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Romanian smes During the Crisis: Economic Results and Perceptions Luminița Nicolescu, Irina Alina Popescu, and Ciprian Nicolescu

Tourism Expenditures of Taiwanese and Slovenes: A Comparative Analysis Nataša Slak Valek and Tai-Chi Wu

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The Dynamic Internationalization Model of Slovenian Born Global smes

Ina Lejko and Štefan Bojnec

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# Management

Revija Management je namenjena managerjem in podjetnikom, raziskovalcem in znanstvenikom, študentom in izobražencem, ki snujejo in uporabljajo znanja o obvladovanju organizacij. Združuje dejavnostne, vedenjske in pravne vidike managementa in organizacij. Obravnava dejavnosti organizacij, njihovo urejenost in sredstva, ki jih uporabljajo. Zastopa svobodo misli in ustvarjanja, sprejema različnost vrednot, interesov in mnenj. Zavzema se za etičnost odločanja, moralnost in zakonitost delovanja.

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Jezik in obseg članka. Prispevki za revijo Management so napisani v slovenščini ali angleščini. Članki naj obsegajo od 4000 do 5000 besed vključno z opombami, seznamom literature in grafičnimi prikazi. Nadaljevanje za zadnji notranji strani ovitka

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# **Guest Editor's Introduction** to the Thematic Issue

Introduction This issue of *Management* contains five articles that were originally presented at a conference entitled 'Global Economic and Financial Systems: Crisis or Change?' that was co-sponsored by the University of Primorska and the Society for the Study of Emerging Markets. The Conference, held on 12-14 July, 2012 in Portorož, Slovenia, was attended by researchers from Europe, Asia and North and South America who exchanged views on many topics related to the current global crisis. The papers published here in revised form not only give a good overview of the topics discussed at the Conference but they also provide some valuable insights about the major challenges to mangers and policy makers that have resulted from the current crisis. Particularly valuable is the international composition of the authors of these articles as well as the range of countries with which they deal. While the broad effects of the crisis are more or less the same everywhere, there is much we can learn about the effectiveness of policies and institutions from the experiences of other countries, since policies, business sector responses and precrisis institutions differed considerably among countries.

The first article, 'Romanian smes During the Crisis: Economic Results and Perceptions' by Luminita Nicolescu, Irina Alina Popescu and Ciprian Nicolescu examines the effect of the crisis on Romanian SMES. The authors use both indicators of the economic performance of these smes as well as responses by sme mangers about the impact of the crisis on the SME sector. The statistical analysis shows the shock from the crisis quite clearly. Perhaps more surprising is the response to, and evaluation of, the effects of the crisis by Romanian sme managers. Their responses must be viewed in the light of the fact that this was the first 'global' crisis they had faced in the new 'market economy' era, and thus the article's suggestions for future strategies for SMES are of particular value.

The second article, 'Tourism Expenditures of Taiwanese and Slovenes: A Comparative Analysis' by Nataša Slak Valek and Tai-Chi Wu examines the domestic and international tourism trends of the residents of the two countries. Taiwanese tourists face greater barriers due to distance as well as difficulties in travelling to China due to limited air links. Slovene tourists, on the other hand, face few limits on foreign tourism due to distance or political barriers, but Slovenia's varied geography and tourism opportunities also tend to keep Slovene tourists at home. Since outbound tourism is a potential source of revenue for tourist bureaus and transportation companies in both countries, this study is a valuable exploration of underdeveloped markets.

In an article entitled 'Analyzing Systemic Risk in CEE Markets in the 2007–2008 Financial Crisis,' Renata Karkowska examines the role of the foreign bank groups that dominate many of the financial sectors of CEE countries. Prior to the crisis, the large inflows of capital engineered by these banks were seen as a positive boost to the CEE economies, but, during the crisis, there was a danger that the withdrawal of liquidity by foreign banks in order to bolster the liquidity of the parent banks could cause grave harm to the CEE economies. The author's analysis will be relevant today and in the future, as banks continue to face liquidity problems and as policy makers contemplate what regulations will be needed in the future.

Irena Vodenska's and Lou Chitkushev's article 'Impact of Euro Adoption on Emerging European Countries' uses macroeconomic performance of a number emerging European economies to evaluate the benefits of Euro adoption in the context of their sovereign debt positions. The author's analysis leads them to conclude that Euro adoption should be delayed.

The last article, 'The Dynamic Internationalization Model of Slovenian-Born Global smes' by Ina Lejko and Štefan Bojnec examine the behavior of Slovenian smes that are globalized almost from the day they are founded. This business model is in stark contrast with the tradition view that smes tend to be less globalized than large firms and that the globalization of sme's must proceed very slowly because their managers lack the expertise necessary to engage in foreign operations. This is a pioneering work that should stimulate considerable research in Slovenia and elsewhere and that could also serve as a new business model for smes.

