



**NEW OPPORTUNITIES FOR ENHANCING SELF-EMPLOYABILITY - DEVELOPING  
ENTREPRENEURIAL SKILLS VIA INTERNATIONAL VIRTUAL PROGRAMS  
(THE AIMS AND RESULTS OF CROSS BORDER VIRTUAL ENTREPRENEURSHIP  
PILOT-PROGRAMS IN HUNGARY)**

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## Summary

*In Hungarian economic environment it is essential to teach and develop entrepreneurial skills. The University of Miskolc recognized these needs and has actively taken part in several national and international programmes focusing on this special target area. Based on the long-term, successful collaboration of its two units: Faculty of Economics and the North Hungarian Regional Distance Education Centre, moreover in strategic collaboration with the Chamber of Commerce and Industry of the Borsod-Abaúj-Zemplén county, several successful projects have been implemented for developing advanced e-learning programmes, offered for entrepreneurs, SMEs and different sectors of economy. Participation in the two recent European projects for stimulating employability (CSVN) and virtual entrepreneurship (CBVE) offers us even more beneficial possibilities for sharing experiences and developing innovative approaches and operable models for addressing, developing, extending and expanding learners' professional and entrepreneurial skills. Success of these projects may effectively contribute to the improvement of economic competitiveness and human potential of North-Hungarian region.*

This paper assesses small and medium-sized enterprises (SME's) in Hungary, which sector represents 99,9 percent of total enterprises. Their activity is mainly characterized by high labour and low capital intensity, the efficiency and competitiveness of their business management are relatively low.

There is an increasing emphasis in many countries, including Hungary, on developing new models of partnership between universities and enterprises and developing entrepreneurial skills as well. The economic significance of SME's has been continuously increasing since 1989, the political changes in Hungary. Supporting this sector and improving its development is highlighted objective of European Union, and the Hungarian economic policy as well.

Analyzing the statistical data of enterprises we have to deal with the regional differences inside the country. As it known, Hungarian economy is very centralized; the capital Budapest determines the economy. Almost 40% of registered enterprises exist in the central region, which represents 23% of inhabitants and less than 10% of the territory of

Hungary. Our region, the North-Hungarian region, is one of the most under developed region in EU.

Small and medium-sized enterprises (SMEs) are a very heterogeneous group of businesses usually operating in the service, trade, agri-business, and manufacturing sectors. They include a wide variety of firms. Some are dynamic, innovative, and growth-oriented while others are satisfied to remain small and perhaps family owned. SMEs usually operate in the formal sector of the economy and employ mainly wage-earning workers.

*Table 1: Definition of SMEs in Hungary*

SIZE	STAFF NUMBER	NET ANNUAL TURNOVER		BALANCE SHEET TOTAL	
		Act XCV of 1999	Act XXXIV of 2004	Act XCV of 1999	Act XXXIV of 2004
Micro	0-9	---	2 million EURO	---	2 million EURO
Small	10-49	HUF 700 million (2,3 million €)	10 million EURO	HUF 500 million (1,7 million €)	10 million EURO
Medium-size	50-249	HUF 4000 million (13,3 million €)	50 million EURO	HUF 2700 million (9 million €)	43 million EURO

(1€ = 300 HUF)

As table 1 shows, the ranges – referring to the net turnover and the balance sheet total – have significantly widened, therefore about 1000 had to be reclassified into the category of SMEs in 2005, and the ratios within the categories are also expected to change at the expense of the medium sized businesses. According to the new law, the share of the state and the local governments must not exceed 25% in SMEs, neither separate nor jointly, nevertheless the law precisely describes the criteria's of independent enterprises.

There is a great interest for relevant statistical data and analyses about the existing numbers, efficiency and competitiveness of SME's. Before the political change, in 1989 the number of registered enterprises was almost 30 thousand and by the end of 1994 it exceeded 1 million in numbers. Afterwards there was a significant slow down in this dramatic growth in 2004, and finally 1,2 million enterprises were registered in statistics with 60% of sole proprietorship among them. More then 200 thousand enterprises inactive, which means 16-18% of registered enterprises does not exist and work. In the aspect of assessing economic efficiency, only active enterprises are important to be considered, therefore, all the data of the study refer to the category of enterprises. According to the published data of Central Statistic Organization the number of the registered active enterprises grew to 72,2% from 57,5% between 1995 and 2004.

