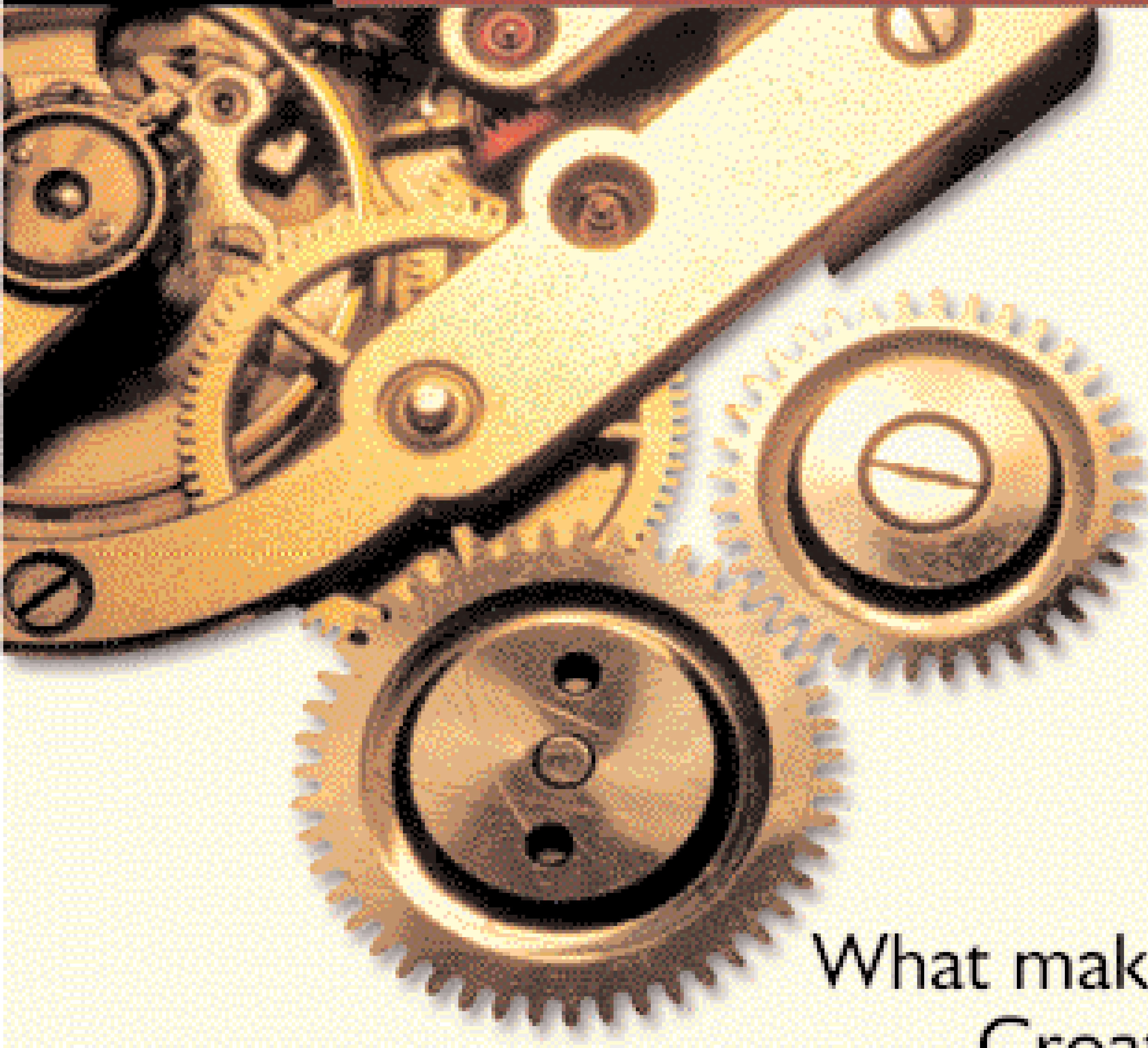
GEM

GLOBAL ENTREPRENEURSHIP MONITOR CROATIA



What makes Croatia an entrepreneurial country?

RESULTS OF GEM CROATIA RESEARCH 2002 - 2005

Slavica Singer, Nataša Šarlija, Sanja Pfeifer, Đula Borozan, Sunčica Oberman Peterka

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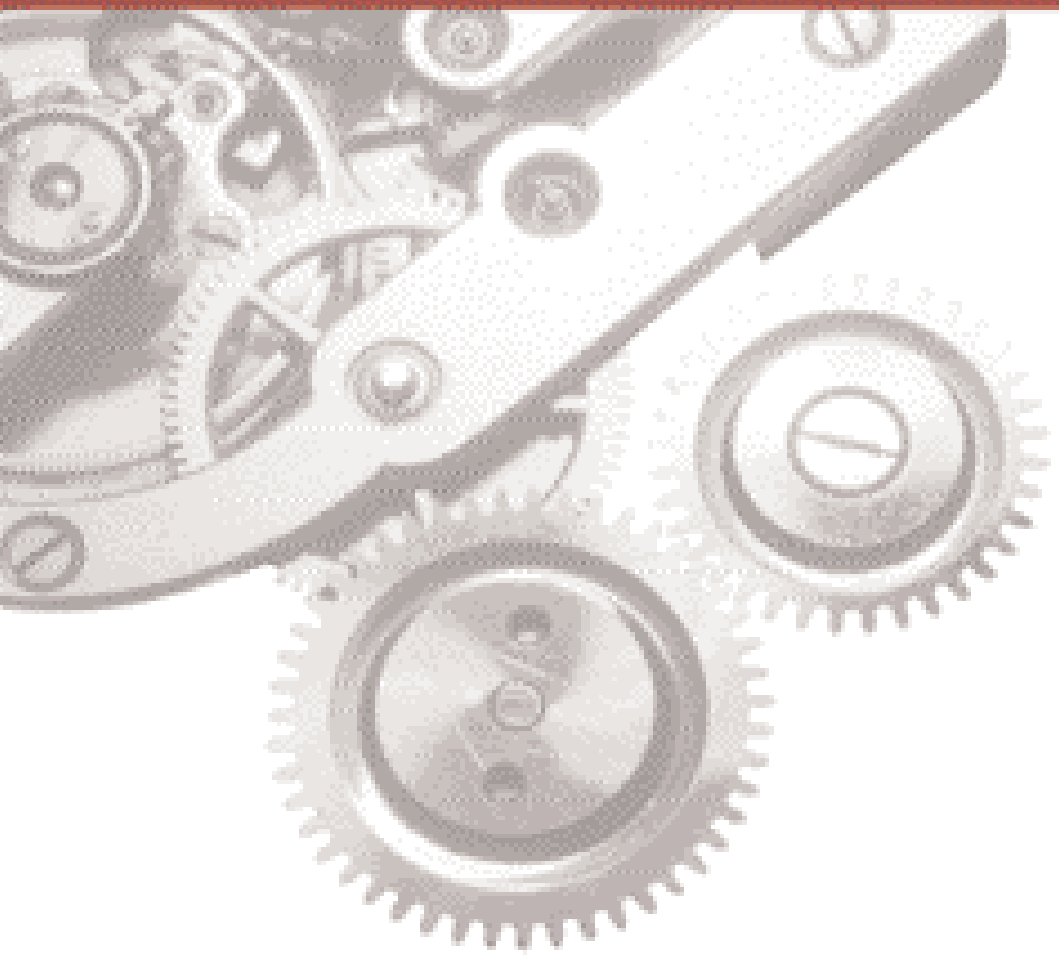

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for Croatia 2005

CEPOR

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Branko Vukelić,
Minister of Economy, Labour and Entrepreneurship

Entrepreneurship has a crucial role in the process of adjusting Croatian economy to the standards of the European Union, because it puts the whole range of our own resources into action, from human to financial resources. Entrepreneurial capacity of a country does not depend solely on the individual, but also on the environment that has to support realization of individual entrepreneurial initiative. This is precisely the area in which Ministry of Economy, Labour and Entrepreneurship continuously launches numerous programmes that are designed to eliminate "bottlenecks" in the process of building up the entrepreneurial strength of Croatia. In 2004 and 2005 Ministry of Economy, Labour and Entrepreneurship has started numerous programmes that enabled the entrepreneurs to have adequate access to financial resources and education, to take advantage of different professional services, to entice innovativeness and export. Financial means for these programmes amounted to 229,052,354 HRK. Among a large number of results achieved through these programmes, building of institutional professional infrastructure is especially important: 16 incubators, 27 entrepreneurial centres, 6 regional development agencies and 235 entrepreneurial zones (areas), since they are the backbone for supporting entrepreneurs throughout Croatia. Furthermore, knowing that the programmes launched by the Ministry of Economy, Labour and Entrepreneurship in 2004 and 2005, were used by 4,293 entrepreneurs, we may understand why Croatia leaped up the scale of the Global Entrepreneurship Monitor (GEM) research, from the last place to the middle position on the scale.

The results of the GEM research, which include Croatia since 2002, are very important for setting priorities in interventions and policies that support the development of entrepreneurial capacity of a country and its competitiveness. Taking into account the importance of being able to make an international comparison of Croatia with other countries included into the GEM research and the relevance that this project has for designing national policies, as well as possibility to use the research results in numerous international institutions, Ministry of Economy, Labour and Entrepreneurship used the results of the GEM research as basis for defining its programmes, because precisely the lack of education and professional infrastructure was crucial for designing adequate programmes.

Recommendations given in this study will be taken into account for further designing of policies, programmes and instruments that the Ministry of Economy, Labour and Entrepreneurship uses in order to create a supportive environment for entrepreneurship and innovativeness, and in its further efforts to eliminate administrative obstacles in starting and developing business ventures, to introduce education about entrepreneurial activities on all levels of formal education and to create conditions that will enable better and easier access to financial resources.

Branko Vukelić,
Minister of Economy, Labour and Entrepreneurship

Preface

In 2002 Croatia became a part of the Global Entrepreneurship Monitor (GEM) research, which gave us the priceless opportunity to compare effectiveness of policies, programmes and activities of different institutions and associations that deal with building up the entrepreneurial capacity of Croatia. Since then, Croatia has learned a lot about entrepreneurship. The most important lesson is in understanding what entrepreneurship really is and what it is not.

In order to accept entrepreneurship as a way of behaviour (proactive, creative) based on empowered and responsible individuals and competent and responsible institutions, it was necessary to detach ourselves from the myths that surrounded the word "entrepreneur" for a long time. The key myth that had far-reaching consequences on individuals and institutions was that an entrepreneur is born and that a person cannot learn to be one, as well as that entrepreneurial success depends on the amount of risk that an individual takes. However, facts tell us otherwise. Entrepreneurial success is more likely to happen if people have adequate knowledge and skills, if entrepreneurial career is a personal choice, and if there is an environment that stimulates and supports entrepreneurial activity (from cultural and social norms to regulatory frameworks).

Participation in the GEM research enabled Croatia to join in with the group of countries, among which there are also the richest countries in the world, which have recognized entrepreneurship as the main focus of their public policies and economic development, because entrepreneurship is the axis around which everything revolves (Schumpeter).

Croatia has made great progress since the first study "What makes Croatia a (non) entrepreneurial country?" which presented the results of the Croatian participation in the GEM research in 2002, until the current study "What makes Croatia an entrepreneurial country?" which presents the results of Croatian participation in the GEM research from 2002 to 2005: Croatia leaped up from 32nd place (out of 37 countries) in 2002 to 19th place (out of 35 countries) in 2005. GEM research results are publicly available at www.gemhrvatska.org or www.cepor.hr or www.gemconsortium.org.

GEM research team from the J. J. Strossmayer University in Osijek (Slavica Singer, Nataša Šarlija, Sanja Pfeifer, Đula Borozan and Sunčica Oberman Peterka) and CEPOR - SMEs and Entrepreneurship Policy Center, would like to thank the Ministry of Economy, Labour and Entrepreneurship, Croatian Chamber of Economy and National Competitiveness Council for constant support in dissemination of research results. We would especially like to thank the experts who, with their evaluations, contribute greatly to better understanding of strengths and weaknesses of the entrepreneurial environment. Printing of this publication was financially supported by USAID through the CroNGO program of the Academy for Educational Development, precisely because of the desire to promote the results regionally, through a series of conferences and discussions about entrepreneurial capacity and the limitations of its development.

Professor Slavica Singer, Ph.D.
Head of the GEM Croatia research team

Summary

In 2005 Croatia took part in the Global Entrepreneurship Monitor (GEM), the biggest worldwide research of entrepreneurial activity, for the fourth time. GEM team Croatia wishes to thank the Ministry of Economy, Labour and Entrepreneurship for continuous financial support and their growing interest for using the research results in designing their policies and programmes.

By means of a unique conceptual frame and methodological approach, GEM analyses annual changes in entrepreneurial activity, which enables every participating country to track changes in entrepreneurial activity in time and to decide on the relevance of these changes by comparing them with the other countries.

Methodology of the GEM research includes surveying a randomly selected group of adults aged from 18 to 64 (in order to determine the level of entrepreneurial activity), surveying and interviewing experts (in order to evaluate the quality of entrepreneurial environment) and analysing statistical indicators on the level of development, collected from international sources of information.

Entrepreneurial activity in Croatia in international perspective

The main result shown in the analysis of Croatia as a part of the GEM research for the period of 2002 - 2005 is an increase in entrepreneurial activity, measured by the TEA index (Total Entrepreneurial Activity) which determines the percentage of people whose entrepreneurial activity lasted less than 42 months in the population of adults. After having scored a TEA of 3.62% in 2002, Croatia scored a TEA of 6.11% in 2005. This means that in 2005 out of every 16 adults (in the working population) one person is entrepreneurially active, whereas in 2002 one person out of 30 adults was entrepreneurially active.

Entrepreneurial capacity of Croatia is growing, but…

Croatia has moved up the scale of GEM countries in 2005, but it is mainly because of a sharp increase of entrepreneurial activity among those who did not have another choice. In the total TEA index it is desirable that there should be more TEA Opportunity-driven entrepreneurs (those who have started entrepreneurial activity of their own free will because they saw a business opportunity) rather than the TEA Necessity-driven entrepreneurs (those who have started entrepreneurial activity because their situation forced them into it), because those who have started entrepreneurial activity of their own free will have long-term plans and more optimistic expectations. In Croatia this ratio is reversed. It is a good thing that unemployed people decided not to wait for someone else to solve their problems, but it is still necessary to create conditions for strengthening the TEA-Opportunity index.

The trend of a growing number of small businesses with growth potential is another good news, because only growing businesses can generate a significant number of new job openings. Both in the structure of start-up businesses (not older than 42 months) and in the structure of businesses that have been active longer than 42 months, there is a significant decrease in number of businesses without growth potential: in the first case it decreased from 71% to 50%, and in the second from 80% to 63%. Even better, with 1.8% of businesses with strong growth potential (in the category of businesses that have more than 42 months of entrepreneurial activity) Croatia exceeds the GEM average. However, in the category of businesses that have less than 42 months of entrepreneurial activity Croatia falls greatly behind the GEM average.

Regional differences are decreasing

Regional developmental differences can be seen in the level of entrepreneurial activity. The difference between regions with the strongest and the weakest entrepreneurial activity has decreased in the period 2002 - 2005 from 1 : 2.3 to 1 : 1.91.

Who starts business ventures in Croatia?

People with higher education start their entrepreneurial activity more often than those with lower or no education. The gap between entrepreneurial activity of men and women is increasing: in 2002 there were 2.95 times more entrepreneurially active men in Croatia, and in 2005 this ratio grew to 3.79. People with lower income start their entrepreneurial activity more often than those with high income, which is consistent with a strong TEA-Necessity index in Croatia.

Entrepreneurial environment in Croatia: does it help or hinder?

Expert evaluation of the quality of certain entrepreneurial environment components leads us to the following conclusions about the change in the quality of entrepreneurial environment in Croatia:

- Tendency of lower quality of financial support, because of the lack of a developed financial market (not enough venture capital, not enough informal investors) and the lack of guarantee funds
- Government programmes are better rated than government policies
- Government policies for grants are better rated than government policies for regulations
- Growing quality of education focused on development of entrepreneurial potential in young people (especially in primary and secondary education)
- Better availability of business and professional infrastructure, but the question of service quality remains open
- Better access to physical infrastructure

Recommendations for increasing the entrepreneurial capacity in Croatia

Recommendations are focused on the limitations that have been perceived in the effects of certain entrepreneurial environment components, especially in:

- Development of a financial market (informal investors, venture capital funds, guarantee funds, microcrediting)
- Government policies for regulatory framework, education, transfer of research and knowledge
- Development of quality services for entrepreneurs, especially for those who have the potential and the desire to grow
- Strengthening and promoting entrepreneurial culture (education, media)
- Strengthening the involvement of women in entrepreneurial activity

1 Introduction

Numerous theoreticians of economic growth (Schumpeter, 1943; Hayek, 1948; Kirzner, 1973; Gartner, 1989; Audreutsch and Thurik, 2000) advocate entrepreneurship as one of the basis for economic growth. And even though researchers show great interest and that many successful countries have gained experiential insight into the great importance that creating new business ventures has for national economic development, still, the entrepreneurial capacity of a country remained outside the main current of theoretical discussions and of national economic policies. Global Entrepreneurship Monitor (GEM) is a unique international research reaction to those facts.

Objectives of the research

The objective of the research is to develop common indicators for monitoring entrepreneurial activity in time and space, and thus also building a consistent basis for policy interventions with the aim of improving conditions on which entrepreneurial capacity of a country depends.

GEM project started in 1999 as an initiative of a group of researchers from London Business School in Great Britain and Babson College in USA. That year, the research included ten most developed countries[1] that wanted to get an answer to the question why the entrepreneurial capacity in the USA is greater than in other developed countries. So far, 45 countries have been involved in the project. The starting research questions - is the entrepreneurial activity different among countries and why, as well as what can help develop the entrepreneurial capacity of a country, have been transformed into the basic objectives of the research:

- Measuring differences in the level of entrepreneurial activity between countries
- Uncovering factors determining the levels of entrepreneurial activity
- Identifying policies that may enhance the level of entrepreneurial activity in a country

Within these three objectives the results of the GEM research have a major influence in answering the two very important questions, theoretical and applicable:

- To what extent are the differences in entrepreneurial activity connected to total economic growth of a country?
- What can the governments do in order to influence the level of entrepreneurial activity in a country?

The uniqueness of the GEM research is in the fact that it gives the basis for both vertical and horizontal comparison by using a unique conceptual framework for its research and unique indicators. Vertical comparison enables every participating country to track changes in its own environment, i.e., effects of the applied policies and instruments. Horizontal comparison enables every country to make international comparisons, i.e., to choose an adequate **benchmark**.

1 The project included G-7 countries (France, Italy, Japan, Canada, Germany, USA and Great Britain), and Denmark, Finland and Israel.

The model (conceptual research framework)

GEM research relies on the assumption that national economic growth depends on the developmental capacity of the existing economy, but also on the capacity of the society as a whole to innovate, anticipate changes and use them for creating prosperity for the individual and for the country as a whole. Therefore, GEM uses the conceptual research framework that presupposes complementarity of two basic mechanisms (framework of general macroeconomic conditions and framework of entrepreneurial conditions) on which the capacity of a national economy to create prosperity on the level of the individual and the community, depends:

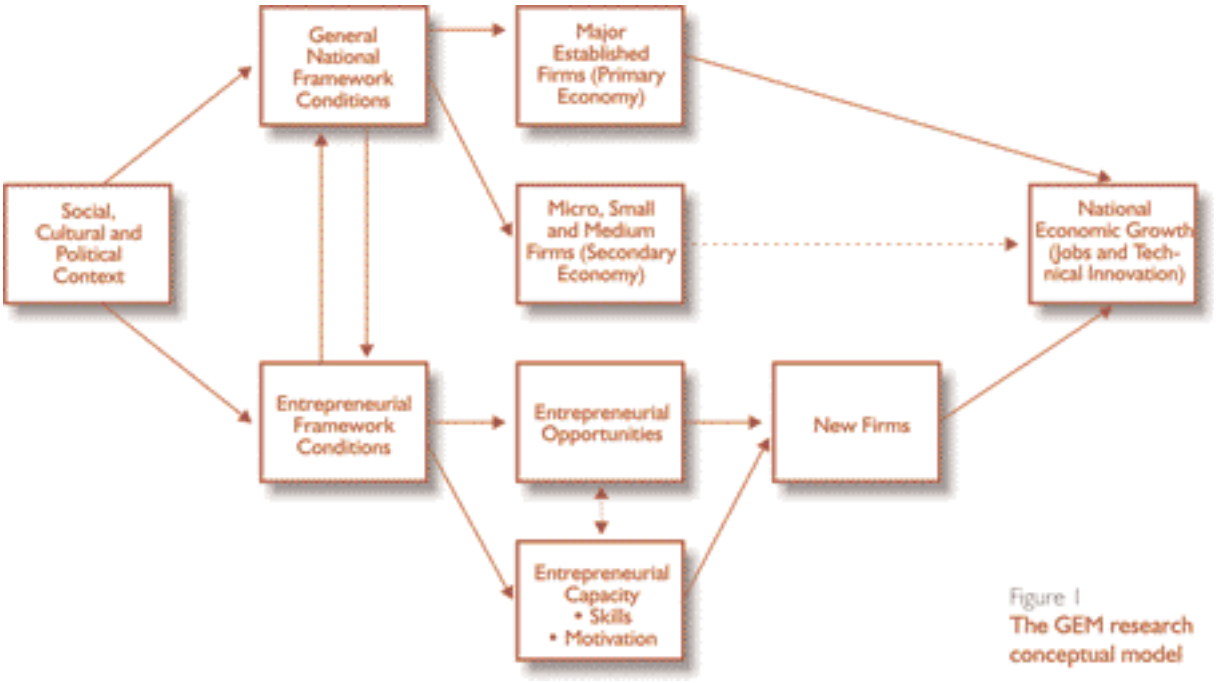


Figure 1
The GEM research conceptual model

General National Framework Conditions:
Openness of national economy
The role of government
Effectiveness of the financial market
Level of investment into research and development
Physical infrastructure
Managerial competence
Flexibility of the labour market
Rule of law

Entrepreneurial Framework Conditions:
Financial support
Government policies
Government programmes
Education
Transfer of research and development
Business and professional infrastructure
Openness of the internal (national) market and competitiveness
Access to physical infrastructure
Cultural and social norms

Traditionally, analysis of economic growth is focused on "primary" economy, neglecting the role of new and smaller enterprises. Small and new enterprises create innovations, fill market niches, increase competitive pressure and thus promote economic efficiency.

GEM approach is focused on researching economic connections of all business forms within a national economy, including the evaluation of the contribution of new enterprises, small enterprises as well as already established firms in the total aggregate level of economic growth in the country, and especially the entrepreneurial framework conditions. GEM research analyses the importance and intensity of the connections between these complementary mechanisms, viewing these connections through the role of an empowered individual, one who acts in a proactive, entrepreneurial way.

Such conceptual research framework is based on a holistic approach in defining entrepreneurship as an integral phenomenon of the interaction between an individual and his/her environment. That is why GEM research defines entrepreneurship as a complex behavioural phenomenon that exists in all social organizations, not only in economy, but in education, research, culture, government institutions and local administration.

The indicators

For the purposes of GEM project, and based on the conceptual research framework and holistic approach to the definition of entrepreneurship, a set of indicators that measure different aspects of entrepreneurial activity has been identified:

Indicators of total entrepreneurial activity in the life cycle of the entrepreneurial process, from start-up to maturity of the business venture:

- Nascent entrepreneurs (who decide to start a business venture)
- New business owners (business owners whose entrepreneurial activity is measured by having paid salaries for more than 3 months, but less than 42 months)
- Established business owners (business owners who are entrepreneurially active for more than 42 months)

Entrepreneurial activity of the nascent entrepreneurs and new business owners, measured by the ratio of the number of such entrepreneurs (start-up) in the sample of the adult population, aged 18 to 64, is expressed through Total Entrepreneurial Activity (TEA) Index.