Josef C. Brada Arizona State University

# Romanian smes During the Crisis: Economic Results and Perceptions

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The paper looks at how smes from Romania evolved in the period 2004–2011. The main objective of the paper is to compare smes' situation before the start of the economic crisis and during the period of the crisis. The examination is done from a dynamic perspective and the analysis comprises two aspects: a) the evolution of a number of economic indicators related to Romanian smes' in the studied period and b) the opinions and the perceptions of smes about the impact of the economic crisis on their activity. The paper advances proposals of possible strategies to help smes better cope with the on-going economic crisis.

Key words: small and medium size enterprises, Romania, economic crisis

The paper starts from the important contribution that smes have in any economy they operate in, in terms of employment, added value contribution to job creation, competition, and support of the entrepreneurial spirit. The recent global economic crisis affected smes all over the world including those in Romania. The paper studies the Romanian smes and their economic evolution in the pre-economic crisis timeframe and during the economic crisis, in order to identify how they were affected.

To fulfil this objective, the paper looks at evolutions in the Romanian economy in the last years, makes a short presentation of Romanian smes' statistics and of other studies in the field; it also conducts an analysis of smes economic evolution and makes an analysis of their crisis related opinions. In its final section the paper discusses the implications of the economic crisis over smes and makes a number of proposals for developing smes supporting strategies.

# Romanian Economy in the Period 2004–2011: Some Statistics

The most important event that affected the Romanian economy during this period was the global economic crisis. The global financial

crisis that emerged in 2007 has determined the collapse of large financial institutions, the close down or the restructuration of companies and the loss of thousands of jobs in the affected economies. In this unstable international context, Romania was inevitably hit by the global economic and financial crisis. The recession experienced by the major trading partners of Romania (e.g. in 2009, Germany, Italy and France, see NSSE 2012) led to further propagation of the crisis. Even though the global economic crisis was launched in 2007, the first signs of the economic and financial crisis were felt in Romania at the beginning of 2009 when the national economy contracted by 6.6% and continued to contract in 2010 by 1.6% (International Monetary Fund 2006; 2012). This demonstrates a time gap between the start of the crisis affecting immediately the more mature Western European markets and its diffusion on the Romanian market.

Immediate measures started to be taken in 2009 envisaging to restore the growth of the Romanian economy. Most of them aimed to reduce the public deficit (by reducing public spending and by increasing public revenues). For instance, the agreement Romania signed with the IMF in 2009 aimed, among others, to reduce public sector salary expenses by 20%. This objective was implemented through cuts in the public sector employees' salaries by 25% starting with June 2010, a measure that aimed to reduce the number of public sector employees on short term. Other important measures taken by the Romanian government in order to reduce the public spending were: the pension fund reduction by 15%, and the reduction by 15% of unemployment fund. In addition, increased fiscal burdens with the aim to collect revenues to the state budget were levied. Measures included the introduction of progressive taxation of profits with a minimum tax of approx. 350 Euro to be paid by firms since 2009, and the increase of the VAT rate by 5% (from 19% to 24%) as of July 2010. The progressive taxation impacted on smes, due to the minimum amount to be paid as profit tax irrespective of the level of profit. This resulted in the close down of many smes, already affected by the contraction of the economic activity.

During the analysed period, the evolution of the inflation rate moved from deflation in the period 2002–2007 to inflation after 2008. In 2010 the increase of the inflation rate can be explained by the increase of the vat rate, the prices of food products and the international prices of fuels. The decrease of the inflation from 7.8% in 2008 (International Monetary Fund 2006; 2012) to 5.8% in 2011 was due to two major factors, according to the Romanian National Bank

(Banca Naţională a României 2011): firstly, the depletion of the var increasing effect, and secondly, the deflation of the prices for food products due to a rich agricultural year. Year 2011 was the first year in which Romania recorded economic growth since the debut of the crisis in 2007. The gdp growth rate of 2.5% was 1.5% points above the Eu average (see http://www.eurostat.org). Moreover, second wave of the current global crisis is expected, crisis which is considered to be the most severe in Europe since the end of the 2nd World War and the most severe in us since the Great Depression from the 1930s.

# Romanian SMES in Turbulent Times: Facts and Other Studies

The importance of smes as drivers of economic growth and of economic policy development in national economies has been widely acknowledged after extensive investigations conducted by various researchers (Radosevic 1990; Henderson 2002; Fisher and Reuber 2003; The World Bank 2012). SMES are key drivers of competition, growth and job creation, particularly in developing economies (The World Bank 2012). Henderson (2002) underlined that entrepreneurs increase local incomes and wealth, create new jobs, and connect the community to the larger, global economy. In Romania, small and medium-size enterprises accounted for 99.6 percent of the total number of 491,956 active enterprises in 2010 in Romania (CNIPMMR 2011). The importance of SMES sector in Romania is also demonstrated by the relatively high number of people employed in this type of enterprises. The employment in smes has known increasing trends from 58.2% in 2008 up to 66.3% in 2009 (National Institute of Statistics 2008; 2012), followed by a decrease in 2010 down to 65.9%. The relative stagnation of the personnel employed in smes during the years of economic crisis at around the level of 65% of total employment, illustrates a certain stability of the sector as an employer also during the years of economic crisis, as opposed to other sectors that decreased their contribution to employment due to legislation (public sector) or immediate reaction to decrease in the market demand (large and multinational companies).

