

SIGNIFICANTLY DIFFERENT – YET ALIKE: MALE AND FEMALE EARLY-STAGE ENTREPRENEURSHIP IN THREE EUROPEAN POST-SOCIALIST COUNTRIES

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ABSTRACT

This paper focuses on the differences in male and female early-stage entrepreneurship in three post-communist countries: Slovenia, Croatia and Hungary. Despite sharing a long history of cohabitation, they significantly differ in various aspects of their early-stage entrepreneurial activity. Significant gender differences within each of the three countries have also been found. Other results indicate that lower entrepreneurial awareness also lowers risk aversion among adults in a country. Men are also more likely to perceive and exploit business opportunities than women, but in necessity prompted entrepreneurship the gender is unlikely to be influential. Women are on average also less likely to start with entrepreneurship, but once started, they have on average as high growth aspirations as men.

INTRODUCTION

The Central and Eastern European transitional countries of Slovenia, Croatia and Hungary share a lot of similarities in their development and economic situation, as well as a lot of common history: they were part of the Austrian-Hapsburg Empire, and after the Second World War they shared almost half a century of socialism and a common communist history. Slovenia and Croatia even spent several decades living in the same state – Yugoslavia, where they shared similar government institutions, as well as a legal and economic system.

Each country has its own prevailing ethnicity – Slovenians, Croats and Hungarians, and is also highly ethnically homogenous (at 90% of prevailing ethnicity) with one dominant language: 92% (Slovenia), 96% (Croatia) and 98% (Hungary). As shown by Table 1, none of the countries can be considered as either technologically developed or globally competitive. The economies of all three countries have gone through, and are still undergoing changes, to adapt to a market economy. This process has brought radical changes to the labour market, including the legislation that permitted the establishment of private firms. The transitional processes have not finished yet, even though Slovenia and Hungary became EU members in May 2004. There are many deeply ingrained values and cultural matrices that need to be changed (Rebernik, 1997).

Table 1: Main economic indicators in Slovenia, Croatia and Hungary

Indicators	Slovenia	Croatia	Hungary
Main Economic Indicators			
Real GDP Growth ¹⁾	2.3	3.7	3.4
GDP per capita (US\$ at PPP) ¹⁾	21,175	11,256	14,800
Consumer price inflation ¹⁾	3.6	2.1	6.8
Unemployment rate ¹⁾	10,4	18.7	6.1
Total Population ¹⁾	1,990.000	4,442.000	10,100.000
Total Labor Force 2003 ²⁾	960.000	2.100.000	4.150.000
Population 18 – 64 in 2004 ²⁾	1.344.000	2.841.000	6.550.000
Global Competitiveness Report Rankings ³⁾			
Growth Competitiveness Index	33	61	39
Technology Index	26	46	29
Public Institution Index	31	76	37
Macroeconomic Environment Index	39	59	55
Business Competitiveness Index	31	72	42

¹⁾ The Economist Intelligence Unit: Country profiles 2005, actual or estimation for 2004

²⁾ GEM collected secondary data 2004

³⁾ Global Competitiveness Report 2004

The characteristics of these transitional countries also share many common features with regard to female participation in the labor force, the average level of education, the gender wage gap etc.,. The transition process has affected both men and women with a loss in job security and employment costs, but it seems that women took over a large share of the adjustment costs (Ruminska-Zimny, 2003). Moreover, it seems that the transition changes have also had important and often negative effects on women's position in society (Stoyanovska, 2001), where men and women were, under the communist regime, supposedly equal in all aspects of society. However, with the fall of the communist regime, structural inequalities between men and women became evident (Tominc, 2002) together with the challenge of learning the inner workings of the market economy (Ogloblin, 1999).

A common characteristic of labour market developments during the transition process is gender asymmetry, seen in employment, sectoral changes of employment, income and wages, access to jobs in the private sector etc. (Table 2).

There is no doubt that the development of any economic and social system is to a large extent grounded in the development of entrepreneurship (Acs 2002, Barretto 1989, Baumol 1990, Hebert and Link 1989, Leibenstein 1968, Von Mises 1949, Schumpeter 1934). One way of fostering economic development on the basis of entrepreneurship is to stimulate existing entrepreneurs to develop their companies, while another is to motivate and encourage the adult population to start their own entrepreneurial careers. In this paper, we are interested in the latter.

In most countries, the share of men in the start-up phases of entrepreneurship is much higher than the share of women. Empirical evidence can be found in a recent Global Entrepreneurship Monitor (GEM) research report (Acs et al., 2005). GEM is a multi-national research program,

Table 2: Gender differences – some labour force characteristics in Slovenia, Croatia and Hungary

Indicators	Slovenia	Croatia	Hungary
Labour force characteristics			
Percentage of female labour force unemployed 1998–2002 ⁴⁾	6.3	18.5	5.4
Percentage of male labour force unemployed 1998–2002 ⁴⁾	5.6	13.4	6.1
Percentage of female labour force in agriculture 1998–2002 ⁴⁾	10.0	15.0	4.0
Percentage of male labour force in agriculture 1998–2002 ⁴⁾	10.0	16.0	9.0
Percentage of female labour force in industry 1998–2002 ⁴⁾	29.0	21.0	26.0
Percentage of male labour force in industry 1998–2002 ⁴⁾	46.0	37.0	42.0
Percentage of female labour force in services 1998–2002 ⁴⁾	61.0	63.0	71.0
Percentage of male labour force in services 1998–2002 ⁴⁾	63.0	47.0	49.0
Ratio of female to male earned income ⁵⁾	62.0	56.0	59.0
Self-employ. of females as a share of total employment, 2000 ⁶⁾	6.5	14.4 ⁷⁾	9.6
Self-employ. of males as a share of total employment, 2000 ⁶⁾	15.3	23.3 ⁷⁾	18.7

