internal_market/en/finances/actionplan.

The opinions of Slovenian enterprises about the influence of foreign banks on the range of banking services are shown in Figure 2-10. The majority of enterprises expect positive changes, mainly an increase in the number of services offered by domestic banks, whereas foreign banks will offer reasonably priced and high quality banking services, which will lead to the widening of Slovenian banking services.

![Figure 2-10: Opinions of Slovenian enterprises about the influence of foreign banks (upon entering the EU, financial integration) on the range of banking services](image)


Research carried out among European and Slovenian small and medium-sized enterprises shows that companies have similar experience with regard to banking services. Slovenian banks will have to face some challenges stemming from our accession to the EU, globalisation and the development of information technology. We need to focus on enterprises and on measures of economic policy in order to ensure the competitive financing of SMEs. The measures should decrease the asymmetry of information that accompanies SMEs in their efforts to obtain capital from banks and include the following:

1. Insuring the transparency of banking services offered to enterprises, which can be done by providing regular information about their business activities to banks by SMEs. In the present situation, companies provide such information only when they need a loan.
2. Decreasing the costs of switching banks. Here, the role of the Bank of Slovenia is important.
3. Economic associations, representing small and medium-sized enterprises should carry out surveys about the experience of enterprises regarding banking services, publish brochures about procedures and good practices between SMEs and banks, carry out and make public the selection of enterprises-friendly banks, etc.
4. Asymmetric information between banks and enterprises can be reduced by making access to information about SMEs public, e.g. company databases, ranking companies according to business success, rewarding and promoting the best enterprises. The Chamber of Commerce and Industry of Slovenia should, together with agencies that already represent small and medium-sized enterprises, play an important role.

---

11 The concentration is among the highest in the EU, as it amounted to 69.3% (market share of 5 biggest banks) in 2002. In 2001, the highest concentration within the EU was in the Netherlands (82%). The concentration was higher than in Slovenia also in Belgium and Finland (Cabral et al. 2002).
Attitudes towards Female Entrepreneurship in the Slovenian Social Environment

3.1 Introduction

Last year’s GEM research results (Rebernik et al. 2002, 35) showed that women represent an underdeveloped source of entrepreneurial activity. This is why we decided to analyse some aspects of support aimed at female entrepreneurship in the Slovenian social environment, particularly gender equality, with regard to access to good business opportunities. Those becoming entrepreneurs because of good business opportunities represent a much better source for entrepreneurship than those becoming entrepreneurs out of necessity, or because they have no better choices for work.

There seems to be a high level of declared equality among male and female entrepreneurs in Slovenia. Recently, three laws have been adopted, namely: the Equal Opportunities Act, the Employment Act and the Parental Protection and Family Benefits Act. The research results on male and female entrepreneurs in Slovenia gives a less favourable picture.

3.2 Components of social support for female entrepreneurship

In this part, we analyse the situation in the field of public support aimed at female entrepreneurship among experienced male and female entrepreneurs who own all or part of a business, which they have been managing for more than 42 months. In our opinion, their personal experience in this field may help us find reliable answers. In June 2003, we carried out a telephone questionnaire of 672 enterprises in Slovenia. With regard to the structure of size classes, the sample of surveyed enterprises was weighted. There were 442 polled enterprise owners or co-owners who helped manage the businesses, of which 343 were in the business for 42 months or more.

Male and female entrepreneurs were asked to assess the truthfulness of five statements - components of social support for female entrepreneurship - on a scale ranging from 1 – not true at all to 5 – absolutely true:

S1 In Slovenia, there are enough social organisations (kindergartens, day care, etc.) that help women work after they have started a family.

S2 In Slovenia, setting up a company is considered to be an acceptable career for women.

S3 In Slovenia, women are encouraged to self-employ or set up a new venture.

S4 In Slovenia, women have the same opportunities as men in accessing an equal amount of good business opportunities.

S5 In Slovenia, women have the same level of skills and knowledge for setting up new business ventures as men.

In Table 3.1, the average estimates are given for each of the five size groups. The weighted average is also given for all three size classes of enterprises.

The following can be concluded from this part of the research:

• Both male and female entrepreneurs gave the highest rating to the statement that women have the same level of skills and knowledge for setting up a business as men. Among the average estimates for this statement by male and female entrepreneurs, there is no statistically significant difference for any enterprise size class.

Research confirms that, with regard to the level of education, women are equal to men in Slovenia. On the other hand, the following can also be stated (Tominc 2002):

• The average level of female professional competence is higher than that of men, especially in jobs with a predominantly male workforce (jobs with less than 30% of female workforce).
• On the other hand, in jobs with a predominantly female workforce (jobs with less than 30% of male workforce) and in jobs with a mixed workforce, the average level of female professional competence is much lower than that of the average level of professional competence in predominantly male jobs.

It appears that, on average, women can successfully participate in predominantly male jobs only if they have a substantially higher level of professional competence.

<table>
<thead>
<tr>
<th>Size class</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average estimate on the scale from 1 to 5</td>
<td>M</td>
<td>F</td>
<td>M</td>
<td>F</td>
</tr>
<tr>
<td>1. In Slovenia, there are enough social organisations that help women work after they have started a family.</td>
<td>2.79</td>
<td>2.85</td>
<td>3.10</td>
<td>2.47</td>
</tr>
<tr>
<td>2. In Slovenia, setting up a company is considered to be an acceptable career for women.</td>
<td>3.42</td>
<td>3.76</td>
<td>3.59</td>
<td>3.31</td>
</tr>
<tr>
<td>3. In Slovenia, women are encouraged to self-employ or set up a new venture.</td>
<td>2.31</td>
<td>2.50</td>
<td>2.25</td>
<td>2.04</td>
</tr>
<tr>
<td>4. In Slovenia, women have the same opportunities as men in accessing an equal amount of good business opportunities.</td>
<td>3.43</td>
<td>2.93</td>
<td>3.34</td>
<td>2.91</td>
</tr>
<tr>
<td>5. In Slovenia, women have the same level of skills and knowledge for setting up new business ventures as men.</td>
<td>4.15</td>
<td>4.46</td>
<td>4.23</td>
<td>4.34</td>
</tr>
</tbody>
</table>

Remarks:
• M = men; F = women
• size class 1-enterprises with 0-9 employees, 2-enterprises with 10-49 employees, 3-enterprises with 50-249 employees

Table 3-1: Components of social support for female entrepreneurship

• The truthfulness of the statement that entrepreneurship is an acceptable career for women was also given a high average estimate. There are no statistically significant differences between the opinion of male and female entrepreneurs within any enterprise size group. It seems that female entrepreneurs are unlikely to confront prejudice in Slovenia. In addition, there are no legal obstacles that would limit a woman from owning an enterprise.

• The picture is far from being as bright when we look at the remaining three components of social support aimed at female entrepreneurship. The statement that there are enough social organisations that help women work after they have started a family is ranked next to last by both male and female entrepreneurs. With the growth of the size of the enterprise, the average estimate rated by female entrepreneurs gets lower and lower. When analysing individual size classes, it was found that the average estimate of male entrepreneurs is statistically significantly higher than that of female entrepreneurs in the size class of small enterprises with 10 to 49 employees. This means that male entrepreneurs have a much more favourable opinion of the situation regarding available services which make it possible for women to work after they have started a family, than women.

As the gender-based division of labour within the home is still far from being based on equal rights, it is quite obvious that women in a traditionally patriarchal society take over a much larger part of the housework. As men usually spend less time with the family and are often not involved in housekeeping duties, it is rather understandable that their picture about the amount of work needed for such activities is skewed, or that they do not know a lot about how women manage to harmonize home duties with their entrepreneurial career. Men believe that the available services make it possible for women to be involved in, or continue, with their entrepreneurial career after they have started a family. On the other hand, female entrepreneurs know that this is rather difficult and that their efforts are not as supported by the social environment as meets the eye. In a micro-enterprise, female entrepreneurs are less often faced with such problems, since the sample average estimate given by female entrepreneurs in this size group is higher than that of male entrepreneurs, but without being statistically significant.

• From the point of view of entering entrepreneurship, the statement that women are encouraged to self-employ or set up a new venture in Slovenia is worrying. Both men and women ranked the truthfulness of this statement on the scale from 1 to 5 as the lowest in all enterprise size classes. Mechanisms that would encourage female entrepreneurship are few, or are not efficient enough.

Taking into account the research findings (Rebernik et al. 2002, Reynolds et al. 2002), which show that women
are an underdeveloped source of entrepreneurial activity, it is quite obvious that finding efficient mechanisms to encourage female entrepreneurship (education, providing capital, etc.) could represent an important source for the development of entrepreneurial ideas in Slovenia in the future.

The opinions of male and female entrepreneurs differ most evidently with regard to the truthfulness of the statement that, in Slovenia, women have the same opportunities as men in accessing an equal number of good business opportunities. This is true for all three enterprise size classes. The average estimate of male entrepreneurs is statistically significantly higher (p<0.05) that that of female entrepreneurs. Men are much more convinced that access to good business opportunities is equal for both genders than women are.