*Table 2: The number of registered and active businesses in Hungary 1999-2004*

Years	1999.	2000.	2001.	2002.	2003.	2004.
<b>Number of businesses</b>	876.168	903.822	919.387	935.892	948.403	964.073
<b>Ranges (%)</b> : (1999 represents 100%)	100,00	103,15	104,93	106,81	108,24	110,03
<b>Differences (%)</b> : (based on the previous year)	-	+3,15	+1,78	+1,88	+1,43	+1,79

Source: Central Statistic Organization- Hungary: Demography of enterprises 1999-2003. and 2004.

The tendency of enlargement the number is businesses stopped in 2005. The number of registered and existing enterprises is decreasing in 2006 and this tendency going to continue in the next years as well; the reason is mainly the macro environment. The number of bankruptcies is growing since last October.

If we analyze the number of enterprises we have to deal with the regional differences inside the country. (figure 1) Analyzing the economic role of SMEs, we have to deal with employment rates, export activity, contribution to the gross value added and some other economic aspects. As a member state of European Union, we always compare our figures to EU countries. Comparing data there is no dramatic differences between EU average and Hungarian results. (see table 4.)

*Table 3: Registered businesses by legal form in Hungary 2002-2007*

Year	Proprietorship	Fellowship	Limited partners hip	Limited Liability Company	Incorporation	Co-operative	Sum
2002	708.513	8.113	208.454	182.242	4.425	6.768	1.152.221
2003	716.729	7.889	214.787	193.247	4.345	6.790	1.176.934
2004	717.323	7.725	219.023	209.720	4.357	6.532	1.198.628
2005	710.838* (469.809) *	7.483	220.955	224.146	4.371	6.230	1.208.780
2006	670.203* (434.601) *	7.244	221.152	238.411	4.373	5.860	1.183.953
2007	702.595* (425.950) *	6.868	218.307	257.347	4.493	5.488	1.233.704

\* Personal entrepreneurs with pass Source: (KKV helyzete 2007. p.122.)

In EC-19, there are approximately 20 million enterprises (EC 2002), in Hungary the number of registered enterprises was 1,2 million. In comparison, The Hungarian GDP was 0,8% of the EU-15 total in 2002, so an equal economic activity in a similar structure would indicate more, than 1,2 million enterprises. This is however a contradiction to the general opinion in Hungary, that the number of enterprises was too high. This opinion is usually generated by the fact, that by approximation 18-25 % of all registered enterprises is not functioning. Such as high proportion of inactive enterprises can be originated from the fact, that it is still cheaper in Hungary to operate an inactive enterprise in short term, than to eliminate it legally.

*Figure 1. The ratio of registered enterprises in Hungarian regions (2002)<sup>1</sup>*

<sup>1</sup> Ministry of Economy and Transportation; Regional Development Headquarter 2003.

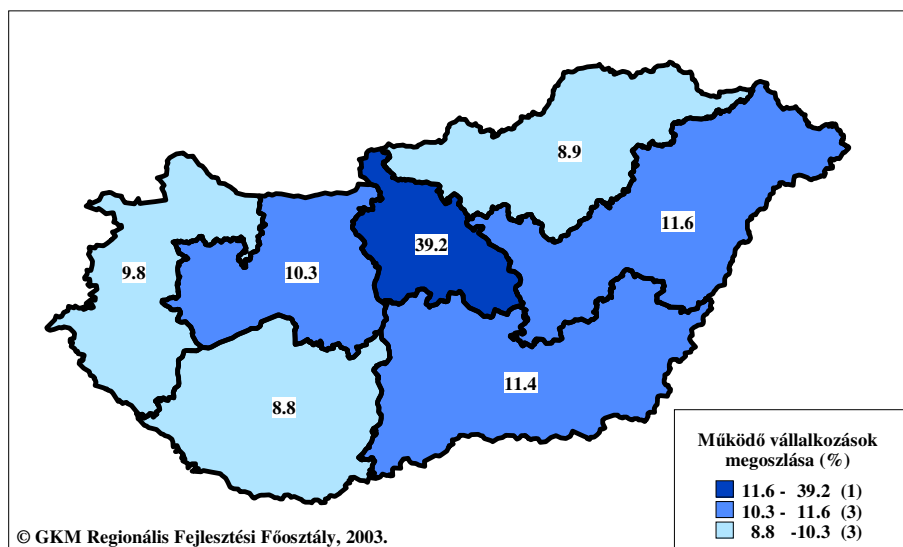


Table 4: Distribution of major indicators of enterprises in EU<sup>2</sup> and in Hungary, 2003 (%)