⁴⁾ World Bank 2004, World Development indicators

⁵⁾ UNDP 2004, Human Development Report

⁶⁾ Labour force surveys – Nesporova (2002)

⁷⁾ 1999

aimed at describing and analysing the entrepreneurial process in the early stages (the start-up phase) within a wide range of countries. It began in 1998 and has, since then, provided a very rich database of early-stage entrepreneurship. Early-stage entrepreneurs are identified as those individuals, who are, *first*, personally involved in the creation of a new venture or who are, *secondly*, employed as owners/managers of a new firm that is younger than 42 months.

The GEM study for 2004 reports that men are almost twice as likely as women to become early-stage entrepreneurs. These differences are consistent across age groups and in no country are there more female active early-stage entrepreneurs than male ones, even though there is a wide variation among countries. The largest gender divisions occur among middle-income countries with a per capita GDP between 10.000 and 25.000 US\$, (like Slovenia, Greece or Spain) where men are on average 75% more likely than women to be active early-stage entrepreneurs. The smallest gap appears in high-income countries with per capita GDP over 25.000 US\$ (like the USA or Finland), where the percentage difference falls to 33%. In low-income countries with per capita GDP at or below 10.000US\$ (like Peru, South Africa, Hungary and Ecuador) men are, on average, 41% more likely to be active in the start-up phases of entrepreneurial activity than women.

This paper attempts to make three main contributions. The first is to provide a clearer insight into the gender differences of entrepreneurial capacities of adults in these three countries; entrepreneurial capacities are analysed through entrepreneurial awareness and through the risk aversion of adults. The second is to provide a clearer insight into the current state of gender differences in opportunity and necessity based early-stage entrepreneurship among adults in these three countries, while the third is to enhance our understanding of gender differences in the entrepreneurial growth aspirations of early-stage entrepreneurs in Slovenia, Croatia and Hungary.

In light of the triggering question: “What differences exist among countries that look very similar from a global perspective?” the analysis in this paper was performed on two levels: *cross-country analysis* – country differences across the three countries in early-stage entrepreneurship for each gender, and *inter-country analysis* – gender differences in each of the three countries, separately.

LITERATURE REVIEW AND HYPOTHESIS

In general, the entrepreneurship literature as well as the literature on gender segregation in entrepreneurship can be classified into two main streams: the supply-side and demand-side examining literature. The demand-side literature examines, on a macro level, historically and culturally determined framework conditions, such as market sources, political and institutional framework etc, while the supply-side studies focus on the availability of skilled and motivated individuals to occupy entrepreneurial roles, such as the effects of human capital, norms, etc.

Our paper deals with some of the aspects of supply-side factors, particularly with some of the different aspects of personal characteristics that are assumed to be important for individuals to enter the entrepreneurship process. Personal characteristics that are taken into account in this paper are: (a) the ability to perceive good business opportunities, (b) entrepreneurial skill, knowledge and experience (c) entrepreneurial networking behaviour and (d) risk aversion.

The ability to perceive good business opportunities is assumed to be important for entrepreneurship (Eckhardt and Shane, 2003, Shane and Venkataraman, 2000, Reynolds et al., 2003). It is true, that there are some doubts regarding the opportunity concept (Davidsson, 2003); for example, opportunity is by almost all definitions considered a favourable situation, known to be profitable. From this point of view, individuals cannot know whether or not what they pursue is an opportunity – only successful actions can, *ex post facto*, be marked as opportunities. Since our paper is focused particularly on start-up entrepreneurs, evaluating opportunities in a retrospective way is not possible.

The ability of an individual to enter into entrepreneurship and use the entrepreneurial skills, knowledge and experiences needed for it, can be regarded as the next major determinant of entrepreneurship (Davidsson, 1991). Shane (2000) demonstrated the impact of entrepreneurs’ competence and knowledge in acting on business opportunities. An entrepreneur is an individual who has the ability to evaluate possibilities and who is motivated to enter and to persist in the entrepreneurship process (Shaver and Scott, 1991).

In entrepreneurial research, social networks are being used as surrogate measures for behavioural characteristics, since networking skills and strategies may give new insights as well as provide alternative factors for understanding venture success (Liao and Welsch, 2003). The role of networks and networking has been increasingly adopted as a medium for understanding behavior both in the start-up phase of entrepreneurship (Aldrich and Zimmer, 1986) as well as in later phases (Charan, 1991).

The ability to perceive good business opportunities, individual entrepreneurial skills, knowledge and experience, and entrepreneurial networking behaviour can be studied as a multi-item variable called *entrepreneurial awareness*. We were interested in whether there were country differences across

Slovenia, Croatia and Hungary regarding the entrepreneurial awareness by gender. For this research question to be answered, we first formed the pair of hypotheses *H1a* and *H1b*:

H1a: Entrepreneurial awareness among men in Slovenia, Croatia and Hungary does not significantly differ.

H1b: Entrepreneurial awareness among women in Slovenia, Croatia in Hungary does not significantly differ.