Indicators of motivation for entrepreneurial activity:

- TEA Opportunity index: those who start entrepreneurial activity because they have perceived a business opportunity
- TEA Necessity index: those who are pushed into entrepreneurship by the situation they found themselves in (they lost their job, could not find another job…)

Figure 2
Definitions of GEM indicators of entrepreneurial activity

Indicators of the entrepreneurial profile:

- Gender
- Age
- Education
- Financial status
- System of values

International dimension of the GEM research

Since 1999, when the research included ten countries, the GEM research grew and in 2005 it included 35 countries that make up about 65% of world population and about 90% of world gross domestic product:

Asia and Oceania
Australia, China, Japan, New Zealand, Singapore and Thailand

Africa and the Middle East
South Africa

Europe
Austria, Belgium, Croatia, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Netherlands, Norway, Slovenia, Spain, Sweden, Switzerland and the United Kingdom

North America
Canada, Jamaica, Mexico and the United States

South America
Argentina, Brazil, Chile and Venezuela

Data Sources

GEM research is conducted through cooperation between GEM Coordination Team and national teams and is based on two questionnaires specially designed for the purpose of this research and on collected standardized indicators of economic activity of the participating countries:

- Data collected by surveying a representative sample of adult population in every GEM country by using a common specially designed questionnaire for identifying entrepreneurial activity of the respondents and their viewpoints on entrepreneurial activity. Surveying the representative sample of adult population is done by a professional agency (in Croatia it was PULS). The collected data is sent to GEM Coordination Team, which compiles a harmonized database and puts it at the disposal of national teams for expert interpretation.

- Data collected by surveying and interviewing experts in each of the GEM countries, by using a common, specially designed questionnaire about viewpoints of experts on the components of the entrepreneurial framework. Every national team selects a sample of experts based on their reputation and experience. National teams use the harmonized database, made by the GEM Coordination Team, for producing national reports.

- Standardized internationally comparable indicators of economic activity are obtained from international sources such as the World Bank, the International Monetary Fund, OECD and the United Nations.

A detailed description of the research procedure can be found in Reynolds et al. (2005), whereas a short explanation of the methodology applied in the analysis of the database collected by surveying adult population and experts can be found in Appendix 1.

Sample in Croatia

In each country a sample of adult population is randomly chosen, whereas the sample of experts is selected based on their reputation and experience.

Usual sample amounts to 2,000 adults aged 18-64, although certain countries choose to have a larger sample (such as United Kingdom, Germany, Switzerland, Spain, Canada, Belgium…), because they wish to identify differences in the entrepreneurial activity within the country. In Croatia, the sample for each year of research was 2,000 adults.

In each year that Croatia participated in the GEM research 36 experts were surveyed/interviewed. Appendix 2 gives the list of all experts who have helped monitor entrepreneurial activity in Croatia by giving us their opinion on this subject and whose viewpoints make up a constitutional part of this study.

GEM research team in Croatia

GEM project is headed by the research Coordination Team situated in London Business School (London) and Babson College (Boston), and is conducted by national research teams. Coordination Team is responsible for the project as a whole, for collecting standardized data from international sources and for making the executive report with a comparison of the level of entrepreneurial activity among the participating countries. National research teams conduct interviews with the experts, survey the adult population and produce a national report. GEM Coordination Team and national teams must publicly promote research results because of their importance for policy interventions in implementing national economic policy.

In 2005, Croatia participated in the GEM research for the fourth time. During all these years that Croatia participated in the GEM research, the head of the research was CEPOR - SMEs and Entrepreneurship Policy Center. The research team consists of a group of researchers from the J. J. Strossmayer University in Osijek: Slavica Singer, team leader and team members: Nataša Šarlija, Sanja Pfeifer, Đula Borozan and Sunčica Oberman Peterka. Mirna Oberman and Anita Buljan from CEPOR participated in the process of surveying and interviewing experts.

Appendix 3 gives a list of all members of the GEM Coordination Team and all national GEM teams as well as their sponsors who participated in the 2005 research.

Financing the GEM research in Croatia

Participation of Croatia in the GEM research is co-financed by the Ministry of Economy, Labour and Entrepreneurship and the Open Society Institute - Croatia (through CEPOR), with a small contribution of the J. J. Strossmayer University in Osijek (through the Paradigm and Practice of Entrepreneurship project, financed by the Ministry of Science, Education and Sport). In 2005 the project was also financially supported by USAID, Academy for Educational Development, CroNGO Program, precisely because of the promotion of entrepreneurship at the regional level.

2 Entrepreneurial activity of Croatia in an international perspective

From the lower end to the middle of the scale
Participants in entrepreneurial activity - without the new ones there are no "established" ones, but without the growing ones there is no prosperity
Entrepreneurial motivation, more for necessity than for opportunity
Entrepreneurial activity of Croatia in European perspective

Thanks to GEM research, entrepreneurship has came into the focus of world research, because the complexity of the phenomenon pointed out the need for the creation of adequate indicators, which enable adequate description of the occurrence and forecasting of changes, as well as international comparison. The danger of using separate indicators "tailored" for the purpose of proving the correctness of a certain policy has been recognized in time, and the importance of consistent monitoring of long-term effects of certain policies directed towards building entrepreneurial capacity of a country has been especially emphasised.

International dimension of the GEM research enabled grouping of countries according to different criteria of entrepreneurial activity, which provoked a discussion on the efficiency of government policies and learning from other people's experience.

Although this report uses international comparisons of certain aspects of entrepreneurial capacity of Croatia, in order to emphasise the positioning of Croatia and the step forward that occurred during Croatia's participation in the GEM research (2002-2005) we used the following indicators:

- Total entrepreneurial activity of those who have been active for less than 42 months (TEA index)
- Motivation for entrepreneurial activity (TEA Opportunity and TEA Necessity)
- Structure of the participants in entrepreneurial activity (nascent, new business owner, "established" entrepreneur)
- Transitional rate of "maturity" of business ventures

Total entrepreneurial activity based on starting ("swarming") new business ventures (expressed through TEA index) is an important prerequisite for building entrepreneurial capacity of a country. Every business system has its own life cycle and so does the economy as a whole. Without new business ventures, neither the renewal of economic structure nor the "infusion" of new products, new technologies, or moving to new markets can occur. New enterprises help increase business efficiency and competitiveness.

An individual can decide to become entrepreneurially active because he/she perceived a business opportunity (TEA Opportunity) or because he/she was pushed into it (TEA Necessity). Previous GEM research have shown that the dominance of TEA Opportunity over TEA Necessity increases the entrepreneurial capacity of a country, because those who decide to be entrepreneurs because of a business opportunity they saw, are generally more oriented towards business growth than those who became entrepreneurially active because their situation forced them into it (they lost their job, could not find a job, etc.). Being aware of this difference in entrepreneurial motivation is of extraordinary importance for those who create government policies and programmes, because support mechanisms that cannot recognize these differences use public resources inefficiently and do not achieve expected goals.

Rates of entrepreneurial activity differ depending on the type of the entrepreneur (nascent, new business owner, established entrepreneur), which is also important information for creators of government policies and programmes that influence the creation of supportive environment, i.e., eliminate barriers to entrepreneurial activity.

Transitional rate of "maturity" of businesses tells us about the rate of surviving businesses, which includes a whole range of factors (motivation, knowledge and skills, effectiveness of the environment and - of course, luck!). Higher transitional rate means better preparation for entrepreneurial activity on individual and institutional levels. The rate is calculated as ratio of "established" entrepreneurs (entrepreneurial activity longer than 42 months) and of number of nascent and new business owners, i.e., start-up entrepreneurs (entrepreneurial activity of up to 42 months).

From the lower end to the middle of the scale

TEA index shows entrepreneurial activity of those who have decided to start a business venture in the last three months (nascent entrepreneurs) and those who have been entrepreneurially active for less than 42 months, but longer than 3 months (new business owners), and who can prove their entrepreneurial activity by having paid salaries during that period. TEA index is determined through surveying a randomly selected sample of adults aged 18 - 64 and shows the start-up level of entrepreneurial activity in the adult population.

2005 brought Croatia the pleasure of exchanging the position at the lower end for one in the middle of the GEM countries scale (Table 1). GEM Master Data Set and Minitti et al: Global Entrepreneurship Monitor: 2005 Executive Report were the source of indicators for GEM countries that were used for comparison with Croatia throughout this study.

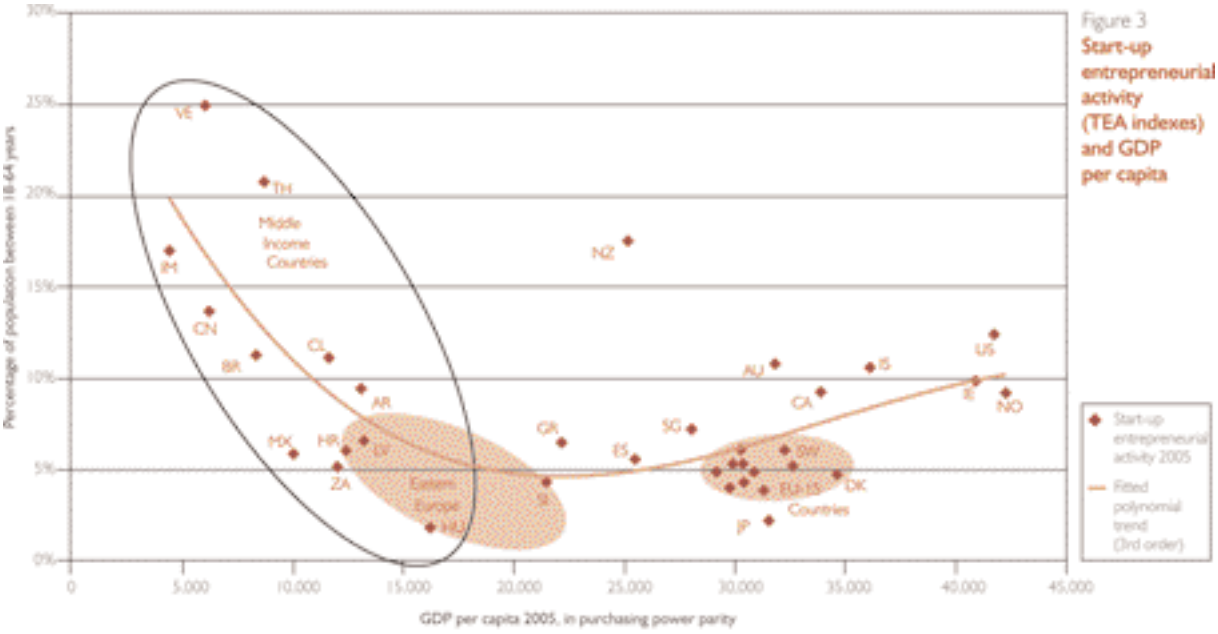
	2002	2003	2004	2005
TEA	3.62	2.56	3.74	6.11
Rank	32/37	29/30	29/34	19/35
TEA Opportunity	2.18	1.74	2.04	2.92
Rank	35/37	29/30	32/34	32/35
TEA Necessity	0.85	0.59	1.57	3.09
Rank	25/37	22/30	12/34	6/35

Table 1
TEA indexes - Croatia and all GEM countries

There are several reasons to be satisfied with the results showing entrepreneurial activity achieved in 2005, but there is also one serious reason for dissatisfaction. A cause for satisfaction is surely the fact that Croatia moved away from the lower end of the scale, because it is a good sign of efficiency of different activities designed for strengthening the entrepreneurial framework conditions in which individuals and institutions are active, although there are no detailed mechanisms for monitoring the effects of certain interventions. At the same time, the change in rank on the scale of the entrepreneurial start-up activity shows the need for patience, because the interventions in quality of the entrepreneurial framework conditions can rarely have short-term effects.

The fact is that the change in rank is mostly a result of radical increase in necessity-driven entrepreneurial activity and this is both a source of satisfaction and dissatisfaction. It is a good thing that people decided not to wait for someone to solve their employment problems, but have decided to do something about it on their own, through self-employment, starting a business venture. However, the dissatisfaction arises from the fact that there are many more of those necessity-driven entrepreneurs than those who are opportunity-driven, because this opens up the issue of being trained to know how to recognize a business opportunity, adequate knowledge and skills, the availability of financial resources, etc.
Similar level of entrepreneurial activity can occur in countries with higher or lower GDP, and in order to be satisfied with the achieved result, it is important to know the level of economic development.
Entrepreneurial activity of 6.11 % is a success for Croatia, after being at the bottom of the list of GEM participating countries for years with the following results: 3.62% (2002), 2.56% (2003) or 3.74% (2004).
But we still have a long way to go to be able to transfer this entrepreneurial activity into prosperity of Croatia measured in GDP per capita (Figure 3).

Croatia's progress up the scale should simultaneously include the strengthening of entrepreneurial activity, but also achieving higher economic growth rates, which will allow achieving national prosperity. Achievement of such goals demands excellent coordination of all government policies, which is a true challenge for creators of different policies directed towards better design of the entrepreneurial framework conditions and also towards interactions with macroeconomic conditions in Croatian economy.



Source: Global Entrepreneurship Monitor. 2005 Executive Report, p. 58

Participants in entrepreneurial activity - without the new ones there are no "established" ones, but without the growing ones there is no prosperity

Dissecting entrepreneurial activity to all participants, from nascent, new business owners to "established" entrepreneurs reveals another very important dimension of entrepreneurial capacity in Croatia - which is also very important for creating policies and programmes focused on strengthening the entrepreneurial framework conditions. Croatia especially lags behind in the rate of entrepreneurial activity of "established" entrepreneurs (active for longer than 42 months) (3.70% as opposed to 6.60% in all GEM countries, which makes up to only 56% of the GEM countries average). In analysing the rates of entrepreneurial activity according to individual categories of entrepreneurs, Croatia's biggest discrepancy in reference to the average rates of all GEM countries is precisely in the category of "established" entrepreneurs (only 56%), whereas rate of nascent entrepreneurial activity amounts to 82% of GEM average and the rate of entrepreneurial activity of new business owners amounts to 64% of GEM average (Table 2).

Table 2
Rates of entrepreneurial activity in 2005 - %

	Nascent entrepreneurs, active up to 3 months	New business owners, who are active 3 - 42 months	TEA index for nascent and new business owners	Established entrepreneurs, active for more than 42 months	Total entrepreneurial activity
			(nascent + new)		
Argentina	5.90	3.90	9.50	5.00	14.10
Australia	6.50	4.70	10.90	9.60	20.40
Austria	3.00	2.40	5.30	3.80	8.80
Belgium	2.90	1.20	3.90	5.60	9.40
Brazil	3.30	8.20	11.30	10.10	21.40
Canada	6.60	3.60	9.30	7.40	16.60
Chile	6.00	5.30	11.10	3.80	14.40
China	5.60	9.40	13.70	13.20	26.70
Croatia	4.10	2.50	6.10	3.70	9.70
Denmark	2.40	2.40	4.80	4.40	8.80
Finland	3.10	1.90	5.00	8.60	13.50
France	4.70	0.70	5.40	2.30	7.50
Germany	3.10	2.70	5.40	4.20	9.40
Greece	5.20	1.60	6.50	10.50	16.90
Hungary	1.10	0.80	1.90	2.00	3.80
Iceland	8.50	2.70	10.70	7.30	17.60
Ireland	5.70	4.70	9.80	8.10	17.70
Italy	2.90	2.30	4.90	6.40	11.30
Jamaica	10.50	6.70	17.00	9.50	26.40
Japan	1.10	1.10	2.20	5.40	7.40
Latvia	4.20	2.80	6.60	5.00	11.50
Mexico	4.60	1.40	5.90	1.90	7.60
Netherlands	2.50	1.90	4.40	5.70	9.40
New Zealand	9.40	10.00	17.6	10.80	28.20
Norway	4.40	5.20	9.20	7.30	15.60
Singapore	3.90	3.70	7.20	4.70	11.90
Slovenia	3.00	1.40	4.40	6.30	10.10
South Africa	3.60	1.70	5.10	1.30	6.00
Spain	2.40	3.40	5.70	7.70	13.20
Sweden	1.70	2.50	4.00	6.30	10.20
Switzerland	2.60	3.70	6.10	9.70	15.40
Thailand	9.70	13.10	20.70	14.10	34.80
United Kingdom	3.40	2.90	6.20	5.10	11.20
United States of America	8.80	5.20	12.40	4.70	16.20
Venezuela	18.80	7.50	25.00	8.60	33.10
Average	5.00	3.90	8.40	6.60	14.80

Source: Global Entrepreneurship Monitor. 2005 Executive Report. Babson College and London Business School. 2006. p. 19

A low rate of entrepreneurial activity in the category of "established" entrepreneurs, which puts Croatia into 31st place, warns that insufficient attention is paid to the problems of precisely those participants in the entrepreneurial activity on which, for the most part, economy's absorptive capacity needed for new employment depends. New employment occurs in growing small enterprises: large enterprises are not generators of new employment, whereas starting business ventures enables self-employment, and only to a certain extent, new employment. Coordinated activity of different government policies and programmes, and also of universities (education, transfer of technology) should be directed towards creating a supportive environment for growing businesses.

Entrepreneurial motivation, more for necessity than for opportunity

Taking into account the differences in motivation for entrepreneurial activity, GEM project has developed two different TEA indexes: TEA Opportunity and TEA Necessity, from which the motivation index is derived (ratio of TEA Opportunity to TEA Necessity). It is desirable that the motivation index is as high as possible, and it should never be below 1. Motivation index above 1 means that there are more of those who started entrepreneurial activity of their own free will because they perceived a business opportunity that they wish to take advantage of. Motivation index below 1 means that there are more of those who were pushed into entrepreneurial activity by their situation, not of their own free will. Behind such an indicator there is also a greater risk of business failure, because these may be the people who were pushed into a situation where they must accept a risk that is greater than what they would normally be willing to take, under different circumstances (possibly because of inadequate knowledge and skills, unfavourable financial conditions under which a business venture is started, etc.).

Motivation index indicator is highly unfavourable for Croatia, because in 2005 Croatia was the only country with a higher TEA Necessity than TEA Opportunity. That indicator requests urgent reaction through the development of those conditions of entrepreneurial activity which can help reduce the risk of business failure for this category of entrepreneurs - in other words, to prepare them better for entrepreneurial life (professional services, education, availability of more convenient financial resources through guarantee schemes, instruments of business angels, etc.) (Table 4 and Figure 4).

Country	Ratio TEA Opportunity TEA Necessity	Country	Ratio TEA Opportunity TEA Necessity
Denmark	27.4	Italy	5.0
Iceland	18.2	Latvia	4.9
New Zealand	12.7	Mexico	4.7
Netherlands	11.5	Ireland	4.2
Norway	9.8	Japan	4.2
Belgium	8.7	Chile	2.8
Slovenia	7.8	Thailand	2.8
USA	7.2	Germany	2.4
Australia	7.1	Argentina	2.2
United Kingdom	6.7	Jamaica	1.7
Finland	6.3	Venezuela	1.6
Switzerland	6.1	Hungary	1.5
Canada	6.0	South Africa	1.5
Austria	5.9	France	1.3
Spain	5.9	China	1.2
Greece	5.7	Brazil	1.1
Sweden	5.6	Croatia	0.9
Singapore	5.3	Average	5.9

Source: Global Entrepreneurship Monitor. 2005 Executive Report. Babson College and London Business School. 2006. p. 22

Table 3
Motivation Index - TEA Opportunity to TEA Necessity ratio, 2005

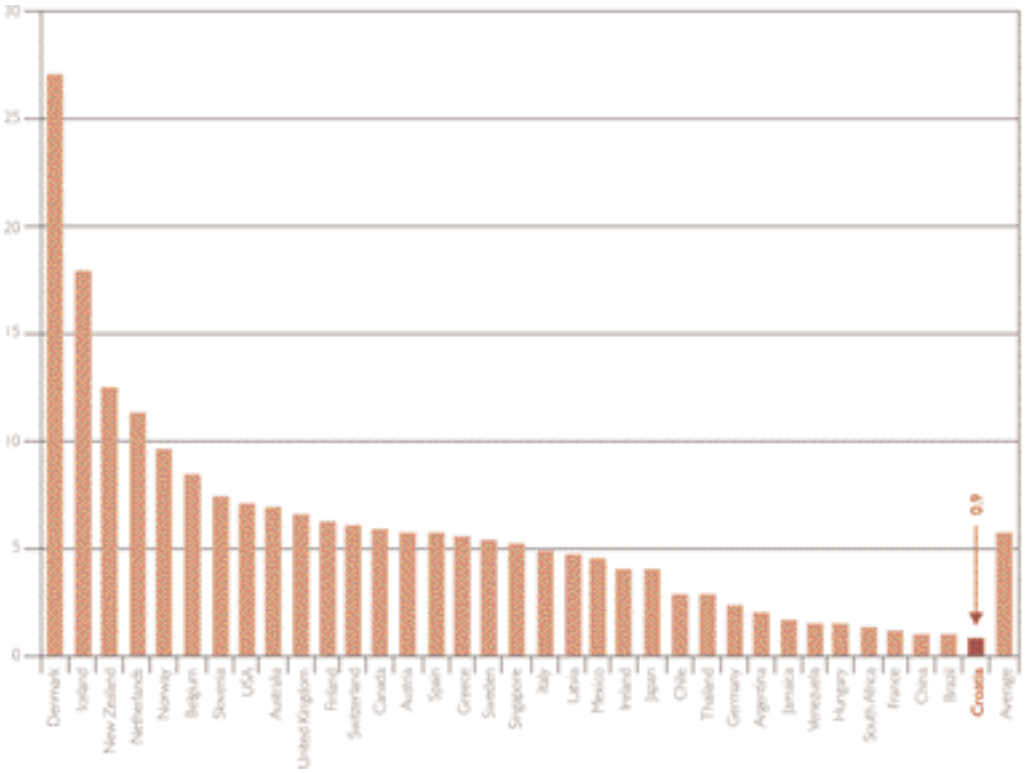


Figure 4
Entrepreneurial motivation - Croatia in international perspective, 2005

Low level of motivation index (i.e., more TEA Necessity than TEA Opportunity) is connected to the ability to run a business venture from adolescence to maturity. The ratio between the percentage of "mature" (established) enterprises and start-up enterprises can be used only as rough approximation of successful transition from the start-up stage to maturity stage, with a whole range of prerequisites connected to the stability of relationship between these two categories of entrepreneurial activity. Low ratio of transition from the start-up stage to maturity stage (established enterprises, older than 42 months) positions Croatia in the 27th place in 2005 (Table 4).