Thus, it can be claimed that male entrepreneurs are unlikely to notice the problems women have in facing the circumstances within society that rarely allow for equal opportunities in setting up new enterprises. On the other hand, women in Slovenia frequently find it difficult to access good business opportunities because of their educational and professional skills in jobs that are less suitable for entrepreneurship (education, health care, social welfare, etc.).

Research activities (Tominc, Rebernik, 2003) show that women are less likely to become entrepreneurially active because they wish to exploit a business opportunity. In the age group between 25 to 34, which is the most entrepreneurially active group in Slovenia and worldwide, men are, on average, more than four times more likely to become entrepreneurially active because they wish to exploit a business opportunity than women: on average, 95 men and only 21 women per 1,000 adults. In necessity entrepreneurship, where people decide to become entrepreneurially active because they have no better choices to work, 1.7 men and 2.7 women per 1000 adults decide to become entrepreneurially active in this size class in Slovenia.

To summarise, male entrepreneurs ranked, on average, various aspects regarding gender equality in the field of entrepreneurship higher than female entrepreneurs. This can be explained as a lack of awareness in men about obstacles that female entrepreneurs face after they have decided to become entrepreneurially active. This gap is most obvious in the estimate of access to business opportunities. Both male and female entrepreneurs ranked the social acceptability of entrepreneurial careers extremely highly. Similarly, they highly ranked knowledge and skills women need to start a business. A high level of declared equality among male and female entrepreneurs in Slovenia does not necessarily mean that female entrepreneurs have the same possibilities with regard to business opportunities.

Within the GEM 2002 research, the truthfulness of these five statements was also assessed in all participating countries by national experts (37 of them in Slovenia). Sixteen European countries participated in the GEM research: Hungary, Germany, Belgium, Croatia, France, Spain, the Netherlands, the United Kingdom, Ireland, Denmark, Sweden, Finland, Iceland, Norway, Switzerland and Slovenia. The average estimates of national experts in Slovenia for all five discussed components, as well as the ranking of Slovenia among the European GEM countries is given in Table 3-2.

<table>
<thead>
<tr>
<th>Average estimate on a scale between 1 and 5</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. In Slovenia, there are enough social organisations that help women work after they have started a family.</td>
<td>3.22</td>
</tr>
<tr>
<td>2. In Slovenia, setting up a company is considered to be an acceptable career for women</td>
<td>3.67</td>
</tr>
<tr>
<td>3. In Slovenia, women are encouraged to self-employ or set up a new venture.</td>
<td>3.14</td>
</tr>
<tr>
<td>4. In Slovenia, women have the same opportunities as men in accessing an equal number of good business opportunities.</td>
<td>3.65</td>
</tr>
<tr>
<td>5. In Slovenia, women have the same level of skills and knowledge for setting up new business ventures as men.</td>
<td>3.56</td>
</tr>
</tbody>
</table>


Table 3-2: Average estimates of Slovenian experts, GEM 2002

The average estimates of Slovenian male and female entrepreneurs differ from the average estimates of experts. A statistically significant difference regarding the access to sound entrepreneurial opportunities for both men and women in Slovenia can be found in the opinions expressed by experts and female entrepreneurs in small and medium-sized enterprises, where experts ranked the statement significantly higher. It seems that their opinion stems from the declared, formal (also constitutional) equality for both sexes in our country, which blurred their picture. Undoubtedly, female entrepreneurs can give a much more reliable estimate, as they were faced with obstacles on their entrepreneurial path. In accordance with our findings that experts’ rankings are, deliberately or not, unrealistic, is
the fact that Slovenia ranked, among the European GEM countries, second with regard to the average estimate of this statement (3.65), after Denmark which ranked first (3.75). We were placed in the middle with regard to all other statements. In Europe, Scandinavian countries ranked highest with regard to all statements.

In order to illustrate our point, we will present the results of an analysis on gender wage discrepancy in Slovenia, which was analysed by industries. Our analysis was based on the comparison of the average female salary as a percentage of the average male salary (we were not interested in the level of earnings which differs in different industries). It was found (Tominc 2002, Širec Rantaša et al, 2003) that the average salary in industries with predominantly male employees does not vary a lot (an average female salary amounts to 98.91% of the average male salary). The situation is different in industries with a predominantly female work force as well as in industries with a balanced number of men and women, where an average female salary amounts to 81% of the average male salary, whereas in predominantly female industries it amounts to only 75% of the average male salary.

Factors influencing wage discrepancies are numerous and can be divided into four main categories:

• Differences arising from different levels of so-called human capital in men and women, and which are defined as knowledge and skills brought to the labour market by an individual.

• Parenthood and parental duties, which are mostly needed during the key period of a female business career. Women are under the burden of a double load (paid work and unpaid work at home) to a much greater extent than men.

• Differences caused by the so-called replacement value of their salary for dangerous and less attractive jobs in unfavourable working conditions.

• Discrimination which is difficult to prove, and would mean that possibilities for a certain group of workers are much (in our case, women) more limited in comparison to another group (men), be it because of the employers, legislation, or for any other reason.

It was found out that in industries with a predominantly male workforce, each percentage of women among employees represented a »bonus« towards the average earning of women in a certain industry. Each additional percentage of women among employees within a certain industry adds 4.35% (p<0.05) to the average salary of women as a percentage of male salaries. This situation changes in industries with predominantly female industries and in mixed industries. The »bonus« is changed into a »fine«, as each additional percentage of women among the employees represents a 0.2% smaller average salary for women as a percentage of male salaries. Thus, predominantly male industries, with all their characteristics, on average, ensure a higher level of average salaries for women, measured as a percentage of average male salaries.

3.3 Conclusion

Our research can be concluded with the following recommendations:

• Women, as one of the target entrepreneurial groups in the Small Business Development Strategy in Slovenia need to be supported within social networks in the national economy with specific programmes and not only on a declarative level.

• We should strive to achieve such conditions in which women, especially mothers, will be able to connect their entrepreneurial and reproductive functions.

• We should develop education in the field of technological skills, which are mainly male oriented.

• Non-formal links among women should be encouraged. Such links would contribute towards the exchange of information and experience and would ensure a specific business support as well as allow for lobbying to overcome difficulties stemming from gender differences.

• A database of female entrepreneurship should be built.

• It is necessary to increase the number of activities carried out by women in areas where their representation is weaker: political engagement, public life, cooperation in business information centres, incubators, local business infrastructures, etc.

Within the next ten to twenty years, Slovenia will face demographic difficulties, mainly in the form of an ageing population and decreased fertility rates, which represents an obstacle for desired economic growth and for assuring support for the old in the long run. These two key segments of our future reflect on the role of women. Thus, our long-term economic policy should include measures that take the role of women into consideration. This is necessary for a successful demographical and economic development in the future.
4

The Challenges of Cluster Development into Regional Innovation Systems in Slovenia

4.1 Introduction

Preparations for Slovenia’s accession to the EU have been highly intensive for a number of years. Slovenia has achieved positive macroeconomic results, placing it among the most successful transitional countries. On the other hand, various indicators of competitiveness show that we are still lagging behind with regard to some key factors of economic growth and development, especially in the field of cluster development, innovations, a favourable support environment for entrepreneurship, financial systems, the flexibility of labour market and the availability of specialised local suppliers (IER 2002). This is why the government, with its numerous programmes, which are a part of its proactive policy, encourages enterprises to improve their business operations in areas that represent key sources for competitive advantages in the modern business environment. Among these, the folowing are particularly important: the ability to cooperate and integrate with enterprises, as well as research, education and other institutions. The concept of clustering has become widely used in numerous countries. It has become an important tool for increasing productivity, innovativeness and for the setting up of new enterprises, thus at the same time promoting economic growth and development, as well as the competitiveness of firms, regions and whole national economies. Interestingly, clustering has become widespread in the period of globalisation in all areas. Competitive advantages often stem from a local or regional environment, if there is a concentration of specialised skills and knowledge, a critical mass of different organisations, competitors, enterprises in related industries and suppliers (Porter 1998, 90).

Because of the expected beneficial effects, countries form different cluster policies. Unfortunately, Slovenia, which is following the same practice, needed ten years in order to establish programmes and implement initial activities. The process began with an incentive by the Ministry of the Economy. This short history of clustering and entrepreneurship is only partly responsible for the small number of (sometimes) underdeveloped clusters in Slovenia. The programmes of the Ministry of the Economy are comparable with, or even considered better than, those in highly developed countries. Still, our clusters are often faced with various obstacles on their way to regional innovation systems, which are the next step of cluster development process in other countries. Quantitative indicators point to encouraging results, whereas qualitative indicators remind us of the difficulties even in our most developed clusters. Without a unique definition and precise criteria about what clusters are, it is difficult to make comparisons and generalisations, as the concept has been explained differently in different countries. Even following the best practices cannot always yield good results. In its research of 34 clusters in 17 European countries, the Observatory of European SMEs uses a hierarchy of three concepts1, which also lead to the formation of regional innovation systems (ENSR 2002, 14). This is not a representative sample that could be used in order to find the general characteristics of European clusters, but it nevertheless identifies some key developmental trends, which are likely to affect clusters in Slovenia. From the point of view of these trends, we analysed the development of Slovenian clusters and formed some recommendations for cluster policy.