Indicators	Micro		Small		Medium sized		SMEs		Large		Total
	EU	H	EU	H	EU	H	EU	H	EU	H	
Number	92,3	96,1	6,5	3,2	0,9	0,6	99,7	99,9	0,3	0,1	100
Employment	39,4	41,5	17,4	17,0	12,9	15,5	69,7	74,0	30,3	26,0	100
Turnover	26,3	20,9	15,3	21,2	15,5	18,7	57,1	60,8	42,9	39,2	100
Gross value added	20,8	16,7	14,5	16,0	15,5	18,7	50,8	51,4	49,2	48,6	100
Export	14,1	7,3	11,8	14,6	15,6	13,7	41,5	35,6	58,5	64,4	100

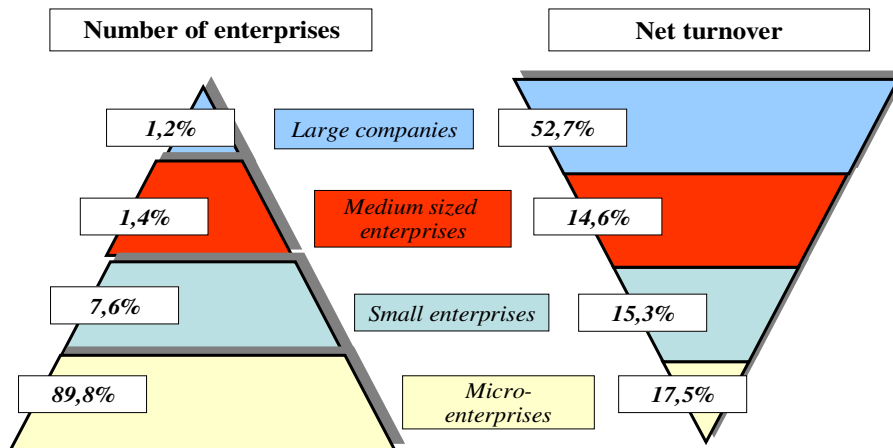
There is also a great significance of the fact that 66,% of all the employees<sup>3</sup> worked in SMEs in 1995 and this 2/3 proportion rate remained the same until 2001, nevertheless these businesses played an important role in economy that time. The total staff employed by SMEs increased with the rate of 9,3% that time. Within these ranges, the rate of grows was 20,2% in case of micro, 13,2% in case of small businesses, contrarily, the staff employed by medium sized enterprises dropped with a significant rate of 13,9%. These tendencies are stable.

The results are less outstanding if the rate of contribution to the own capital is analyzed in SMEs. In 1995 the total own capital of businesses, approximately 40% was owned by this business sector, however, it was only 20% by 2001, representing an intensive capital concentration in this sector. The economic activity in external markets is decreasing inside the SMEs. External sales figures represented the highest rate of decrease in the efficiency index of Hungarian SMEs. The distribution rate of export activities between SMEs and large enterprises was about 50-50% in 1995. But in short period of time this rate changed dramatically. The privatization ended, multinational companies settled down in large number in Hungary. More than 75% of export activities was transacted by Large enterprises in 2001. This rate decreased to 65% in 2003.

<sup>2</sup> These data refer to the so-called Europe-19 countries, besides the 15 – that time already existing member states – the data of Iceland, Norway, Liechtenstein and Switzerland are also included. Sources: Observatory 2003/7. State of Small and Medium Sized Businesses 2003/04. p17.

<sup>3</sup> This term refers to employees, and private enterprisers (sole proprietorship) people employed by partnership businesses, and associate dependants are also included in this category by State of Small and Medium Sized Businesses 1996-2002.