Country	Ratio	Country	Ratio
Japan	2.45	Norway	0.79
Finland	1.73	Germany	0.78
Greece	1.61	Latvia	0.75
Switzerland	1.60	Austria	0.73
Sweden	1.56	Iceland	0.68
Slovenia	1.44	Thailand	0.68
Belgium	1.43	Singapore	0.66
Spain	1.36	New Zealand	0.62
Italy	1.30	Croatia	0.60
Netherlands	1.30	Jamaica	0.56
Hungary	1.06	Argentina	0.52
China	0.96	France	0.42
Denmark	0.92	United States of America	0.38
Brazil	0.89	Chile	0.34
Australia	0.88	Venezuela	0.34
Ireland	0.82	Mexico	0.32
United Kingdom	0.82	South Africa	0.25
Canada	0.79	Average	0.92

Table 4
Transition ratios: transition from the start-up stage into established business venture, 2005 (ratio of the number of entrepreneurs who are active longer than 42 months to the number of start-up entrepreneurs)

Source: Global Entrepreneurship Monitor, 2005 Executive Report, Babson College and London Business School, 2006, p. 20

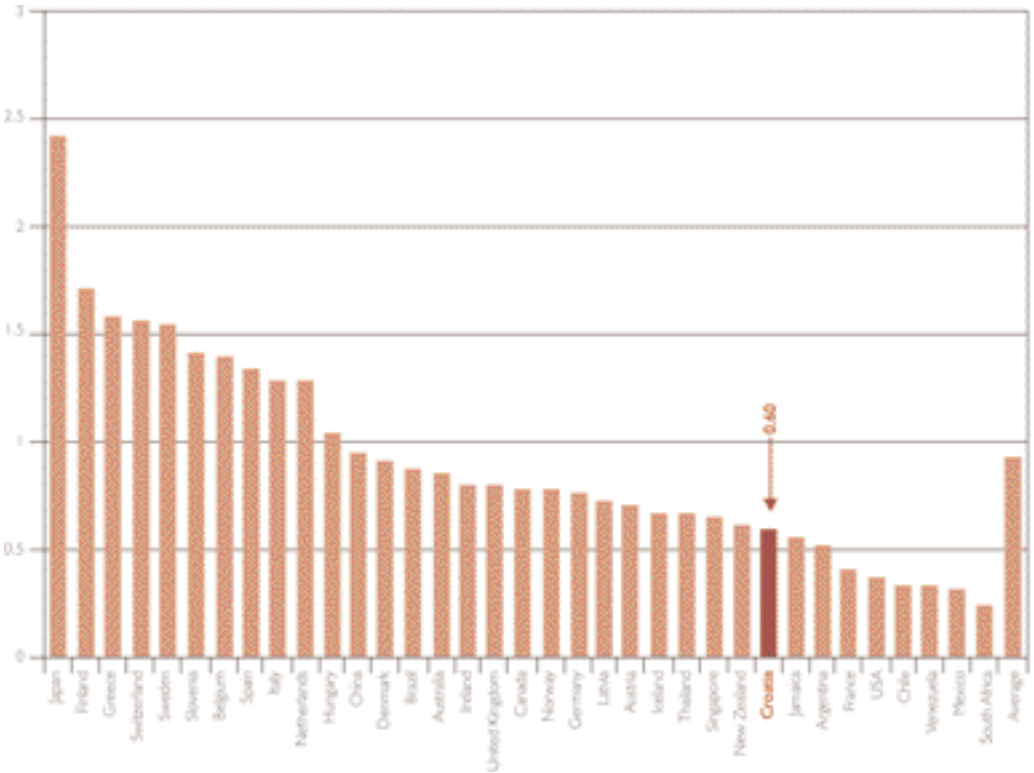


Figure 5
Business "maturing" ratios - Croatia in international perspective, 2005

Slovenia ranked 7th based on its motivation index (7.8 times more TEA Opportunity than TEA Necessity) and 6th based on the established businesses to start-up businesses ratio, so it can be a good **benchmark** for Croatia in looking for adequate policies and programmes to change and strengthen these two components of entrepreneurial capacity of Croatia.

Entrepreneurial activity of Croatia in European perspective

Current initiatives in the European Union, which have been prompted by the Lisbon Declaration and followed by a range of documents which insist on strengthening entrepreneurial capacity as an important prerequisite for strengthening the competitiveness of the EU (Entrepreneurship in Europe - Green Paper, Competitivenss and Innovation Framework Programme) constitute a very clear signal for Croatia to keep measuring the efficiency of its policies, programmes, regulations and instruments, especially in reference to the European Union. By the means of several chosen indicators of entrepreneurial activity (TEA; percentage of entrepreneurs who have been active longer than 42 months; motivation: TEA Opportunity and TEA Necessity; gender-oriented TEA) Croatia has been ranked among other participating EU countries (Table 5).

			2002[1]	2003[2]	2004[3]	2005[4]
TEA entrepreneurs who have been active for less than 42 months		EU	5.1	4.87	5.12	5.26
		Croatia	3.62	2.56	3.73	6.11
		Rank	10/12	12/13	14/17	5/16
Entrepreneurs who have been active for more than 42 months		EU	5.38	5.23	5.45	5.74
		Croatia	2.17	2.55	2.15	3.65
		Rank	11/12	9/13	16/17	15/16
Motivation	TEA Opportunity	EU	4.13	3.99	4	4.13
		Croatia	2.18	1.74	2.04	2.92
		Rank	12/12	12/13	17/17	15/16
	TEA Necessity	EU	0.65	0.76	0.92	0.87
		Croatia	0.85	0.59	1.57	3.09
		Rank	4/12	5/13	3/17	1/16
Gender	TEA Women	EU	3.3	2.89	3.21	3.54
		Croatia	1.83	1.42	1.74	2.58
		Rank	11/12	12/13	16/17	14/16
	TEA Men	EU	6.83	6.82	17.02	7.36
		Croatia	5.4	3.69	5.76	9.78
		Rank	9/12	11/13	11/17	2/16

Table 5
Croatia in European perspective, selected indicators of entrepreneurial activity, 2002-2005

Rank shown as position of Croatia acording to the number of EU countries included in GEM.

(1) EU countries participating in the GEM project in 2002: Netherlands, Belgium, France, Spain, Italy, United Kingdom, Denmark, Sweden, Germany, Ireland and Finland

(2) EU countries participating in the GEM project in 2003: Greece, Netherlands, Belgium, France, Spain, Italy, United Kingdom, Denmark, Sweden, Germany, Ireland and Finland

(3) EU countries participating in the GEM project in 2004: Greece, Netherlands, Belgium, France, Spain, Hungary, Italy, United Kingdom, Denmark, Sweden, Poland, Portugal, Ireland, Finland, Slovenia and Germany

(4) EU countries participating in the GEM project in 2005: Greece, Netherlands, Belgium, France, Spain, Hungary, Italy, Austria, United Kingdom, Denmark, Sweden, Ireland, Finland, Latvia and Slovenia

In the period between 2002 and 2005, Croatia has significantly changed its rank for the better, with respect to the TEA index, but only thanks to the fact that it ranked 1st because of TEA Necessity. Croatia is very slow in catching up with the participating EU countries average when it comes to entrepreneurial activity of "established" businesses, but the gap between entrepreneurially active women and men is growing. Comparisons with the level of entrepreneurial activity in the European Union are very useful, because they help direct the creators of national policy towards areas that demand intensive interventions. In that sense, Croatia has a whole range of EU programmes at its disposal, which can be used to intensify these processes.

Comparisons with the cluster of countries to which Croatia belongs based on its GDP per capita level, are even more useful (Table 6).

Table 6
Differences in entrepreneurial activity based on the economic strength of the country, 2005

	Nascent entrepreneurs, active up to 3 months	New business owners, who are active 3 - 42 months	TEA index for nascent and new business owners (nascent + new business owners)	Established entrepreneurs, active for more than 42 months	Total entrepreneurial activity (nascent + new business owners + established entrepreneurs, active for more than 42 months)
Cluster of GEM participating EU countries with GDP below 20,000 US dollars	5.90	4.70	10.00	6.10	15.60
Croatia	4.10	2.50	6.11	3.70	9.70
Slovenia	3.00	1.40	4.40	6.30	10.10
Hungary	1.10	0.80	1.90	2.00	3.80
Latvia	4.20	2.80	6.60	5.00	11.50

Source: Global Entrepreneurship Monitor, 2005 Executive Report, Babson College and London Business School, 2006, p. 17, 18 and 19

It is interesting to see that Croatia and Slovenia are on opposite sides of the East European cluster (Figure 3), in which Croatia has 6.11% of entrepreneurial activity and a GDP of 7,801 US dollars per capita, whereas Slovenia has 4.40% of entrepreneurial activity and a GDP of 17,606 US dollars per capita. Latvia with its 6.60% of entrepreneurial activity and GDP of 6,559 US dollars per capita is in a situation similar to that of Croatia. Exchange of experiences with such countries and possible common projects for strengthening entrepreneurial framework conditions can be a useful additional leverage in building the entrepreneurial capacities of these countries and for their better positioning in using the advantages of the European Union's common market.

2 Global Entrepreneurship Monitor, 2005 Executive Report, p. 15

3 Entrepreneurship in Croatia

Building the entrepreneurial capacity of each country depends on the attitude of individuals towards entrepreneurship and quality of entrepreneurial environment. Precisely because entrepreneurship is an integrative phenomenon of an individual's behaviour in his/her interaction with the environment, it is necessary to be well acquainted with the anatomy of causes that motivate people to entrepreneurial activity and the architecture of entrepreneurial environment in order to be able to lead efficient policies for building the entrepreneurial capacity of a country. Entrepreneurial capacity of Croatia, as seen from the definitions of the GEM project (nascent, new business owners, "established" entrepreneurs) is analysed from the viewpoint of demographic and economic characteristics of the population, system of values that forms (non) entrepreneurial behaviour and people's perception of individual components of entrepreneurial environment (access to financial resources, education, government policies, government programmes…). Each person can influence the development of entrepreneurial capacity of a country with two major decisions: decision on starting entrepreneurial activity and decision on growing their business venture. Starting entrepreneurial activity is the beginning of building entrepreneurial capacity, in the process of establishing a business the entrepreneurial capacity is being build up, and businesses that have growth potential intensify this process and give the entrepreneurial capacity an additional quality - competitiveness. Because of such great importance of growing businesses for the whole entrepreneurial capacity of a country, GEM research especially analyses the growth potential from the aspect of innovativeness, orientation towards export and capacity for new employment.

Entrepreneurial capacity of Croatia is growing, but…

"Motivation" Index
"Establishment" Index

GEM identifies entrepreneurship as total entrepreneurial activity of nascent entrepreneurs (who have just decided to start a business), new business owners (who have been active up to 42 months, which they can prove by having paid salaries in the period of 3 to 42 months of their activity) and "established" entrepreneurs (entrepreneurially active for more than 42 months). Indicators that support this definition (TEA indexes for nascent and new business owners, i.e., start-up entrepreneurs) and the percentage of "established" entrepreneurs in the adult population enable determining important ratios that can be used to evaluate entrepreneurial capacity of a country:

- "Motivation" Index
- "Establishment" Index

"Motivation" Index

The decision on starting a business venture is expressed by the TEA index, i.e., number of nascent and new business owners in the adult population, aged 18 - 64. The important quality of this indicator is differentiation between those who have started a business of their own free will (TEA Opportunity), because they have perceived a business opportunity, and those who were pushed into business by their situation (TEA Necessity). Previous GEM research has confirmed that - on a world level - those who have become entrepreneurially active of their own free will have more ambitious and long-term plans with their business than those who were pushed into entrepreneurial activity due to necessity. Entrepreneurs from the TEA Necessity category more often think of their entrepreneurial activity as a temporary solution.

By connecting the decision to start a business venture and the reasons for it, through the ratio between TEA Opportunity and TEA Necessity, it is possible to construct the "motivation" index. The "motivation" index gives important information to creators of national policies and to potential investors on the quality of entrepreneurial capacity of a country: the higher above 1 the values of that ratio are, the more optimism and long-term vision the entrepreneurial capacity has. As the ratio approaches the value of 1, it gives strong signals about a worrying tendency of decrease in optimism and long-term perspective, i.e., quality of the entrepreneurial capacity of a country. The values below 1 present an alarming situation and the need to train, encourage and support those who will think of entrepreneurship as their own choice made by recognizing a business opportunity, by means of different policies, programmes and instruments.

"Establishment" Index

Starting a business venture is a necessary condition for building entrepreneurial capacity of a country, but it is not sufficient on its own. It is also necessary to make sure that the businesses survive and successfully enter the "established" businesses (older than 42 months) and start-up businesses (up to 42 months old). Since this ratio does not track the "pure" generations of entrepreneurs, the ratio between existing "established" and existing start-up entrepreneurs[3] gives us the important "establishment" index, which enables better understanding of entrepreneurial capacity of a country.

Using these two indexes, entrepreneurial capacity of Croatian economy shows a worrying trend: fall of the "motivation" index and a rather stable low level of the "establishment" index (Table 7).

		2002	2003	2004	2005
"Motivation"[1] Index	Croatia	2.56	2.95	1.30	0.95
	GEM	5.73	5.68	5.55	5.94
"Establishment"[2] Index	Croatia	0.58	0.96	0.58	0.60
	GEM	0.87	0.79	0.92	0.92

[1] Ratio between TEA Opportunity and TEA Necessity
[2] Ratio between categories "established" entrepreneurs and "nascent + new business owners"

Table 7
Entrepreneurial capacity of Croatian economy, 2002-2005

Although entrepreneurial activity grows measured by all categories of the TEA index (Total TEA, TEA Opportunity, TEA Necessity - Table 1), TEA Necessity, which surpassed TEA Opportunity in 2005 is dominantly responsible for total growth. Long-term unemployment in Croatia, numerous programmes for self-employment and support programmes for start-up entrepreneurs have probably influenced the growth of TEA Necessity entrepreneurs. TEA Necessity entrepreneurs are a better option than "waiting for a job", but TEA Opportunity entrepreneurs are an even better option. Knowing the characteristics of the TEA Necessity entrepreneurs (they were forced by their situation to start entrepreneurial activity, a short-term perspective of entrepreneurial activity), it is very important to keep as many such entrepreneurs entrepreneurially active as possible, but this time of their own free will. Creators of different government policies and programmes (e.g., in the area of developing training and consulting services) should especially keep this in mind, in order to make it possible for these entrepreneurs, who make up a significant part of entrepreneurial population in Croatia, to change their short-term perspective into a long-term one and to train themselves for the development of their entrepreneurial ventures. This is especially important keeping in mind the comparison with the GEM participating countries average where this "motivation" index has a constant value of almost 6. In 2005, of all the GEM participating countries, only Croatia had the value of this index below 1, whereas at the same time there are countries such as Denmark (27.4), Iceland (18.2), New Zealand (12.7) and Netherlands (11.5) with far greater index values. Slovenia with its 7.8 value can be a very useful **benchmark** for us.

The "establishment" index has multiple importance for evaluation of entrepreneurial capacity of a country. Index value above 1 shows dominance of "established" entrepreneurs, whereas index value below 1 shows dominance of start-up entrepreneurs. Entrepreneurial capacity of a country can be developed by increasing start-up entrepreneurial activity, but also in a much safer way - through "establishment" of those who have become entrepreneurially active. It depends on the national economic policy of every country to what extent and how they will create conditions for development of both categories of entrepreneurs.

[3] By tracking "pure" generations of entrepreneurs, i.e., each individual entrepreneur from the start-up of his/her venture for at least 4 years of entrepreneurial activity, we would obtain precise information on the survival rate, i.e., on maturity/establishment of a business venture.

In the period of 2002-2005 "establishment" index points to stable differences between Croatia and GEM participating countries average (except in 2003), i.e., existence of a gap between Croatia and GEM participating countries average. This also points to the question to what extent do the existing conditions of entrepreneurial activity in Croatia contribute to "establishment" of entrepreneurs? Keeping in mind the information about TEA Necessity, we may say that stronger entrepreneurial activity is a result of the decision an individual made (due to the situation he/she found himself/herself in) about starting entrepreneurial activity, supported by different government programmes for start-up entrepreneurs, but there are no mechanisms that could help start-up entrepreneurs make their business venture sustainable.

There are more and more small enterprises with growth potential

Technologically more advanced, but product innovation is still a great challenge
Most entrepreneurs have strong competition, because everybody has the same products
Export orientation insufficient - fear of the unknown?
A growing number of enterprises with the aspiration for greater employment
Entrepreneurial growth potential levels - where is Croatia?

Growing enterprises are a minority in all economies of the world, but this champion minority is the source of new employment and innovativeness. Also, growing enterprises are the most effective connection between entrepreneurial capacity of a country and country's economic growth. The significance of new, innovative, growing enterprises has been confirmed by many researches. For example, Storey (1994) concluded that of all the new enterprises founded every year in United Kingdom only 4% of enterprises that survive the establishment stage create 50% of all new job positions after 10 years. Kirchoff (1994) concluded that 10% of the fastest growing enterprises in the USA created three quarters of all new job positions in the eight-year period, during which he observed the destiny of enterprises founded in 1978.

Connection between growing small enterprises and employment is recognized in many countries and transferred in different **policy** interventions that encourage development of such enterprises. European Union has published a whole range of papers as supplements to the Lisbon Declaration (especially Competitiveness and Innovation Framework Programme, 2007-2013) and thus emphasised its determination for strengthening capacities of innovativeness and competitiveness of economy, strongly supporting increase in number of enterprises with growth potential as an important mechanism for achieving these objectives.

In the GEM research, growing enterprises are observed based on the following five criteria:

- Innovativeness in using new technologies (latest technologies - up to 1 year old, technologies old from 1 to 5 years, no new technologies)
- Innovativeness in the development of new products (products are new to everybody, to somebody, to nobody)
- Exposure to competition (the same product is offered by everybody, by somebody, by nobody)
- Export orientation (in the client structure, up to 25% clients outside the country, from 26 to 50%, from 51 to 75%, from 76 to 100%)
- Capacity for new employment (expected new employment in the period of 5 years: no new employees, 1-5, 6-19, more than 20 employees)

Use of these criteria provides the possibility to determine if an enterprise has growth potential, individually by each criterion and by different combinations of these criteria.

Tables 8 to 12 describe differences in the structure of enterprises in Croatia based on their growth potential, by each criterion separately, as well as changes that occurred during the period Croatia participated in the GEM research (2002-2005). Changes in the structure are monitored by the comparison of differences between entrepreneurs who have been entrepreneurially active up to 42 months (start-up entrepreneurs) and those who have been entrepreneurially active for longer than 42 months ("established" entrepreneurs). Croatian results are compared to the cluster of GEM participating countries to which Croatia belongs according to GDP per capita (below 20,000 US dollars)[4].

[4] This cluster includes the following GEM countries: Argentina, Brazil, Chile, China, Croatia, Hungary, Jamaica, Latvia, Mexico, South Africa, Thailand and Venezuela.

Technologically more advanced, but product innovation is still a great challenge

Start-up entrepreneurs use latest technologies more often than the "established" ones (Table 8), but are not much different from "established" entrepreneurs in innovativeness in developing new products (Table 9). In using the latest technologies, Croatia is on the average level of its cluster of GEM participating countries: 30% of start-up entrepreneurs and 19% of "established" entrepreneurs in the cluster use latest technologies.

According to the criterion of new products that entrepreneurs market, Croatia lags behind the GEM cluster average only in the category of start-up entrepreneurs (15% of start-up entrepreneurs in the GEM cluster have products that are new to everybody, whereas in Croatia percentage of such entrepreneurs is 9.65%).

	2002	2003	2004	2005
Start-up entrepreneurs	%	%	%	%
Latest technologies	9.21	7.84	21.31	28.70
New technologies (1 to 5 years old)*	-	-	-	26.08
No new technologies	90.79	92.16	78.69	45.22
Total	100.00	100.00	100.00	100.00
"Established" entrepreneurs	%	%	%	%
Latest technologies	5.71	10.00	9.09	22.81
New technologies (1 to 5 years old)*	-	-	-	28.07
No new technologies	94.29	90.00	90.91	49.12
Total	100.00	100.00	100.00	100.00

Table 8
Newness of technologies/ procedures for entrepreneurs, 2002-2005 - structure in % (How many entrepreneurs use new technologies/ procedures?)

* In 2002, 2003 and 2004 the question about new technologies was formulated in such a way that the respondents could have given one of two answers: it is the latest technology (< 1 year old) or it is not (i.e., no new technologies); there was no third category "technology which is 1 to 5 years old"

	2002	2003	2004	2005
Start-up entrepreneurs	%	%	%	%
For everybody	2.63	11.76	8.00	9.65
For somebody	10.53	9.80	20.00	22.81
For nobody	86.84	78.44	72.00	67.54
Total	100.00	100.00	100.00	100.00
"Established" entrepreneurs	%	%	%	%
For everybody	2.86	7.50	0.00	8.00
For somebody	8.57	2.50	5.88	18.70
For nobody	88.57	90.00	94.12	73.50
Total	100.00	100.00	100.00	100.00

Table 9
Newness of products for customers, 2002-2005 - structure in % (For how many customers is the product new?)

Most entrepreneurs have strong competition, because everybody has the same products

Expected competition is different for start-up entrepreneurs and "established" entrepreneurs - "established" entrepreneurs both in Croatia (Table 10) and in the GEM cluster can expect more severe competition, but in Croatia this ratio is much different from that of the GEM cluster. In Croatia, 49% of start-up entrepreneurs think that they will have many others as competitors, whereas 63% of "established" entrepreneurs expect such competition. In the comparative GEM cluster, 58% of start-up entrepreneurs and 66% of "established" entrepreneurs expect severe competition. When it comes to Croatia, a far lower expectancy of severe competition by start-up entrepreneurs, although they do not have grounds for it based on the level of the innovativeness of their products, shows their ill-founded self-confidence.

	2002	2003	2004	2005
Start-up entrepreneurs	%	%	%	%
Many	48.68	58.82	62.16	49.12
Some	35.53	37.26	29.73	44.74
Nobody	15.79	3.92	8.11	6.14
Total	100.00	100.00	100.00	100.00
Established entrepreneurs	%	%	%	%
Many	79.41	80.00	72.73	63.16
Some	14.71	17.50	27.27	31.58
Nobody	5.88	2.50	0.00	5.26
Total	100.00	100.00	100.00	100.00

Table 10
Intensity of expected competition, 2002-2005 - structure in % (How many entrepreneurs offer the same product?)

Export orientation insufficient - fear of the unknown?

For small countries such as Croatia export orientation of entrepreneurs is inevitable. The level of competitiveness, which the products that they wish to market can handle determines the choice of the export market, so the technological competence (because of more efficient usage of resources) and product competitiveness are important components of the export orientation of entrepreneurs.

In both categories of entrepreneurs there is a high percentage of those who do not have any customers outside Croatia: 74% of start-up entrepreneurs and 68% of "established" entrepreneurs (Table 11). Number of such entrepreneurs is lower in Slovenia: only 20% of nascent entrepreneurs and 41% of new business owners have no export orientation, whereas only 34% of "established entrepreneurs" have no customers abroad. Only 8% of the start-up entrepreneurs in Croatia have more than 75% of customers abroad (there are 17% of those among nascent and 5.5% among new business owners in Slovenia) and only 7% among "established" entrepreneurs (9.7% in Slovenia).

Entering an export market is a test of many aspects of the business and therefore also an opportunity to learn by comparison to others. Fear of export may also mean a fear of the unknown. Therefore, encouraging export orientation demands a much wider approach with the focus on learning and increasing capacity for change. Internalisation of economy starts with education, which includes knowledge of foreign languages and understanding the role of industrial design, so we should look for solutions in that direction and financially encourage such initiatives.

	2002	2003	2004	2005
Start-up entrepreneurs	%	%	%	%
None	39.74	66.00	65.75	74.07
Up to 25%	25.64	4.00	5.48	2.78
26-50%	5.13	6.00	8.22	5.56
51-75%	8.97	12.00	2.74	9.26
76-100%	10.26	10.00	4.11	8.33
No answer	10.26	2.00	13.70	0.00
Total	100.00	100.00	100.00	100.00
"Established" entrepreneurs	%	%	%	%
None	58.32	66.67	64.71	68.42
Up to 25%	27.78	3.33	2.94	7.02
26-50%	2.78	3.33	14.71	7.02
51-75%	5.56	3.33	8.82	7.02
76-100%	2.78	10.00	5.88	7.02
No answer	2.78	13.34	2.94	3.50
Total	100.00	100.00	100.00	100.00

Table 11
Export orientation, 2002-2005 - structure in % (How many customers do you have abroad?)

A growing number of enterprises with the aspiration for greater employment

It is no news that new, growing enterprises are a source of new employment, because many empirical researches have already confirmed it. However, there are few researches about how well-founded growth expectancy (business optimism) in different aspects of business growth is, and how great the potential of such expectancy in generating new employment actually is. By focusing on the growth expectancy through employment, GEM joins in with the few research efforts in the world, which try to evaluate **ex ante** how exactly the entrepreneurial aspirations influence the growth of an enterprise, measured by the actual expectancy of new employment.

2005 is a year of promising changes in Croatia, as opposed to the previous two years. In the structure of entrepreneurs (start-up and "established"), "established" entrepreneurs are slightly more optimistic than start-up entrepreneurs, because 18% of them expect 20 or more newly employed in the upcoming five years, whereas 15% of start-up entrepreneurs expect the same (Table 12).