Both in theory and practice a wide variety of clusters can be found with regard to their size, participating institutions, geographical scope, industries, etc. The number of identified clusters and the level of their development varies, even among countries with a similar level of development. With regard to the efficiency and business success in comparison to the national average, it can be

---

1 Regional cluster: A Concentration of interdependent enterprises within the same or adjacent industrial sectors on a small geographical area.
Regional innovation network: More organised co-operation (agreement) among enterprises, stimulated by trust, norms and conventions which encourages innovation activities of their members.
Regional innovation system: Cooperation between enterprises and other institutions in order to develop, disseminate and use new knowledge.
stated that in different fields (e.g. recruitment, enterprise set-up, scale of salaries, productivity, profitability and other indicators of efficiency and effectiveness of enterprises) cluster performance is well above the national averages in different countries (OECD 2001).

4.2 The analysis of Slovenian clusters from the point of view of basic developmental trends in cluster formation within the EU

The results of a four-year effort of the Ministry of Economy and participating enterprises are rather encouraging, which was also confirmed by the Cluster Initiative Greenbook (2003). Today, the process of clustering includes more than 350 enterprises and institutions with almost 55,000 employees (MG 2003). Cars, tools, transport-logistics, plastics and the clusters in air-conditioning, heating and cooling are all prepared for dynamic growth. Some clusters are in their early growth stages, e.g. the cluster for environmental technology. There are incentives for clusters in the fields of wood processing, tourism and the energy industry, all in their initial life cycle phase (ibid., 2003). It cannot be said that any of these clusters reached the level of a regional innovation system. The number of participating enterprises and employees has been increasing, which is mainly due to the fact that these clusters are relatively young and in their initial, or growing, developmental phase. It is clear that only the most promising and innovative clusters have a chance of progressing into the phase of dynamic growth. Further on, we analyse Slovenian clusters from the point of view of their basic developmental trends, which were identified by the Observatory of European SME’s (2002).

a. Traditional/technological clusters, industries of the new economy

The Slovenian economy still depends on traditional industries with a low value added. Only a very small part of the economy is a part of the new economy, which is also reflected in clusters. Nevertheless, there is research and ideas about how to connect Slovenian enterprises of the new economy in clusters and how to integrate them into international networks and improve their competitive capacity on the global market. Such incentives should be encouraged by the government, without neglecting traditional clusters.

b. The role of SMEs in clusters

In Slovenia, SMEs do not constitute a driving force of clusters formation, which is the case with European clusters (Muijer and Hospers 1998, 54). Increasingly, they are becoming more and more important, but the main actors are still large enterprises. There are successful SMEs in the field of high technology and are the main suppliers for well-known multinationals and institutions. As a rule, they are not interested in joining domestic clusters, because their cooperation with demanding foreign partners takes a lot of time and other resources. In addition, they are afraid of losing their independence and guard their knowledge. They are least familiar with the concept of clustering, and thus unaware of the benefits.

c. Globalisation, outsourcing of activities and the role of multinational companies in clusters

The concern that the concept of clustering, which has a predominantly regional character, loses its appeal in the globalised world is not easily answered. Enterprises are becoming a part of global supply chains and other integrations, spreading over huge distances and including multinationals, which undoubtedly have an effect on local/regional integrations, which form the core of the clustering formation (Carrie 1999). It is rather obvious that some global trends support processes that are going on in clusters, whereas others fundamentally change their basic characteristics. The cooperation between local and regional partners is perhaps becoming less important than the cooperation in global networks, but this seems to be a minor obstacle for cluster formation. Their role is becoming even more important, especially in the sense of a regional community of enterprises and institutions with a strong influence in the processes of creation and dissemination of new knowledge and innovation. Slovenian enterprises exploit the advantages of an inexpensive supply of sources and production with a low added value from areas with low labour costs without the cluster. Their ICT does not lag behind foreign companies, but the available equipment is poorly utilised. There is a lack of organisational and managerial knowledge in connection with information knowledge. Integrations into global networks should be intensified, and more multinational companies attracted. It cannot be said for domestic enterprises that they are true multinationals, and there are few foreign multinationals involved. One should, of course, be careful, because multinational companies try to spread different activities into different clusters. This inevitably means that some enterprises will have to produce standardised products and services with an unqualified and cheap workforce, whereas others will be in a position to perform R&D activities and develop research results into highly sophisticated products and services with a highly educated and qualified workforce. The latter will help the cluster get access to new knowledge, skills, technology and other important sources and become a part of wider networks that are managed by multinationals. This will encourage innovation activities, entrepreneurship and growth, as well as quality cluster development. If multinationals decide to join a cluster, what they decide to do there depends on the quality of the regional environment. There are very few successful European clusters without a participating multinational company. The accelerated internationalisation, work on the key cluster attractiveness factors, as well as the
successful promotion of their activities will have to become priorities for our clusters. Despite this fact, some Slovenian clusters do not have a clear picture about the role of internationalisation. In addition, enterprises in different size classes, which participate in a cluster, have not got a unique picture about this issue (Jaklič 2002).

d. Intention for cooperation among members, coordination of activities and the role of socio-cultural factors

Among the analysed European clusters, there is a trend to develop long-term partnerships and shape temporary coalitions in order to manage and implement projects. Their success depends on the level of trust and respect, or the so-called cooperation culture. In Slovenia, a research activity was carried out in 2002, which dealt with the three most developed clusters. The research showed that the level of cooperation among enterprises lags far behind the wanted level, as there are few common projects with only a few enterprises involved (Jaklič 2002). The picture was more optimistic during last year’s meeting of cluster leaders. Some common projects were successfully terminated, others were still being implemented, and there are plans for new ones (MG 2003). Still, cooperation between enterprises and various research and education institutions is rather weak. Among coordinating activities, the prevailing form is still temporary coalitions in the implementation of joint projects. In order to develop long-term partnerships, it will be necessary to pay attention to various socio-cultural factors.

e. Competitiveness and innovation

The main features of the most important European clusters, with a strong global competitive position, are the following: exceptional ability to innovate, the integration of multinational companies and the implementation of R&D activities within the cluster. A high level of competitiveness means competing with innovations, whereas a low level represents competition with low prices (Storper and Walker 1989). Some Slovenian enterprises that are a part of a cluster, reached important competitive positions in international markets, which demonstrates their contribution towards the competitive level of the whole cluster. Synergistic effects will be larger the closer the cooperation. The increase in innovation and productivity will need a lot of attention in the future, especially in traditional industries, where the lagging behind is most obvious.

4.3 Obstacles and opportunities for the development of clusters in Slovenia

Almost 40% of all SMEs in Slovenia are not familiar with the concept of clustering. Among them micro enterprises (0 – 9 employees) reached the highest percentage. 25% of enterprises knew there were tenders, but did not apply for them for different reasons. Most often, SMEs did not feel the need to join a cluster (28.2%). We are sure that many of them are not aware of the advantages and disadvantages of joining. Others were unable to find suitable partners (13%) or found the application to be far too complicated (7.8%). Only 3% had bad experiences with previous tenders and were not prepared to invest additional time or effort into filling out applications. In response to the question if their enterprises is willing to join a cluster, 40% of SMEs answered that they are not. Such answers were mostly given by micro (39.3%) and small (37.8%) enterprises, which may represent an additional cause for concern. Foreign research has proven that such enterprises profit the most by joining clusters, because they neutralise disadvantages related to their size and, on the other hand, can remain flexible and retain other advantages. There are many reasons for the resistance of domestic micro and small enterprises to the idea of clusters: a lack of specialised knowledge, a lack of trust and a fear of losing independence, distrust for the concept of clustering and lack of other resources. On the other hand, 21.8% of SMEs are willing to join clusters, especially medium-sized and large enterprises which believe that clustering may represent a source for business opportunities. The analysis of pilot clusters showed that interest on the part of enterprises increased once the cluster started to operate, especially among small enterprises, whereas large enterprises are always able to remain self-sufficient (Jaklič 2002). These results reveal that there are large differences with respect to the concept of clustering and the motivation for cooperation among enterprises in different size classes. This is why the Ministry of Economy decided to draw up a special programme for the development of local networks for small enterprises within a limited geographical area. This is intended to give support to the most vulnerable part of our economy at the beginning of our membership in the EU and, at the same time, improve their ability for cooperation, strengthen regional and national clusters and encourage dynamic growth and development (Rebernik, Dermastia and Krošlin 2003). With regard to the above-mentioned trends, such orientation is both suitable and necessary.

a. Distrust of the concept

An important obstacle for the further development of clusters in Slovenia is distrust for the concept of clustering and in other incentives made by the government (Sölvell, Lindqvist, Ketels 2003). There is a lack of motivation among enterprises (especially, the small ones) and some institutions. Due to the lack of actual results there are doubts about clustering, even among those who decided to participate (Jaklič 2002). There is also a lack of information publicly available on the activities carried out by members and about the actual benefits stemming from cooperation. Despite the fact that domestic enterprises are becoming
more and more aware of the benefits of cooperation, there remains an impression that the relative success of clusters in Slovenia is strongly related to financial support granted by the state. Undoubtedly, this is one of the most important reasons for enterprises to participate in the process. Unfortunately, there are no reliable research activities that would show how many enterprises that applied to tenders, but were not chosen, realised their ideas with their own investments. There are a lack of domestic success stories, which would add to the recognition and reputation of clustering.