The OECD Report on female entrepreneurship (OECD 2004) brought out a fundamental feature of the market, important for this research, namely the portioning of knowledge among individuals. This knowledge is idiosyncratic, because it is acquired through each individual's own experiences and from areas including one's occupation, on-the-job routines, social relationships and daily life (Acs, 2002). Women differ from men in their experience because they hold different occupations (often less appropriate for self-employment and entrepreneurship), on-the-job routines, social relationships and daily life; they also identify business opportunities differently and try to exploit them differently. There is evidence that women are less involved in networks than men are and that their type of network is different. The strong and personal networks that women traditionally engage in are those linked mainly to family-related tasks (Lin, 1999). Women have therefore less access to the critical resources, support and information needed to successfully start a new business. Gender difference in entrepreneurial awareness can be expected. The hypothesis *H1c* states:

H1c: Gender differences regarding entrepreneurial awareness within a single country (Slovenia, Croatia and Hungary) are significant.

Entrepreneurs are often expected to "fight" against uncertainty. On a national level, the relationship between the uncertainty avoidance index (one of four cultural indices; Hofstede, 1980) and economy is often studied (Shane, 1992). Since the skills one needs to create and manage a new firm, such as risk taking, are also culturally embedded and historically specific, we may presume that due to similar social conditions and historical co-habitation, adults in Slovenia, Croatia and Hungary do not significantly differ regarding risk aversion. The following hypothesis was formed:

H2a: Men in Slovenia, Croatia and Hungary do not significantly differ regarding risk aversion.

H2b: Women in Slovenia, Croatia and Hungary do not significantly differ regarding risk aversion.

In general, entrepreneurship is often viewed as a male domain (DiMaggio, 1997). Risk taking is among the job requirements of entrepreneurship (as along with leadership, a sense of adventure and aggressiveness) all of which are assumed to be masculine, since men seem to be more comfortable taking risks than women (Arch, 1993). Males are "more likely to see a challenge that calls for participation" in a socially risky situation, whereas females more commonly perceive such activities as threatening and try to avoid them. Therefore, gender differences regarding risk aversion are also expected, leading to the hypothesis *H2c*:

H2c: Gender differences regarding risk aversion within a single country (Slovenia, Croatia and Hungary) are significant.

Individuals participate in entrepreneurial activities for two main reasons: they start a new business to exploit a perceived business opportunity or they are pushed into entrepreneurship because all other options for work are either absent or unsatisfactory. A GEM study revealed that 97% of individuals involved in business start-ups were either “opportunity” or “necessity” entrepreneurs (Acs et al., 2005). In 2004, a great variability across countries was observed in the balance of opportunity and necessity early-stage entrepreneurship. On a global scale, an average of about 65% of those involved in entrepreneurial endeavours claimed that they were attempting to take advantage of a business opportunity, while 35% stated that they were doing so because they had no other viable employment option. Since we consider Slovenia, Croatia and Hungary to be very similar with regard to economic, cultural, and historical traits, we also expect that levels of early-stage entrepreneurial activity are not significantly different. The following hypotheses were stated:

H3a: Opportunity early-stage entrepreneurship levels among men in Slovenia, Croatia and Hungary do not significantly differ.

H3b: Necessity early-stage entrepreneurship levels among men in Slovenia, Croatia and Hungary do not significantly differ.

H3c: Opportunity early-stage entrepreneurship levels among women in Slovenia, Croatia and Hungary do not significantly differ.

H3d: Necessity early-stage entrepreneurship levels among women in Slovenia, Croatia and Hungary do not significantly differ.

Since the majority of the more than 40 countries included in the GEM study have a higher share of men in early-stage entrepreneurship than women (Acs et al., 2005) gender differences regarding the early-stage entrepreneurial levels in each of the three countries are expected.

H3e: Gender differences with regard to necessity and opportunity early-stage entrepreneurship levels within Slovenia, Croatia and Hungary are significant.

A firm's growth is regarded as a key to economic development and to the creation of wealth and employment. Two main streams of thought can be found in the existing literature. The first is based on longitudinal research designs studying actual growth (Liao and Welsch, 2003, Gundry and Welsch, 2001), while the second focuses on the growth expectations of those entering into entrepreneurship (Bager and Schott, 2004, Delmar and Davidsson, 1999). Our paper focuses on those entrepreneurs, who are in the start-up phase of the entrepreneurial process, where the actual growth cannot be established yet. Therefore, their growth aspirations were studied and were not expected to differ across the countries analysed.

H4a: The growth aspirations of early-stage male entrepreneurs in Slovenia, Croatia and Hungary do not significantly differ.

H4b: The growth aspirations of early-stage female entrepreneurs in Slovenia, Croatia and Hungary do not significantly differ.

The role of gender in a company's growth is vague. Liao and Welsch (2003) reported on a study of Norwegian entrepreneurs done by Kolvereid (1992), which found no significant relationship between the growth aspirations of entrepreneurs and their experience, gender, location and size of their business. Other researchers claim that gender is an influential feature for a company's growth – being female is supposed to have a negative effect on growth, and female entrepreneurs rarely become »growth entrepreneurs« (Kjeldsen and Nielsen, 2004). The hypothesis *H4c* is formed:

H4c: Gender differences regarding the growth aspirations of early-stage entrepreneurs within Slovenia, Croatia and Hungary are significant.