At present, the economic and financial crises have reduced the appetite for entrepreneurship in affected economies from all over the world. The themes related to Romanian smes, their evolution, and their problems in the Romanian context in general and the implications of the current crisis in particular, have been of interest to researchers. Recent papers looked at how smes evolved during the

EU and after the EU integration (Hunya 2011; Roman and Ignătescu 2011). Roman and Ignătescu (2011, 140) concluded through their research that Romania's EU accession had positive effects for the SMES sector, among which they mentioned: easier access to markets, routes to cheaper suppliers, better access to structural funds, the development of the legal and institutional framework for SMES, better access to new information and communication technologies. In the period of economic crisis that followed immediately after Romania's accession to the EU, the recession from the Western EU economies, the main trading partners of Romanian enterprises, affected SMES exports. Accordingly, the contribution of SMES exports to the total exports of Romanian enterprises gradually decreased, registering: 30.6% in 2007, 29.2 % in 2009, and 27.9% in 2010 (National Institute of Statistics 2008; 2012).

Researches on how Romanian smes cope in the period of economic crisis identified a number of general difficulties encountered by Romanian smes during their operations (such as high taxation, excessive bureaucracy) and specific difficulties related to the present economic crisis, such as: decrease in the revenue, decrease in the demand, lower opportunities to enter new markets, smaller opportunities for financing and consequently for further development (Vişinescu and Micuda 2011; Roman and Ignătescu 2011). Access to finance was considered among the main problems of European smes during the economic crisis. Companies from Greece, Spain, Latvia and Romania identified access to finance as the most pressing problem.

During the economic and financial crisis, the level of the economic activity decreased in Romania. SMES adapted their business volume to the unfavourable market conditions, both from Romania and from abroad. This resulted in the decrease of the SMES contribution to the total turnover in Romania, showing that, compared to large enterprises, these were affected to a higher extent by the crisis. If in 2004, the SMES contribution to the total turnover in Romania was 57.5%, this increased up to 61% in 2008, and then started to decrease reaching 59.4% in 2010 (National Institute of Statistics 2008; 2012).

In their study on Romanian smes during the crisis period Vişinescu and Micuda (2011) attempted to evaluate the effectiveness of the government policies in the present situation. They concluded that the Romanian government tried to take a number of measures envisaged to support smes since the crisis began in 2007 (see Vişinescu and Micuda 2011), but despite this, forecasts predict further smess economic deterioration in the following years.

### Methodology of the Study

The present study has as main objective to look at the evolution of SMES in dynamics from the point of view of their economic activity and to present the evolution of smes' opinions on the economic crisis. The paper envisages comparing smes situation before the start of the economic crisis (period 2004–2007) and during the period of the crisis (2007–2011), so as to identify the consequences of recent economic developments on Romanian smes. The main bibliographical source used is the White Charter of smes from Romania with its yearly editions for the period 2002–2011. The analysis is based on a) a number of economic indicators and b) on the results of the yearly surveys published in every annual edition of the above-mentioned document. The economic indicators, whose evolution is presented in the fourth section of the paper are included in the White Charter of the Romanian smes and are based on the collection of the annual balance sheets of smes, registered on a yearly basis at the Ministry of Finance. They include all Romanian smes that registered balance sheets at the end of the studied years.

The fifth section of the paper analyzing the evolution of the smes opinions about the economic crisis is based on a dynamic interpretation of the results of an yearly survey conducted with smes by the National Council of the Romanian Private Small and Medium Sized Enterprises – cnimmpr and published in the White Charter of smes from Romania. The annual surveys used the same data collection methodology: a questionnaire, comprising a set of similar questions, was sent every year via mail to a number of Romanian smes. The smes samples were considered to have representativeness at national level from geographical, company size and field of activity points of view. In this way comparability over time was ensured. Table 1 (page 10) presents the structure of the smes comprised in the samples for the 2004–2011.

To look at the evolution of SMES in dynamics we have studied a number of indicators dating back as far as: before the economic crisis (2004–2007) and during the economic crisis (2007–2011), according to availability of data. Year 2007 is seen as the recognized year for the debut of the global economic crisis (Harper 2011).