b. Socio-cultural obstacles

Very often, entrepreneurs and managers in Slovenia lack the most important element for every successful cooperation - trust. This is most obvious for the relations between large and small enterprises. We believe that Slovenian culture, unlike some other cultures, is not in favour of processes that are in the centre of clustering, which is why these processes are rather slow in Slovenia. The development of social capital, which is based on the common values of mutual understanding and trust among entrepreneurs and in their relationship towards the state, is of utmost importance for the development of existing and new clusters in Slovenia. Cluster members have to be aware that they have embarked on the same ship, taking them closer to their common objective – higher competitive capacity and success.

c. Obstacles in setting up new enterprises within clusters

Numerous countries face the problem of an unfavourable entrepreneurial atmosphere (Rebernik et al. 2003). Slovenia is no exception. Clusters proved more in favour of entrepreneurship, giving birth to a number of new enterprises that exceeded the average birth rate in different countries. Our most developed clusters encouraged the set-up of new enterprises, but the process still needs to be further developed. Some are approaching the phase of dynamic growth, which should be accompanied by the processes of setting up new, technologically advanced enterprises, as a result of spin-off processes in large enterprises and new enterprises that were the result of new business ideas, which were formed in this process (spillover) (Rebernik, Dermastia and Krošlin 2003). It is necessary to systematically search for new business opportunities in clusters and encourage people to start their own businesses, while at the same time seeking to ensure favourable conditions. Institutions responsible for the transfer of knowledge and technology should play an important role, which, on the other hand, is an extremely problematic area in Slovenia.

d. Support institutions, R&D and its transfer into economic practice

There are few private investments in R&D among SMEs, whereas publicly financed investments bring little effect, mainly due to the inactive mechanisms for the transfer of knowledge and technology from education and research institutions to the economy. Global Entrepreneurship Monitor research (Rebernik et al. 2003) showed that in the area of cooperation between universities and industry, Slovenia lags behind the countries surveyed in this research project. Relatively high investments in research and development have brought few immediate commercial benefits. Our universities are mainly pedagogically and seldom research-oriented. The prevailing system of values in higher education institutions is not in favour of entrepreneurship (Rebernik 2002). Of course, one should not blame only educational institutions or other research institutions, since the poor technological development of small enterprises also represents an important obstacle. Their research horizon is short and they lack the knowledge needed for cooperation. Rebernik (2002) divides obstacles into institutional, cultural and infrastructural. Enterprises are seldom satisfied with the quality of graduates coming from our universities; moreover they believe that in some areas the school system is completely out-of-date (Jaklič 2002).

A part of the mentioned obstacles can be removed with the active participation of enterprises in clusters as well as with common investments in research and development. Support institutions and the existing transfer mechanisms have an important role for the further development of clusters in Slovenia. There are many such organisations in Slovenia, and some have started to develop around clusters, but their efficiency is rather poor. Lack of cooperation between these institutions leads to services which are not completely adapted to the needs of industry, while at the same time enterprises are not fully informed about their services. With Slovenia’s accession to the EU, our enterprises are able to use the services of various EU institutions. But it seems that only a few are likely to seize this opportunity.

e. Obstacles for cross-border cooperation

Due to the smallness of the domestic market, Slovenian enterprises are traditionally oriented towards foreign markets. Fierce competition at home encourages the remaining companies to take similar steps. According to research, cooperation among clusters encourages their growth and development (Sölvell, Lindqvist, Ketels 2003). Among the main obstacles for a more intense cross-border cooperation are: differences in legislation, the labour market, tax policy, administration, education and research, infrastructure and logistics, economic policy and culture (ENSR 2002, 26). Our accession to the EU is likely
to reduce at least some of them. But the fact is that some clusters (e.g. in the field of research) in the EU member countries never decide for cross-border cooperation. National innovation systems are still most important, despite different efforts within the EU (ibid. 26). Of course, the national border is only a symbolic obstacle. Cultural distance represents a much bigger problem. Opportunities for further development of Slovenian clusters lie in closer cooperation with highly developed clusters in Austria, Italy, Germany and other countries. The first activities have been triggered via cooperation in the 6th Framework Programme (Rebernik, Dermastia and Krošlin, 2003). Purchasing relationships have, in some cases, been developed to cooperation on common projects. The overall situation is also improving with numerous presentations of our clusters abroad. According to some research activities, small domestic enterprises still lack knowledge about where to find the necessary information and how documentation should be prepared if the firm would like to participate in a programme.

f. Unfavourable innovation environment

A lack of critical mass for support institutions and their poor relationships with enterprises have adverse effects on innovation processes. The quick and efficient transfer of knowledge into new processes, products and services is the key factor for strengthening a competitive position. This can be ensured by centres of excellence, specialised technological centres, technological parks, entrepreneurial incubators, venture capital funds and multipurpose educational centres, which would help improve the technological and developmental capacity of our clusters, provide help for setting up new enterprises, ensure growth and development of existing enterprises, increase creativity, and improve the skills and knowledge of individuals.

g. Partial state support

The research showed the dissatisfaction of cluster members with the role of some state institutions. Presently, only the Ministry of the Economy systematically supports the development of clusters. There are few remarks with regard to the work of the Ministry of the Economy, but some participating enterprises lack support from other ministries and support institutions. The Ministry of Economy played a key role in the initial process of clustering. The success of further activities will depend on its key people and participating institutions, which will have to disseminate the concept of clustering among enterprises and state institutions. On the other hand, the responsibility for the success of individual enterprises and clusters is still in the hands of managers, entrepreneurs and their employees (Rebernik, Dermastia in Krošlin, 2003). Undoubtedly, the role of the state is important, but it should be careful in choosing the right instruments for the policy of clustering.

4.4 The policy of clustering in Slovenia and the role of the state in eliminating identified obstacles

The measures taken by national, regional and local authorities in different countries vary. Observatory of European SMEs research has shown that there are a variety of policies and instruments in different countries. The policy that supports the existing and developing clusters has to be oriented towards strengthening entrepreneurial cooperation and developing networks. In addition, such a policy has to provide help in setting up organisations in charge of the transfer of technology in accordance with the needs of enterprises. The fulfilment of these objectives represents upgrading clusters into innovation systems.

The analysed obstacles constitute a challenge for the state and participating enterprises and institutions, which should draw up instruments and measures for the further development of clusters, which will play an important role within the global economy. These objectives are extremely ambitious and will help us to promote innovation processes, create incentives for the development of special knowledge, connect domestic clusters with foreign clusters and integrate them in international networks (MG, 2001). Following the best foreign practices are unlikely to bring the desired results because of specific national, regional and local environments (Sölvell, Lindqvist and Ketels 2003). Thus, the Ministry of Economy made a correct decision when it decided to develop its own »Slovenian model of clustering«. Neglecting the role of local/regional environment can be a reason for overestimating the possibilities for the development of new clusters in industries and regions that are not suitable for this. The Ministry of Economy should take this into account when choosing projects proposed by enterprises that apply for tenders. A detailed analysis of clusters is needed, their progress and effectiveness, to adapt certain instruments to their needs. Cooperation on common projects with an identified common aim, channels of communication and trust need to be promoted: marketing activities, the development of new products, education and training, lobbying, etc. Such promotion has an important economic impact (Enright 2000). During the initial phase of trust building, a coordination and intermediary role of an independent organisation is of great importance. Further on, a lot needs to be done in the field of cooperation between research and education institutions and industry. Such cooperation would help to improve educational programmes and research in areas which are of great importance for enterprises. In addition, assistance in developing mechanisms for a more efficient commercialisation of scientific findings is also needed. These activities will also help to improve the level of cooperation between enterprises and the state and the integration of enterprises into the process of formation and implementation of policies in various areas (ENSR
The state can provide support by actively promoting clustering at home and abroad, by attracting foreign partners, helping in efforts aimed at developing the culture of cooperation and trust, improving the education system and by setting up the necessary infrastructure, as well as by establishing the mechanisms for the transfer of knowledge and technology. Different institutions should become a part of clusters if their activities are to be targeted and are able to offer enterprises what they need. In order to select the appropriate instruments for the promotion of the development of clusters, the state should set targets and monitor and analyse their implementation. A common vision and a consensus regarding future development are also important for the success of clustering. The existing Slovenian clusters should seize on opportunities to reveal their advantages to various participants, or else their life cycle is likely to start lagging behind. Today, it is difficult to claim that participating enterprises perform much better than those that are not a part of a cluster. But it is quite clear that the pace of development is quickening and that there are encouraging news coming from abroad. This can contribute to the promotion of clustering and can increase the motivation of those involved, as well as of those thinking about joining clusters and even those who are not, for various reasons, in favour of clustering. We should not be impatient, because large developmental steps cannot be made overnight.

By successfully eliminating the identified obstacles for clustering, and with the successful development of a number of new clusters, some basic problems of the Slovenian economy could be eliminated and the gap between Slovenia and developed countries could be narrowed. This may bring us close to our vision: Slovenia – a knowledge society with sustainable regional development that belongs to the global economy. This is extremely important now, when Slovenia is the member of the EU. Special attention should be paid to SMEs. In the future, clusters will change, but their existence and importance for the economic growth and development are beyond question. Fears expressed by some entrepreneurs that this might only be a short-lived concept are without foundation. The belief held by some that they do not need cooperation, is also mistaken. This is how the economy works today, not because it is fashionable, but because it is necessary for the survival and success.

