



GENDER DIFFERENCES IN EARLY-STAGE ENTREPRENEURSHIP IN THREE EUROPEAN POST-SOCIALIST COUNTRIES

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This paper focuses on differences in male and female early-stage entrepreneurship in Hungary, Croatia and Slovenia. The analysis was performed on two levels: cross-country analysis and inter-country analysis. The paper focuses on three main characteristics of early-stage entrepreneurial activity among adults: entrepreneurial capacity, analysed through entrepreneurial awareness and risk aversion, motivation for entrepreneurship, by analysing opportunity-driven and necessity-pushed entrepreneurship, and entrepreneurial growth aspirations of male and female early-stage entrepreneurs in Hungary, Croatia and Slovenia. Despite sharing a long history of adjoining living, countries differ significantly in various aspects. Significant gender differences were identified within each of the three countries. Some of the most interesting results include: lower entrepreneurial awareness also lowers risk aversion among adults in a country; men are more likely to perceive and exploit business opportunities than women; women are, on average, less likely to start new firms; however, once started, female entrepreneurs have similar growth aspirations as their male counterparts.

Key words: gender differences, entrepreneurial capacity, motivation for entrepreneurship, entrepreneurial growth aspirations

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INTRODUCTION

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

Each country has its own prevailing ethnicity – Hungarians, Croats and Slovenians – and each is also highly ethnically homogenous (at 90% of prevailing ethnicity), with one dominant language: 98% (Hungary), 96% (Croatia) and 92% (Slovenia). As shown in Table 1, none of the countries can be considered 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 about radical changes to the labour market, including legislation that has permitted the establishment of private firms. The transitional processes are not yet complete, despite Slovenia and Hungary's May 2004 entry to the European Union. There are many deeply ingrained values and cultural matrices that need to be changed (Rebernik, 1997).

These transitional countries also share many common features with regard to female participation in the labour 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 women took over a large share of the adjustment costs (Rumin-ska-Zimny, 2003). Moreover, it seems that transition changes have also had important and often negative effects on women's position in society (Stoyanovska, 2001), where men and women under the communist regime were supposedly equal in all aspects of society. But, as Gal and Kligman claim (Gal and Kligman, 2000), state socialism was only officially supporting equality between men and women by women's full participation in the labour force; the states also intruded significantly on women's reproductive lives, in a directly embodied manner; but this is not the scope of this paper. 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).

The economic, political and social processes of the transition affected women differently in each of the countries. For instance, in Hungary during the communist period, full-time

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employment and the employment of women were definitive elements of the prevailing ideology (IHF, 2000). Although after the transition the level of employment decreased significantly, it remained socially acceptable for women to have professional careers; however, household activities and child-care continued to be seen as women's tasks. Women's social status is similar in Slovenia (IHF, 2000). On the other hand, Leinert-Novosel claims (Leinert-Novosel, 2000) that in Croatia it is evident that the politics of the past 10 to 15 years, which highlighted the role of the church and decreed that women's place was primarily in the house, have considerably worsened the status of women and discouraged them in their attempts to improve their own status in society through work and career advancement.

TABLE 1
Main economic
indicators in Hungary,
Croatia and Slovenia

Indicators	Hungary	Croatia	Slovenia
Main Economic Indicators			
Real GDP growth ¹⁾	3.4	3.7	2.3
GDP per capita (US\$ at PPP) ¹⁾	14,800	11,256	21,175
Consumer Price Inflation ¹⁾	6.8	2.1	3.6
Unemployment rate ¹⁾	6.1	18.7	10.4
Total population ¹⁾	10,100,000	4,442,000	1,990,000
Total labour force 2003 ²⁾	4,150,000	2,100,000	960,000
Population 18-64 in 2004 ²⁾	6,550,000	2,841,000	1,344,000
Global Competitiveness Report Rankings³⁾			
Growth Competitiveness Index	39	61	33
Technology Index	29	46	26
Public Institution Index	37	76	31
Macroeconomic Environment Index	55	59	39
Business Competitiveness Index	42	72	31

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

²⁾ GEM collected secondary data 2004; ³⁾ Global Competitiveness Report 2004

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 grounded to a large extent in the development of entrepreneurship (Acs, 2002; Barreto, 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.