	2002	2003	2004	2005
Start-up entrepreneurs	%	%	%	%
None	0.00	7.69	6.67	6.96
1-5	31.58	30.77	48.00	24.35
6-19	15.79	19.23	9.33	27.83
20 and more	13.16	7.69	5.33	14.77
No answer	39.47	34.62	30.67	26.09
Total	100.00	100.00	100.00	100.00
Established entrepreneurs	%	%	%	%
None	12.50	12.82	5.71	5.45
1-5	25.00	28.21	45.71	32.73
6-19	15.62	17.95	25.71	14.55
20 and more	6.25	2.56	2.87	18.18
No answer	40.63	38.46	20.00	29.09
Total	100.00	100.00	100.00	100.00

Table 12
Growth expectancy through employment, 2002-2005 - structure in % (How many newly employed do you expect in the upcoming five years?)

Entrepreneurial growth potential levels - where is Croatia?

Growth potential is a synergy effect of all growth dimensions (openness to technological and production innovations, export orientation, new employment expectations). In order to gain insight into growth potential of a country, as well as to compare it with other countries, we must determine the level of growth potential.

GEM research defines the following levels of growth potential by using the combined index of growth potential:

No growth potential
Products are new to some or none of the customers, the enterprise has a lot of or some competitors, and the technology is not new

Partial growth potential (without new technologies)
Products are new to all the customers, the enterprise has no competition, and the technology is not new

Partial growth potential (based on new technologies)
Products are not new to anyone, the enterprise has a lot of competitors, but the technology is new

Strong growth potential
Products are new to everybody or somebody, the enterprise has few competitors or no competitors at all, and the technology is new

In the period between 2002 and 2005 Croatia marks a positive trend of decrease in the number of entrepreneurs without growth potential in both observed categories of entrepreneurs (start-up entrepreneurs and "established" entrepreneurs) (Table 13). Increase in number of start-up entrepreneurs with growth potential on new technologies is a good basis for further strengthening of business efficiency. This trend is the same as in other GEM participating countries, because it is logical that younger enterprises (up to 42 months) have newer technologies than the "established" entrepreneurs.

	2002	2003	2004	2005
Start-up entrepreneurs	%	%	%	%
Strong growth potential	2.6	0	2.7	1.7
Partial growth potential on new technologies	6.6	7.8	14.6	27.6
Growth potential without new technologies	19.7	19.6	18.7	20.7
No growth potential	71.1	72.6	64	50.00
Total	100.00	100.00	100.00	100.00
'Established' entrepreneurs	%	%	%	%
Strong growth potential	0	0	0	1.8
Partial growth potential on new technologies	5.7	10	9.1	21
Growth potential without new technologies	14.3	7.5	3	14
No growth potential	80.00	82.5	87.9	63.2
Total	100.00	100.00	100.00	100.00

Table 13
Combined index of growth potential, 2002-2005, structure in %

Satisfaction with the positive trends that occurred in the period of 2002-2005 can be especially confirmed through comparison of Croatia with the GEM cluster to which Croatia belongs, i.e.; countries with GDP per capita below 20,000 US dollars (Figure 6). Croatia's result is average in the cluster, except for the percentage of start-up entrepreneurs with strong growth potential, which is smaller than the cluster average by half.

Start-up entrepreneurs	Highly developed countries[1]	Medium developed countries[2]	Croatia
No growth potential	59.10	48.28	50
Partial growth potential without new technologies	28.7	21.66	20.7
Partial growth potential based on new technologies	10.31	26.15	27.6
Strong growth potential	2.51	3.91	1.7

[1] Countries with GDP per capita above 20.000 US dollars
[2] Countries with GDP per capita below 20.000 US dollars

"Established" entrepreneurs	Highly developed countries[1]	Medium developed countries[2]	Croatia
No growth potential	69.96	65.20	63.2
Partial growth potential without new technologies	18.51	16.54	14
Partial growth potential based on new technologies	10.57	16.89	21
Strong growth potential	0.96	1.36	1.8

[1] Countries with GDP per capita above 20.000 US dollars
[2] Countries with GDP per capita below 20.000 US dollars

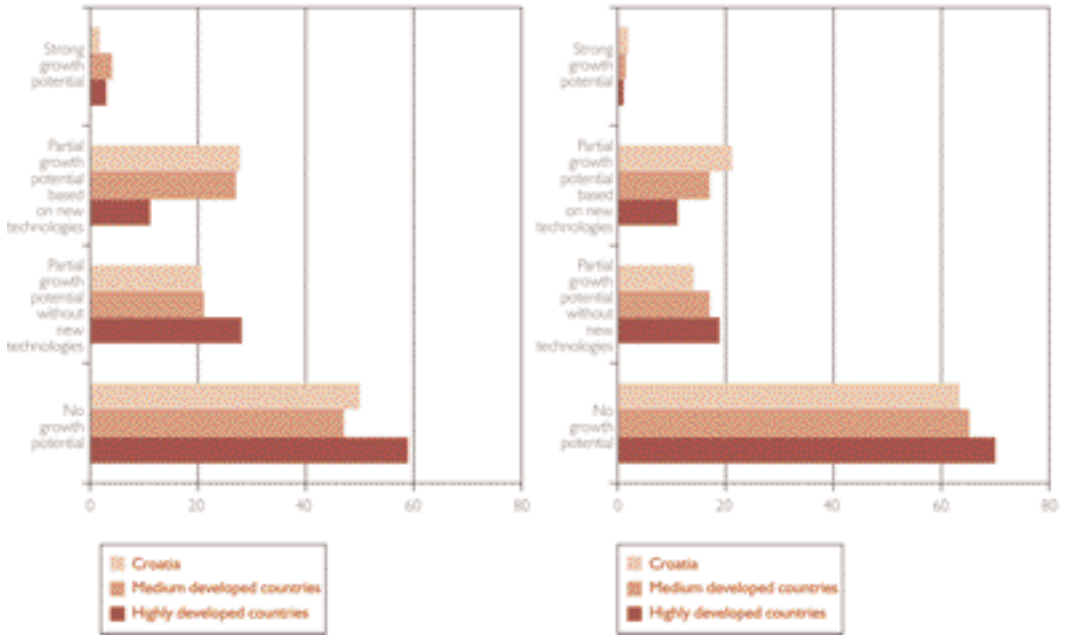


Figure 6
Combined index of growth potential, Croatia vs. other GEM participating countries, 2005, structure in %

Regional differences are decreasing

Zagreb and surroundings City of Zagreb Zagreb County	**Slavonia and Baranja** Brod-Posavina County Osijek-Baranja County Požega-Slavonia County Vukovar-Syrmia County	**North Croatia** Bjelovar-Bilogora County Krapina-Zagorje County Koprivnica-Križevci County Međimurje County Varaždin County Virovitica-Podravina County
Lika and Banovina Karlovac County Lika-Senj County Sisak-Moslavina County	**Istria, Primorje and Gorski Kotar** Istria County Primorje-Gorje County	**Dalmatia** Dubrovnik-Neretva County Split-Dalmatia County Šibenik-Knin County Zadar County

The differences in entrepreneurial activity within regions of a country are usually connected with the differences in the degree of development of a certain region - this applies also to Croatia. Therefore, the indicators of TEA indexes for Croatian regions[5] are complementary with the "hard" indicators of general development of each region, measured by GDP per capita and rate of employment.

During the period of 2002-2005, entrepreneurial activity changed for the better in all regions, mostly in Slavonia and Baranja, Lika and Banovina and Zagreb and surroundings, which influences a decrease in differences among regions. However, the rank of entrepreneurial capacity of Croatian regions has remained unchanged for the most part. Zagreb and surroundings are ranked 1st, Istria, Primorje and Gorski Kotar are ranked 2nd, whereas Slavonia and Baranja and North Croatia are at the bottom of the scale (Table 14).

	2002	2003	2004	2005
Zagreb and surroundings	4.89	4.30	4.42	8.43
Slavonia and Baranja	2.11	1.00	4.44	4.91
North Croatia	2.83	1.99	3.00	4.40
Lika and Banovina	2.71	1.78	3.99	5.11
Istria, Primorje and Gorski Kotar	4.47	3.05	5.29	5.74
Dalmacia	3.95	2.43	1.68	6.34
Total	3.62	2.56	3.74	6.11

Table 14
Regional dimension of Croatia's entrepreneurial capacity - TEA indexes, 2002-2005

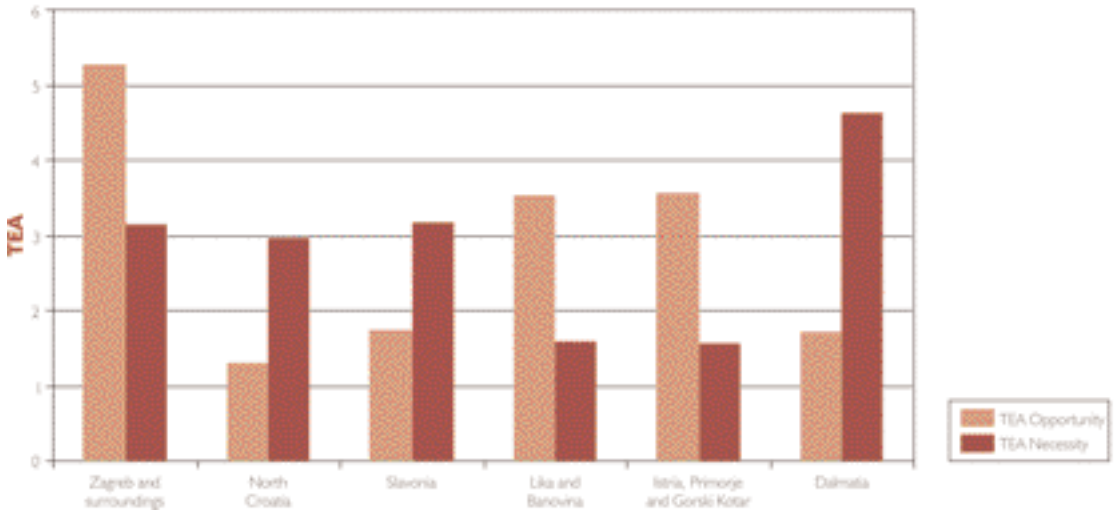
[5] For the purposes of the GEM project, Croatian counties were grouped into regions, according to the criterion of geographic-historical division of Croatia into a regional structure.

"Motivation" index according to regions within a country is especially important, because it provides an evaluation of the **quality** of entrepreneurial capacity (Figure 7). Values above 1 show a better ratio between TEA Opportunity entrepreneurs and TEA Necessity entrepreneurs, i.e., more optimism and a long-term perspective that the TEA Opportunity entrepreneurs have. In 2005, according to the "Motivation" index, Istria, Primorje and Gorski Kotar are ranked 1st, and Lika and Banovina follow as 2nd, whereas Zagreb and surroundings are ranked 3rd. Dalmatia is at the bottom of the scale.

The indicator of regional differences in entrepreneurial motivation within a country helps us get a better insight into the efficiency of entrepreneurial framework conditions, because it eliminates the influence of differences that different macroeconomic conditions and different entrepreneurial framework conditions have, and which must be respected when comparing different countries. Therefore, the regional differences in entrepreneurial capacity shed more light on the efficiency of certain government policies and programmes.

	Zagreb and surroundings	North Croatia	Slavonia	Lika and Banovina	Istria, Primorje and Gorski Kotar	Dalmatia
TEA Opportunity	5.28	1.3	1.74	3.53	3.56	1.71
TEA Necessity	3.15	2.95	3.17	1.58	1.57	4.62
"Motivation" index	1.68	0.44	0.55	2.23	2.27	0.37

Figure 7
Regional differences in entrepreneurial motivation (TEA Opportunity and TEA Necessity), 2005



Who starts business ventures in Croatia?

People with higher education become entrepreneurs more often
Men are more entrepreneurially active than women, and the trend increases
Age also plays a part
Poorer people are more often entrepreneurially active

Profile of entrepreneurs who are entrepreneurially active for less than 42 months in Croatia is different from the profile of the same category of entrepreneurs in GEM participating countries by all criteria we used for comparison (education, gender, age, income), especially in 2005.

People with higher education become entrepreneurs more often

Both in Croatia and in GEM participating countries business ventures are more often started by more educated people than by those with lesser education. However, in Croatia the dominant group is the one with medium education (secondary school degree) (Table 15), whereas in the GEM participating countries people with university education dominate (graduate and postgraduate education).

	2002	2003	2004	2005
Entrepreneurs who are active for less than 42 months (start-up)	%	%	%	%
More than secondary school	11.2	32.5	23.3	18.3
Secondary school	84	65	66.7	70.7
Less than secondary school	4.8	2.5	10	9.9
No answer	0	0	0	1.1
Entrepreneurs who are active for longer than 42 months ("established")	%	%	%	%
More than secondary school	29.7	32.6	39.5	32.8
Secondary school	59.5	67.4	52.6	63.0
Less than secondary school	10.8	0	7.9	4.2
No answer	0	0	0	0

Table 15
Entrepreneurial activity and education of entrepreneurs, 2002-2005 (structure, %)

Men are more entrepreneurially active than women, and the trend increases

Both in Croatia and in GEM participating countries men start entrepreneurial activity more often than women, but in Croatia that ratio is far greater (Figure 8) than the GEM countries average. Whereas in the GEM countries this ratio decreased from 1.8 in 2002 to 1.6 in 2005, Croatia shows a different trend: in 2002 there were 2.95 more men than women who were entrepreneurially active, whereas in 2005 that ratio grew to 3.79.

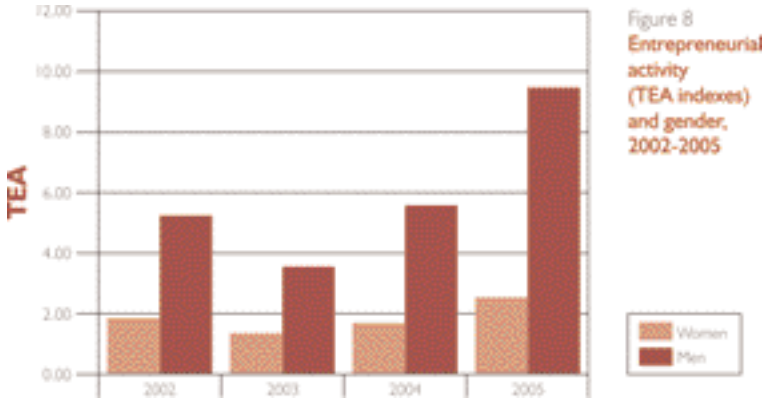


Figure 8
Entrepreneurial activity (TEA indexes) and gender, 2002-2005

Age also plays a part

Since 2002, the average age of those who start entrepreneurial activity has increased. While in 2002, both in Croatia and in GEM participating countries, people aged between 25 and 34 were the most numerous entrepreneurial group, in 2005 in Croatia the most numerous entrepreneurial group consists of people aged between 25 and 44 (Figure 9). In the GEM participating countries this indicator has not changed in 2005: most start-up entrepreneurs (those who have been active for up to 42 months) are aged between 25 and 34.

Gender also affects the differences in age of start-up entrepreneurs: women are entrepreneurially most active at the age between 18 and 24, when they are also closest to number of men involved in entrepreneurial activity. The difference between entrepreneurial activity of women and men decreases again in the 55-64 age group (Figure 10).

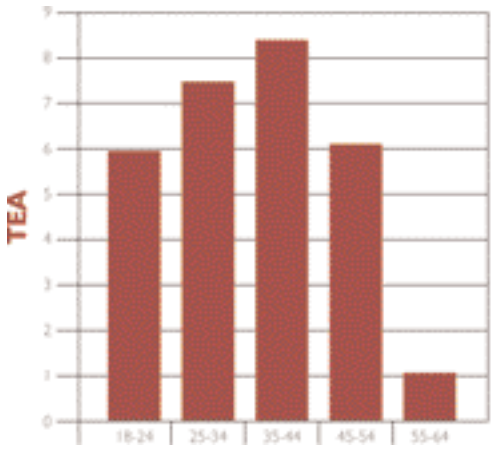


Figure 9
Entrepreneurial activity (TEA indexes) and age of entrepreneurs, 2005

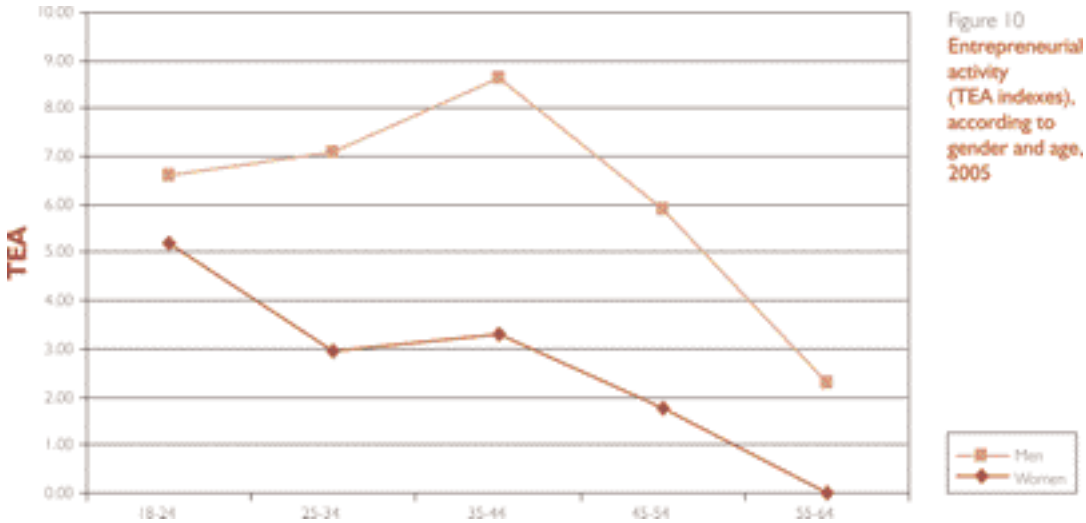


Figure 10
Entrepreneurial activity (TEA indexes), according to gender and age, 2005

Poorer people are more often entrepreneurially active

Structure of entrepreneurs who are active for less than 42 months based on the household income criteria has significantly changed in Croatia during the period 2002-2005. In 2002, number of entrepreneurs who had household income in the lowest third was 77.6%, whereas in 2005 it fell to 56.7%, with the increase in number of entrepreneurs with medium household incomes (Table 16). Situation is different in GEM participating countries: people with higher income start to be entrepreneurially active more often than those with low income. The change in structure in Croatia also goes in that direction, but it still falls greatly behind the GEM countries average. The fact that in Croatia poorer people start entrepreneurial activity more often than others is consistent with the indicator which shows that in Croatia a dominant number of people are necessity driven entrepreneurs, and not opportunity driven.

Household income	2002	2003	2004	2005
Entrepreneurs who are active for less than 42 months (start-up)	%	%	%	%
Lower third	77.6	65.0	63.3	56.7
Middle third	10.3	12.5	11.7	25.8
Upper third	6.9	2.5	8.3	10.3
No answer	5.2	20.0	16.7	7.2
Entrepreneurs who are active for more than 42 months ("established")				
Lower third	45.7	54.1	47.4	43.5
Middle third	11.4	13.5	18.4	27.5
Upper third	2.9	2.7	7.9	13.1
No answer	40.0	29.7	26.3	15.9

Table 16
Entrepreneurial activity and household income, 2002-2005 (structure, %)

What motivates entrepreneurs in Croatia?

Perception of entrepreneurial environment - women equal to men! Entrepreneurial culture is only being generated

The decision on starting entrepreneurial activity is a turning point in life of many people. Such a decision is one of the most complex ever, because it demands numerous evaluations that rely on information availability, knowledge and skills of the person and his/her system of values that influences perception of opportunities and risks. The anatomy of cause and motives for entrepreneurial behaviour on a personal level relies in the GEM research on the evaluation of perception of entrepreneurial environment (capacity to recognize business opportunities), and the system of values as the source of (non) entrepreneurial behaviour.

Perception of entrepreneurial environment - women equal to men!

Starting entrepreneurial activity is influenced by knowing someone else's experience, the feeling of self-confidence through own knowledge and skills, the ability to perceive business opportunities and being prepared to accept possible failure. The research hypothesis is that the perception of entrepreneurial environment is significantly different between those who have decided to become entrepreneurially active and those who have not, and it has been confirmed in all years of research and in Croatia as well. Since the structure of responses is rather stable during the entire research period (2002-2005), Table 17 shows only the results for 2005. During all the years of research, among those who have decided to become entrepreneurs there is a larger number of those who have contacts among other entrepreneurs, who see a business opportunity and have entrepreneurial knowledge and skills than among non-entrepreneurs. The research period is too short in order to be able to determine statistical dependence between these results, but some other researches (Minniti 2005) suggest that self-confidence and sensitivity to business opportunities have a positive influence on personal decisions to start a business venture.

Entrepreneurs who have been active for up to 42 months (start-up entrepreneurs) in Croatia have a similar anatomy of perception of entrepreneurial environment as the average of GEM countries.

Table 17
Factors that influence perception of entrepreneurial environment, 2005, structure, in %

You personally know an entrepreneur who started own business in the last two years	Start-up entrepreneurs	Non-entrepreneurs
Yes	75.5	50.6
No	24.5	49.4

In the area where you live you see a good business opportunity in the next 6 months	Start-up entrepreneurs	Non-entrepreneurs
Yes	52.3	39.9
No	47.7	60.1

You have the necessary knowledge and skills to start a business venture	Start-up entrepreneurs	Non-entrepreneurs
Yes	96	60.8
No	4	39.2

Fear of failure would stop you from starting a business venture	Start-up entrepreneurs	Non-entrepreneurs
Yes	28.7	38.4
No	71.3	61.6

Although there are great differences between entrepreneurial activity of men and women in Croatia, there are no such differences in the perception of entrepreneurial environment (Figure 11). Furthermore, women are better in perceiving business opportunities and are less afraid of business failure. The average of GEM participating countries is different: women have less entrepreneurial knowledge and greater fear of failure.

A very important question for Croatia is why does the equality in perception of business environment disappear in real life? There is a long list of possible answers: from traditional culture that sees women in other roles, over lack of possibilities to ensure different social services that could help organize family life better, to regulatory inflexibility in defining terms for different entrepreneurial ventures. The fact that women do not participate in entrepreneurial activity is not only a political question of human rights, but also an economic issue due to unused available human resources. Ratio of TEA index for men and TEA index for women in GEM countries is improving (although very slowly), whereas in Croatia this ratio is growing in favour of men. This situation calls for many institutions to act specifically with the objective to increase the probability that the women's potential that exists through the perception of business environment be transformed into entrepreneurial activity.

	Personally know an entrepreneur	Perceive a good business opportunity	Have knowledge and skills	No fear of failure
Women	66.7	55.6	95	75
Men	77.3	50.7	96	70.7

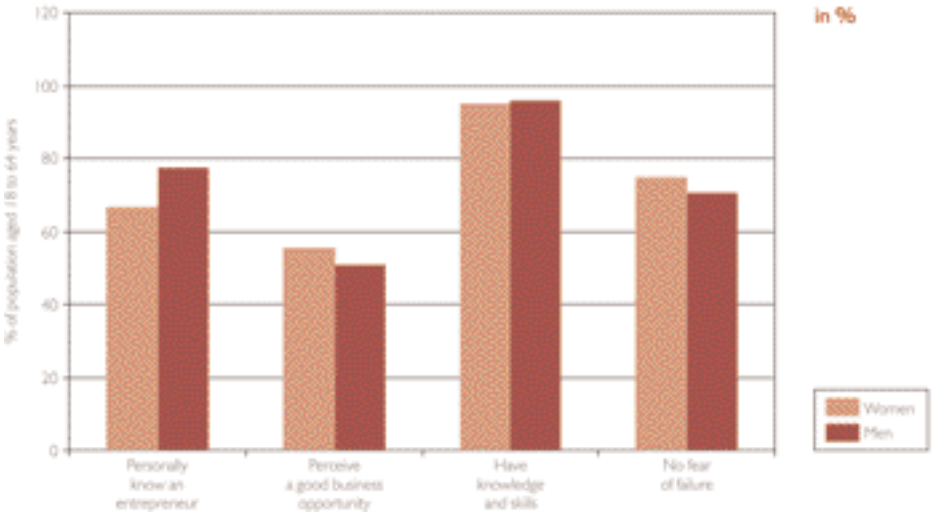


Figure 11
Difference in perception of entrepreneurial environment, TEA active entrepreneurs, based on gender, 2005 - structure, in %

Entrepreneurial culture is only being generated

Stimuli for entrepreneurial activity, apart from the perception of business environment, also come from the systems of values, which are the basis of entrepreneurial culture. GEM research has developed a framework of four questions, which are used to evaluate the system of values in a specific country, and is based on evaluation of values on egalitarianism, on entrepreneurial career, social status of an entrepreneur and the role of media in creating entrepreneurial culture.