Despite obstacles regarding the comparison of results of clustering research and policies in different European countries, the Observatory of European SMEs research offered a number of important findings and drew up possible guidelines for further development, thus helping in the identification of obstacles for the development of clusters into innovation systems in Slovenia. The obstacles mentioned and described in this paper are not limited to clusters, but refer to the whole Slovenian economy. The concept proved to be a successful tool for solving problems in a national economy and ensuring sustainable regional development. The promotion of entrepreneurship, innovation and competitiveness is the driving force of economic growth and development. Slovenia lacks a systemic view on the development of clusters, as this development inevitably extends into other areas, which are not covered by the Ministry of Economy. The strongest links are a consequence of market needs and not because of tempting financial aids offered by the state in different tenders. Many projects would not see their implementation without the help of the state. Entrepreneurs and managers still count too often on help provided by the state. The fact remains that decisions about integration into a cluster and about the growth and development of their enterprises is not in the hands of the government, regional or municipal administration or political parties. Such decisions should be made by managers or owners and their teams (Rebernik 2002). Without the necessary knowledge about managing such systems, our clusters are unlikely to succeed. Unfortunately, such knowledge can rarely be obtained at our faculties.

State measures should not represent a substitution for market mechanisms, thus no direct interference in clustering processes should be allowed. What is needed is the identification of obstacles, their eventual removal, improvements in operating conditions, as well as motivation by means of different incentives and guidance towards common goals. The success of clustering, on the other hand, is still in the hands of managers and entrepreneurs. The right amount of state support is still necessary in Slovenia, but in the long-run enterprises will have to search for benefits of clustering by themselves.

4.5 Conclusion

2002, 52). The role of the state is also to promote clusters at home and abroad. It is necessary to prepare the strategy, case studies of successful domestic and foreign clusters and to provide education for entrepreneurs and managers. Other ministries, as well as state and private institutions, should be invited to participate, and ways of attracting foreign multinational companies to start participating in our clusters should be found. This cooperation will help our enterprises to integrate into global networks and get access to new knowledge.

The state can provide support by actively promoting clustering at home and abroad, by attracting foreign partners, helping in efforts aimed at developing the culture of cooperation and trust, improving the education system and by setting up the necessary infrastructure, as well as by establishing the mechanisms for the transfer of knowledge and technology. Different institutions should become a part of clusters if their activities are to be targeted and are able to offer enterprises what they need. In order to select the appropriate instruments for the promotion of the development of clusters, the state should set targets and monitor and analyse their implementation. A common vision and a consensus regarding future development are also important for the success of clustering. The existing Slovenian clusters should seize on opportunities to reveal their advantages to various participants, or else their life cycle is likely to start lagging behind. Today, it is difficult to claim that participating enterprises perform much better than those that are not a part of a cluster. But it is quite clear that the pace of development is quickening and that there are encouraging news coming from abroad. This can contribute to the promotion of clustering and can increase the motivation of those involved, as well as of those thinking about joining clusters and even those who are not, for various reasons, in favour of clustering. We should not be impatient, because large developmental steps cannot be made overnight.

By successfully eliminating the identified obstacles for clustering, and with the successful development of a number of new clusters, some basic problems of the Slovenian economy could be eliminated and the gap between Slovenia and developed countries could be narrowed. This may bring us close to our vision: Slovenia – a knowledge society with sustainable regional development that belongs to the global economy. This is extremely important now, when Slovenia is the member of the EU. Special attention should be paid to SMEs. In the future, clusters will change, but their existence and importance for the economic growth and development are beyond question. Fears expressed by some entrepreneurs that this might only be a short-lived concept are without foundation. The belief held by some that they do not need cooperation, is also mistaken. This is how the economy works today, not because it is fashionable, but because it is necessary for the survival and success.
Environmental Responsibility of Slovenian SME's

Our research on the environmental responsibility of Slovenian SMEs is based on a definition of social responsibility, which is in accord with the documents issued by the EU (Observatory of European SMEs, 2000, Commission of European Communities, 2001, European Communities, 2002). Our primary interest is to assess the environmental responsibility (of both internal and external participants) within the population of SMEs. The survey is based on a sample of Slovenian enterprises in three size classes. The participating enterprises were asked about: their motives for environmentally responsible behaviour, the obstacles preventing such behaviour, how their environmental strategy was connected with the enterprise's strategy, how it was manifested in the company, and what their environmental protection plans for the next three years were.

5.1 Environmental responsibility as a component of social responsibility of enterprises

The relationship of enterprises towards their natural environment is not only reflected in their compliance with legislative requirements or their reactions stemming from external incentives, but also in a much wider context (e.g. their business operations, products/services and capacities). There is a common belief that SMEs, when compared to large enterprises, have a less harmful impact on the environment, while at the same time being environmentally vulnerable, as their business operations are less diversified. At the same time, small enterprises supposedly find the implementation of preventive measures difficult.¹

5.2 Motives/reasons for environmentally responsible activities

The most frequent reason among the surveyed enterprises was concerns for a healthy environment and human health (65%). Percentage points differ with regard to different size classes, but the difference is statistically insignificant (p>0.05).

Compliance with legislative requirements was given as the main reason for 41% of the surveyed enterprises. Testing of data reveals statistically significant differences (p<0.05). Thus, it can be asserted with less than 5-percent risk that this percentage is lowest in micro enterprises and highest in medium-sized enterprises. Slightly less than one third of enterprises (32%) connected environmentally responsible behaviour with their efforts for an improved enterprise image. Statistically, significant differences among micro and small enterprises and among micro and medium-sized enterprises reflect that micro enterprises are least motivated by this factor. Slightly more than one fourth of the surveyed enterprises (26%) are motivated by business success. Statistically significant differences exist only between micro and medium-sized enterprises. Fewer micro enterprises see any economic benefits (one fourth) than medium-sized enterprises (more than a third). Pressure from participants was stated as a reason in 15% of surveyed enterprises. Data can only be generalised for micro and medium-sized enterprises. Pressure from participants (internal and external) is most obvious in medium-sized enterprises.

¹ The demands and challenges of environmental responsibility of SMEs have been discussed in the context of sustainable development in SMEs (Knez-Riedl in Belak et al., 1998, pp. 145-154).
Table 5-1: Motives/reasons of Slovenian SMEs for environmentally responsible activities
(the percentage of enterprises that responded positively)

<table>
<thead>
<tr>
<th>Reason</th>
<th>All size classes (weighted average)</th>
<th>Micro enterprises</th>
<th>Small enterprises</th>
<th>Medium-sized enterprises</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compliance with legislative requirements</td>
<td>41.43</td>
<td>40.62</td>
<td>49.67</td>
<td>65.75</td>
</tr>
<tr>
<td>Pressure from participants</td>
<td>15.23</td>
<td>14.73</td>
<td>21.19</td>
<td>23.29</td>
</tr>
<tr>
<td>Improved enterprise image</td>
<td>31.97</td>
<td>31.25</td>
<td>40.07</td>
<td>47.26</td>
</tr>
<tr>
<td>Business success</td>
<td>26.4</td>
<td>25.89</td>
<td>31.79</td>
<td>40.41</td>
</tr>
<tr>
<td>Concerns for a healthy environment and human health</td>
<td>65.36</td>
<td>65.18</td>
<td>67.22</td>
<td>70.55</td>
</tr>
</tbody>
</table>


5.3 Obstacles for environmentally responsible activities in SMEs

Lack of time is an obstacle for 37% of surveyed enterprises. In medium-sized enterprises, this percentage is lower, both in micro and small enterprises.

High costs were the answer given, on average, by 28% of respondents. This obstacle is a major obstacle for medium-sized enterprises, rather than for micro and small enterprises. Being more often involved in environmental activities they find it easier to assess expenses, but see them – due to a short-term outlook – more as an obstacle than investment. Only 2.14% of surveyed enterprises believe that company philosophy can represent an obstacle. This obstacle gets more difficult with the size of the enterprise. In enterprises with more employees, the values, beliefs and knowledge may differ substantially, which represents an obstacle for environmentally friendly activities. Other obstacles represent 29% of answers given by the surveyed enterprises. In micro enterprises, these are more disturbing than in medium-sized enterprises. They include poor knowledge of environmental problems and risks, poor knowledge of legislative requirements, as well as lack of information about available support. Poor environmental education and training aimed at solving environmental problems can also represent an obstacle.