DATA, VARIABLES AND METHODS

The main data source for testing our hypotheses was the master data file of the Global Entrepreneurship Monitor (GEM) research, a worldwide research project, and national GEM data files for Slovenia, Croatia and Hungary. GEM has been collecting data every year since 1998 with surveys of adult populations, which are conducted in each participating country, based on a sample of at least 2,000 adults. A detailed description of the methodology behind the collection of GEM data is provided in Reynolds et al. (2005). For the purpose of this paper, we utilized surveys of adult populations conducted in 2004 in Slovenia, Croatia and Hungary. For analysing gender differences in the growth aspirations of early-stage entrepreneurs, a consolidated sample of individuals identified as early-stage entrepreneurs in Slovenia and Croatia in 2002, 2003 and 2004 and in Hungary in 2002 and 2004 (the adult population survey in 2003 was not conducted) was formed, with the purpose of making estimates more reliable. In a single year, due to limited sample sizes and especially due to low early-stage entrepreneurial activity rates, the number of people involved in early-stage entrepreneurship is very limited in all three countries. The consolidated sample consists of 190 early-stage entrepreneurs from Slovenia, 158 from Croatia and 255 from Hungary.

Variables measuring entrepreneurial awareness and risk aversion were formed on the principle of component analysis, which revealed that four items describing personal characteristics assumed to be important for entering into entrepreneurship can be loaded into two components. The ability to perceive good business opportunities was assessed by asking respondents if they agree with the statement '*In the next six months, will there be good opportunities for starting a business in the area where you live?*'; entrepreneurial skills, knowledge and experience by asking them if they agree with the statement '*You have the knowledge, skill and experience required to start a new business*' while the entrepreneurial networking behaviour by the statement '*You know someone personally who started a business in the past two years*'. The avoidance of uncertainty was assessed by asking respondents if they agreed with the statement: '*Fear of failure would prevent you from starting a new business.*'

Principal components analysis revealed the result in the Table 3.

Table 3: Results – principal components analysis

Component	Initial eigenvalues		Component Matrix for components 1 and 2 extracted	
	Total	% of Variance	Component 1	Component 2
1	1.610	40.249	0.775	0.101
2	1.009	25.237	0.704	-0.130
3	0.750	18.759	0.102	0.984
4	0.630	15.755	0.709	-0.123

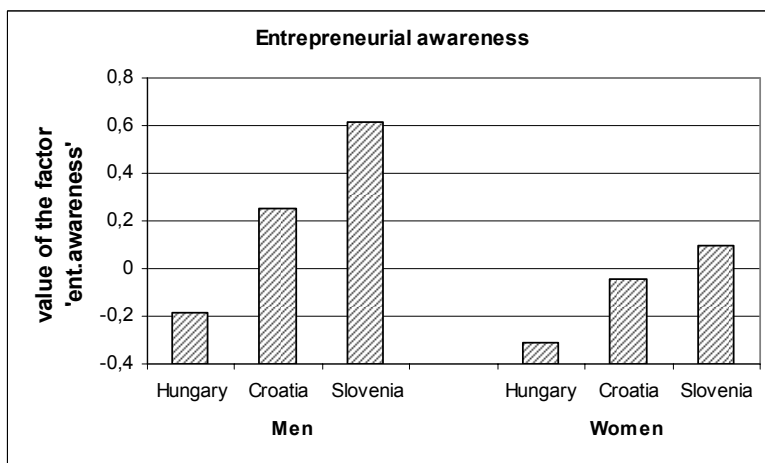
The first principal component is interpreted as entrepreneurial awareness and the second as risk aversion.

Individuals participate in entrepreneurial activities for two main reasons: they start a new business to exploit a perceived business opportunity or they are pushed into entrepreneurship because all other options for work are either absent or unsatisfactory. In this way, opportunity-driven entrepreneurship and necessity-driven entrepreneurship are distinguished. For this study, we utilized the database to reveal the level of opportunity early-stage entrepreneurship activity in a country, as measured by the share of adults, who are 18-64 years old and are engaged in setting up a new business because an opportunity presented itself. The level of necessity early-stage entrepreneurship level in a country is measured by the share of adults, who are 18-64 years old and are entering into entrepreneurship because they had no better option to work.

The growth aspirations of early-stage entrepreneurs can be divided into those, which are stated by the entrepreneur and those, which are objectively possible, with regard to the characteristics of their products/services, competition, etc. The growth aspirations of early-stage entrepreneurs were assessed by taking into account their anticipation of an increase in the number of new jobs, while the potential of their ventures to grow was based on their opinions about the creation of new markets and market expansion with their products/services, and regarding the technology used:

- *degree of growth aspiration – employment*, is found in those early-stage entrepreneurs who intend to increase the number of jobs by 6 or more in the next five years.
- *degree of growth aspiration – market creation*, is found in those early-stage entrepreneurs who plan some market expansion/creation for their products/services by stating that there are only a *few or no other business offering* the same products/services to the potential customers and that *all or some potential customers consider the product/service unfamiliar*.
- *degree of growth aspiration – technology*, is found in those early-stage entrepreneurs who state that *technologies or procedures* required by this product/service *were not available more than a year ago*.

The methodology used includes principal component analysis to form variables entrepreneurship awareness and risk aversion, as described above. To test the statistical significance of country and gender differences, the one-way ANOVA, independent samples t-test and the Chi-square test were used. The general criteria for rejecting the hypothesis that differences do not exist was determined with statistical significance at 5% (two-tailed test).