In comparison to the answers given in 2003 and 2004 (in 2002, GEM research did not include these questions), the only significant change is the increased opinion that most people in Croatia would be happier if everyone had similar standard of living (from 55% in 2003 to 82% in 2005). Bitterness arising from such answers of start-up entrepreneurs is emphasised by the fact that a smaller number of start-up entrepreneurs than non-entrepreneurs sees entrepreneurship as a desirable career option. However, both categories of respondents (start-up entrepreneurs and non-entrepreneurs could not decide whether entrepreneurs have a high social status or not (some 50% think that they do, and 50% that they do not). Slightly better situation is in the viewpoint on the role of media in promoting successful business ventures (Table 18). This leads to the conclusion that the system of values that could shape entrepreneurial culture is only being generated, since there are no significant differences in values.

Table 18
System of values, 2005, structure, in %

In Croatia, most people would be happier if everyone had a similar standard of living	Start-up entrepreneurs	Non-entrepreneurs
Yes	81.9	68.5
No	16.9	21.9
I don't know	1.2	9.6

In Croatia, most people think that starting a business venture is a desirable career choice	Start-up entrepreneurs	Non-entrepreneurs
Yes	66.4	73.6
No	33.6	26.4

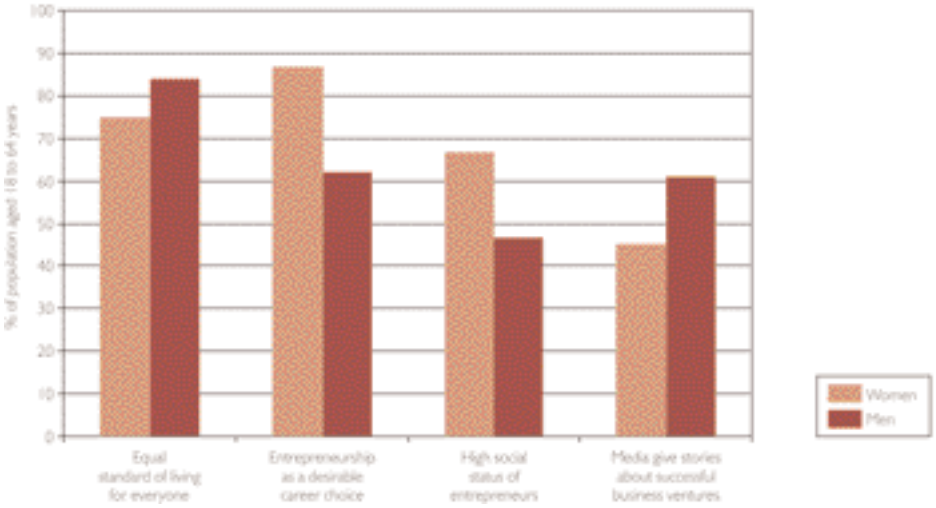
In Croatia, it is believed that those who have successfully started a business venture have a high social status	Start-up entrepreneurs	Non-entrepreneurs
Yes	50.4	53.7
No	49.6	46.3

In Croatian media there are often stories about successful business ventures	Start-up entrepreneurs	Non-entrepreneurs
Yes	56.9	56.4
No	43.1	43.6

While there are no differences in perception of entrepreneurial environment between men and women, when it comes to values on entrepreneurial culture, in case of values about entrepreneurial culture, the difference in viewpoints of women and men are interesting: women are less egalitarian-oriented, more of them think that entrepreneurship is a desirable career choice, more of them think that entrepreneurs have a high social status, but are more critical towards media (Figure 12). Since women are less entrepreneurially active, maybe their belief that entrepreneurs have a high social status results more from their expectations than from experience. Still, the fact that women have a similar perception about entrepreneurial environment and that they more often believe that entrepreneurship is a desirable career choice, is obliging to many institutions, and especially to government policies and programmes to help create such entrepreneurial conditions that will enable women to realize their entrepreneurial potentials.

	Equal standard of living for everyone	Entrepreneurship as a desirable career choice	High social status of entrepreneurs	Media give stories about successful business ventures
Women	75	86.7	66.7	45
Men	84	62	46.5	60.9

Figure 12
Difference in perception of values of TEA active entrepreneurs, based on gender, 2005 - structure, in %



Since we have shared a common political and economic history with Slovenia for 70 years, it is interesting to compare Croatian and Slovenian values as elements of entrepreneurial culture (Table 19).

Table 19
Comparison of values related to entrepreneurial culture between Croatia and Slovenia, YES answers, % of respondents

	Nascent	New entrepreneurs	"Established" entrepreneurs	Non-entrepreneurs
In Croatia most people would be happier if everyone had a similar standard of living	80.4	82.2	75.4	68.5
In Slovenia most people would be happier if everyone had a similar standard of living	70.7	65.8	70.6	48.8

	Nascent	New entrepreneurs	"Established" entrepreneurs	Non-entrepreneurs
In Croatia most people think that starting a business venture is a desirable career choice	63.8	69.8	61.6	73.6
In Slovenia most people think that starting a business venture is a desirable career choice	49	40.3	49.6	32

	Nascent	New entrepreneurs	"Established" entrepreneurs	Non-entrepreneurs
In Croatia it is believed that those who have successfully started a business venture have a high social status	46.2	58.4	37.9	53.7
In Slovenia it is believed that those who have successfully started a business venture have a high social status	73.1	83.6	66	44

	Nascent	New entrepreneurs	"Established" entrepreneurs	Non-entrepreneurs
In Croatian media there are often stories about successful business ventures	53.7	66.7	52.9	56.4
In Slovenian media there are often stories about successful business ventures	61.4	59.1	56.4	31.3

Source for Slovenian indicators: Rebernik, M., P. Tominc, K. Pušnik: Global Entrepreneurship Monitor, Slovenija 2005: Podjetništvo med željami in stvarnostjo, Inštitut za podjetništvo in management malih podjetij, Ekonomsko-poslovna fakulteta, Univerza v Mariboru, Maribor, January 2006, p. 34

Egalitarianism is more evident in Croatia than in Slovenia, but at the same time more respondents in Croatia think of entrepreneurship as a desirable career choice. There is some bitterness in viewpoints of Croatian citizens, because a significantly small number of respondents think that successful entrepreneurs have a high social status. The only value in which viewpoints of Croatian and Slovenian respondents are equal is the rather small number of those who think that media often present stories about successful business ventures (from 53 to 67%). The most significant difference between Slovenian and Croatian citizens in the GEM research in 2005, however, is the difference between viewpoints of entrepreneurs and non-entrepreneurs. In Croatia there is no significant difference between these two categories in any of the viewpoints, rather we see that in some situations non-entrepreneurs choose "a more entrepreneurial" viewpoint than the entrepreneurs themselves (e.g., viewpoint on the entrepreneurial career). However, in Slovenia the differences between viewpoints of non-entrepreneurs and entrepreneurs are very significant. These differences point to the conclusion that the entrepreneurial culture in Slovenia is more evident and formed, whereas entrepreneurial culture in Croatia is only just being generated.

Entrepreneurial environment in Croatia: does it help or hinder?

Who evaluates the quality of entrepreneurial environment and how? Entrepreneurial environment in Croatia: better or worse than the GEM countries average?

In the GEM research, entrepreneurial environment has been described by entrepreneurial framework conditions (see Figure 1 in Introduction). Its availability and quality stimulate, while its limitations and lack of quality hinder entrepreneurial activity. In 2005, out of 35 countries participating in the research of entrepreneurial activity, France, Japan, Sweden and Mexico did not take part in evaluating the quality of entrepreneurial environment, but two additional countries - Jordan and Puerto Rico - did, so ranking of countries according to the quality of entrepreneurial environment is done on a scale containing 33 countries.

Who evaluates the quality of entrepreneurial environment and how?

The level of availability and quality of entrepreneurial environment for the GEM research is evaluated by experts, who are chosen based on their knowledge of a specific component of entrepreneurial environment. The sample of experts is selected from entrepreneurs - people who know the practice, scientists who research entrepreneurship, experts in professional infrastructure, government institutions and non-government organizations who deal with entrepreneurship, no less than 36 experts per country[6], if possible.

Experts evaluate entrepreneurial environment by means of a standardized questionnaire with some 80 statements that describe components of entrepreneurial environment (generally, one component is described by 4 to 7 statements). They express their agreement/disagreement with these statements by means of grades from 1 to 5, 1 being total disagreement and 5 total agreement. In that way we get an evaluation of every individual component of entrepreneurial environment.

Statements are grouped in such a way as to form measuring instruments[7], which make it possible to interpret the perception of experts regarding:
- Availability and structure of the sources of financing for entrepreneurs,
- Government policies,
- Government programmes for encouraging entrepreneurship,
- Educational programmes,
- Transfer of knowledge and technology,
- Quality of professional and supporting institutions,
- Openness of the market,
- Availability of physical infrastructure,
- Cultural and social norms.

The questionnaire also includes statements with which the experts evaluate several important aspects of entrepreneurial behaviour:
- Ability to perceive entrepreneurial opportunities,
- Entrepreneurial capacity (knowledge and skills),
- Entrepreneurial motivation (understanding and reputation of an entrepreneurial career), etc.

Expert evaluation of entrepreneurial environment, under the assumption of continuous participation in GEM researches, gives us three kind of information:
- Evaluation of each segment, where the grade above 3 signalises a positive value of a certain component (stimulating environment), and the grade below 3 gives a negative value of a certain component (non-stimulating environment)
- Comparison of changes in the evaluation of quality of certain components of entrepreneurial environment in time (in Croatia since 2002)
- Comparison of differences between perception of quality of a certain component of entrepreneurial environment in space (i.e., among GEM participating countries)

[6] Following numbers of experts participated in Croatia: 36 in 2002, 36 in 2003, 34 in 2004 and 40 in 2005. A list of all experts that took part in the GEM research in Croatia can be found in Appendix 2.

[7] Cronbach Alpha test with values between 0.7 and 0.89 shows a high reliability of measuring instruments, which gives credibility to evaluations of quality of entrepreneurial environment.

Entrepreneurial environment in Croatia: better or worse than the GEM countries average?

Participation of Croatia in the GEM research since 2002 gives a great basis for evaluating how different Croatian results are from the average quality of entrepreneurial environment in all the other GEM countries, but also for understanding the time dimension of changes in the quality of entrepreneurial environment. Entrepreneurial environment is the totality of all policies, institutions and value norms. Changes in certain categories are interconnected: it is hard to change policies when there are no value norms to support such changes. Institutions are changing slowly and the value norms mostly only incrementally. The comparison of changes in the perception of quality of a certain component of entrepreneurial environment in Croatia and in all GEM countries in the period 2002-2005 confirms this (Table 20).

Table 20
Average grades of components of entrepreneurial environment in Croatia - comparison to GEM average, 2002-2005

Components of entrepreneurial environment		2002		2003		2004		2005	
		Croatia	GEM	Croatia	GEM	Croatia	GEM	Croatia	GEM
1	Financial support	3.21* 2.17*	2.91* 2.81*	2.72	2.61	2.32	2.58	2.36	2.72
2a	Government policies - grants	2.27	2.68	2.03	2.60	2.10	2.55	2.11	2.61
2b	Government policies - regulations	1.81	2.41	1.87	2.43	1.81	2.36	1.76	2.46
3	Government programmes	2.11	2.63	2.40	2.62	2.18	2.53	2.39	2.61
4a	Education in primary and secondary schools	1.63	1.97	1.59	2.06	2.05	2.07	1.91	2.12
4b	Education after secondary school	2.01	2.83	1.97	2.79	2.63	2.71	2.56	2.83
5	Transfer of research and development	2.05	2.47	2.11	2.49	2.18	2.44	2.06	2.48
6	Business and professional infrastructure	2.43	3.17	2.75	3.23	2.60	3.20	2.67	3.29
7a	Openness and competitiveness in internal market - speed of changes	3.37	2.84	3.49	2.81	3.65	2.76	3.05	2.82
7b	Openness and competitiveness in internal market - entry barriers	2.04	2.05	2.23	2.75	2.11	2.70	2.08	2.80
8	Access to physical infrastructure	3.08	3.86	3.55	3.95	3.36	3.81	3.35	3.91
9	Cultural and social norms	2.20	2.79	2.15	2.76	2.17	2.81	2.13	2.83
10	Recognizing business opportunities	2.93	3.29	3.11	3.19	3.28	3.30	3.19	3.36
11	Entrepreneurial capacity - potential	2.43	2.52	2.16	2.48	2.38	2.54	2.13	2.66
12	Entrepreneurial capacity - motivation	2.99	3.31	2.89	3.38	2.73	3.32	2.95	3.41
13	Protection of intellectual property	2.36	3.11	2.44	3.12	2.52	3.08	2.36	3.19
14	Attitude towards women in entrepreneurship	2.79	3.14	2.78	3.34	3.01	3.22	2.84	3.30
15	Attitude towards growing enterprises	-	-	-	-	-	-	2.55	3.12

Source: Global Entrepreneurship Monitor; Expert Questionnaire
* Availability of credit lines and owner's resources
** Availability of venture capital funds, business angels and IPO (Initial Public Offering)

Dominance of grades below 3 in Table 20 tells us that there are massive reserves in the entrepreneurial environment that could be used to increase its quality. To get from a non-stimulating to a stimulating quality of entrepreneurial environment in the process of building the entrepreneurial capacity of a country, we need to make well-thought, consistent and interconnected interventions, and to understand that for realization of changes in the quality of entrepreneurial environment, political will is needed as well.

A four-year period of comparison gives us information that shows stability of relationship or a tendency towards change in the quality of entrepreneurial environment in Croatia:

- Tendency of lower quality of financial support
- Government programmes are better rated than government policies
- Government policies for grants are better rated than government policies for regulations
- Growing quality of education focused on development of entrepreneurial potential in young people, but this component of entrepreneurial environment is still a serious obstacle for stronger entrepreneurial capacity
- Growing quality of business and professional infrastructure
- Better access to physical infrastructure

Configuration of grades of individual components of entrepreneurial environment points to a similar pattern of quality of entrepreneurial environment in Croatia and in GEM participating countries, but the grades in Croatia are generally somewhat lower than the GEM countries average. Discrepancy from the GEM countries average is well illustrated by the situation we observed in 2005 (Figure 13), when entrepreneurial environment in Croatia, as in all previous years, was evaluated as less stimulating than the GEM countries average. Only one component (Openness of the market - speed of change) is better rated in Croatia, and three components are rated significantly worse (Government policies - regulations; Openness of the market - entry barriers; Protection of intellectual capital).

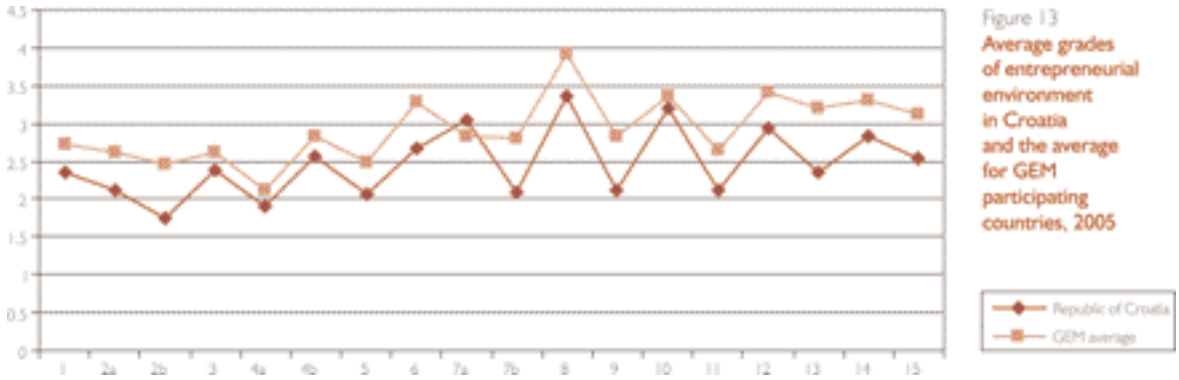


Figure 13
Average grades of entrepreneurial environment in Croatia and the average for GEM participating countries, 2005

Apart from comparison with the GEM countries average for individual components of entrepreneurial environment, for leading an efficient policy of change in the entrepreneurial environment it is also important to know the position of Croatia within the quality span of each component. In that way we obtain **benchmark** information that enables analysis of the best practice and assessment of possibility to apply such experiences in Croatia (Table 21). On the other hand, information on Croatia's rank within the quality span of a certain component of entrepreneurial environment is a good basis for assessing efficiency of applied interventions, whereby we must take into account the time dimension in which these effects can be expected. Achievements of certain countries in the quality of individual components of entrepreneurial environment are encouraging, because they show that long-lasting and consistent efforts can help free the entrepreneurial environment of obstacles and turn it into a highly stimulating environment for entrepreneurial activity. Out of 15 components of entrepreneurial activity, USA leads in quality with as much as 7 components. Countries such as Singapore, Finland, Ireland, Thailand and Latvia are on the list of countries that have the best graded individual components of entrepreneurial environment, which only confirms that mentioning these countries in different contexts as examples of successful management of economic development is not a coincidence.

Table 21
Components of entrepreneurial environment, 2005 - Croatia in international perspective

Component of entrepreneurial environment		GEM countries				
		Max	Min	Average	Croatia	Croatia's Rank
1	Financial support	4.08 (USA)	1.57 (Brazil)	2.72	2.36	30
2a	Government policies - grants/support	3.52 (Singapore, Finland)	1.71 (Hungary)	2.61	2.11	27
2b	Government policies - regulations	4.03 (Singapore)	1.33 (Brazil)	2.46	1.76	29
3	Government programmes	3.43 (Austria)	1.59 (Venezuela)	2.61	2.39	22
4a	Education in primary and secondary schools	2.84 (Latvia)	1.5 (Austria)	2.12	1.91	22
4b	Education after secondary school	3.42 (Thailand)	2.04 (Brazil)	2.83	2.56	29
5	Transfer of research and development	3.26 (Jordan)	1.7 (Brazil)	2.48	2.06	24
6	Business and professional infrastructure	4.07 (USA)	2.32 (Brazil)	3.29	2.67	31
7a	Openness and competitiveness in internal market - dynamics of change	4 (Jordan)	1.91 (Finland)	2.82	3.05	7
7b	Openness and competitiveness in internal market - entry barriers	3.46 (USA)	1.86 (Brazil)	2.80	2.08	32
8	Access to physical infrastructure	4.75 (USA)	2.98 (Brazil)	3.92	3.35	29
9	Cultural and social norms	4.54 (USA)	2.13 (Croatia)	2.83	2.13	33
10	Recognizing business opportunities	4.14 (USA)	2.62 (Italy)	3.36	3.19	24
11	Entrepreneurial capacity - potential	3.96 (Jordan)	1.98 (Brazil)	2.66	2.13	31
12	Entrepreneuria capacity - motivation	4.58 (USA)	2.82 (Norway)	3.40	2.95	29
13	Protection of intellectual property	4.25 (Finland)	1.7 (Venezuela)	3.19	2.36	30
14	Attitude towards women in entrepreneurship	4.34 (Finland)	2.5 (Hungary)	3.30	2.84	29
15	Attitude towards growing enterprises	3.97 (Ireland)	2.38 (Brazil)	3.11	2.55	31

Source: Global Entrepreneurship Monitor; Expert Questionnaire

For a more precise diagnosis of current situation and in order to gain adequate orientation regarding the steps that need to be taken, it is necessary to look behind the average grades of each component, i.e., enter their anatomy. That is why Table 22 shows ten highest graded statements about entrepreneurial environment in Croatia, and Table 23 ten lowest graded statements.

Depending on the type of statement, deviation from the GEM average can either mean unused potential or a serious cause for dissatisfaction. For example, telecommunication infrastructure (8/03) enables intensifying of online businesses and should be recognized as a very important component of business growth potential. However, that option is not available to everyone, because it is expensive (8/02) and therefore it has a more restrictive influence on the possibility of doing business online than in the GEM countries average. The price of utility services can also have a restrictive influence on business, which is evident through the lower grade of the possibility of absorption of such costs in Croatian businesses than in GEM countries (8/04). However, the fact the statement that "In Croatia there are more favourable opportunities to open new enterprises than people who can take advantage of these opportunities", has been awarded higher average (10/02) than the GEM countries average, points to the problem of having educated, trained people who are able to take advantage of business opportunities, forces us to think about the role of education in this sense, about the quality of business and professional infrastructure, etc.
Furthermore, if Croatian experts have awarded such grades to the statement that "In Croatia, starting new businesses is seen as a good way to gain material wealth", (12/01) that put it among 10 best graded statements (although it is the last one of these), than this must raise questions about motivation, role of education and media in the development and promotion of entrepreneurial culture.

Ten lowest graded statements about entrepreneurial environment in Croatia, which are all lower that the average grades for these statements in GEM countries, signal the need for urgent interventions. The starting of HITRO.HR project in 2006 is a good example of how to start solving the problem of inadequate regulatory entrepreneurial framework conditions and the obstacles that hinder the start-up of entrepreneurial activity (2b/04).

Component of entrepreneurial environment, statement code	Statement	Average grade in Croatia	Average grade for GEM countries
8/03	In Croatia, a new or growing enterprise can open a phone line or get Internet access in about a week.	4.08	3.97
1/4/02	In Croatia, women have the same level of knowledge and skills needed to start a business as men.	4.03	3.68
6/05	In Croatia, new and growing enterprises can easily get good bank services (current accounts, foreign currency transactions, letters of credit, etc.)	3.56	3.63
10/02	In Croatia there are more favourable opportunities to start a business than there are people who can take advantage of these opportunities.	3.56	3.36
8/02	In Croatia, it is not too expensive to get a good access to communication network for a new or growing enterprise (phone, Internet, etc.).	3.42	3.90
1/03	In Croatia, good opportunities to start a new business have increased significantly in the last five years.	3.37	2.97
1/01	In Croatia there are many good opportunities to start a new business.	3.31	3.62
8/04	In Croatia, a new and growing enterprise can cover the costs of basic utility services (gas, water, electricity, sewerage)	3.26	3.98
1/02	In Croatia there are enough credit sources available to new and growing enterprises.	3.21	3.01
12/01	In Croatia, starting new businesses is seen as a good way to gain material wealth	3.18	3.35

Source: Expert survey, Croatia, 2005

Table 22
Ten highest graded statements about the entrepreneurial environment in Croatia in comparison to GEM countries, 2005

Component of framework conditions code	Statement	Average grade in Croatia	Average grade for GEM countries
2c_04	In Croatia, new enterprises can get all necessary licences and certificates within a week.	1.46	2.08
2a_01	In Croatia, government measures and policies (e.g., those for public procurement) consistently prefer enterprises.	1.55	2.15
2b_07	In Croatia, new and growing businesses do not find it extremely difficult to handle administration, legal and regulatory demands.	1.58	2.34
1_04	In Croatia, physical persons (apart from the owner) are an important source of financial help to new and growing enterprises.	1.82	2.62
1_06	In Croatia, issues of stock and other securities are an important source of financial help to new and growing enterprises.	1.82	2.41
2b_05	In Croatia, the amount of tax obligation IS NOT a burden for new and growing enterprises.	1.83	2.53
4a_03	In Croatia, primary and secondary education gives adequate attention to entrepreneurship and starting new enterprises.	1.85	1.89
3_03	In Croatia, many people know how to start and manage a fast-growing enterprise.	1.85	3.56
4a_02	In Croatia, primary and secondary education provides adequate knowledge about the principles of market economy.	1.87	2.15
3_01	In Croatia, one can obtain a wide range of government measures for helping new and growing enterprises by turning to just one agency.	1.9	2.32

Source: Expert survey, Croatia, 2005

Table 23
Ten lowest graded statements about the entrepreneurial environment in Croatia in comparison to GEM countrie 2005

A bad example - principle of administrative silence, typically our way

The Law on General Administrative Procedure in the Republic of Croatia (Official Gazette 53/91, 103/96), articles 171 and 172 actually state that government institutions issuing certificates and other documents (attestations, etc.) DO NOT HAVE TO give the client a decision on denying the request, because:

" (5) If the institutions mentioned under items (1) and (2) of this article deny the request to issue a certificate or other document they shall issue a separate decision about it. If they do not issue a certificate or other document within 15 days of the day when the client submitted the request, and if they do not deliver a decision on denying the client's request in that period of time, the request shall be deemed denied".