Table 5-2: Obstacles preventing Slovenian SMEs to take part in environmentally responsible activities (the percentage of enterprises that responded positively)

<table>
<thead>
<tr>
<th>Obstacles</th>
<th>All size classes (weighted average)</th>
<th>Micro enterprises</th>
<th>Small enterprises</th>
<th>Medium-sized enterprises</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of time</td>
<td>36.55</td>
<td>36.61</td>
<td>37.42</td>
<td>23.29</td>
</tr>
<tr>
<td>High costs</td>
<td>28.07</td>
<td>27.68</td>
<td>31.46</td>
<td>44.52</td>
</tr>
<tr>
<td>Company philosophy</td>
<td>2.14</td>
<td>1.79</td>
<td>5.63</td>
<td>14.38</td>
</tr>
<tr>
<td>Other</td>
<td>28.86</td>
<td>29.46</td>
<td>22.19</td>
<td>14.38</td>
</tr>
</tbody>
</table>


5.4 Adopting environmental standards

The majority of surveyed enterprises (85%) have not adopted any environmental standards. On the basis of statistically determined significant differences it can be said that there are more such enterprises among micro and small firms. Medium-sized enterprises have adopted the highest percentage of the ISO 14001 standard, as well as other environmental standards.
5.5 The relationship between the environmental activities of Slovenian SMEs and company strategy

In the majority of surveyed enterprises, environmentally responsible behaviour is not a part of the company strategy (46%). Significant statistical differences show that this problem is likely to appear in micro and small enterprises, which is also the case with regard to the answer »I do not know« (25%). Micro and small enterprises were unable to provide an answer. Data for enterprises in which environmental activity is connected with company strategy (28%) are statistically significant. In larger enterprises, environmentally responsible activities are strategically oriented.

<table>
<thead>
<tr>
<th>Adopted environmental standards</th>
<th>All size classes (weighted average)</th>
<th>Micro enterprises</th>
<th>Small enterprises</th>
<th>Medium-sized enterprises</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISO 14001</td>
<td>2.08</td>
<td>1.9</td>
<td>3.52</td>
<td>10.79</td>
</tr>
<tr>
<td>Other environmental standards</td>
<td>5.65</td>
<td>5.21</td>
<td>10.21</td>
<td>17.99</td>
</tr>
<tr>
<td>No standards</td>
<td>85.23</td>
<td>85.78</td>
<td>80.28</td>
<td>63.31</td>
</tr>
<tr>
<td>I do not know</td>
<td>7.04</td>
<td>7.11</td>
<td>5.99</td>
<td>7.91</td>
</tr>
</tbody>
</table>


Table 5-3: Adopted environmental standards of Slovenian SMEs
(the percentage of enterprises that responded positively)

5.6 Indicators of environmental responsibility for Slovenian SMEs

In addition to more traditional indicators (related to materials, technology, energy, packaging, waste and investments) the following can also be added: environmental accounting, ecological balance sheets, environmental reporting, environmental education, environmental benchmarking and other environmental projects.

<table>
<thead>
<tr>
<th>Connection between environmental activities and company strategy</th>
<th>All size classes (weighted average)</th>
<th>Micro enterprises</th>
<th>Small enterprises</th>
<th>Medium-sized enterprises</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>28.54</td>
<td>27.49</td>
<td>38.85</td>
<td>54.08</td>
</tr>
<tr>
<td>No</td>
<td>45.86</td>
<td>46.45</td>
<td>39.93</td>
<td>26.76</td>
</tr>
<tr>
<td>I do not know</td>
<td>25.61</td>
<td>26.07</td>
<td>21.22</td>
<td>9.15</td>
</tr>
</tbody>
</table>


Table 5-4: Connection of environmental activities of Slovenian SMEs with the company strategy
(the percentage of enterprises that responded positively)

Slovenian SMEs are responsible with regard to the use of materials and their utilisation. Statistically significant differences were found between micro and medium-sized enterprises as well as between small and medium-sized enterprises by testing data. The latter are more environmentally responsible with regard to material management. The situation is similar with regard to environmentally-friendly technologies and energy management, as well as with regard to packaging and waste management (with an emphasis on the latter). Environmental investments are, especially according to micro enterprises, less important.

<table>
<thead>
<tr>
<th>Basic indicators of environmental responsibility</th>
<th>All size classes (weighted average)</th>
<th>Micro enterprises</th>
<th>Small enterprises</th>
<th>Medium-sized enterprises</th>
</tr>
</thead>
<tbody>
<tr>
<td>Materials</td>
<td>42.65</td>
<td>41.96</td>
<td>50.00</td>
<td>60.96</td>
</tr>
<tr>
<td>Technology &amp; energy</td>
<td>31.39</td>
<td>30.80</td>
<td>36.09</td>
<td>59.59</td>
</tr>
<tr>
<td>Packaging &amp; waste</td>
<td>45.39</td>
<td>45.09</td>
<td>47.35</td>
<td>63.70</td>
</tr>
<tr>
<td>Investments</td>
<td>10.01</td>
<td>9.38</td>
<td>17.55</td>
<td>21.23</td>
</tr>
</tbody>
</table>


Table 5-5: Basic indicators of environmental responsibility of Slovenian SMEs
(the percentage of enterprises that responded positively)
The percentage of enterprises (in the sample) that prepares eco balance sheets is small, and slightly larger in medium-sized enterprises. Statistically significant differences (among micro and medium-sized and small and medium-sized enterprises) show that the practice of eco-bilancing is more often found in medium-sized enterprises. The share of enterprises that prepare environmental reports increases with size. Few enterprises participate in projects of environmental benchmarking. Data can be generalised on the basis of the comparison between micro and medium-sized enterprises. The latter are more likely to participate in such projects (benchmarking is a project focused on useful comparisons\(^2\)). There is more cooperation in other environmental projects, but very few in micro enterprises.

5.7 Plans of Slovenian SMEs related to environmental protection within the next three years

The percentage of enterprises that do not plan any environmentally responsible activities in the next three years is the lowest among medium-sized enterprises. Micro enterprises are among companies that do not know what will be going on with regard to environmental protection in their company in the near future.

---

\(^2\) More about environmental benchmarking can be found in Szekely et al. (1996).
weakest in micro enterprises. Lack of time is an obstacle in micro and small enterprises, whereas high costs represent an obstacle for medium-sized enterprises. Micro enterprises are likely to perceive different obstacles than medium-sized enterprises. Micro and small enterprises adopted fewer ISO 14001 standards than medium-sized enterprises. With the size of enterprises, a strategic orientation towards environmentally responsible activities is likely to increase, there are also more environmental reports and participation rates in other environmental projects also increase. Medium-sized enterprises are likely to become environmentally active in the next three years. On the other hand, micro enterprises are less aware of environmental problems.

It can be expected that the number of requirements demanded by socially responsible investors (SRI) will increase in Slovenia, which will, consequently, sharpen the selection on the market of environmental responsibility. The question of various forms of support and tax relief is of importance in cases of environmentally innovative products, services and environmental investments. Slovenia is harmonising its regulations regarding the financing of environmental protection with European legislation. In addition to subsidies, there is the possibility of financing ecological investments (through the Ecological Development Fund and banks). Enterprises should be informed about these possibilities. SMEs should also become more familiar with the concept of environmental accounting, as well as with environmental expenses and eco-bilancing. Enterprises need help in adapting and managing environmental standards and in their efforts to achieve and maintain environmental efficiency (with networks, common projects, manuals, etc.).

In Slovenia, responsible environmental business practices are encouraged with programmes in which the Chamber of Commerce and Industry of Slovenia is also involved (programmes: clean production, eco-profit and responsible management), with prizes awarded by the magazine GV and the Ecological Development Fund of Slovenia for environmentally-friendly enterprises, environmental product of the year, environmentally-friendly procedures and established international environmental partnerships. A joint effort of the Agency of the RS for the Efficient Use of Energy and GV magazine is a prize awarded to energetically efficient enterprises, projects, individual managers and project leaders (http://www.gzs.si).

This research is limited to some of the aspects of the environmental responsibility of SMEs. It would be sensible to continue our research with a thorough research of individual ecological phenomena, exposure of enterprises to environmental risks and an assessment of the impact of size as well as of industry on the level of environmental responsibility of enterprises. Another aspect worth researching is the available sources SMEs can use in order to finance environmental activities, how familiar they are with such possibilities and to what extent enterprises have utilised such possibilities.
How do Slovenian and European SMEs Learn?

6.1 Introduction

The contemporary competitive environment, in which the majority of enterprises operate, has four main characteristics: continuous technological development (especially in connection with the development of information-communication technology - ICT), products with a short life span, increased customer requirements, and global competitiveness. Within this framework, advanced economies are becoming "knowledge economies," strengthening the common belief about the increasing role of human capital for the growth and development of today's society.

It can be stated that companies, especially small and medium-sized enterprises (SMEs), are becoming aware of the importance of key words like: 'knowledge', 'skills', 'experience' or 'competences' which help them ensure their own competitiveness.

'Competence' is defined in this article as human knowledge and skills that serve entrepreneurs and their enterprises in carrying out business activities, thereby helping the company's competitiveness.

'The development of competences' can be defined as a network of activities, carried out by a company in order to develop its stock of competences.

Research about key competences for SMEs is rare. The information available is mainly limited to certain aspects in the development of competences (e.g. formal education), whereas studies dealing with the development of competences in SMEs are difficult to find.

This contribution presents the analysis of SMEs in Slovenia, the European Union, in Norway, Iceland and Switzerland (Europe-19) with regard to the development of their competences -- the challenges met and obstacles faced.

With regard to the methodology, this report is based on the results of the «Competence Development in SMEs» research carried out by the Observatory of European SMEs in 2003, which includes a review of existing national and international studies collected with the help of ENSR network partners, based on information gathered from the research on a large sample of European SMEs. The data for Slovenian SMEs stem from the research (questionnaires), carried out within IPMMP, EPF that was carried out on a representative sample of Slovenian enterprises.