Indicators	Hungary	Croatia	Slovenia
<u>Labour force characteristics</u>			
Percentage of female labour force unemployed 1998-2002 ¹⁾	5.4	18.5	6.3
Percentage of male labour force unemployed 1998-2002 ¹⁾	6.1	13.4	5.6
Percentage of female labour force in agriculture 1998-2002 ¹⁾	4.0	15.0	10.0
Percentage of male labour force in agriculture 1998-2002 ¹⁾	9.0	16.0	10.0
Percentage of female labour force in industry 1998-2002 ¹⁾	26.0	21.0	29.0
Percentage of male labour force in industry 1998-2002 ¹⁾	42.0	37.0	46.0
Percentage of female labour force in services 1998-2002 ¹⁾	71.0	63.0	61.0
Percentage of male labour force in services 1998-2002 ¹⁾	49.0	47.0	63.0
Ratio of female to male earned income ²⁾	59.0	56.0	62.0
Self-employ. of females as a share of total employ., 2000 ³⁾	9.6	14.4 ⁴⁾	6.5
Self-employ. of males as a share of total employ., 2000 ³⁾	18.7	23.3 ⁴⁾	15.3

¹⁾ World Bank 2004, World Development indicators; ²⁾ UNDP 2004, Human Development Report; ³⁾ Labour-force surveys – Nesporova (2002); ⁴⁾ 1999

TABLE 2
Some labour force
characteristics in
Hungary, Croatia and
Slovenia

In most countries, the share of men in the start-up phases of entrepreneurship is much higher than the share of women. Empirical evidence of this can be found in a recent Global Entrepreneurship Monitor (GEM) research report (Acs et al., 2005). 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 active female 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 of between US\$10,000 and US\$25,000, (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 a per capita GDP of over US\$25,000 (like the USA or Finland), where the percentage difference falls to 33%. In low-income countries with a per capita GDP at or below US\$10,000 (like Croatia, Peru, South Africa, Hungary and Ecuador) men, on average, are 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 risk aversion. The second is to provide a clearer insight into the current state of gender differences in opportunity and necessity-based, early-stage en-

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entrepreneurship 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 Hungary, Croatia and Slovenia.

In light of the triggering question: "What differences exist among countries that seem similar from a global perspective?" analysis in this paper was performed at 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 literature on entrepreneurship as well as the literature on gender segregation in entrepreneurship can be classified into two main streams: literature that examines the supply side, and that which examines the demand side. The demand-side literature examines, at 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, the effects of human capital, norms, etc.

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

Entrepreneurial awareness

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 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 focuses particularly on early-stage entrepreneurs, evaluating opportunities retrospectively is not possible.

An individual's ability to enter into entrepreneurship and use the entrepreneurial skills, knowledge and experiences needed for it, can be regarded as the next major determi-

nant 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 into, 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 behaviour, both in the start-up phase of entrepreneurship (Aldrich and Zimmer, 1986) and the 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 differences between Slovenia, Croatia and Hungary with regard to entrepreneurial awareness by gender. To answer this research question, we first formulated two hypotheses H1a and H1b:

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

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

The OECD Report on female entrepreneurship (OECD 2004) highlighted 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), and have different 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, therefore, have less access to the critical resources, support and information needed to successfully start a new business. In their recent research, O'Gorman and Terjesen (2006) found out that Irish female entrepreneurs¹ are significantly less likely to report knowing an individual who

started a business in the last two years, but they find no differences between male and female entrepreneurs in terms of perception of opportunity and in terms of perception of possessing skills and knowledge to start a business.