# Romanian smes in 2004–2009: An Overview of Economic Indicators

This section looks at a number of economic indicators collected on the basis of the methodology presented and related to the evolution

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SMES by size, total number	1378	1398	1306	1178	1256	1099	1485	1723
Micro-enterprises (Less than 10 employees)	53.97%	55.29%	62.43%	53.48%	64.10%	52.68%	%02.99	71.83%
Small enterprises (10–49 employees)	32.35%	30.83%	27.73%	33.45%	26.44%	34.85%	24.32%	21.83%
Medium enterprises (50–249 employees)	13.68%	13.88%	9.84%	13.07%	9.46%	12.47%	9.48%	6.44%
SMES by field of activity, total number	1378	1398	1306	1178	1256	1099	1485	1723
Industry	26.44%	17.17%	17.50%	21.41%	22.41%	21.05%	19.48%	17.22%
Building	8.01%	7.65%	%99.9	11.61%	12.67%	10.43%	%62.9	6.67%
Trade	34.31%	45.92%	44.78%	38.95%	34.45%	38.60%	32.60%	37.64%
Tourism	2.54%	4.86%	2.81%	3.18%	3.48%	2.31%	8.88%	7.49%
Transportation	6.14%	6.44%	%99'9	7.57%	8.21%	5.63%	5.75%	10.48%
Services	22.56%	17.95%	21.59%	17.28%	18.78%	21.98%	23.51%	20.49%
NOTES Adapted from CNIPMMR (2004; 2005; 2006; 2007; 2008; 2009; 2010; 2011).	96; 2007; 2008	3; 2009; 2010	0; 2011).					

TABLE 2 The evolution of SMES on size and turnover structure

Number of smes/Turnover	2004	2005	2006	2007	2008	2009
Micro-enterprises (0–10 employees)	457,712	477,972	508,314	558,021	602,700	560,248
Under 2 million EUR	457,122	477,955	507,224	556,304	600,717	558,711
2–10 million EUR	538	15	1,020	1,582	1,792	1,354
10–50 million EUR	48	87	63	122	169	156
Over 50 million EUR	4	0	7	13	22	27
Small enterprises (10–50 employees)	34,385	39,730	42,525	47,603	49,552	42,688
Under 2 million EUR	32,389	39,666	38,888	42,597	43,933	38,790
2-10 million EUR	1,830	62	3,350	4,552	5,094	3,561

## Romanian smes During the Crisis

10-50 million EUR	158	73	268	428	485	311
Over 50 million EUR	8	0	19	26	40	26
Medium enterprises (50–250 employees)	8,297	8,616	8,881	058'6	9,738	8,206
Under 2 million EUR	5,720	8,435	4,908	4,792	4,391	3,917
2–10 million EUR	2,216	169	3,231	3,948	4,050	3,365
10–50 million EUR	340	12	684	1,023	1,184	862
Over 50 million EUR	21	0	58	87	113	62
TOTAL number of SMES	500,394	526,318	559,720	615,474	661,990	611,142
Under 2 million EUR	495,231	519,381	551,020	603,235	649,041	601,418
2–10 million EUR	4,584	6,168	7601	10,082	10,936	8,280
10–50 million EUR	546	717	1015	1573	1,838	1,329
Over 50 million EUR	33	52	84	126	175	115
TOTAL number of enterprises	502,091	527,931	561,356	617,405	663,849	612,748
NOTES Adapted from CNIPMMR (2004; 2005; 2006; 2007; 2008; 2009; 2010; 2011)	2007; 2008; 200	); 2010; 2011).				
TABLE 3 The evolution of the average turnover on main fields of activity of smes	nain fields of a	ctivity of smes				
Average turnover/company on fields of activity		2005	2006	2007	2008	2009
qhline		1,502.5	1,692.24	1,969.03	2,339.7	2,196.9
Wholesaling (except autos)						
Retailing (except autos)		253.2	290.71	333.69	452.06	458.8
Construction of buildings		600.4	758.17	871,16	956.1	1,301.4
Wholesaling and retailing of autos		1,203.5	1,409.22	2,073.18	2,117.9	1,317.7
Transportation		456,5	458.25	477.16	553.6	504.5
Food and beverage industry		913.4	1028.47	1,217.51	1,517.05	1,658.9
NOTES Adapted from CNIPMMR (2004; 2005; 2006; 2007; 2008; 2009; 2010; 2011)	207; 2008; 2009	); 2010; 2011).				

of smes over time, considering or departing from the earliest data available (2009).

The role of smes as sector that represents a major player in the economy is additionally confirmed in the Romanian case, where smes account for 99% of the total number of companies in the country over the whole period. The sector developed at large pace from 2002 to 2008, when the number of existing smes was with 59% larger than in 2002 (CNIPMMR 2004). However, in 2009 when the economic crisis was in full manifestation, the total number of smes decreased by 8% compared to the previous year. Even though there is a time lag of 2 years from the moment of the crisis' recognized debut in 2007 and the start in the decrease in the number of smes (2009), the sector was definitively affected by the world level economic crisis.