6.2 Activities for the development of competences of Slovenian and European SMEs

Data stemming from ENSR and IPMMP research show that around half of European (and 66% of Slovenian) SMEs stress that activities for the development of competences represent the key element in their overall company strategy (Figure 6-1). Differences between size classes can be noticed among European enterprises. Relatively large companies are more often aware of the importance of the development of competences than small enterprises (micro 51%; small 53%; medium-sized 67%). In Slovenia, enterprises are, to a similar extent, aware of the importance of the development of competences in all size classes (micro 66%; small 64%; medium-sized 62%). Interestingly, Slovenian enterprises are more likely to be aware of the importance of the development of competences than European companies. This is probably because of the awareness of Slovenian enterprises that their lagging behind their European counterparts is mainly due to a lack of knowledge and skills.
The ENSR and IPMMP research confirm the theoretical premises and expectations regarding the results. In both, entrepreneurs were asked which methods their companies used in order to improve the level of knowledge, experience and skills, i.e. competences of their human resources. Table 6-1 shows that in addition to formal education (e.g. courses, seminars and conferences organised by external experts), which takes second place among the most often used methods of upgrading internal competences, there are also informal methods which are often used by SMEs.
In addition to visiting exhibitions and fairs, reading professional literature and meetings organised for the exchange of information are among the most important methods used by enterprises in order to increase the level of knowledge, experience and skills. The IPMMP research results show that Slovenian enterprises (between 70% and 80% of surveyed enterprises) use these methods more often than European companies (between 30 and 60% of surveyed enterprises). Large enterprises in both Slovenia and Europe use these methods more frequently. After this comes cooperation with advisers, which is used by 59% of Slovenian and 33% of European SMEs.

Some interesting findings were revealed from the NSR data with regard to individual countries and from IPMMP data for Slovenia (see Table 6.2). With regard to the activities used in order to improve the level of knowledge, experience and skills in the company, three main groups of European countries can be identified. The first group consists of the majority of Nordic countries (Norway, Finland, Sweden and Iceland), Central-European countries (Liechtenstein and Austria) and Ireland. These countries can be labelled as the most active in this field. With regard to the results, Slovenia can be placed into this group. SMEs belonging to this group show high participation in formal and informal activities for the development of their competences, and a wide choice of used methods.

<table>
<thead>
<tr>
<th>Country</th>
<th>A</th>
<th>B</th>
<th>DK</th>
<th>FIN</th>
<th>F</th>
<th>D</th>
<th>EL</th>
<th>IS</th>
<th>IRL</th>
<th>I</th>
<th>LI</th>
<th>L</th>
<th>NL</th>
<th>NO</th>
<th>P</th>
<th>E</th>
<th>S</th>
<th>CH</th>
<th>UK</th>
<th>SI</th>
<th>EU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visits to expos/</td>
<td>81</td>
<td>66</td>
<td>57</td>
<td>72</td>
<td>34</td>
<td>75</td>
<td>37</td>
<td>45</td>
<td>73</td>
<td>60</td>
<td>74</td>
<td>53</td>
<td>68</td>
<td>73</td>
<td>45</td>
<td>58</td>
<td>77</td>
<td>69</td>
<td>52</td>
<td>76</td>
<td>58</td>
</tr>
<tr>
<td>trade fairs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Promote reading</td>
<td>54</td>
<td>53</td>
<td>41</td>
<td>60</td>
<td>28</td>
<td>61</td>
<td>10</td>
<td>43</td>
<td>49</td>
<td>27</td>
<td>63</td>
<td>28</td>
<td>61</td>
<td>69</td>
<td>15</td>
<td>11</td>
<td>48</td>
<td>47</td>
<td>47</td>
<td>73</td>
<td>37</td>
</tr>
<tr>
<td>of professional</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>literature</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meetings</td>
<td>36</td>
<td>30</td>
<td>50</td>
<td>49</td>
<td>22</td>
<td>27</td>
<td>44</td>
<td>51</td>
<td>50</td>
<td>39</td>
<td>44</td>
<td>27</td>
<td>27</td>
<td>64</td>
<td>16</td>
<td>24</td>
<td>45</td>
<td>34</td>
<td>42</td>
<td>71</td>
<td>33</td>
</tr>
<tr>
<td>amongst</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>personnel for</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>knowledge</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>exchange</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Courses /</td>
<td>64</td>
<td>51</td>
<td>50</td>
<td>62</td>
<td>24</td>
<td>42</td>
<td>38</td>
<td>57</td>
<td>63</td>
<td>40</td>
<td>68</td>
<td>28</td>
<td>53</td>
<td>65</td>
<td>21</td>
<td>40</td>
<td>56</td>
<td>46</td>
<td>41</td>
<td>69</td>
<td>41</td>
</tr>
<tr>
<td>seminars /</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>conferences</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>provided by</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>external trainers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Co-operation</td>
<td>36</td>
<td>19</td>
<td>31</td>
<td>28</td>
<td>9</td>
<td>17</td>
<td>19</td>
<td>23</td>
<td>36</td>
<td>30</td>
<td>29</td>
<td>13</td>
<td>31</td>
<td>32</td>
<td>7</td>
<td>16</td>
<td>38</td>
<td>21</td>
<td>30</td>
<td>59</td>
<td>22</td>
</tr>
<tr>
<td>with consultants</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>and advisers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>for developing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>internal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>competence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Courses /</td>
<td>21</td>
<td>17</td>
<td>18</td>
<td>18</td>
<td>16</td>
<td>25</td>
<td>30</td>
<td>19</td>
<td>24</td>
<td>17</td>
<td>22</td>
<td>21</td>
<td>23</td>
<td>29</td>
<td>13</td>
<td>29</td>
<td>28</td>
<td>33</td>
<td>16</td>
<td>37</td>
<td>21</td>
</tr>
<tr>
<td>seminars /</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>conferences</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>provided by own</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>personnel</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Study visits</td>
<td>33</td>
<td>30</td>
<td>26</td>
<td>23</td>
<td>11</td>
<td>21</td>
<td>24</td>
<td>29</td>
<td>27</td>
<td>12</td>
<td>30</td>
<td>14</td>
<td>24</td>
<td>27</td>
<td>8</td>
<td>21</td>
<td>45</td>
<td>26</td>
<td>17</td>
<td>27</td>
<td>18</td>
</tr>
<tr>
<td>Tutoring /</td>
<td>10</td>
<td>23</td>
<td>22</td>
<td>14</td>
<td>2</td>
<td>3</td>
<td>27</td>
<td>39</td>
<td>30</td>
<td>11</td>
<td>8</td>
<td>2</td>
<td>32</td>
<td>17</td>
<td>4</td>
<td>3</td>
<td>18</td>
<td>6</td>
<td>21</td>
<td>27</td>
<td>11</td>
</tr>
<tr>
<td>mentoring</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>activities for</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>staff</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job rotation</td>
<td>7</td>
<td>11</td>
<td>17</td>
<td>23</td>
<td>5</td>
<td>5</td>
<td>10</td>
<td>13</td>
<td>12</td>
<td>13</td>
<td>7</td>
<td>6</td>
<td>4</td>
<td>12</td>
<td>3</td>
<td>10</td>
<td>18</td>
<td>9</td>
<td>10</td>
<td>14</td>
<td>9</td>
</tr>
<tr>
<td>(in-house or in</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>other firms)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other activities</td>
<td>13</td>
<td>3</td>
<td>2</td>
<td>8</td>
<td>2</td>
<td>6</td>
<td>4</td>
<td>5</td>
<td>3</td>
<td>4</td>
<td>13</td>
<td>6</td>
<td>2</td>
<td>18</td>
<td>4</td>
<td>2</td>
<td>11</td>
<td>6</td>
<td>5</td>
<td>44</td>
<td>4</td>
</tr>
</tbody>
</table>


Table 6.2: The share of micro, small and medium-sized enterprises that participated in various activities in order to improve the level of knowledge, experience and skills in the enterprise, in EU countries and Slovenia
The second group of countries is their opposite and consists of Italy, Greece, Spain and Portugal, as well as France and Luxemburg, with the lowest degree of participation in activities to develop competences (both in formal and informal activities as well as with regard to the number of used methods).

The third group of countries (the Netherlands, Denmark, Belgium, Great Britain, Switzerland and Germany) can be placed between the first two groups.

The next interesting finding stems from ENSR research carried out in 2002 and IPMMP research activities from 2003, and relates to the most frequently used methods in SMEs in various countries. Visits (see Table 6-2) to exhibitions and fairs are among the most often used methods in the surveyed countries, with the exception of Greece and Iceland, where courses, seminars and consultations organised by external experts are the most frequently used methods. The comparison of different practices in different countries emphasises the important difference in the frequency of use of individual methods in the EU and Slovenia.