Figure 1: Entrepreneurial awareness by gender in Hungary, Croatia and Slovenia

FINDINGS

Even though there are many economic, social and historical similarities among Slovenia, Croatia and Hungary, the countries significantly differ by almost all variables analysed. Gender differences in each of the country analysed are also numerous. Let us look at the findings in more detail.

Entrepreneurial awareness

The highest entrepreneurial awareness is found among men in Slovenia, followed by men in Croatia and in Hungary. The results are presented in Figure 1 and reported in Table 4.

Table 4: Country differences in entrepreneurial awareness for each gender

Ent. Awareness	ANOVA F-statistic (signif.)	Tukay test– Mean difference (significance) Hungary–Croatia	Tukay test– Mean difference (significance) Hungary–Slovenia	Tukay test– Mean difference (significance) Slovenia–Croatia
Men	73.927 (0.000)	-0.4349 (0.000)	-0.7938 (0.000)	0.3589 (0.000)
Women	22.466 (0.000)	-0.2668 (0.000)	-0.4069 (0.000)	0.1401 (0.158)

Differences among all three countries are significant. Entrepreneurial awareness among women in Slovenia and Croatia does not significantly differ, while women in Hungary exhibit the lowest entrepreneurial awareness. The hypotheses *H1a* and *H1b*, that there are no significant country differences regarding entrepreneurial awareness, are therefore rejected – significant country differences are found in both genders.

Gender differences, found within a single country, are expected: men in each country are more likely to indicate a higher entrepreneurial awareness than women in their country. The results are reported in Table 5.

Table 5: Gender differences in entrepreneurial awareness in each country

Gender differences in the entrepreneurial awareness			
<i>Hungary</i>	<i>Hungary–men; mean</i>	<i>Hungary– women; mean</i>	<i>t–statistic (signif.)</i>
	–0.1819	–0.3102	2.379 (0.018)
<i>Croatia</i>	<i>Croatia–men; mean</i>	<i>Croatia– women; mean</i>	<i>t–statistic (signif.)</i>
	0.2529	–0.0433	3.443 (0.001)
<i>Slovenia</i>	<i>Slovenia–men; mean</i>	<i>Slovenia– women; mean</i>	<i>t–statistic (signif.)</i>
	0.6119	0.0967	7.007 (0.000)

Therefore, the hypothesis *H1c*, that both genders in each country significantly differ, is not rejected. As expected, men on average exhibit higher entrepreneurial awareness than women.

Risk aversion

Results on country differences regarding risk aversion for each gender indicate that a lower level of entrepreneurial awareness sometimes also leads to lower risk aversion. Namely, men as well as women in Hungary, who are likely to have the lowest entrepreneurial awareness among the three countries, also exhibit on average the lowest risk aversion; and yet, not all country differences are significant: men in Hungary do not significantly differ from men in Slovenia, while men in Croatia have the highest risk aversion.

Women in Hungary exhibit significantly lower risk aversion than women in Croatia and Slovenia, while women in Croatia and Slovenia do not significantly differ. The results are reported in Table 6 and presented in Figure 2.

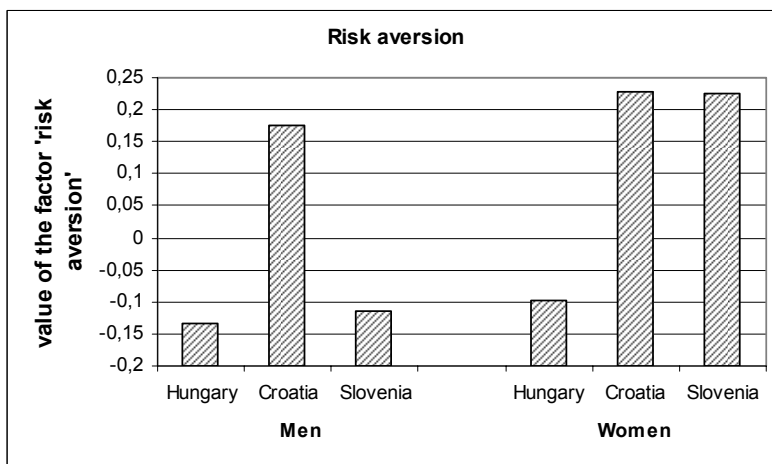
Table 6: Country differences in risk aversion for each gender

Risk aversion	ANOVA F–statistic (signif.)	Tukay test– Mean difference (significance) Hungary–Croatia	Tukay test– Mean difference (significance) Hungary–Slovenia	Tukay test– Mean difference (significance) Slovenia–Croatia
Men	9.831 (0.000)	–0.3085 (0.000)	–0.0196 (0.953)	–0.2890 (0.001)
Women	15.826 (0.000)	–0.3261 (0.000)	–0.3247 (0.000)	–0.0015 (1.000)

The similar situation, that lower risk aversion appears along with lower entrepreneurship awareness, was also found when comparing adults in Hungary and Ireland (Acs et al., 2005a). The Irish are more likely to indicate a greater entrepreneurial awareness than Hungarians, but are also more likely to indicate that fear of failure would prevent them from starting a new business.

Therefore, the hypothesis *H2a* and *H2b*, that there are no differences regarding risk aversion among adults in Hungary, Croatia and Slovenia can be rejected – significant country differences are found in both genders.