Microenterprises were the most influenced among the SMES categories and their number decreased most in 2009 compared to 2008, as companies with up to 10 employees are usually highly vulnerable in worsening economic conditions.

Our analysis of the evolution of smes is organized around their size and turnover structure. This classification is in accordance with Romanian Law 346/2004 and its subsequent completions, which in its own turn complies with the European Commission Recommendation 2003/361/EC (Commission of the European Communities, 2003). It can be noticed that in all smes categories, most of the companies obtained over the whole period turnovers under 2 million Euros/year (98% of the total number of smes). However, it is observed that during the economic boom period (2004–2007), in all turnover categories of over 2 million Euros, the number of smes increased until 2008, when it registered a sharp switch down in all turnover categories.

In spite of its concordance with EU standards this classification of SMES on turnover, does not have a major relevance, due to the concentration of 98% of the Romanian SMES in the under 2 million Euros category. Therefore, a new regrouping in more adequate categories for Romania (under 5000 Euro, 5000–50,000 Euro, over 50.000 Euro) was set up. This new regrouping reveals a more equilibrated (or balanced) distribution of SMES in categories. The proportion of SMES that obtained a low turnover (under 5000 Euro) decreased from almost half of total in 2003 to around one third in 2009. Consequently, the percentages of SMES that obtained higher turnovers increased in 2003-2009 from 32% to 35% for the 5000–50,000 Euro category and from 20% to 28% for the over 50.000 Euro category. This evolution illustrates a trend of growth of the annual turnover of Romanian SMES, even though they did not reach the levels of other Eu-

ropean smes. Romanian smes became stronger and obtained higher turnovers, when the economy was doing well. The figures illustrate once again the lag (or gap) between the start of the global economic crisis and its manifestation, as only in 2009 a larger percentage of smes started to obtain lower turnovers.

The analysis of the average SME turnover on their main fields of activity illustrates that in the period of economic growth, companies in all fields have experienced an increase of the average field turnover, while after 2008 in all fields except the food industry, the average turnover started to decrease. See table 3 on page 11. The domains with the highest average company turnover were the wholesaling of general goods and of autos followed by the food and beverages industry. The increase in the standard of living in Romania in the period 2000–2008 was reflected also in higher turnovers for the food and beverages industries that kept growing even after the economic crisis began. But different industries had different speeds in reacting to the economic crisis. For instance, the construction of buildings' sector in the first two years after the economic crisis started, still had increasing trends in the evolution of the turnover. An explanation may be found in the continuation of the already started construction works that were very numerous at the time, as the economy was in a construction boom. On the contrary, in the auto industry the market reaction after the start of the economic crisis was very rapid and in 2009, compared to 2008, the decrease of the average turnover/sme was of 38 percent. Explanations for this high level of decrease in just one year can be: a lower number of cars acquisitions due to lower incomes, the decrease in credit and leasing opportunities and a higher caution spirit and attitude of people when buying expensive goods.

The study of the economic results in terms of profit or loss, illustrates that the proportion of smes, which declared obtaining profits at the end of the year, decreased by 10% from 2003 to 2009. See table 4. At the same time the proportion of smes that incurred losses constantly increased from 2003 until 2009, when 50% of the smes experienced losses. Starting with 2007, the increases in the proportions of smes that obtained losses were sharper, as a result of the deteriorating economic conditions. This situation comes to confirm the idea also found by Roman and Ignätescu (2011, 143) that in times of economic turbulence, smes are more vulnerable than other types of companies.

To appreciate in a synthetic way the efficiency of the activity of the company, the commercial profitability rate (calculated as the ra-

TABLE 4 The evolution of SMES according to the nature of the economic result

Item	2003	2004	2005	2006	2007	2008	2009
Profit	51.54%	51.79%	53.54%	53.17%	50.98%	46.40%	42.09%
Loss	31.63%	32.94%	34.74%	36.23%	38.62%	43.09%	49.88%
Null	16.83%	15.27%	11.73%	10.60%	10.41%	10.51%	8.03%

NOTES Adapted from CNIPMMR (2004; 2005; 2006; 2007; 2008; 2009; 2010; 2011).

tio between profit and the turnover) has been looked at. Once again, a constant increase of the smes' commercial profitability rate took place from the beginning of 2000's until 2006, when the profitability rate increased from 5.6% to 8.23%, indicating increasing profits out of the turnover. However, starting with 2007 the commercial profitability rate began to decrease, at 7.25% in 2007 and 6.14% in 2008 (CNIP-MMR 2011). Profitability is an indicator whose evolution has known an immediate reaction to the economic crisis, as early as 2007 a decrease was registered, illustrating the higher sensitivity of this indicator to the evolution of the economy.