With regard to meetings organised for the exchange of knowledge, a north-south division can be identified. Nordic countries (Norway, Iceland, Finland, Denmark and Sweden) and Ireland use this method more often than Portugal, Spain or France, which is in accordance with the findings of other studies (The European Foundation 2001), which point to the existence of a demarcation line between Northern and Southern Europe in the sense of the importance of team work, or the possibility of taking part in decision-making regarding changes within a company. There are different possible explanations for such differences. Many authors believe (AC&G 2000) that the understanding of different activities and methods for the development of competences differ among countries. Historical and cultural differences among individual countries have a substantial influence on the decisions taken by SMEs regarding the choice of different activities for the development of competencies (e.g. a more autocratic managerial style in the south).

Individual countries will have to create (OECD 2001) a favourable environment that encourages enterprises in their efforts to facilitate an efficient upgrading of their competencies, i.e. knowledge, experience and skills.

Numerous programmes carried out by individual countries in the European Union as well as by the Slovenian government, show that countries are aware of the importance of knowledge and therefore spend a lot of time in various activities for the development of knowledge, experience and skills in their SMEs. Despite this, the ENSR research from 2002 and IPMMP research activities show that 46% of European SMEs and 58% of Slovenian SMEs believe that the support in this area granted from the state is not sufficient (see Figure 6-2).

![Figure 6-2: The share of micro, small and medium-sized enterprises that believe that the government does not fully support the implementation of education and other activities in order to increase knowledge and skills in enterprises](source: Observatory of European SMEs, Competence Development in SMEs, 2003, No.1. and IPMMP, 2003.)
6.3 Conclusion

This article summarises the findings of ENSR research from 2002 and IPMMMP research activities, which show that almost 80% of Slovenian and European SMEs carry out numerous activities in order to develop the knowledge, experience and skills of their employees. The fact remains that enterprises, especially SMEs, are becoming aware of the importance of their level of competences. They identified the importance of knowledge, experience and skills in the process of developing their competitive advantages in the so-called knowledge-based society.

In developing their competences, companies, especially SMEs, use both formal (e.g. courses, seminars and conferences prepared by external experts) and informal training methods. Some authors believe that discreet ‘learning from others’ and gaining experience by working are a ‘trademark’ of small enterprises, where learning is usually based on ‘working by doing’. In this way, silent knowledge and competences are developed, which represent an important part of building competitive advantages in a company.

Visiting exhibitions and fairs is the most commonly used method for the development of competences in all enterprise size classes. Exhibitions and fairs are places where companies, especially SMEs, get to know the latest technological achievements and familiarise themselves with the newest developments in their industry.

Other methods include cooperation with advisers on the development of competencies in the company, courses designed by employees for their fellow workers, study visits, activities like tutoring and mentorship for employees and head shunting (within the company and in other companies). The fact that visiting exhibitions and fairs represents the most frequently used method indicates that informal methods are rarely used and that it is difficult to achieve the set targets about upgrading knowledge, experience and skills in both European and Slovenian SMEs.

The distribution of the presented methods, according to their importance in different enterprise size classes, is even. This cannot be claimed with regard to the variety of formal and informal methods used in the development of competences. The bigger the company, the bigger the variety of used methods.

There is a positive correlation between the company’s size and the frequency of activities carried out in order to develop competencies. Large enterprises organise such activities more regularly. Many SMEs try to seek a quick economic return on their investments into knowledge. Approximately half of European SMEs, and a slightly smaller number of Slovenian enterprises, employ a person or a group of people in charge of identifying poor knowledge and lacks of skills. In some companies, this role is played by the owner or CEO (mainly among micro and small enterprises). Only a small number of Slovenian and European SMEs have a written plan for the development of their competencies, with substantial differences with regard to the size of enterprises.

Individual countries will have to create (OECD 2001) a favourable environment that encourages enterprises in their efforts to facilitate an efficient upgrading of their competencies, i.e. knowledge, experience and skills.

The following are the most important suggestions for policy-makers:

• We should find a new, wider, definition of learning, which would represent the basis for different forms of education and training as well as for the majority of policy measures. Our research has also shown that a wider concept of learning should be adopted, which would include the relationship between formal education and education within enterprises (informal education), as well as the integration of education, training and the labour market.

• Policy-makers should encourage the formation of various ways for the formal acknowledgement of informal education and skills gained through practical experience, which is especially important for SMEs. This may help people in their efforts to get jobs by proving their level of qualifications and skills. In addition, such opportunities would encourage people to participate in informal education.

• It is necessary to increase the number of investments and efforts for the study of corporate learning, which would bring to a deeper understanding of organisational, production, technological and social factors that foster or hinder learning in SMEs. Such research would also help us identify procedures and tools acceptable to SMEs. When these factors are clearly identified, policy-planners should form a system of instruments, which will encourage enterprises in investing into corporate learning. It is advisable to consider the existing examples of ‘good practices’ and promote the exchange of information among participants.

• Last but not least, policy-makers should develop measures, which will increase the number of possibilities for the formal and informal education of workers with fewer possibilities to participate in education (employees in small enterprises, people in non-standard jobs).
APPENDIX 1

METHODOLOGICAL NOTE

The sample included 672 micro (with 0 to 9 employees), small (with 10 to 49 employees) and medium-sized (with 50 to 249 employees) enterprises in Slovenia.

A telephone questionnaire was carried out between September 19, 2003 and October 21, 2003. The questionnaire included 32 questions. Stratified disproportionate random sampling was used, which enabled a statistically reliable analysis of the whole population and individual strata represented by enterprises in different size classes. The structure of surveyed enterprises according to size is as follows:

<table>
<thead>
<tr>
<th>Enterprise size</th>
<th>the number of surveyed enterprises</th>
<th>weights – enterprise share within the population</th>
</tr>
</thead>
<tbody>
<tr>
<td>micro</td>
<td>224</td>
<td>0.9375</td>
</tr>
<tr>
<td>small</td>
<td>302</td>
<td>0.0497</td>
</tr>
<tr>
<td>medium-sized</td>
<td>146</td>
<td>0.0128</td>
</tr>
</tbody>
</table>

This ensures at least 5% accuracy of the assessment in a 95% confidence interval for the assessment of the statistical parameters in the population, with the expected value of statistical parameters. With regard to the structure of enterprises in different size classes in the Slovenian economy (data for 2002), answers were weighted for the calculation of average estimates for the whole population; weights are shown in the third column of the table.

In some parts of our research, we were interested in the opinions expressed by male and female entrepreneurs, but not in the enterprises themselves (which is explicitly stressed in the text). There are 442 such statistical units in the sample.
LITERATURE

1. Miroslav Rebernik, Dijana Močnik, Matej Rus, Silvo Dajčman
   THE BASIC CHARACTERISTICS OF SLOVENIAN ENTREPRENEURSHIP IN 2002

2. Silvo Dajčman
   THE CHALLENGES OF FINANCING SMALL AND MEDIUM-SIZED ENTERPRISES IN
   SLOVENIA AND THE EU


3 Polona Tominc, Karin Širec Rantaša
ATTITUDES TOWARDS FEMALE ENTREPRENEURSHIP IN THE SLOVENIAN SOCIAL ENVIRONMENT


http://www.eoc.org.uk/cseng/policyandcampaigns/our_vision.asp


Tadej Krošlin, Matej Rus

THE CHALLENGES OF CLUSTER DEVELOPMENT INTO REGIONAL INNOVATION SYSTEMS IN SLOVENIA


ENVIRONMENTAL RESPONSIBILITY OF SLOVENIAN SMEs


European Communities: Observatory of European SMEs 2002/No 4: European SMEs and Social and Environmental Responsibility, str. 42


Kolk, A.: Economics of Environmental Management, Edinburg Gate, Harlow-Prentice Hall 2000

Kumar Pramanik, A.: Environmental Accounting and Reporting, New Delhi, Deep&Deep, 2002

Observatory of European SMEs 2000, No. 4


Web pages:
http://www.gzs.si
http://www.umanotera.doyen.si

HOW DO SLOVENIAN AND EUROPEAN SMEs LEARN?


Department of Business Administration and Social Sciences, Acquisition in Small Manufacturing Firms, University of Technology, Luleå, 1997.


Nordhaug, O., *Human Capital in Organisations; Competence, Training and Learning*, Scandinavian University Press, Oslo, 1993 (p. 50), taken from H. Ylinenpää, Managing Competence Development and


Ylinenpää, H. *Managing Competence Development and Acquisition in Small Manufacturing Firms*, Department of Business Administration and Social Sciences, University of Technology, Luleå, 1997.
Slovenian Entrepreneurship Observatory 2003

Published by
Institute for Entrepreneurship and Small Business Management
Faculty of Economics and Business
University of Maribor
Razlagova 14, 2000 Maribor
SLOVENIA

Director
prof. dr. Miroslav Rebernik

Title of the publication
Slovenian Entrepreneurship Observatory 2003

Authors
Miroslav Rebernik
Jožica Knez – Riedl
Dijana Močnik
Polona Tominc
Karin Širec Rantaša
Matej Rus
Tadej Krošlin
Silvo Dajčman

Design and layout
Tadej Krošlin
Institute for Entrepreneurship and Small Business Management
Faculty of Economics and Business
University of Maribor
Razlagova 14, 2000 Maribor
SLOVENIA

Publishing Year
2004

Printed by
Tiskarna tehničnih fakultet Maribor

Number of copies
150

Available
http://epfip.uni-mb.si

ISBN 961-6354-46-9