**The number and rate of enterprises and the rate of turnover by size of enterprises in Hungary 2004.**



**STRENGTH OF HUNGARIAN SMEs<sup>4</sup>**

**Flexibility:** SMEs may have greater flexibility, relative to large firms, in adapting production and sales to changes in the market. The advantage, however, may be more apparent than real in some cases. Computerized technologies (numerical control, robotics, etc.) may make large-scale production extremely flexible.

**Innovation:** SMEs in some countries are a source of innovation and may serve as the catalysts for economic growth. The number of innovative SMEs in Hungary is very low, but those who deal with innovation, and R&D as very well known and successful. They may become large firms, or disappear, not infrequently by being bought up by other companies wishing to take up their ideas. This does not necessarily mean that people are better off with SMEs, however. SMEs are often not as productive as large firms and this is reflected in the lower prices associated with their factors of production.

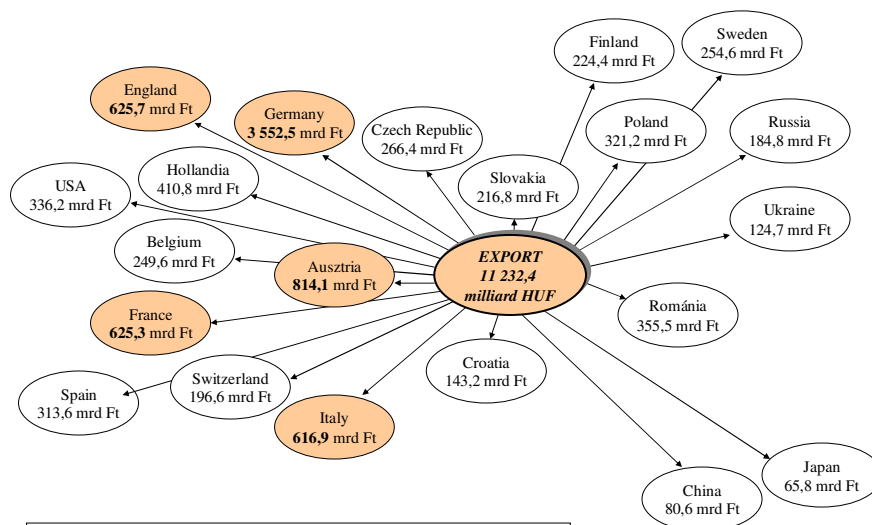
**Lower costs:** In some cases, SMEs have lower costs than large firms, including lower labour costs and lower indirect costs such as lower overhead. Whether costs are really lower for SMEs than for large firms depends on the structure of the market and the technologies associated with production in the market.

**Spatial benefits and the potential for decentralized supply opportunities:** The potential for decentralized supply opportunities exists where SMEs are local suppliers that are closer to areas of distribution or have relatively better information on distribution points than large firms. When supply is required at several points that are geographically apart, SMEs located at or near the respective supply points may have comparative advantages over a large unit operating from a fixed point. SMEs has more information about the local market and the actors.

**Lower congestion costs:** Lower congestion may be reflected in contract pricing by SMEs. SMEs located in less congested areas outside or in the peripheries of metropolitan areas may have lower costs. There may be relatively less use of congestible resources such as land, infrastructure and housing, in areas where SMEs are located.

<sup>4</sup>SME and Export-Led Growth: Are There Roles For Public procurement Programmes? A Practical guide for Assessing and Developing Public Procurement programmes to Assist SMEs [http://www.wto.org/english/tratop\\_e/gproc\\_e/wkshop\\_tanz\\_jan03/itcdemo3\\_e.pdf](http://www.wto.org/english/tratop_e/gproc_e/wkshop_tanz_jan03/itcdemo3_e.pdf) International Trade Organisation

## Hungarian export activity , 2004



Source: Magyar Statisztikai Évkönyv 2004, KSH, Budapest, 2005

### WEAKNESSES OF HUNGARIAN SMEs

Language problems; lack of speaking foreign languages. Lack of experience in European financial systems. Lack of national co-founding. Special salary conditions. Disadvantages from the national working circumstances: (very) strong black market. Lower background by equipments. The lack of capital is a general problem, due to the permanently low profitability of production the producers and the processors are not able to invest in the necessary technological development. Most of the assets used are outdated, especially the buildings, facilities and technological equipment.