One general conclusion after the study of the dynamics of some economic characteristics of the Romanian smes is that after the year 2000, there was a positive ascending trend in all aspects of the economic life of smes (the actual number of smes, turnover, profit) due to a good economic climate. Starting with 2007, all economic aspects studied reflected a decline in the activities of smes as a direct consequence of the economic crisis, but the decline manifested immediately for some aspects (profit) and industries (auto) and with a 2-3 years time delay for some other aspects (turnover) and industries (building).

## Romanian smes and the Economic Crisis: **Opinions and Perceptions**

In the CNIPMMR' surveys organized since 2009, new questions have been introduced and SMES have been asked about their perceptions of the impact that economic crisis has on their activities. This impact has been looked at from two perspectives: a) the dynamics of the smes activity (self-declared) from one year to another and b) the psychological impact the crisis had on smes. According to what SMES stated, the largest reduction in SMES activity was encountered in 2008 and the decrease continued in the following years, but at lower levels. See table 5. The proportion of smes that went bankrupt increased in the studied years illustrating the negative influences of the crisis. However, there was still a small but growing proportion of smes that declared increased activity during the period. The pre-

TABLE 5 Perceived impact of the economic crisis for smes (% of smes)

Item	2008/2009	2009/2010	2010/2011
The dynamics of SMES activity			
smes that have reduced their activity	57.58%	43.95%	39.22%
smes that bankrupted	14.08%	27.91%	24.02%
SMES that have the same activity	23.39%	20.82%	27.25%
smes that have increased their activity	4.23%	7.32%	9.51%
The psychological impact of the crisis			
Very large	_	13.95%	14.16%
Large	24.22%	18.10%	16.51%
Medium/large enough	42.92%	41.77%	42.21%
Low	27.26%	20.85%	22.75%
No impact	5.60%	5.33%	4.36%

NOTES Adapted from CNIPMMR (2009; 2010; 2011).

sented trends based on the declarations of smes are consistent with the statistical data available on the dynamics of smes.

The vast majority of smes (over 90%) declared that they felt a psychological impact of the crisis on their activity. Only 4–5% of the smes declared that there was no psychological impact on their activity and this percentage overlaps to a certain extent on the percentage of smes that declared they have increased their activity in the last years. A very high psychological impact of the crisis was felt by around 14% of the smes, while the majority of smes (40%) perceived a medium level in terms of psychological impact.

### Findings, Conclusions and Recommendations

Based on the analysis done, we appreciate that the main findings related to the implications of the global economic crisis on the Romanian SMES are:

- 1. A deterioration in quantitative terms of the economic activity of SMES. This manifested through: (a) a decrease in the SMES numbers: 8% in the first year of the crisis and a continuing downturn evolution; (b) a decrease in the percentage of SMES that obtained profit in the last years and an increase in the number of SMES that incurred losses, accordingly; (c) a decrease in the level of profit earned by SMES obtaining profit and (d) a decrease in profitability rates.
- 2. SMES declared that the economic crisis had an impact on their activity: both in terms of influence on the economic activity and in terms of psychological impact. The SMES declared decreases

in their economic activities and these declarations were consistent with the evolution of the available economic indicators. Also, most of the smes appreciated a remarkable psychological influence of the economic crisis on their activity, and only around 25% declared that there was either none or little crisis related psychological impact.

3. There have been observed differences in experiencing the consequences of the economic crisis in terms of timing, as some aspects reacted faster (profit) than others (turnover) to the crisis and some economic fields also have been influenced more rapidly (auto) than others (trade) by the economic crisis. It can be stated that there is time lag between the beginning of the crisis, in 2007 and its economic consequences on smess measured by different indicators.

SMES are more vulnerable than other types of companies during times of economic turbulence and even though it is difficult to make recommendations to fit all situations, we will try to indicate a few possible directions of actions that might help SMES to better cope with the current economic crisis situation and also to recover after the crisis. Among these:

- 1. Revise the product policy by possibly choosing one of the following strategies: (a) focus on the products that have higher demand in the crisis period, products offered at lower prices; (b) focus on eco-innovations as types of future generations of products.
- 2. Accessing at higher levels European funds designated to smes and different domains of activity, so as to better integrate innovative products/technologies in their activity.
- 3. Increase the level of participation in business networks in order to strengthen the chances to create new partnerships and alliances between SMES and other types of companies, so that as group of companies these might better cope with the existing economic situation.
- 4. The survival of SMES in times of economic crisis may depend on the way human resources are used. SMES could or might try to adopt flexible approaches to labour relations, in terms of income determination and different material and moral incentives, so as to motivate employees and adjust to the economic constraints of the present period. Another strategy that SMES can use is to attract qualified and experienced employees who are laid off by large companies in the crisis period, by taking advantage of the situation (Nicolescu, Nicolescu, and Nicolae 2012).