It is worthwhile to note that men and women in Croatia and Hungary are not significantly different regarding risk aversions. Gender differences are significant only in Slovenia, where women are much more likely than men to indicate that the fear of failure would prevent them from starting a new business. The results are reported in Table 7. The hypothesis *H2c*, that within

Figure 2: Risk aversion by gender in Hungary, Croatia and Slovenia**Table 7: Gender differences in risk aversion in each country**

	Gender differences in the risk aversion		
<i>Hungary</i>	<i>Hungary–men; mean</i>	<i>Hungary– women; mean</i>	<i>t–statistic (signif.)</i>
	-0.1343	-0.0993	-0.676 (0.499)
<i>Croatia</i>	<i>Croatia–men; mean</i>	<i>Croatia– women; mean</i>	<i>t–statistic (signif.)</i>
	0.1742	0.2269	-0.552 (0.581)
<i>Slovenia</i>	<i>Slovenia–men; mean</i>	<i>Slovenia– women; mean</i>	<i>t–statistic (signif.)</i>
	-0.1148	0.2254	-4.198 (0.000)

a single country gender differences regarding risk aversion are significant, can therefore be partly rejected, since gender differences are significant only in Slovenia.

Motivation to become an entrepreneur

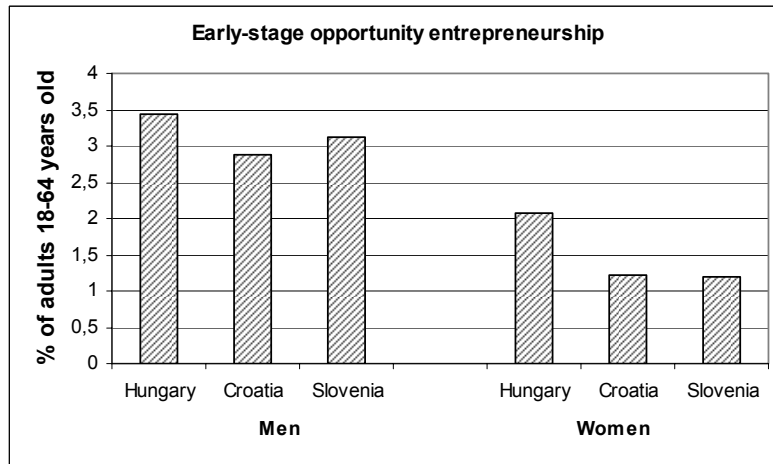
As already mentioned, the motivation to become an entrepreneur can be, on a very basic level, described as opportunity driven and necessity pushed. Regarding the previously described results on entrepreneurial awareness and risk aversion, one would expect that significant country differences would appear also when analysing the levels of opportunity-based early-stage entrepreneurship. It could be expected that men and women in Hungary would be less likely to be included in opportunity entrepreneurship than men and women in Slovenia and Croatia, due to their lower entrepreneurial awareness. But country differences regarding opportunity early-stage entrepreneurship are not significant – this holds for both genders.

A more detailed insight into early-stage entrepreneurship is provided with the analysis of opportunity and necessity early-stage entrepreneurship levels that are reported for both genders are presented by Figures 3 and 4 and in Table 8.

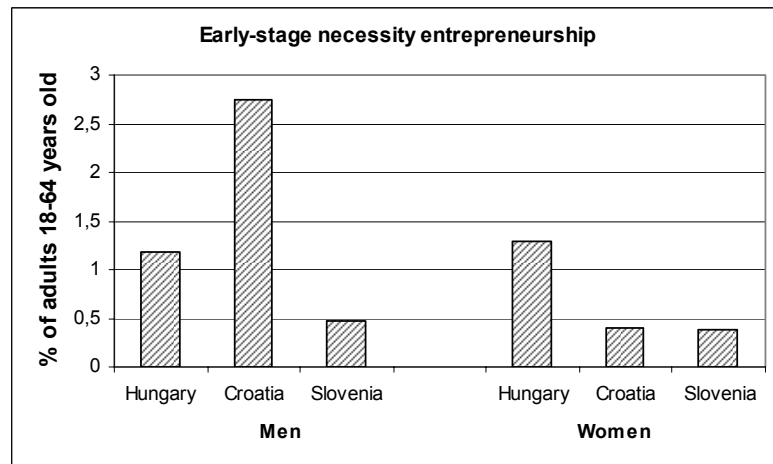
Significant country differences appear with regard to necessity early-stage entrepreneurship. Men in Croatia are more likely to be involved in necessity early-stage entrepreneurship than men

in Slovenia and Hungary, while results for women in Slovenia and Croatia do not significantly differ. With regard to the results surrounding risk aversion, it seems that higher necessity early-stage entrepreneurship levels and lower risk aversion are likely to be associated. The results are very similar for women. This conclusion is supported by the negative value of the Pearson correlation (-0.061 – male and -0.063 – female), which is significant for both genders ($p=0.034$ – male and $p=0.029$ – female), although the strength of association is weak.

Figure 3: Levels of the opportunity early-stage entrepreneurship activities



Figures 4: Levels of the necessity early-stage entrepreneurship activities



The hypotheses $H3a$ and $H3c$ are not rejected, since national differences in opportunity early-stage entrepreneurship levels are not significant for either gender. The hypotheses $H3b$ and $H3d$ can be partly rejected, since, as described, some of the country differences in the necessity early-stage entrepreneurship levels for both genders are significant.