In general, gender difference in entrepreneurial awareness can be expected. The hypothesis H1c states:

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

Risk aversion

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, such as risk taking, one needs to create and manage a new firm, are also culturally embedded and historically specific, we may presume that due to similar social conditions and historical features, adults in Hungary, Croatia and Slovenia do not differ significantly regarding risk aversion. The following hypotheses were formulated:

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

H2b: Women in Hungary, Croatia and Slovenia do not differ significantly 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 are leadership, a sense of adventure and aggressiveness). These job requirements 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 hypothesis H2c:

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

Motivation to become an entrepreneur

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 va-

riability across countries was observed between 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 Hungary, Croatia and Slovenia similar in many ways with regard to economic, cultural, and historical traits, we can 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 Hungary, Croatia and Slovenia do not differ significantly.

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

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

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

Since the majority of 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; Tominc and Rebernik, 2004), 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 Hungary, Croatia and Slovenia are significant.

Growth aspirations

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; Tominc and Rebernik, 2005). 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 included in this study:

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

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

Little is known about the role of gender in a company's growth. Kolvereid (1992) reported on a study of Norwegian entrepreneurs that 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 factor that affects 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). Hypothesis H4c states:

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

TABLE 3
Results – principal
components analysis

text assumed to be important for entering into entrepreneurship can be loaded into two components. Principal components analysis revealed the result shown in Table 3.

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

The four items describing personal context are as follows: the ability to perceive good business opportunities was assessed by asking respondents if they agreed 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 were assessed by asking them if they agreed with the statement 'You have the knowledge, skill and experience required to start a new business' while entrepreneurial networking behaviour was weighted up 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.' 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 between 18 and 64 years old who 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 between 18 and 64 years old who are entering into entrepreneurship because they have 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 six 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 businesses offering the same products/services to 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 the 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).

FINDINGS

Even though there are many economic, social and historical similarities between Hungary, Croatia and Slovenia, the countries differ significantly by almost all variables analysed. Gender differences in each country 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.

Differences between all three countries are significant.² Entrepreneurial awareness among women in Slovenia and Croatia does not differ significantly, 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.

FIGURE 1
 Entrepreneurial awareness by gender in Hungary, Croatia and Slovenia

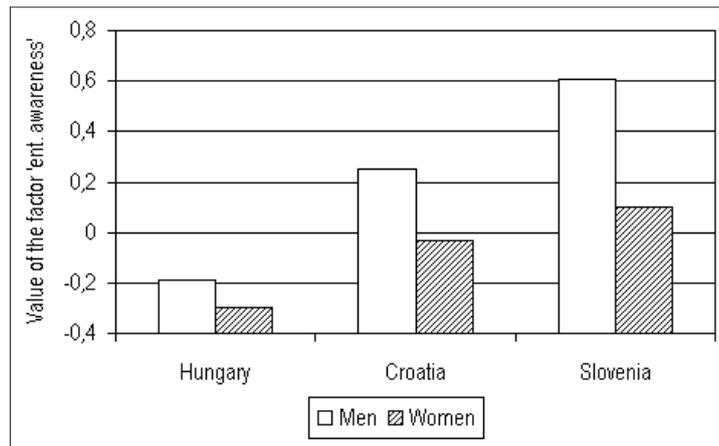


TABLE 4
 Country differences in entrepreneurial awareness for each gender (The Tukey test— mean difference and significance results are presented)

Entrepreneurial awareness	Male early-stage entrepreneurs	Female early-stage entrepreneurs
Hungary-Croatia	-0.4349 (0.000)	-0.2668 (0.000)
Hungary-Slovenia	-0.7938 (0.000)	-0.4069 (0.000)
Slovenia-Croatia	0.3589 (0.000)	0.1401 (0.158)

TABLE 5
 Gender differences in entrepreneurial awareness in each country

Gender differences 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.