### INTERNATIONAL TEACHING PROGRAMS

In this economic environment it is essential to teach and develop entrepreneurial skills. The University of Miskolc recognized these needs and has actively taken part in several national programmes focusing on this special target area. Based on the long-term, successful collaboration of its two units: Faculty of Economics and the North Hungarian Regional Distance Education Centre, moreover in strategic collaboration with the Chamber of Commerce and Industry of the Borsod-Abaúj-Zemplén county, several successful projects have been implemented for developing advanced e-learning programmes, offered for entrepreneurs, SMEs and different sectors of economy. Our participation in the two recent European projects for stimulating employability (CSVM) and virtual entrepreneurship (CBVE) offers us even more beneficial possibilities for sharing experiences and developing innovative approaches and operable models for addressing, developing, extending and expanding learners' professional and entrepreneurial skills. Success of these projects may effectively contribute to the improvement of economic competitiveness and human potential of our North-Hungarian region.

The University of Miskolc, Faculty of Economics introduced the Bologna system and started the BSc programs in September 2006. Five BSc Programs are offered: Economics and Management, Commerce and Marketing, International Business, Finance and accounting, Tourism. The structure of our educational program has fully changed: from now on we have 6 semesters education and 1 full semester for practice – compared to the previous system including only 4 weeks of summer practice. One of the most important results of the international programs (CBVE, CSVM lead by EADTU) is the knowledge of

students. The aim is motivate students establishing new businesses, developing their innovative attitude and openness.

Stimulating European Employability through Cross Sector Virtual Mobility (CSVM) is a project submitted by EADTU and partners to the 2006 EC Leonardo da Vinci Programme. The CSVM consortium consists of 10 partners stemming from seven European countries (BE, ES, EE, IT, HU, PL and NL) added with supportive organisations (to name: Chambers of Commerce, Regional Development Agency and Labour Centre). In the project an innovative approach is developed to facilitate distance education students to enter into online working, stimulate their employability, and provide distance educational systems with increased business and market connectivity.

The main objective of Cross-Border Virtual Entrepreneurship (CBVE) is to enhance the professional skills of students by lifelong open and flexible learning approaches, with a specific focus on the development, extension and expansion of entrepreneurial skills. CBVE is to pilot entrepreneurship as prospective part of the curriculum for students not (longer) part of traditional cohorts. CBVE addresses the training of trainers as well i.e., the upgrading of entrepreneurial skills of the academic staff involved. CBVE has a clear operational focus on cooperation between higher education institutions and relevant stakeholders in the field: Regional Entrepreneurial Networks, Chambers of Commerce, Investment Banks and other Professional Organisations.

First pilot experiences in virtual internship are considered as the basis of developing virtual and blended models of practical training programs within the 7th semester of our new BSc system. In CBVE program we had 4 different pilots. We did a survey about entrepreneurial plans, abilities between students. The presentation will summarize the results of the survey.

## **CONCLUSION**

Due to constant changes in SME definition (in the harmonization process with the EU nomenclature) The cross-sectional analyses of the Hungarian entrepreneurial sector can only be conducted based only employee data. The structure and size of Hungarian entrepreneurial sector is similar to the EU. However on the basis of the presented data, the following remarks can be made:

Entrepreneurial activity cannot be considered over proportional in Hungary compared to the EU average, as the activity rate of enterprises is approximately only 75%.

The 'forces entrepreneurship' phenomenon is still present in Hungary.

The high level of inactivity is probably due to the high funding and eliminating costs of enterprises compared to other European countries.

The number of enterprises is neither proportional to real GDP in the comparison with the EU total (though it is over proportional with population figures), nor is Hungarian GDP growth rate correlated to the change of number of legal entrepreneurial entities. The reasons of weak competitiveness of Hungarian SMEs should change in short period of time. SMEs has a significant role in employment and taxation. Strong SMEs could provide stabile basis of economic development and growth of Hungarian economy. The most beneficial investment can be to invest into education of entrepreneurs. University of Miskolc joined to this aim.

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