Table 8: Country differences in early-stage opportunity and necessity entrepreneurship levels for each gender

Hungary Mean	Croatia Mean	Slovenia Mean	Chi-square (signif.) Hungary-Croatia	Chi-square (signif.) Hungary-Slovenia	Chi-square (signif.) Slovenia-Croatia
<i>Early-stage opportunity entrepreneurship – men</i>					
3.45	2.88	3.13	0.366 (0.545)	0.132 (0.716)	0.009 (0.924)
<i>Early-stage necessity entrepreneurship – men</i>					
1.18	2.75	0.47	6.481 (0.011)	2.022 (0.155)	12.107 (0.001)
<i>Early-stage opportunity entrepreneurship – women</i>					
2.08	1.22	1.20	1.402 (0.236)	1.896 (0.169)	0.000 (1.000)
<i>Early-stage necessity entrepreneurship – women</i>					
1.29	0.40	0.39	3.585 (0.058)	4.115 (0.042)	0.000 (1.000)

Looking *inside* each of the three countries (Table 9), we find out that, as expected, men are significantly more active in start-up entrepreneurship as compared to women in their country. This holds for opportunity-based entrepreneurship in each country. Regarding necessity-based entrepreneurship, gender differences are not significant in Slovenia and Hungary, but are significant in Croatia, where men are more likely to be involved in necessity-driven entrepreneurship than women. It seems that men in Slovenia and Hungary are more likely to perceive good business opportunities than women and exploit them, but when necessity pushes someone into entrepreneurship, the gender no longer matters.

The hypothesis *H3e*, that gender differences regarding necessity and opportunity early-stage entrepreneurship levels within a single country are significant, is partly rejected. It is true that men are more likely to be involved in opportunity early-stage entrepreneurship than women in each of the three countries, while necessity early-stage entrepreneurship levels between genders differ significantly only in Croatia.

Table 9: Gender differences in opportunity and necessity early-stage entrepreneurship in Hungary, Croatia and Slovenia

Gender differences in the opportunity early-stage entrepreneurship			
<i>Hungary</i>	<i>Hungary–men; mean</i>	<i>Hungary– women; mean</i>	<i>Chi-square (signif.)</i>
	3.45	2.08	4.468 (0.035)
<i>Croatia</i>	<i>Croatia–men; mean</i>	<i>Croatia– women; mean</i>	<i>Chi-square (signif.)</i>
	2.88	1.22	4.053 (0.044)
<i>Slovenia</i>	<i>Slovenia–men; mean</i>	<i>Slovenia– women; mean</i>	<i>Chi-square (signif.)</i>
	3.13	1.20	6.170 (0.013)
Gender differences in the necessity early-stage entrepreneurship			
<i>Hungary</i>	<i>Hungary–men; mean</i>	<i>Hungary– women; mean</i>	<i>Chi-square (signif.)</i>
	1.18	1.29	0.054 (0.816)
<i>Croatia</i>	<i>Croatia–men; mean</i>	<i>Croatia– women; mean</i>	<i>Chi-square (signif.)</i>
	2.75	0.40	12.502 (0.000)
<i>Slovenia</i>	<i>Slovenia–men; mean</i>	<i>Slovenia– women; mean</i>	<i>Chi-square (signif.)</i>
	0.47	0.39	0.000 (1.000)

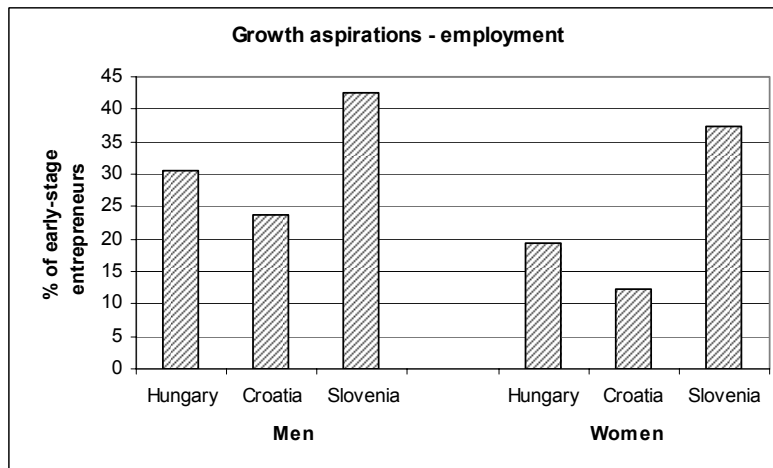
Growth aspirations

Male as well as female early-stage entrepreneurs in Slovenia have significantly higher growth aspirations about the expected number of new jobs than those in Croatia and Hungary, while Croatia and Hungary do not significantly differ in this area. Results for gender differences across countries in growth aspirations, with regard to market creation and the use of the latest technologies, are less reliable due to the small number of entrepreneurs that have such growth aspirations. Nevertheless, it seems that male early-stage entrepreneurs in Slovenia have higher growth aspirations regarding market creation than those in Croatia and Hungary, while female early-stage entrepreneurs in the three countries do not differ. Regarding the use of the latest technologies, neither male nor female early-stage entrepreneurs in the three countries differ. The results are reported in Table 10 and by Figure 5.