Entrepreneurial awareness	Male early-stage entrepreneurs	Female early-stage entrepreneurs	t-statistic (signif.)
Hungary	-0.1819	-0.3102	2.379 (0.018)
Croatia	0.2529	-0.0433	3.443 (0.001)
Slovenia	0.6119	0.0967	7.007 (0.000)

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

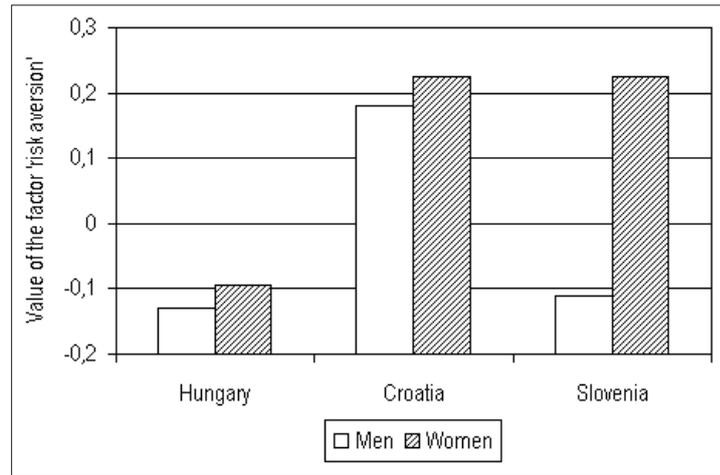
Risk aversion: Results on country differences regarding risk aversion³ for each gender indicate that a lower level of entrepreneurial awareness sometimes also leads to lower risk aversion. Namely, men as well as women in Hungary, who are likely to have the lowest entrepreneurial awareness in the three countries, also exhibit on average the lowest risk aversion; and yet, not all country differences are significant: men in Hungary do not differ significantly from men in Slovenia, while men in Croatia have the highest risk aversion.

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

➔ TABLE 6
Country differences in risk aversion for each gender (The Tukey test – mean difference and significance results are presented)

Risk aversion	Male early-stage entrepreneurs	Female early-stage entrepreneurs
Hungary-Croatia	-0.3085 (0.000)	-0.3261 (0.000)
Hungary-Slovenia	-0.0196 (0.953)	-0.3247 (0.000)
Slovenia-Croatia	-0.2890 (0.001)	-0.0015 (1.000)

➔ FIGURE 2
Risk aversion by gender in Hungary, Croatia and Slovenia



A 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., 2006). 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.

⓪ TABLE 7
Gender differences in risk aversion in each country

Risk aversion	Male early-stage entrepreneurs	Female early-stage entrepreneurs	t-statistic (signif.)
Hungary	-0.1343	-0.0993	-0.676 (0.499)
Croatia	0.1742	0.2269	-0.552 (0.581)
Slovenia	-0.1148	0.2254	-4.198 (0.000)

Therefore, the hypotheses 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 do not differ significantly regarding risk aversion. 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,

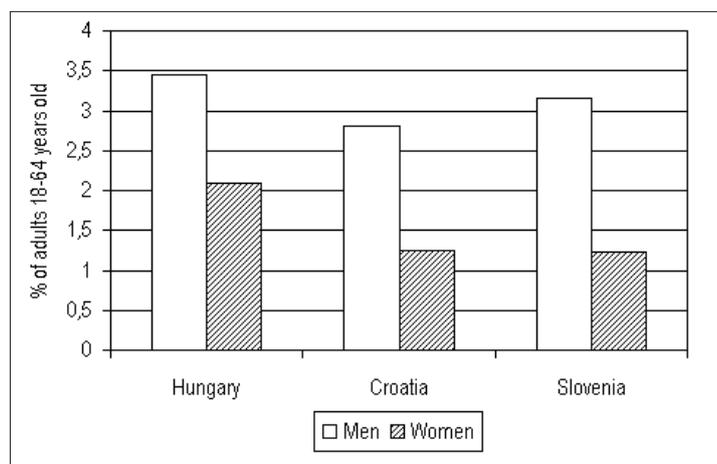
that within a single country gender differences regarding risk aversion are significant, can therefore be partly rejected, since gender differences are significant only in Slovenia.