Besides these actions and strategies that can be applied at SME level, measures can be taken at national and governmental level so as to improve the environment in which smes operate and to support at least the survival of the sector and if possible its recovery and growth in the context of the present difficult economic situation. In this direction the National Council of Private Small and Medium Sized Enterprises from Romania, as the most active organization that supports the smes' interests in Romania, issued in April 2012 a number of proposals for the period 2012–2016 (CNIPMMR 2012). Among those two have immediate importance: a) support the full implementation of the Small Business Act (SBA) adopted by the European Union in 2008, starting with the first principle: 'first regulations for SMES' and b) simplify, de-bureaucratize and increase efficiency of the fiscal system in Romania by reducing the yearly number of payments that smes have to pay in Romania (113 payments in 2012), eliminating the tax on re-invested profit, reduce fiscal taxes on labour.

To conclude, the SMES sector from Romania was affected by the global economic crisis and in these circumstances the sector can be developed and supported through measures and actions to be taken at multiple levels: national, sector level, as well as the organisational one.

The limitation of the present study resides in the fact that the analysis was based on existing data collected on a fixed pattern with restrained information adapted to specific evolutions of the recent economic events. Further research can focus on subsequent surveys with smes that can detail on influencing factors and the causes of the different developments within the sme sector, as well as on their opinions on possible future measures that could assist them in their coping with the existing economic situation.

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# Tourism Expenditures of Taiwanese and Slovenes: A Comparative Analysis

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Slovenia and Taiwan have many similarities. Both countries have a mountainous landscape, seaside, countryside and two major big cities. In 2011 the average annual income was 28,500 USD in Taiwan, but slightly higher in Slovenia at 29,500 USD. The average monthly net earnings amounted to 1,328 USD in Slovenia and 1,541 USD in Taiwan over the same period. Both countries are emerging tourism destinations; 6,087,484 arrivals were recorded on entry into Taiwan in 2011 compared to 3,218,000 tourist arrivals registered in tourist accommodation in Slovenia for the same period. Based on the similarities between these countries the present study was designed to compare expenditures of outbound tourists departing from Slovenia and Taiwan.

Key words: tourism population, economic comparison, tourism expenditure, gdp, Taiwan Roc, Slovenia

### Introduction

The recent paper by Hung, Shang and Wang (2012, 495) starts with the claim 'It is essential to understand the determinants of tourism expenditure since the revenue has become a major source of income in many countries' and finishes with the recommendation that 'Further detailed investigation and a comparison of tourism expenditure determinants among different countries are still needed.' Following from this recommendation the present study provides a comparison between Slovenia and Taiwan that focuses on secondary data for tourist behavior that is available for the two countries.

The choice of Slovenia and Taiwan was taken due to similarities between the two countries, not only in geographical characteristics but also on key economic statistics and demographic profiles. Slovenia is one of the smallest European countries and Taiwan (Republic of China) is one of the smallest Asian countries. The size of territory of Taiwan is approximately 36,000 square kilometers, but Slovenian measures even less, which is 20,273 square kilometers. The ge-

ographic relief of both countries is similar; each has mountains, seaside, countryside and two major cities. The average income of the populations are comparable; for income in Taiwan is 843,030 TWD (28,500 USD or 20,492 EUR), according to 2011/2012 salary survey, on the other hand average annual income in Slovenia is 21,830 EUR (29,500 USD), according to the same survey. According to the data of the Statistical office of the Republic of Slovenia (sors) the average monthly net earnings in Slovenia amounted to EUR 987.39 (1,328.12 USD) in 2011. For Taiwan the average monthly earnings in 2011 was TWD 45,642 (1,541.84 USD = 1,108.61 EUR), according to data from National Statistics Taiwan Roc. Interestingly, both countries are well established as emerging tourism destinations. There were 6,087,484 arrivals recorded in Taiwan in 2011 (9.3% more than in 2010), compared to 3,218,000 tourist arrivals registered in tourist accommodation establishments in Slovenia (7% more than in 2010). The number of foreign arrivals in Taiwan is 3,588,727, which represent an increase of 10.9% comparing it with 2010, but 2,036,652 foreigners visited Slovenia, which is an increase of 9.0% (sors 2010; Tourism Bureau 2010). Based on these similarities between the two countries our interest focuses on the tourism differences. In other words this investigation examines whether tourists from two economically similar countries but dramatically difference cultural backgrounds behave differently in terms of their expenditure and behavior.