Table 10: Country differences in growth aspirations for each gender

		Hungary Mean	Croatia Mean	Slovenia Mean	Chi-square (signif.) Hungary-Croatia	Chi-square (signif.) Hungary-Slovenia	Chi-square (signif.) Slovenia-Croatia
Growth aspi. – employment	men	30.57	23.85	42.45	1.132 (0.287)	4.003 (0.045)	8.568 (0.003)
	women	14.29	12.24	37.25	0.07 (0.932)	8.975 (0.003)	7.056 (0.008)
Growth aspi. – market creat.	men	19.11	19.27	34.53	0.000 (1.000)	8.260 (0.004)	6.350 (0.012)
	women	13.27	20.41	31.37	0.780 (0.377)	5.909 (0.015)	1.044 (0.307)
Growth aspi. – technology	men	16.56	11.93	14.39	0.765 (0.382)	0.125 (0.723)	0.143 (0.705)
	women	16.33	10.20	11.76	0.563 (0.453)	0.251 (0.616)	0.000 (1.000)

Figure 5: Growth aspirations – employment of men and women in Hungary, Croatia and Slovenia



Although women are, on average, less likely to be involved in entrepreneurship than men, the growth aspirations of early-stage female entrepreneurs in each of the three countries are not significantly different from those of males in their countries. The only exceptions are with regard to growth aspirations about future employment in Hungary. It is true that women are, on average, less likely to start into entrepreneurship but, once started, women have on average as high growth aspirations as men as reported in Table 11.

Table 11: Gender differences in growth aspirations in Hungary, Croatia and Slovenia

Gender differences in growth aspirations – employment			
Hungary	Hungary–men; mean	Hungary– women; mean	Chi–square (signif.)
	30.57	14.29	7.836 (0.005)
Croatia	Croatia–men; mean	Croatia– women; mean	Chi–square (signif.)
	23.85	12.24	2.147 (0.143)
Slovenia	Slovenia–men; mean	Slovenia– women; mean	Chi–square (signif.)
	42.45	37.25	0.229 (0.633)
Gender differences in growth aspirations – market creation			
Hungary	Hungary–men; mean	Hungary– women; mean	Chi–square (signif.)
	19.11	13.27	1.082 (0.298)
Croatia	Croatia–men; mean	Croatia– women; mean	Chi–square (signif.)
	19.27	20.41	0.000 (1.000)
Slovenia	Slovenia–men; mean	Slovenia– women; mean	Chi–square (signif.)
	34.53	31.37	0.055 (0.814)
Gender differences in growth aspirations – technology			
Hungary	Hungary–men; mean	Hungary– women; mean	Chi–square (signif.)
	16.56	16.33	0.000 (1.000)
Croatia	Croatia–men; mean	Croatia– women; mean	Chi–square (signif.)
	11.93	10.20	0.002 (0.964)
Slovenia	Slovenia–men; mean	Slovenia– women; mean	Chi–square (signif.)
	14.39	11.76	0.052 (0.820)

CONCLUDING REMARKS

Slovenia, Croatia and Hungary differ significantly regarding almost all the variables analysed and significant gender differences within each single country were also found. Most of the differences were found between Slovenia on one hand and Croatia and Hungary on the other. The highest entrepreneurial awareness among men as well as among women was found in Slovenia, followed by Croatia and Hungary. In each of the three countries, men are more likely to indicate higher entrepreneurial awareness than women in their country. It seems that a lower level of entrepreneurial awareness is sometimes also associated with lower risk aversion among adults. Men, as well as women, in Hungary exhibit on average the lowest level of risk aversion, followed by Slovenia and Croatia. Men in each of the three countries are also more likely to indicate risk aversion than women, but only in Slovenia are the differences between both genders significant.

No significant difference among countries was found in opportunity early-stage entrepreneurship for both genders, but significant differences arise in necessity early-stage

entrepreneurship. Men in Croatia and women in Hungary are more likely to be involved in necessity early-stage entrepreneurship than those in the other two countries. In each of the three countries, as expected, men are more likely to be involved in opportunity early-stage entrepreneurship than women. Regarding necessity early-stage entrepreneurship, gender differences are not significant in Slovenia and Hungary, but are significant in Croatia, where men are more likely to be involved in it than women. It seems that men in Slovenia and Hungary are more likely to perceive good business opportunities than women and exploit them, but when necessity pushes someone into entrepreneurship, gender no longer matters.

The three countries significantly differ regarding the growth aspirations of early-stage entrepreneurs. Male as well as female early-stage entrepreneurs in Slovenia have higher growth aspirations with regard to the expected number of new jobs than those in Croatia and Hungary. Although women are, on average, less likely to be involved in entrepreneurship than men, their growth aspirations do not significantly differ from those of men in their country (by all variables analysed, except one). It is true, that women are, on average, less likely to start with entrepreneurship but, once started, women have on average as high growth aspirations as men, and gender no longer matters.

It could be stated that in all three countries, women represent an unexploited resource for entrepreneurship. Therefore, measures for increasing entrepreneurship awareness among women are needed, through encouraging business and social networking with special support programs for female entrepreneurs and female advisors and through entrepreneurial training (the skills and knowledge needed for entrepreneurship) for women. Gender specific barriers that further limit a woman's capacities to be an entrepreneur, could be, in our opinion, smaller, if women were encouraged to start a new business not only by friends and family, but also by the host society, for example by lowering costs associated with social services to support working mothers, or by offering special funding loans for female entrepreneurs and so forth. These are also measures that would help female early-stage entrepreneurs transform their expectations about future growth into reality. Since women, on average, do not start their entrepreneurial activities with lower expectations than men, there is also no inherent reason for them to be less effective than men during their entrepreneurial careers.

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