And in the European Union it is exactly the opposite.

A good example - HITRO.HR

Walking door-to-door, collecting certificates, stamps… it is only a part of the story of those who wanted to start and register their business. In its 55 recommendations to increase the competitiveness of Croatia (2004), National Competitiveness Council has especially emphasised the priority of cutting down the administrative procedure to register a business, which will save time and costs of the registration process. The Government of the Republic of Croatia and FINA (Financial Agency) have found a solution to this problem in their project HITRO.HR.

HITRO.HR is a service formed by the Government of the Republic of Croatia for faster communication of citizens and businesses with government administration. Its purpose is to increase the quality level of services by increasing speed, effectiveness, flexibility and transparency of government administration. HITRO.HR is developing a whole range of services that will enable citizens and entrepreneurs to access different information and services faster and simpler and in one place. The first of the HITRO.HR services will be establishing and registering limited liability companies. Now you can register your company in 4 steps: three visits to the HITRO.HR office in FINA and one visit to notary public. And that's it - the goal is to enable entrepreneurs to register their businesses in one day.

Financial support

Croatia is in the 30th place of the GEM scale in quality of financial support, which clearly reflects the fact that our financial market is not yet developed; we do not have enough venture capital available, no financial angels (one of the lowest graded statements in general - 1/04, Table 23) and few small enterprises enter the stock market (among lowest graded statements - 1/06, Table 23). Availability of credit sources is well recognized (one of the 10 best graded statements - 1/02, Table 22), but the lack of guarantee funds makes it difficult to take advantage of credit sources for financing a business venture.

Informal investment (business angels) is a very important category in supporting entrepreneurial activity, not only because of the character of such financing, but also because of financial means available. In the GEM countries average in 2005 there were 3.3% of informal investors in the adult population. Croatia with 1.6% in 2005, although still well below the GEM countries average, shows some increase with respect to 1.2% in 2002. In Croatia, business angels most often support business ventures in financial services, trade, business services and transport. Business angels are most often family members and work colleagues. Non-existence of adequate regulatory framework, and almost complete ignorance of the importance of such a way of financing entrepreneurial activity, makes it difficult to increase and support informal investments.

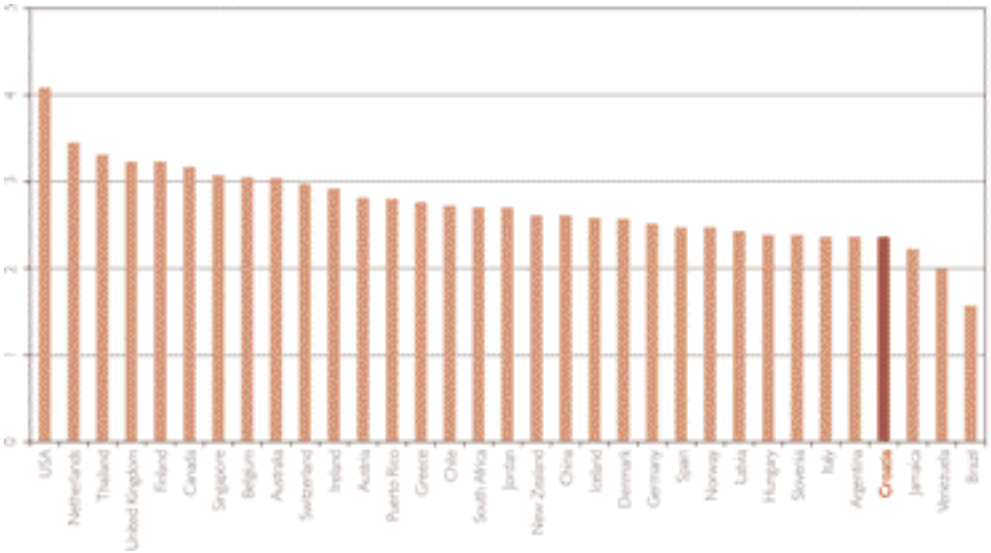


Figure 14
Financial support, Croatia and GEM countries, 2005

Government policies and programmes

The difference in Croatia's rank when it comes to quality of government policies for support/grants (27th place) and quality of government policies for regulations (30th place) is based on government activities so far (Figure15, Figure 16). Much more has been done in the area of policies for support of starting new business ventures and much less in the area of simplifying regulatory framework. Inconsistency of such government policies restricts the possibility to achieve such effects that could have been achieved if these policies were more harmonized. The fact is that in the ten best graded statements about entrepreneurial environment there is not one connected to government policies, whereas among the ten lowest graded statements there are as many as four that are connected to government policies, which also signals an urgent need for change and requires adequate **policy** interventions.

Croatia is best ranked according to the criterion of government programmes (22nd place), which evaluates the availability of support programmes in the development of an incubator network and programmes to start entrepreneurial activity (Figure 17).

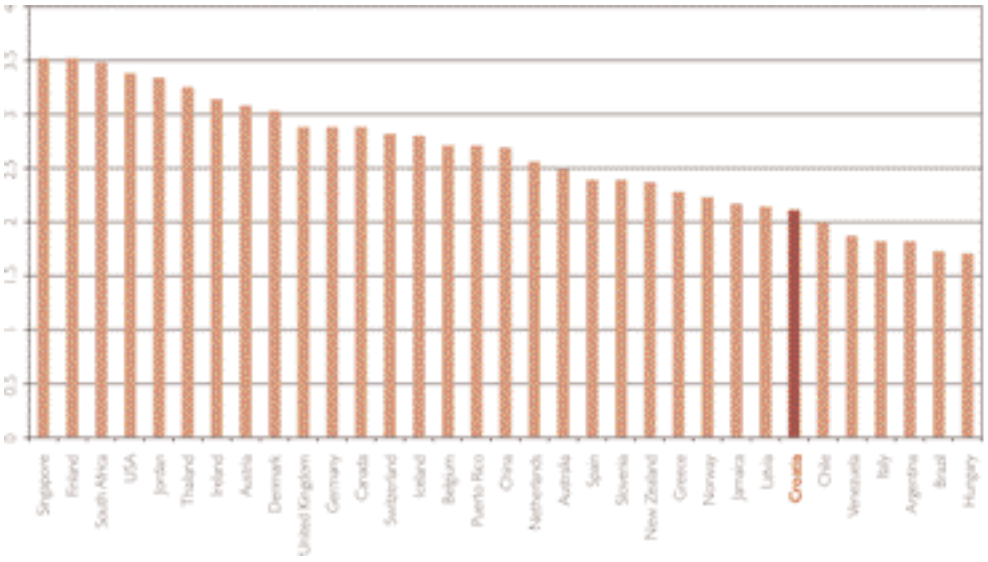


Figure 15
Government policies - support/grants, Croatia and GEM countries, 2005

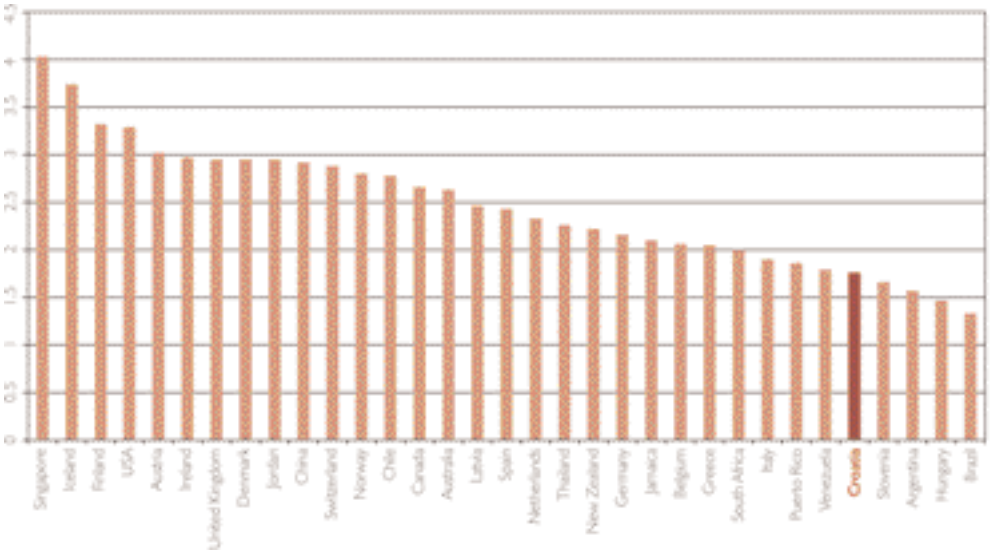


Figure 16
Government policies - regulations, Croatia and GEM countries, 2005

Figure 17
Government programmes, Croatia and GEM countries, 2005

Education

There is an important difference between Croatia's rank according to quality of primary and secondary education (22nd place) and tertiary level of education (29th place) (Figure 18, Figure 19).
However, primary and secondary education is not contributing enough to the development of entrepreneurial capacity of children and young people (4a/03 from Table 23) and their understanding of the mechanisms in the market economy (4a/02), which is reflected in very low grades this aspect of entrepreneurial environment received from the experts. Educational reforms that are currently underway in Croatia (cataloguing of knowledge and skills, transformation of universities according to the Bologna Declaration) show that there is a political will, but that the efficiency in application of these mechanisms depends on the consistency of policies in the educational sphere, as well as on institutional capacity of the educational sector for their implementation.

Figure 18
Education (primary and secondary), Croatia and GEM countries, 2005

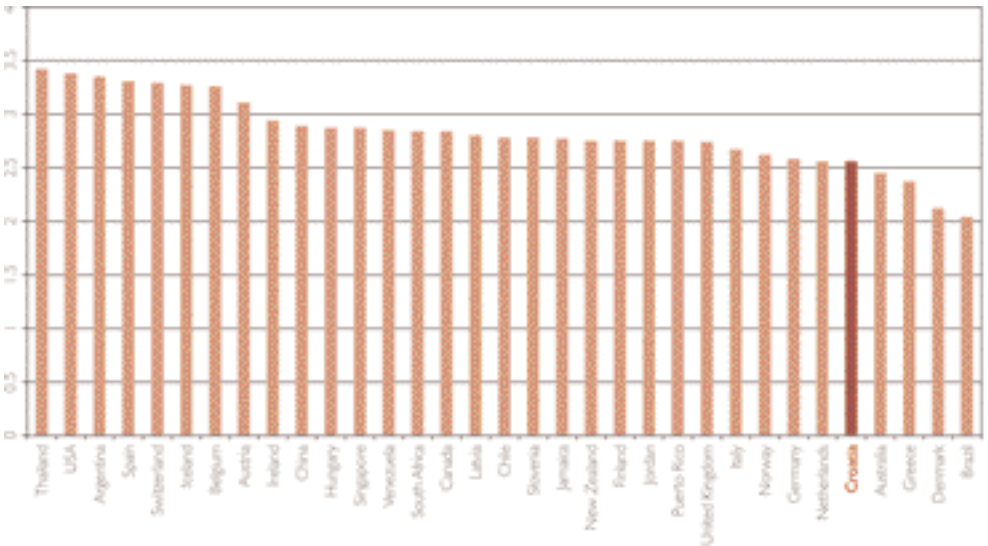


Figure 19
Education after secondary school, Croatia and GEM countries, 2005

Transfer of research and development

Quality of the transfer of research and development from universities and research centres into economic practice is one of the worst graded components of entrepreneurial environment in GEM countries (it is second last out of fifteen components). In Croatia, the quality of this component is better positioned for only one place (Table 20). Croatia's rank in the 24th place on the scale of GEM countries based on quality of the transfer of research and development only means that there are still many of those who are weaker in this area than us, which cannot be a reason for satisfaction. Besides, protection of intellectual property is very badly graded and being in the 29th place among GEM countries is no contribution to quality of entrepreneurial environment (Figure 20).

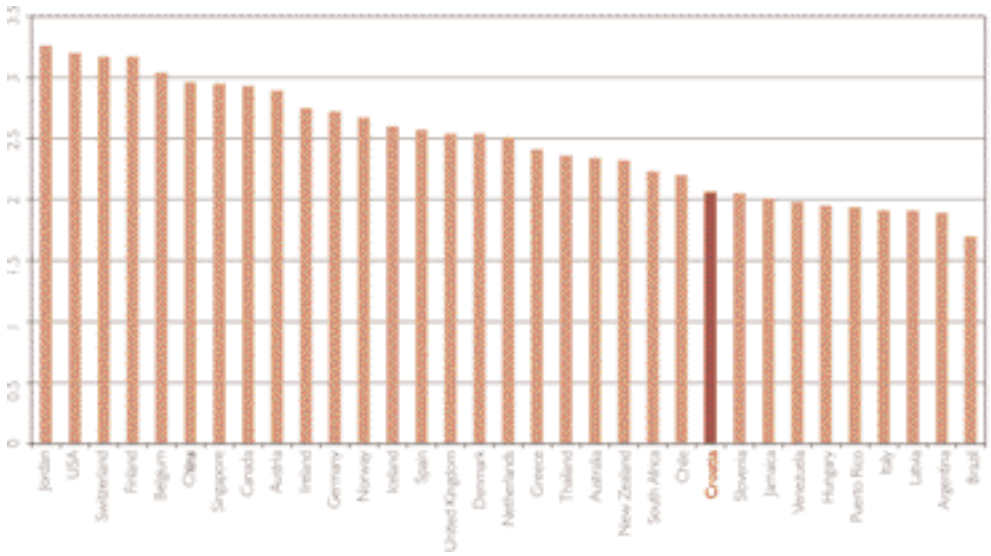


Figure 20
Transfer of research and development, Croatia and GEM countries, 2005

Business and professional infrastructure

Croatia is ranked 31st according to the criterion of quality of business and professional infrastructure, which can sound disappointing because of our great efforts to build and strengthen this component of entrepreneurial environment within the framework of government programmes (Figure 21). In the GEM research this component is described through existence of network of business and professional infrastructure, but also through the fact whether enterprises can afford such services and whether these are high quality services. Government programmes focused on the development of business and professional infrastructure were oriented on establishing business centres and on the development of individual services (training, counselling/consulting). A rise in the quality of business and professional infrastructure since 2002 (from 2.43 in 2002 to 2.67 in 2005, Table 20) is a result of our efforts to build institutions and clearly shows how the effects of such programmes cannot be measured within the period of one or two years. The issue of building up quality of business and professional infrastructure, which means services of education, training and counselling/consulting, has remained outside the focus of government policies and programmes, and of educational institutions, as well.

A good example - educational programme for owners of future Croatian gazelles

Growth and development of your enterprise www.razvoj.biz is a programme of business development designed exclusively for entrepreneurs whose business ventures have a growth potential and who whish to develop them.

The programme is a good example of careful adjustment of successful worldwide experiences to the needs of growing entrepreneurs in Croatia. A three-year-long preparation of the programme with the help of partner institutions Durham Business School, United Kingdom and Curtin Business School, Australia, who have been successfully implementing such a programme for over 20 years, was financially supported by the European Training Foundation (ETF), the then Ministry for Craft, Small and Medium-sized Enterprises and Open Society Institute from New York, USA. Experts from Durham Business School and Curtin Business School educated the group of trainers who lead the programme. The programme consists of 22 workshops, which take place 14 times in 7 months (April to November). Workshops cover basic business areas for each enterprise (strategy, operations, marketing and finance), but also skills that are necessary for business success (communication, negotiation, sales, as well as the skills to find, motivate and keep good quality employees). During the programme, entrepreneurs also receive 10 hours of consulting, which enriches the programme with actual problems that participants have to deal with in real life and with solving real issues and problems for each individual enterprise.

The programme was started in 2005 in the Center for entrepreneurship in Osijek (www.poduzetnistvo.org) as an entrepreneurial attempt of the Center itself towards the development of high quality educational programmes focused on growing enterprises. 40 entrepreneurs have started the programme since 2005.

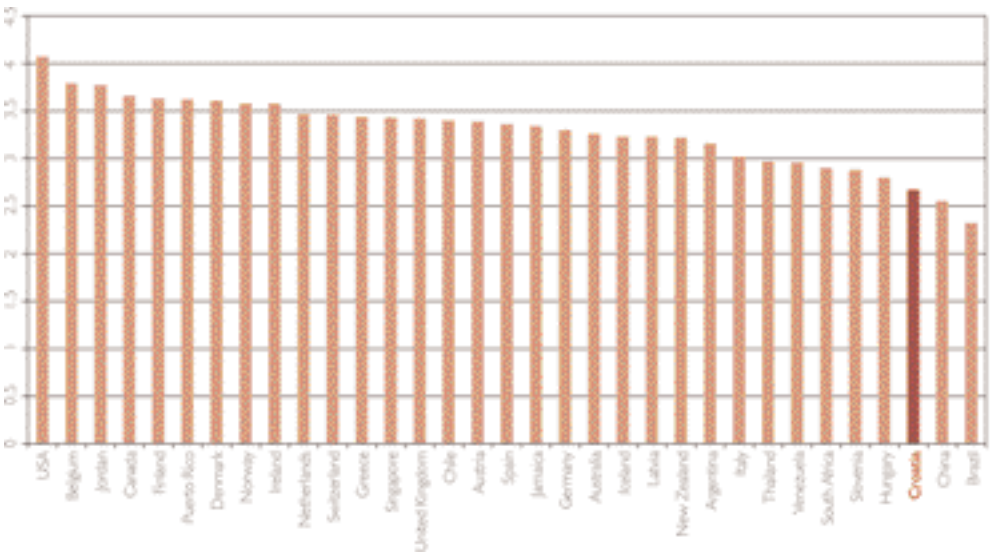


Figure 21
Business and professional infrastructure, Croatia and GEM countries, 2005

[8] Since 2004, when two independent studies (USAID and GTZ) diagnosed the situation on the market for business services for small and medium-sized enterprises in Croatia, Croatian Agency for Small Enterprises (HAMAG) started with different activities for education and development of a network of consultants and their certification. Since 2000, at Graduate Program in ENTREPRENEURSHIP at the Josip Juraj Strossmayer University of Osijek, Faculty of Economics in Osijek, there is one and only course in consulting for small and medium-sized enterprises.

Market mechanisms

Market mechanisms are viewed through the dynamics of change and the existence of entry barriers in the internal market. The difference between ranks of these two dimensions of one component is highly indicative: Croatia is in the high 7th place according to the dynamics/speed of change in the domestic market (Figure 22), whereas it is in the second last, 32nd place according to the existence of entry barriers (Figure 23). While dynamics of change in the domestic market is always stimulating for new entrepreneurial ventures, strong entry barriers annul that. Therefore, stalling with eliminating complicated and expensive procedures of enterprise registration and ignoring corruption and inefficiency of judicial system directly blocks possible positive effects that arise from the dynamics of change on the internal market. Being unprepared to take advantage of such business opportunities (because of insufficient entrepreneurial knowledge and skills) puts people, to some extent, into a passive position towards entry barriers, because they only get an additional confirmation that business venture is a "mission impossible".

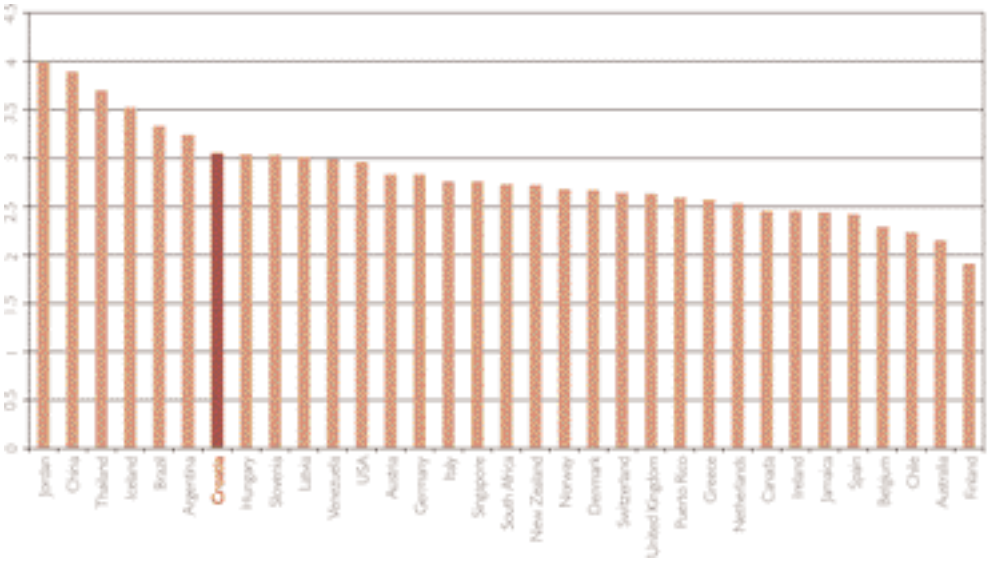


Figure 22
Openness and competitiveness in the internal market - dynamics of change, Croatia and GEM countries, 2005

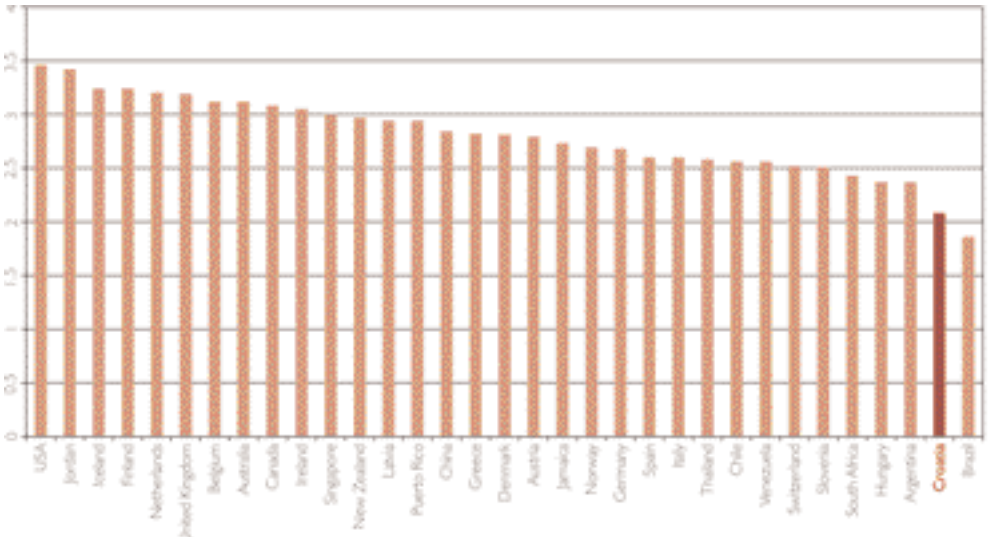


Figure 23
Openness and competitiveness in the internal market - entry barriers, Croatia and GEM countries, 2005

Cultural and social norms

Cultural and social norms that support the development of entrepreneurial environment are described in the GEM research through self-confidence and belief in one's own abilities, initiative, taking risks, creativity and individual responsibility. Croatia is ranked last in the quality of this component of entrepreneurial environment (Figure 24), which is extremely worrying, because the change in values lasts the longest and demands cooperation of different policies, programmes and institutions (from education to media). Comparison by years shows the extraordinary stability of the (lack of) quality of this component, not only in Croatia, but also in all GEM countries, so the change in quality of this component cannot be realized through occasional promotional campaigns:

- Croatia: from 2.2 in 2002, over 2.15 (2003), 2.17 (2004), to 2.13 in 2005
- GEM countries: from 2.79 in 2002, over 2.76 (2003), 2.81 (2004), to 2.83 in 2005

One test of cultural and social norms is the attitude toward involvement of women in entrepreneurial activity: 29th place, just a few places above Hungary (Figure 25), only confirms the need for well-thought and connected activities in the change of value norms and in creating conditions so that some of the value norms can actually be realized (i.e., a good service network that can help people organize their family life better).