Motivation to become an entrepreneur: As already mentioned, at a very basic level, the motivation to become an entrepreneur can be 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 also appear 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.

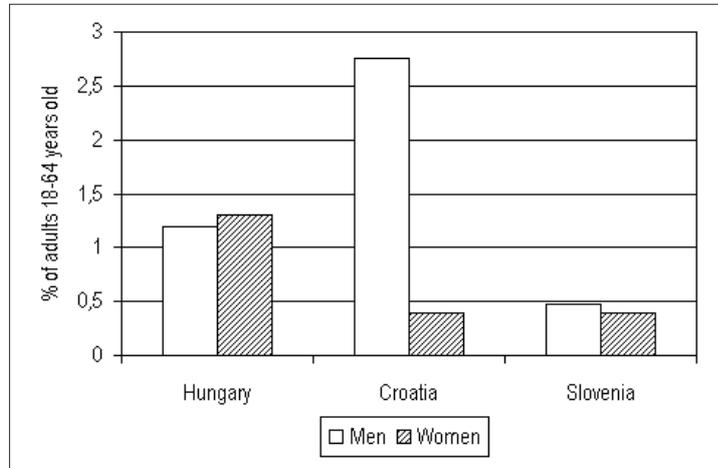
A more detailed insight into early-stage entrepreneurship is provided with the analysis of opportunity and necessity early-stage entrepreneurship levels that are reported for both genders, and are presented by Figures 3 and 4 and in Table 8.

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 differ significantly. 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 association is weak.

➔ FIGURE 3
Levels of the opportunity early-stage entrepreneurship activities



➔ FIGURE 4
Levels of the necessity
early-stage
entrepreneurship
activities



Ⓞ TABLE 8
Country differences in
early-stage opportunity
and necessity entre-
preneurship levels for
each gender (The Chi-
square test and sig-
nificance results are
presented)

	Male early-stage entrepreneurs	Female early-stage entrepreneurs
Early-stage opportunity entrepreneurship		
Hungary-Croatia	0.366 (0.545)	1.402 (0.236)
Hungary-Slovenia	0.132 (0.716)	1.896 (0.169)
Slovenia-Croatia	0.009 (0.924)	0.000 (1.000)
Early-stage necessity entrepreneurship		
Hungary-Croatia	6.481 (0.011)	3.585 (0.058)
Hungary-Slovenia	2.022 (0.155)	4.115 (0.042)
Slovenia-Croatia	12.107 (0.001)	0.000 (1.000)

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.

Looking "inside" each of the three countries (Table 9), we find out that, as expected, men are significantly more active in start-up entrepreneurship 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 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 hypothesis H3e, that gender differences regarding necessity and opportunity early-stage entrepreneurship lev-

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

els 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.

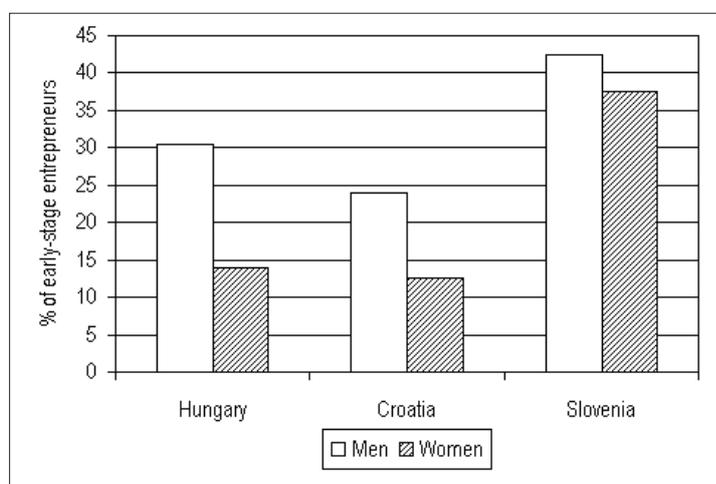
	Males	Females	Chi-square (signif.)
Opportunity early-stage entrep.			
Hungary	3.45	2.08	4.468 (0.035)
Croatia	2.88	1.22	4.053 (0.044)
Slovenia	3.13	1.20	6.170 (0.013)
Necessity early-stage entrep.			
Hungary	1.18	1.29	0.054 (0.816)
Croatia	2.75	0.40	12.502 (0.000)
Slovenia	0.47	0.39	0.000 (1.000)

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 differ significantly 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 Tables 10 and 11 and by Figure 5.