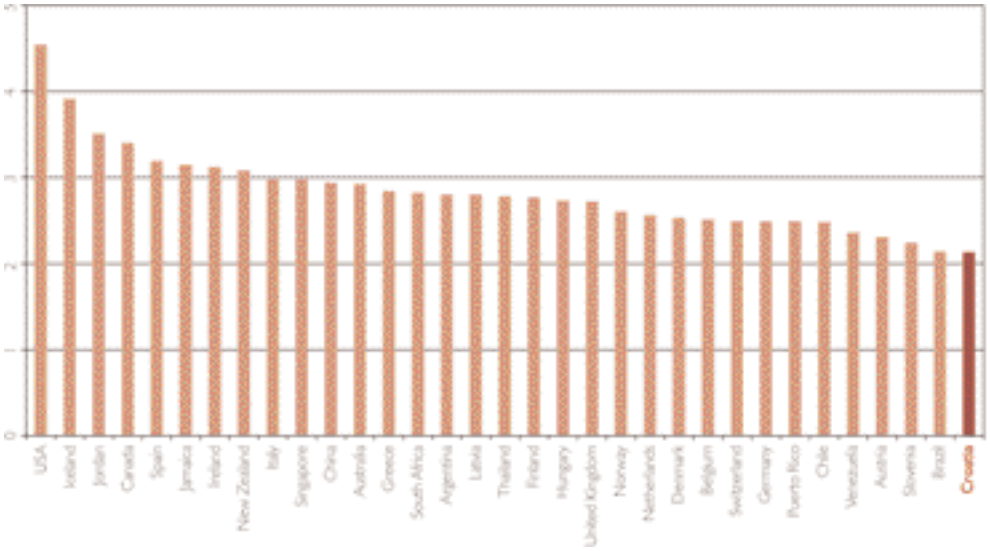


Figure 24
Cultural and social norms, Croatia and GEM countries, 2005

Figure 25
Attitude towards women in entrepreneurship, Croatia and GEM countries, 2005

Entrepreneurial efficiency

Entrepreneurial efficiency arises from the ability to recognize business opportunities, from entrepreneurial capacity, and from attitude towards growing entrepreneurial ventures, and represents a sort of a synergy effect of all the components of entrepreneurial environment.

The "recognizing business opportunities" component is described in the GEM research through presence of business opportunities, availability of information about these opportunities and the capacity to turn the recognized opportunity into a business venture.

Two dimensions describe entrepreneurial capacity:

- Potential dimension includes simple procedures of starting a business venture, existence of knowledge and skills about how to start a venture and the speed with which one reacts to opportunities.
- Motivation dimension includes value norms towards entrepreneurship as a desirable career, high social status of an entrepreneur and the perception that entrepreneurs are competent people.

The "attitude towards growing enterprises" component is described through the awareness of creators of national policies about the importance of growing business ventures, through the existence of numerous support initiatives designed to fit the needs of fast growing enterprises and through availability of adequate competencies.

Dynamics of change in the market (which puts Croatia in the 7th place of the scale of GEM countries, Figure 22) is a source of business opportunity that cannot be ignored - but, since "recognizing business opportunities" also includes turning these opportunities into a business venture, quality of this component moved Croatia far below, to the 24th place (Figure 26). This rank speaks of the fact that the capacity of business opportunities, generated on the basis of dynamics of the market, has "melted" due to entry barriers and low level of entrepreneurial capacity. In both dimensions of entrepreneurial capacity (potential, motivation), Croatia is at the bottom of the GEM countries scale: in the 31st place for potential dimension (Figure 27) and in the 29th place for motivation dimension (Figure 28). This picture is only completed by another such result: the 31st place of Croatia on the GEM countries scale according to the "attitude towards growing enterprises" criterion (Figure 29).

Changes in values of this entrepreneurial efficiency are connected to education, media, development of business and professional infrastructure, simplification of regulations framework … i.e., they are connected to changes in quality of ALL the components of the entrepreneurial environment.

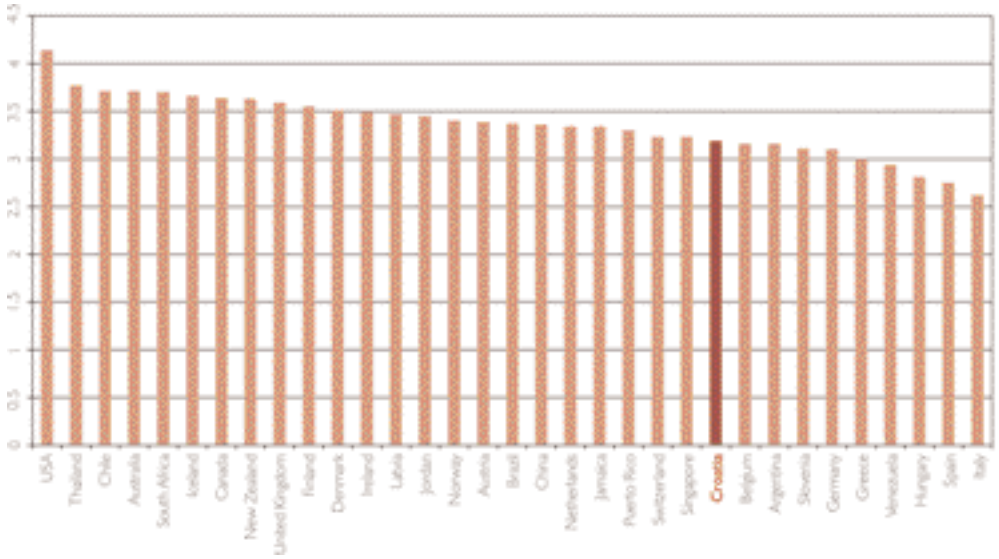


Figure 26
Recognizing business opportunities, Croatia and GEM countries, 2005

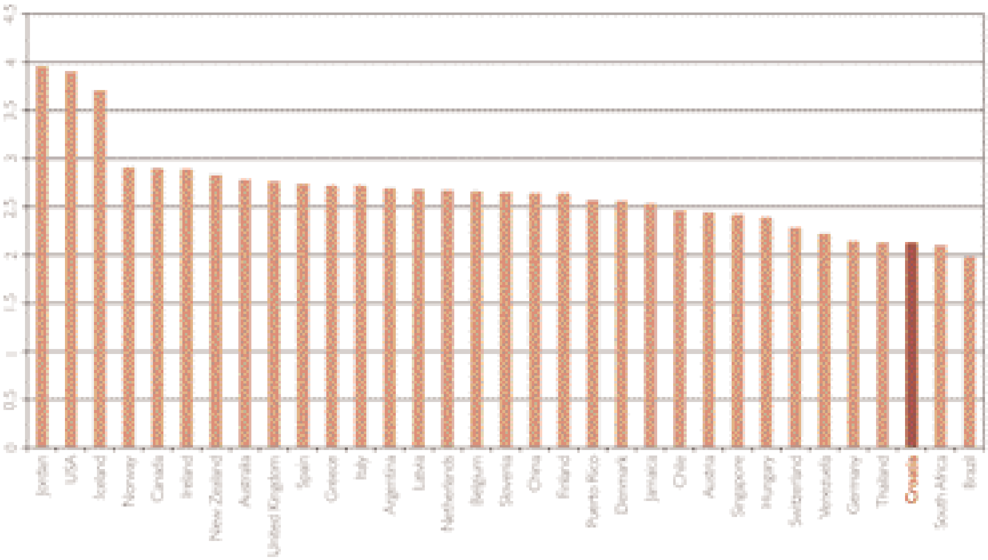


Figure 27
Entrepreneurial capacity - potential, Croatia and GEM countries, 2005

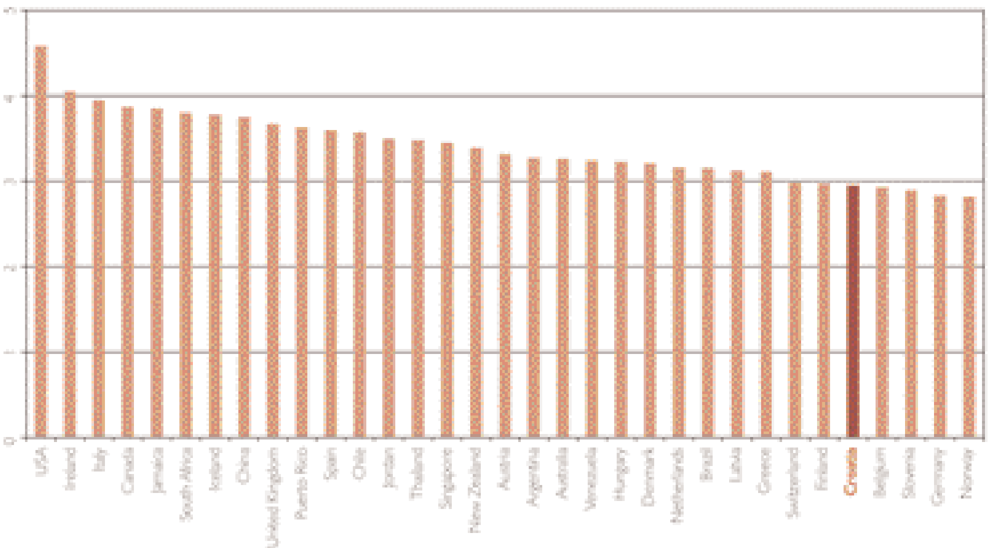


Figure 28
Entrepreneurial capacity - motivation, Croatia and GEM countries, 2005

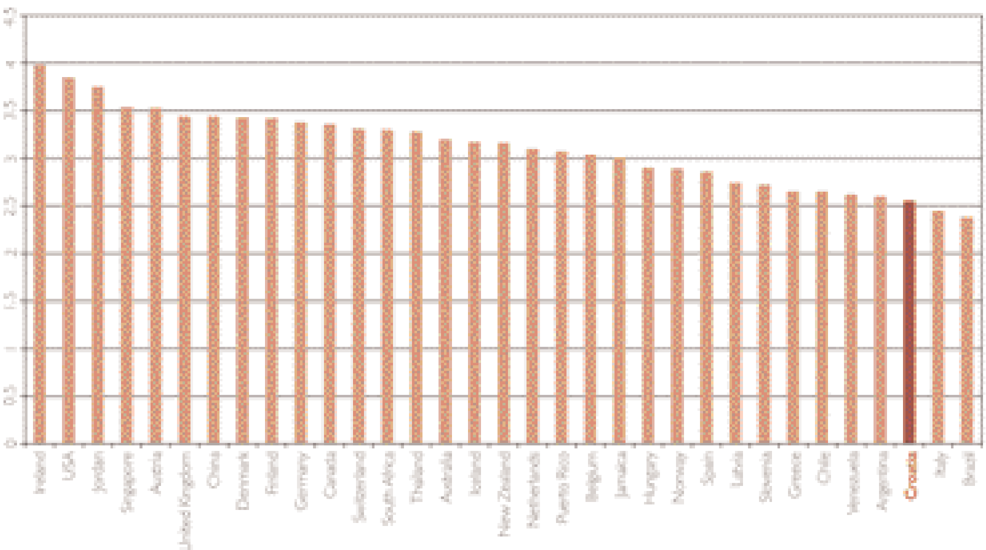


Figure 29
Attitude towards growing enterprises, Croatia and GEM countries, 2005

4 Conclusions and recommendations for increasing the entrepreneurial capacity of Croatia

It is better, but it can be A LOT better
How to increase the quality of the institutional structure of entrepreneurial conditions?
How to strengthen the human dimension of entrepreneurial capacity?

Understanding the anatomy of the entrepreneurial capacity of a country and tracking its changes in time (2002-2005) and space (through international comparisons of individual key dimensions) is a necessary prerequisite for effective advocating of change and creating efficient and well-founded policy interventions.

It is better, but it can be A LOT better

Participation of Croatia in GEM research in the period 2002-2005 enabled tracking of changes in country's entrepreneurial capacity and entrepreneurial efficiency. Starting from the conceptual framework of GEM research, several key indicators were used to evaluate changes that occurred in that period:

- Total entrepreneurial activity of those who have been active for less than 42 months (TEA index)
- Motivation for entrepreneurial activity (TEA Opportunity and TEA Necessity)
- Transitional rate of "establishment" of business ventures
- Share of growing enterprises

Entrepreneurial activity, measured by the TEA index has increased:
From TEA 3.62% in 2002, Croatia achieved TEA 6.11% in 2005, which means that in 2005, one out of every 16 work-capable adults was entrepreneurially active, whereas in 2002 one out of 30 adults was entrepreneurially active. Our TEA index is even better than that of the countries of the European Union which belong to the same cluster in the GEM research, based on the GDP per capita (up to 20,000 US dollars, according to purchasing power parity): Slovenia (TEA 4.40); Latvia (TEA 6.60); Hungary (TEA 1.90). However, our TEA index is DIFFERENT from theirs. The jump in entrepreneurial activity is realized through the increase in TEA Necessity, whereas research has shown that motivation for entrepreneurial activity is an important factor for entrepreneurial success. We can and must do better here, as well: we have too many unemployed to be satisfied with the achieved.

Motivation for entrepreneurial activity measured by TEA Opportunity and TEA Necessity ratio shows a worrying trend:
TEA Necessity of 3.09 has surpassed TEA Opportunity of 2.92, which makes Croatia the only country with motivation index below 1 (0.9, whereas the GEM countries average is 5.9). It is a good thing that many of the unemployed have decided to become entrepreneurially active, but the fact that TEA Opportunity has not increased as well is a cause for dissatisfaction. We can do better here as well.

Transitional rate of "establishment" of business ventures:
The decision to start entrepreneurial activity is important, but it is also important to know how to lead a business successfully and manage it toward its "establishment". In Croatia, the level of "establishment" index is about 1/3 lower, which shows the ratio between start-up entrepreneurs (active for less than 42 months) and "established" entrepreneurs (active for more than 42 months). Here, too, we can do better.

The share of growing enterprises is growing, which is good, but this is never the end of the story. Even the most developed countries are focused on growing enterprises and use different programmes to stimulate innovativeness in technology application, product development, and organization. Furthermore, in the category of start-up entrepreneurs, i.e., those who have been entrepreneurially active for less than 42 months, Croatia lags behind the GEM countries average in the share of growing enterprises. We can do better here, too.

How to increase the quality of the institutional structure of entrepreneurial conditions?

Can government policies become consistent?
From divided programmes to priorities
Transfer of research and development
From being doomed to bank loans to having a diversity of financial instruments
Business and professional infrastructure

Entrepreneurial environment is not a compact whole and cannot be changed by one policy, one programme or one intervention. Changes in individual categories of entrepreneurial environment are interconnected: it is hard to change policies, if there are no value norms that support changes; it is hard to apply policies, if there are no institutions and regulatory framework.

Therefore, efficient creation of a stimulating entrepreneurial environment demands SIMULTANEITY in application of certain policies, NETWORKING of policies, programmes and instruments, COORDINATION between institutions (ministries, agencies, entrepreneurial associations, universities, trade unions…), whereby interventions must have a real assessment of the time frame in which effects can be expected, but they need to occur faster.

Can government policies become consistent?

Successfulness of every government is based on how well it can make certain policies consistent within a short period of time (government's mandate period). In Croatia, process of joining the European Union forces an additional obligation upon everyone participating in that process, to increase country's entrepreneurial efficiency (entrepreneurial capacity, share of growing enterprises) as fast as possible, by efficient coordination of government policies. Only in that way can the increased entrepreneurial activity be transformed into creating new values, i.e., into Croatia's prosperity. It is not insignificant if Croatia has high entrepreneurial activity and low GDP per capita, because it can mean that entrepreneurial ventures do not have growth potential and lack competitiveness.

Numerous government policies focused on entrepreneurial activity and the small and medium sized enterprises sector were often insufficiently coordinated and interconnected. For example, encouraging innovativeness and growth is a responsibility of the Ministry of Economy, Labour and Entrepreneurship as well as of the Ministry of Science, Education and Sport, but it can also be a responsibility of the ministry that is in charge of agriculture or tourism - if we talk about interests of specific sectors.

Recommendation 1:
We recommend to the Government that they should use the instrument of Task Force with highest authorities, on ministry level, as an open coordination for defining common principles on which common policies should be developed, especially in the area of educational policy, tax policy, policy for knowledge and research transfer, social policy and employment policy.

Recommendation 2:
We recommend that further activities on simplifying the regulations framework be continued urgently, and not only for start-up entrepreneurs, but also for all who are already entrepreneurially active. In this sphere, our publicly declared goals should be the benchmark values used by the European Union.

From divided programmes to priorities

In the analysis of entrepreneurial capacity of Croatia we used entrepreneurial environment structure containing 15 components. Out of 15 components, only 3 were graded higher than 3, which means that these components can stimulate entrepreneurial activity (dynamics of national market, access to physical infrastructure, recognizing business opportunities). All other components were graded lower, which in the GEM research signalises insufficient capacity of such component (either through availability or quality). Several examples of blocking positive aspects, i.e., dynamics of national market, due to disharmonised components of entrepreneurial environment is a warning enough that creating government programmes must be based on the criteria of determining priorities. Priority criteria can be defined by using the insights from the GEM research: programmes that eliminate limitations to those components of entrepreneurial environment that "stick out" by their possibilities have the highest priority, but their exploitability is low or almost impossible due to dependence on other components, which have significantly lower capacity.

Recommendation 3:
We recommend using the GEM structure of entrepreneurial conditions and quality assessment for each individual component as basis for defining government programmes for support of entrepreneurial capacity development, based on priorities. This will help avoid dividing the programmes, so that everyone gets some and nobody gets everything, but will help increase entrepreneurial capacity faster thanks to focusing on priorities.

Recommendation 4:
We recommend urgent forming of a Task Force that will organize statistical monitoring of the small and medium enterprises sector, according to Eurostat. By connecting all the places where indicators on small and medium-sized enterprises are collected, from registration over financial reports to statistical reports, reports for the pension-fund and tax organs, all redundancies should be eliminated. Transparency of information about business sector according to the size of the enterprise will help those who are starting entrepreneurial activity to make better decisions and those who are already active to manage their enterprise better.

Recommendation 5:
We recommend development of a transparent system of government programme evaluation that will enable faster reactions to possible inefficiencies and irrationalities.

Transfer of research and development

Growing companies are the strongest generator, if not the only one, of new employment. GEM research has shown that the number of small enterprises that expect more intensive employment is growing. However, in order to make that happen, enterprises must base their growth potential on newness of technology and products. For such combination of growth potential an efficient transfer of research and development, i.e., intellectual property from universities and research institutions into the world of economy is also needed. This has the highest priority for Croatia, because Croatia's strategic goals to minimize unemployment and increase competitiveness cannot be realized without that.

Recommendation 6:
We recommend starting a government fund for venture capital that would finance transfer of research and development into small enterprises with growth potential as a mutual programme of the Ministry of Science, Education and Sport and the Ministry of Economy, Labour and Entrepreneurship.

Recommendation 7:
We recommend incorporating the criteria of public-private partnerships into the evaluation of social responsibility of universities, in solving the developmental problems of the immediate area where universities are situated, i.e., Croatia as a whole.

From being doomed to bank loans to having a diversity of financial instruments

Although bank loans and numerous government loan programmes are available, GEM research has put Croatia in the 30th place of the scale regarding the quality of financial support. This rank is the result of lack of other financial instruments, i.e., the undeveloped financial market, because we do not have enough venture capital, no regulatory framework for financial angels, micro-crediting is out of focus of government policies and programmes, and the knowledge of small enterprises on how to use IPO (Initial Public Offering) is almost non-existent. GEM research in Croatia continuously points to the fact that ensuring guarantee is a bigger problem for entrepreneurs than the price of capital.

Recommendation 8:
We recommend regulatory definition of guarantee funds and redirection of government loan programmes for that purpose.

Recommendation 9:
We recommend introducing regulatory definition of informal investors' activity (financial angels), as well as tax incentives for them.

Business and professional infrastructure

GEM defines the quality of business and professional infrastructure through existence of network of such institutions, availability of their services to entrepreneurs, i.e., whether entrepreneurs can afford such services and what quality these services have. Croatia's low rank in the quality of this component of entrepreneurial environment warns us that after significant investments into the development of network of supporting institutions, we need to focus on the quality of service (training, consulting) and on the fact whether or not entrepreneurs can afford such services.

Recommendation 10:
We recommend selective financial support of development of services that are not available or whose quality should be increased up to the level of standardization.

Recommendation 11:
We recommend using financial support to help better profiling of supporting institutions specialized for certain services (increase of competition), but also to help their virtual connecting with the aim to improve the supply of services offered to entrepreneurs (increase of cooperation).

How to strengthen the human dimension of entrepreneurial capacity?

Knowledge and skills
Motivation
Women

Apart from the institutional structure of entrepreneurial conditions (government policies, government programmes, financial market, business and professional infrastructure), the human dimension of entrepreneurial capacity is the real starting point. Conducted analysis has shown that education is one of the lowest graded entrepreneurial conditions, although some certain positive changes have been recorded in the period 2002-2005.

Knowledge and skills

Educational system always has a key role in the development of the system of values, but also in developing knowledge and skills that make people competent for managing their own life and business. Strengthening openness and mobility of people makes the educational system more socially responsible than ever: educational system will either become a generator of creative, innovative and entrepreneurial people, or young people are going to look elsewhere for such services. Changes that have started in all three levels of education (primary, secondary, tertiary) make a good framework and basis for inclusion of entrepreneurial knowledge and skills that are an important part of the process of building up personal competency, i.e., without which other knowledge and skills cannot be fully exploited.

Recommendation 12:
We recommend introducing entrepreneurial topics into educational programmes on all educational levels, with previous teacher training that will enable teachers to work with such topics.

Recommendation 13:
On the tertiary educational level, all students should be given opportunity to start entrepreneurial career through being provided with adequate knowledge and skills, especially the students of technical and natural sciences.

Motivation

Motivation for entrepreneurial activity is based on personal empowerment and challenges that come from the environment, which can be smothered by obstacles and lack of quality of entrepreneurial conditions. Educational system is responsible for the development of an empowered individual, but additional motivation can be enticed by certain incentives from the outside.

Recommendation 14:
We recommend introducing a voucher system for stimulating entrepreneurs to use services, especially those that are focused on stimulating them to start entrepreneurial activity, those that support enterprise growth (innovation in technology and in products - using industrial design, export), that enable them to enter the stock market, etc.

Women

Equality of women's and men's potential to recognize business opportunities "melts down" due to traditional values that are dominant in Croatian society, but also because of lack of adequate services that would enable women to organize their family life more efficiently in order to enable them to start an entrepreneurial career. The problem of women's inequality is a difficult one and demands great and long-term investments into the change of social, cultural and political norms, but it also demands investments into services for taking care of children.

Recommendation 15:
We recommend continuous public discussion on the problem of insufficient involvement of women in entrepreneurship with a constant open invitation for participation of non-government sector, government and private sector. These discussions will increase public awareness on this subject and give certain suggestions for solving the problem.

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Appendix I

Methodology

GEM research is based on data collected from three sources: data collected by surveying a representative sample of adults, data collected by surveying and interviewing experts in entrepreneurship and data collected from standardized secondary international data bases.

Adult population survey

Surveying adults retrieved the most significant data collection in the GEM project. Every year we use especially developed questionnaire on a randomly selected sample of adults in order to collect data for measuring entrepreneurial activity on the national level. In 2002, 2003 and 2004 in Croatia we collected data by "face to face" surveying, whereas in 2005 we collected data through a telephone survey.