TABLE 10
Country differences in growth aspirations for each gender (The Chi-square test and significance results are presented)

	Male early-stage entrepreneurs	Female early-stage entrepreneurs
Growth aspirations – employment		
Hungary-Croatia	1.132 (0.287)	0.07 (0.932)
Hungary-Slovenia	4.003 (0.045)	8.975 (0.003)
Slovenia-Croatia	8.568 (0.003)	7.056 (0.008)
Growth aspiration – market creation		
Hungary-Croatia	0.000 (1.000)	0.780 (0.377)
Hungary-Slovenia	8.260 (0.004)	5.909 (0.015)
Slovenia-Croatia	6.350 (0.012)	1.044 (0.307)
Growth aspiration – technology		
Hungary-Croatia	0.765 (0.382)	0.563 (0.453)
Hungary-Slovenia	0.125 (0.723)	0.251 (0.616)
Slovenia-Croatia	0.143 (0.705)	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, on average, are less likely to start entrepreneurship but, once started, they have, on average, growth aspirations which are as high as those of men, as reported in Table 11.

Ⓛ TABLE 11
Gender differences in
growth aspirations in
Hungary, Croatia and
Slovenia

	Male early-stage entrepreneurs	Female early-stage entrepreneurs	Chi-square (signif.)
Growth aspirations – employment			
Hungary	30.57	14.29	7.836 (0.005)
Croatia	23.85	12.24	2.147 (0.143)
Slovenia	42.45	37.25	0.229 (0.633)
Growth aspirations – market creation			
Hungary	19.11	13.27	1.082 (0.298)
Croatia	19.27	20.41	0.000 (1.000)
Slovenia	34.53	31.37	0.055 (0.814)
Growth aspirations – technology			
Hungary	16.56	16.33	0.000 (1.000)
Croatia	11.93	10.20	0.002 (0.964)
Slovenia	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 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 between countries was found in opportunity early-stage entrepreneurship for both genders, but significant differences were evident 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 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 differ significantly regarding the growth aspirations of early-stage entrepreneurs. Male and 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 differ significantly from those of men in their country (by all variables analysed, except one). It is true women are, on average, less likely to start with entrepreneurship but, once started, they have, on average, growth aspirations which are as high as those of men, and gender no longer matters.

Several extensions of our research are possible. First, as described in the paper, on one hand adults in the three countries, and on the other hand both genders in each country, differ significantly regarding various aspects of entrepreneurship. Suggestions from our findings, as well as from the literature (for example Arenius and De Clercq, 2005, who conducted a research on opportunity recognition) are that re-

searches should compare drivers of entrepreneurial growth aspirations across a wider range of countries, where cultural factors, in our opinion, are extremely interesting. Cultural factors not only affect levels of entrepreneurship and its characteristics (for example growth orientation); it could be expected that gender differences are, at least to some extent, also culturally conditioned.

Findings from our paper are also important for possible policy implications. Some findings (Arenius and Kovalainen, 2006) confirm that macroeconomic policies are related to the level of differences in entrepreneurship across countries, where, to our knowledge, no previous research focused on policy implications for women entrepreneurship in transitional countries.

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 capacity to be an entrepreneur, could, in our opinion, be 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.

NOTES

¹ In their research Irish nascent entrepreneurs are analysed. Nascent entrepreneurs have taken some actions towards creating a new business and have not paid wages for more than three months, while new entrepreneurs are employed as owners/managers of new businesses which have not paid wages or salaries for more than 42 months. The term early-stage entrepreneur refers to nascent, as well as to new entrepreneurs.

² Males: ANOVA F-statistics = 73.927 ($p = 0.000$); Females: ANOVA F-statistics = 22.466 ($p = 0.000$)

³ Males: ANOVA F-statistics = 9.831 ($p = 0.000$); Females: ANOVA F-statistics = 15.826 ($p = 0.000$)

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Razlike među spolovima pri pokretanju poduzetništva u trima europskim post-socijalističkim zemljama

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Ovaj rad usmjeren je na razlike između muškaraca i žena pri pokretanju poduzetništva u Mađarskoj, Hrvatskoj i Sloveniji. Analiza je provedena na dvije razine: na razini analize između zemalja i analize unutar zemalja. Rad se bavi trima glavnim karakteristikama početne poduzetničke djelatnosti među odraslima: poduzetničkim kapacitetom, koji se analizira poduzetničkom sviješću i nesklonošću prema riziku, poduzetničkom motivacijom, analiziranim poduzetništvom što ga stvara prilika ili poduzetništvom što ga potiče nužnost, i težnjom za poduzetničkim rastom muških i ženskih poduzetnika-početnika u Mađarskoj, Hrvatskoj i Sloveniji. Usprkos dugotrajnom susjedskom suživotu, ove se zemlje međusobno značajno razlikuju u mnogim aspektima. Značajne razlike među spolovima otkrivene su u svim zemljama. Najzanimljiviji rezultati pokazuju da niža poduzetnička svijest također smanjuje nesklonost prema riziku među odraslima u pojedinoj zemlji;

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muškarci će prije uočiti i iskoristiti dobru poslovnu priliku nego žene; žene će u prosjeku rjeđe pokretati nove tvrtke; međutim, jednom kada krenu u posao, poduzetnice će imati slične težnje za rastom kao i poduzetnici.

Ključne riječi: razlike u spolovima, poduzetnički kapacitet, poduzetnička motivacija, težnje za poduzetničkim rastom

Geschlechtsgebundene Unterschiede bei der Unternehmensgründung in drei post-sozialistischen europäischen Ländern

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Die vorliegende Arbeit widmet sich den Unterschieden zwischen Männern und Frauen, die in Ungarn, Kroatien und Slowenien ihr eigenes Unternehmen gründen. Die Analyse wurde auf zwei Ebenen durchgeführt: zwischen den Ländern und innerhalb der einzelnen Länder. Untersucht werden drei Hauptmerkmale, die bei der Unternehmensgründung sowohl auf Seiten der Männer als auch der Frauen zutage treten: die Unternehmerkazipazität, analysiert anhand des Bewusstseinsniveaus und der Fähigkeit zur Risikoeinschätzung; die Unternehmermotivation, analysiert durch marktgerechte Reaktionen (als Antwort auf sich ergebende Chancen oder Notwendigkeiten), und Wachstumsstreben. Trotz ihrer langjährigen Nachbarschaft unterscheiden sich Ungarn, Kroatien und Slowenien in verschiedenen Aspekten sehr. Bedeutende Unterschiede zwischen den Geschlechtern konnten in allen Ländern aufgedeckt werden. Zu den interessantesten Erkenntnissen gehört die Entdeckung, dass ein weniger stark ausgeprägtes Unternehmerbewusstsein einhergeht mit größerer Risikobereitschaft; Marktlücken werden von Männern eher erkannt und genutzt als von Frauen. Des Weiteren neigen Frauen im Durchschnitt weniger dazu, ein eigenes Unternehmen zu gründen; haben sie sich jedoch einmal dazu entschlossen, zeigen sie ein ähnliches Wachstumsstreben wie Männer.

Schlüsselwörter: Geschlechtsgebundene Unterschiede, Unternehmerkazipazität, Unternehmermotivation, Wachstumsstreben