Every sample is weighted according to gender and age in order to get data that represent working population in the country. Sample prepared in such a way for every year is sent to the GEM Coordination Team (London Business School and Babson College) who is in charge of checking data quality and harmonizing data. In the process of harmonizing data, weights in the sample are adjusted according to the gender and age structure in accordance with US Census International Population Data Base.

		2002	2003	2004	2005
Total respondent sample		2001	2000	2016	2000
Gender	Women	56.8%	58.4%	52.3%	52.5%
	Men	43.2%	41.7%	47.7%	47.6%
Age	<18	2.6%	2.5%	5.9%	4.4%
	18-24	13%	11.5%	11.8%	12.8%
	25-34	18.6%	14.6%	15.4%	14.4%
	35-44	18.1%	18.8%	17.9%	18.6%
	45-54	16.4%	19.1%	17.3%	16.8%
	55-64	13.9%	15.1%	14.4%	15.3%
	>64	17.2%	18.6%	17.5%	17.9%

Appendix I
Sample structure according to research years, based on gender and age

National expert survey

As second relevant data source in researching the entrepreneurial activity we used viewpoints and opinions of experts collected by a standardized questionnaire which consists of several groups of statements that refer to the framework of entrepreneurial conditions. Through analysis of data collected in such a way, we quantify the viewpoints of experts and thus measure the perception of the chosen entrepreneurial environment components in the country. The sample of experts is selected according to their reputation and experience and as such does not constitute a representative sample of experts in entrepreneurship. Harmonized database made by the GEM Coordination Team is used for producing the national reports.

Standardized cross-national data

In order to establish the link between national levels of entrepreneurial activity and macroeconomic conditions, GEM project collects different standardized data obtained from international data sources, such as the World Bank, the International Monetary Fund, OECD and the United Nations. The GEM Coordination Team is in charge of collecting this data, and all the data for all countries participating in the GEM project is available to the national teams.

Appendix 2

Experts for the assessment of the quality of the entrepreneurial environment, who participate in GEM research 2002-2005

Name	Position	Institution
Babić Ante	State Secretary	Government of the Republic of Croatia, Office for Strategy
Bakić Nenad	Director and Founder	Moj Posao - Tau on line L.L.C.
Barišić Zoran	Chairman of the Board	Croatian Agency for Small Business - HAMAG
Bebek Sandra	Consultant	Croatiabiz magazine
Begović Leo	Assistant Minister	Ministry of Economy, Labour and Entrepreneurship, Crafts Directorate
Belak Zoran	Director	Center for Entrepreneurship of Šibenik-Knin County
Bilandžija Nikola	Branch Director	Raiffeisen Bank
Bohaček Zoran	Chairman	Croatian Banking Association
Bračić Ivan	Assistant Minister	Ministry of Economy, Labour and Entrepreneurship
Cerovac Mladen	Deputy Director	Croatian Competition Agency
Crnković Pozaić Sanja	Director	Croatian Employment Service
Crnjak Mario	Director	Croatian Motorways Ltd.
Čikić Lidija	Consultant	Technology Park Zagreb
Čolaković Esad	Head Manager	Croatian Managers' and Entrepreneurs' Association - CROMA
Ćorić Gordana	Lecturer of Entrepreneurship, Trainer and Counselor	Festina lente
Čudković Nevenka	Researcher	Institute for International Relations
Čuturilo Duško	Founder, Owner and Director	Creativa L.L.C.
Davidović Drago	Entrepreneur	
Dokleja Mladen	Entrepreneur	Eloop L.L.C.
Dronjić Mira	Head of the SME Department	Croatian Bank for Reconstruction and Development
Džapo Miro	Manager	Center for Technology Transfer
ivić Ilija	Entrepreneur	WMD L.L.C.
Pegar Tomislav	Director	Savings and Loan Cooperative NOA, Osijek
Franičević Vojmir	University Professor	Faculty of Economics Zagreb
Franić Zdenko	Assistant Minister	Ministry of Science, Education and Sports
Fuzek Gordana	Director	Center for Promotion of Entrepreneurship and Trades Split - CEPOS
Gavranović Ante	Chief Editor and Director	Privredni vjesnik magazine
Gosić Srećko	University Professor	Faculty of Economics Split
Grediček Tatjana	Director	Center for Entrepreneurship of Krapina-Zagorje County
Huzmadar Zijad	University Professor	Faculty of Electrical Engineering and Computing Zagreb
Hanžek Lidija	Member of the Board	Croatian Credit Registry - HROK
Ivančević Željko	Director General	Croatian Employers' Association
Ivanković Željko	Chief Editor	Banka magazine
Ivić Pave	Director	Center for Entrepreneurship of Zadar County
Jakelić Bernard	Regional Office Director	Croatian Employers' Association
Jurišić Milivoj	Director of the Small Business Department	Croatian Chamber of Economy
Karaić Dragica	Head of Department	Ministry of Economy, Labour and Entrepreneurship

Name	Position	Institution
Kermek Asja	Entrepreneur	Panek-Mix L.L.C.
Kesić-Šapić Tajana	State Secretary for Entrepreneurship	Ministry of Economy, Labour and Entrepreneurship
Konjhodžić Indira	Country Manager	World Bank Croatia
Kordi Milena	Senior Associate	Osijek City Council
Kotlar Denis	Director	Envox L.L.C.
Krajcar Slavko	University Professor	Faculty of Electrical Engineering and Computing Zagreb
Kristelj Vesna	Director	Center of Technology Transfer
Kukec Ljiljana	Entrepreneur	Promaturo L.L.C.
Lauc Boris	Director	Center for Entrepreneurship Osijek
Lenardić Mira	General Secretary	National Competitiveness Council
Leppee Miljenko	Assistant Minister	Ministry for Trades, Small and Medium Enterprises
Levušić Mario	Director	Entrepreneurial Zone Kneginec
Lorencin Darko	Director	Istria Development Agency
Lovrinčević Željko	Scientific Assistant	The Institute of Economics, Zagreb
Majhen Robert	Entrepreneur	Green vector
Maljković Nenad	Entrepreneur	MEDIUS
Marković Darko	Director	Airport Osijek
Marković Ivan	University Professor	Faculty of Economics Rijeka
Mataga Željko	Chairman of the Assembly	Savings and Loan Cooperatives' Union
Mavrović Željko	Owner and Director	Inokez
Mažuran Željko	Director	Kontun
McMaster Vilnja	Entrepreneur	Zagrebački pulleki
Medić Igor	Director	BIOS - Business Incubator Osijek
Milković Alfa	Director	Regional Agency for Small Business Promotion PRIMA, Split
Mladinić Srđan	Owner and Director	SMS L.L.C.
Mikolon-Tomić Delta	University Professor	Faculty of Economics Zagreb
Novak Marjan	Director	REDEA, Development Agency
Novak Tončica	Project Leader	Croatian Association of Entrepreneurship Supporting Institutions
Nuštinović Mustafa	Senior Scientific Assistant	The Institute of Economics, Zagreb
Njavro Đuro	University Professor	Zagreb School of Economics and Management
Oberman Tomislav	Owner and Director	Hidroplonzalt L.L.C.
Orešković Stipe	Director	Europapress Holding
Orsag Silvije	University Professor	Faculty of Economics Zagreb
Ott Katarina	Director	Institute of Public Finance
Pekanov Katarina	Business Secretary	HGK Osijek
Perić Sanja	Entrepreneur	Dijera L.L.C.
Popijač Đuro	Director	Croatian Employers' Association
Pripić Hrvoje	Director	Business Innovation Center BICRO
Rašić Domagoj	Researcher and Consultant	The Institute of Economics, Zagreb
Radovanović Zorin	Manager	Escape L.L.C.
Rako Dijana	Director	Center for Promotion of Entrepreneurship and Trades Split - CEPOS
Rakušić Spomenka	Manager	Ministry of Economy, Labour and Entrepreneurship
Rijavec Majda	University Professor	Teachers Academy Zagreb

Name	Position	Institution
Rikman Ilija	Chairman	Society for Consumer Protection of Croatia "Potrošač"
Samardžić Damir	Owner and Director	Grafoplast
Samardžija Višnja	Head of Department for European Integration	Institute for International Relations
Singer Slavica	University Professor	Faculty of Economics Osijek
Sokolović Dragan	Director	Pula Center for Entrepreneurship
Spevec Olgica	President of the Competition Council	Croatian Competition Agency
Srića Velimir	University Professor	Faculty of Economics Zagreb
Stanković Boja	Senior Expert Associate	Croatian Chamber of Economy, Osijek County Chamber
Šaban Josip	Chief Editor	Center for Management and Counseling, "Poslovni savjetnik" magazine
Šajatović Miodrag	Chief Editor	Europapress Holding
Šestan Alojzije	Co-owner and Director	Šestan-Buch L.L.C.
Šeletj Zlatko	Director	Private Classic Gymnasium
Šoljan Vice	Owner and Director	Ekološki inženjering L.L.C.
Štefanić Ivan	University Professor	Faculty of Agriculture Osijek
Švarc Jadranka	Head of Department for Technologies	Ministry of Science and Technology
Tadin Hrvoje	Director and Dean	HITA - Private Business School
Trezner Željko	Entrepreneur	Ferial L.L.C.
Tubin Jovanka	Counselor for SMEs	Center for Entreprenurship Osijek
Turčinović Petar	Founder and Director of Scientific Institution	LASO
Ukić Cerin Daniela	Consultant, Co-owner and Director	Cerini L.L.C.
Vavra Ivan	Assistant Minister	Ministry of Education and Sports
Vedriš Mladen	Director	SONDER
Vehovec Maja	University Professor	Faculty of Economics Rijeka
Vrdoljak Tadija	Member of the Board	Slavonska Bank Osijek
Vrhovski Mijo	Dean	VERN Business College
Vučina Damir	Director	Technology Center Split
Zuber Marija	Consultant	Association of Accounting and Financial Workers
Žanić Vladimir	Head of Department for Economic System and International Relations	Croatian Chamber of Trades and Crafts
Želinski Matunec Sanja	Chairwoman of the Board	Croatian Agency for Small Business-HAMAG
Žepec Alan	Chairman	Croatian Employers' Association, Association of Small and Medium-sized Entrepreneurs
Ževrnja Zlatko	Project Leader	Entrepreneurial Zone Podi

Appendix 3

List of GEM teams and sponsors 2005

List of GEM Teams and Sponsors 2005		
TITLE	**LOCATION**	**MEMBERS**
GEM Interim Executive Director	London Business School	Mick Hancock
GEM Research Director	Babson College	Maria Minniti
GEM Operations Director	London Business School	Stephen Hunt
GEM Coordination Team	Babson College	William D. Bygrave Stephen Spinelli Marcia Cole
	London Business School	Michael Hay Tatiana Schofield Karla Hoffman Ingvild Ritter

TEAM	INSTITUTION	MEMBERS	FINANCIAL SPONSOR	APS VENDOR
Argentina	Center for Entrepreneurship, IAE Management and Business School, Universidad Austral	Silvia Torres Carbonell Hector Rocha Florencia Paolini Natalia Weisz	IAE Management and Business School Banco Rio Siemens Banco Galicia	MORI Argentina
Australia	Australian Graduate School of Entrepreneurship, Swinburne University of Technology	Kevin Hindle Allan O'Connor	Westpac Banking Corporation	Australian Centre for Emerging Technologies and Society
Austria	FH JOANNEUM - University of Applied Sciences Graz Institute of International Management, University Graz Institute of Technology and Innovation Management, University Graz	Martin Sammer Christina Schweiger Ursula Schneider Sonnn Salomo	Government of the Province of Styria Federal Ministry of Economics and Labour of the Republic of Austria The Austrian Federal Economic Chamber	OGM Vienna
Belgium	Ghent University and Vlerick Leuven Gent Management School Université de Liège	Bart Clarysse Hans Crijns Mirjam Knockaert Sophie Manigart Tom Vanacker Bernard Surlemont	Flemish Ministry of Economic Affairs (Steunpunt Ondernemerschap, Ondernemingen en Innovatie) Walloon Ministry of Economic Affairs	SNT Belgium
Brazil	Instituto Brasileiro de Qualidade e Produtividade - IBQP (Brazilian Institute of Quality and Productivity) Pontifícia Universidade Católica do Paraná - PUCPR	Marcos Mueller Schlemm Simara Maria de S.S. Greco Paulo Albert Bastos Junior Rodrigo Rossi Horochovski Joana Paula Machado Paula Ludwina Ninow Dias Guilinos	SEBRAE - Serviço Brasileiro de Apoio às Micro e Pequenas Empresas Sistema Federação das Indústrias do Estado do Paraná (FIEP, SESI, SENAI e IEL) Instituto Brasileiro de Qualidade e Produtividade - IBQP	Instituto Bonilha
Canada	HEC - Montréal The Sauder School of Business at UBC	Nathaly Riverin Louis-Jacques Filion Ilan Vertinsky Victor Cui Qianqian Du Aviad Pe'er	HEC Montréal Chaire d'entrepreneuriat Rogers - J.A. Bombardier Développement économique Canada pour les régions du Québec W. Maurice Young Entrepreneurship and Venture Capital Research Center The Sauder School of Business, The University of British Columbia	SOM
Chile	Centro de Entrepreneurship Grupo Santander, Universidad Adolfo Ibáñez Centro para el Emprendimiento y la Innovación, Universidad del Desarrollo	José Ernesto Amorós German Echecopar Marina Schorr Patricio Cortés Tomas Flores	Grupo Santander Chile Universidad del Desarrollo	Benchmark
China	National Entrepreneurship Centre, Tsinghua University	Yanlu Jiang Jian Gao Yuan Cheng Wei Zhang Zhenjun Yan	Beijing Municipal Science and Technology Commission	Synovate China
Croatia	J.J. Strossmayer University in Osijek	Slavisa Singer Sanja Pfeifer Dula Borozan Natasa Sarlija Sundica Oberman-Peterka	Ministry of Economy, Labour and Entrepreneurship SME Policy Centre - CEPOR, Zagreb Open Society Institute - Croatia, Zagreb J.J. Strossmayer University in Osijek - Faculty of Economics, Osijek	Puls, d.o.o., Zagreb

Denmark	Centre for Small Business Studies, University of Southern Denmark	Thomas Schøtt Torben Bager Lone Tofft Kim Klyver	Danish Entrepreneurship Academy Erhvervs- og Byggestyrelsen Industriens Realkreditfond	
Finland	Turku School of Economics and Business Administration University of Lausanne Helsinki University of Technology	Anne Kovalainen Jarna Heinonen Tommi Pukkinen Markku Maula Erkko Autio	Ministry of Trade and Industry Turku School of Economics and Business Administration	TNS Gallup Oy
France	EM Lyon	Oliver Torres Aurélien Eminet Danielle Rousson	Caisse des Dépots et Consignation Observatoire des PME	CSA
Germany	Institute of Economic and Cultural Geography, University of Hannover	Rolf Sternberg Udo Brixy Jan-Florian Schlapfner	KfW Bankengruppe Institut für Arbeitsmarkt - und Berufsforschung (IAB)	infas - Institute for Applied Social Sciences
Greece	Foundation for Economic and Industrial Research (IOBE)	Stavros Ioannides Takis Pelekis Aggelos Tsakanikas	Bank of Attica and Chipita SA	Datapower SA
Hungary	University of Pécs George Mason University (US) Queensland University of Technology/ Max Planck	László Szerb Judit Kárpáty Zoltán Acs Siri Terjesen	Ministry of Economy and Transport	Szocio - Gráf Plac-és Közvélemény-kutató Intézet
Iceland	Reykjavik University	Rögnvaldur Sæmundsson Elín Dóra Halldórsdóttir	Reykjavik University The Confederation of Icelandic Employers New Business Venture Fund Prime Minister's Office	Gallup - Iceland
Ireland	UCD Business School, University College, Dublin	Paula Fitzsimons Colm O'Gorman Frank Roche	Enterprise Ireland InterTradeIreland Forfás	Lansdowne Market Research Ltd.
Italy	Bocconi University	Guido Corbetta Alexandra Dawson	Bocconi University Ministry of Education, University and Research	Nomisma
Jamaica	University of Technology, Jamaica	Sandra Glasgow Garth Riddoch Adelani Ogunrinade Dr. Claudette Williams-Myers Vanetta Steele	University of Technology, Jamaica National Commercial Bank Jamaica Limited Jamaica Producers Group Limited Jamaica National Foundation GraceKennedy Limited Digicel Planning Institute of Jamaica National Export-Import Bank of Jamaica Limited City of Kingstone Cooperative Credit Union	Kasi Market Research & Data Mining Services
Japan	Research Institute for Economics & Business Administration, Kobe University Musashi University Keio University	Takehiko Isobe Noriyuki Takahashi Tsuneo Yahagi	Venture Enterprise Center	SSRI
Jordan	Young Entrepreneurs Association Ministry of Planning and International Cooperation	Usama Jaar Khaled al Kurdi Gabi Abram Amjad Attar	Ministry of Planning and International Cooperation	Al Jidara Pro Group Consulting
Latvia	Stockholm School of Economics in Riga	Vyacheslav Dombrovsky Mark Chandler Karlis Kreslins	TeliaSonera NEXB	Latvijas Fakti
Mexico	Tec de Monterrey, Business Development Centre Tec de Monterrey, EGAP, Strategic Studies Centre	Arturo Torres Marcia Campos Elvira Naranjo	EGAP (Escuela de Graduados en Administración Pública y Política Pública/School of Public Administration and Public Policy)	Alduncin y Asociados

TEAM	INSTITUTION	MEMBERS	FINANCIAL SUPPORT	APS VENDOR
Netherlands	EIM Business and Policy Research	Jolanda Hessels Sander Wennekers Kashifa Suddle Andre van Stel Niels Bosma Roy Thurik Lorraine Uhlaner Ingrid Verheul	Dutch Ministry of Economic Affairs	Surveydit
New Zealand	New Zealand Centre for Innovation and Entrepreneurship UNITEC New Zealand Te Wānanga o Raukawa	Howard Frederick Graeden Chittock Dean Pribble Alex Maritz Francesn Rethana Mihipeka Sisley Helmut Modlik	Te Puni Kokiri (Ministry of Maori Development) and Te Wananga o Raukawa	Digipoll
Norway	Bodø Graduate School of Business	Lars Kolvereid Bjørn Willy Åmo Gry Agnete Alsos	Innovation Norway Ministry of Trade and Industry Bodø Graduate School of Business Kunnskapsparken Bodø AS, Center for Innovation and Entrepreneurship	TNS
Puerto Rico	University of Puerto Rico	Marines Aponte Edgardo Rodriguez		
Singapore	National University of Singapore (NUS) Entrepreneurship Centre	Poh Kam Wong Lena Lee Yuen Ping Ho	Standards, Productivity and Innovation Board (SPRING) Singapore and National University of Singapore (NUS) Enterprise	Joshua Research Consultants
Slovenia	Institute for Entrepreneurship and Small Business Management, Faculty of Economics and Business, University of Maribor	Miroslav Rebernik Polona Tominc Ksenja Rupnik	Slovenian Research Agency Ministry of the Economy Smart Com Chamber of Craft Finance - Slovenian Business Daily	RM PLUS
South Africa	UCT Centre for Innovation and Entrepreneurship, The Graduate School of Business, University of Cape Town	Mike Herrington Eric Wood Marlese von Broembsen	Liberty Life South African Breweries The Shuttleworth Foundation	AC Nielsen ZA
Spain	Co-ordination Team Instituto de Empresa	Ignacio de la Vega Alicia Coduras Rachida Justo Cristina Cruz María Pía Noguería	Instituto de Empresa Fundación Cultural Banesto Fundación INCIDE Dirección General de Política de la Pequeña y Mediana Empresa	Opinómetre
	Andalucía's Team Universidad de Cádiz	José Ruiz Navarro Daniel Lorenzo J. Aurelio Medina Álvaro Rojas Salustiano Martínez Antonio R. Ramos	Junta de Andalucía Consejería de Innovación, Ciencia y Empresa Junta de Andalucía Centro de Estudios Andaluces Unicaja Endesa Colaboración Grupo Joly	Opinómetre
	Canarias Team Universidad de las Palmas de Gran Canaria Universidad de la Laguna	Rosa M. Batista Alicia M. Bolívar Alicia Correa	La Caja de Canarias	Opinómetre
	Castilla y León Team Universidad de León	Mariano Nieto Constantino García Roberto Fernández Sergio del Cano Nuria González	Junta de Castilla y León Agencia de Desarrollo Económico de Castilla y León Centros Europeos de Empresas e Innovación de Castilla y León	Opinómetre
	Catalonia's Team Universitat Autónoma de Barcelona IEMB Generalitat de Catalunya	Carlos Guallarte David Urbano Yancy Vaillant Nuria Aguilar J. Miquel Piqué	Institut d'Estudis Regionals i Metropolitans de barcelona Generalitat de Catalunya Conselleria de Treball i Industria	Opinómetre
	C. Valenciana Team Universidad Miguel Hernández Elche	J.M. Gómez Gras Ignasio Mira Jesús Martínez	Air Nostrum	Opinómetre

TEAM	INSTITUTION	MEMBERS	FINANCIAL SPONSOR	APS VENDOR
	Extremadura Team Fundación Xavier de Salas Universidad de Extremadura	Ricardo Hernández J. Carlos Díaz	Junta de Extremadura Cámara de Comercio de Badajoz SODIEZ, SOFIEX, JOICA Amarn Consultores Infostock Pinilla Grupo Alfonso Gallardo Caja Rural de Extremadura Univicasa, Servex, CCOO, Paloma Fundación Academia Europea de Yuste El Periódico, CONYSER Caja Badajoz, UGT, Diario Hoy de Extremadura, Almaraz, UNEX	Opinómetre
	Madrid Team Universidad Autónoma de Madrid	Eduardo Bueno Lidia Villar Carlos Merino	Confederación Empresarial de Madrid Caja Madrid FUAM, IADE, CIC	Opinómetre
	Basque Country Team Universidad de Deusto Universidad del País Vasco	J. Iñaki Peña Juan J. Gibaja F.J. Olarte Mª José Aranguren Mikel Navarro Narla Saiz Arturo Rodríguez Saioa Arando	SPRI Diputación Foral de Bizkaia FESIDE Diputación Foral de Guipuzkoa	Opinómetre
Sweden	ESBRI Entrepreneurship and Small Business Research Institute	Magnus Aronsson	Confederation of Swedish Enterprise ITPS (Swedish Institute for Growth Policy Studies) NUTEK (Swedish Agency for Economic and Regional Growth) VINNOVA (Swedish Governmental Agency for Innovation Systems)	SKOP
Switzerland	University of St Gallen and IMD	Thierry Volery Georges Haour Heiko Bergmann Benoit Leleux	KTI / CTI KMU - HSG IMD	GFS Bern
Thailand	College of Management, Mahidol University	Thanaphol Virasa Brian Hunt Randall Shannon Tang Zhi Min	Office of Small and Medium Enterprises Promotion College of Management, Mahidol University	Taylor Nelson Sofres (Thailand) Ltd.
United Kingdom	Co-ordination Team	Rebecca Harding Johanna Walker Michael Naumann	Small Business Service Barclays Bank plc East Midlands Development Agency Yorkshire Forward South East England Development Agency Blackburn with Darwen Borough Council Institute for Family Business (UK)	#
	Scottish Team Hunter Centre for Entrepreneurship University of Strathclyde	Jonathan Levie Sharon Eaton	Hunter Centre for Entrepreneurship	#
	Welsh Team National Entrepreneurship Observatory University of Glamorgan Cardiff University	David Brooksbank Dylan Jones-Evans	Welsh Development Agency	#
	Northern Ireland Team Small Business Research Centre, Kingston University Economic Research Institute of Northern Ireland	Mark Hart Maureen O'Reilly	Invest Northern Ireland	#
United States	Babson College George Mason University	Elaine I. Allen Erlend Bullvaag Zoltan J. Acs William D. Bygrave Marcia Cole Stephen Spinelli, Jr.	Babson College	Opinion Research Corp.
Venezuela	Instituto de Estudios Superiores de Administración (IESA) - Centro de Emprendedores	Federico Fernández Rebeca Vidal Aramis Rodrigues	Mercantil Servicios Financieros Fundación IESA	Datanálisis

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