From the inbound tourism point of view both Taiwan and Slovenia are emerging destinations, which attract more and more foreign tourists. In this context, both countries are using all their effort to build their image abroad and to be recognized as interesting destinations by foreign tourists. In fact, exporting tourism has a lot in common with the country image. Over three decades ago Hunt (1975, 17), among others, was one of the first to demonstrate the importance of the country image in increasing the number of tourists visiting destinations, subsequently destination image has been the subject of much attention in the related academic literature. Kim and Chung (1997, 386) argued that effects of country image arise from a customer's beliefs that there is something 'special' about the labor, technology, or manufacturing processes within a particular country. Indeed, attitudes are argued to be the most appropriate means to represent understandings of place and its impact on decision-making. However, those economic factors that are known to influence country image do not include all that a country has to offer to foreign tourists, such as natural and cultural resources. Beerli and Martin (2004, 681) stated that many professional and academic papers have

proposed a variety of scales that include the different attributes relevant to measuring perceived image, however these reveal a lack of homogeneity with respect to the attributes that define an individual's perceptions. In addition, many studies forget to count economic factors when analyzing a destination image. As Beerli and Marti (2004, 681) have shown, two of the nine dimensions that influence a country's image are political and economic factors, which amongst others, include social factor such as the characterizes of the local residents and their quality of life as well economic development of the country. In other words, when marketing the tourism destination in a foreign country those responsible should be aware of the uniqueness of its own population and economic development since in part both of those factors contribute to a country's image. Following from this, our research purpose is based on the measurement of expenditures for travel purpose – traveling within the country and abroad. Tourists, by virtue of their nationality show aspects of their country's image as well, mainly through their unique travel habits and their expenditure on traveling.

The purpose of this study is to present comprehensive economic data for tourists from Slovenia and Taiwan and to provide data necessary to understand both populations' expenditure for tourism in the international and domestic markets. Furthermore, the image of a country established through the touristic experience is can be shown to have a positive effect on the export of products and services (Gnoth 2002, 270–271), which means that both countries, with their high reputation of their respective populations and good tourism image, can influence the export of products and services, including tourism.

From a broad economic perspective, the importance of tourism for any country, on the other hand, influences the number of tourists and in consequence the impact of tourism. Different 'formulas' were used in past to evaluate tourism impact and recently some authors have proposed the tourism-led growth hypothesis (TLGH) which contends that international tourism is a strategic factor for long-run economic growth (Brida and Risso 2009, 179–80). The importance of tourism for the economies is well recognized, but academics have mainly researched, evaluated and estimated tourism impact as an economic input for a country or tourism destination. In this view, the Tourism Satellite Account (TSA) suggested by UNWTO in March 2000 was recommended using a common methodology for measuring the contribution of tourism in their economy. In this way, the comparison of the tourism economy between different countries can be made

and more significantly, TSA allows valid comparisons with other industries, and even from country to country or between groups of countries (UNWTO 2011). It comprises a unique set of inter-related tables that show the size and distribution of the different forms of tourism consumption in a country and contributions to gross domestic product (GDP), national income, employment and other macroeconomic measures of a national economy (Frechtling 2010, 151). TSA, with the standard international methodology and complete tables that allow a comparison were published in Slovenia from 2003 and in 2007 in Taiwan. Next TSA for Slovenia are planned to be published at the end of the year 2012 with the data for 2009 (all tables from 1-7). Using the data of TSA our research is not aimed at measuring the importance of tourism in Taiwan and Slovenia, but will focus on those residents of Taiwan and Slovenia and their tourist behavior at the same time, what is not possible to find in the TSA. Our special interest is being in comparing the tourist populations (traveling abroad and domestically) of two small but similar countries, one from Europe and one from Asia.

The data presented shows the situation in 2010. However, not everyone travelled for pleasure or business during a given year that means that not every resident is necessarily a tourist. Even though travel today is seen as an affordable commodity to be enjoyed by all who choose to do so (Singh 1997, 95), part of population does not travel due a variety of reasons. Pleasure travel propensity in the developed world seems to be capped at about 75% of the adult population, which means that one in four adults does not take an overnight pleasure trip in any given year, (McKercher 2009, 510). While the preponderance of the studies have focused on understanding the motives (Lo and Lee 2011; Ryan 2003; Slak-Valek et al. 2008) and decision-making of tourists (Wong and Yeh 2009), there remains much to explore to help us to better understand the motives of nontourists. Caldow (1997) noted that the two primary reasons provided for not having traveled were work commitments and a lack of money. Supporting that discussion, Paptheodorou, Rossello, and Xiao (2010, 40) warned that the global tourism has been severely affected by the current financial and economic downturn, which means that people will work even more for less money. This is a serious issue for tourism sector, since 'more work, but less money' is becoming the primary reason for non-traveling. Although leisure constraints theory can be valuable in a travel and tourism context, it needs further examination within the broader body of travel and tourism behavior research (Gilbert and Hudson 2000, 921-2), which shows that the desire to travel is still strong, but financial limitations and higher prices will make people postpone their travel behavior. Thus, for a better understanding of why people do not travel, a deeper understanding tourists' behavior is needed first. Furthermore, for Slovenes that did not travel in 2010, nearly half (44%) stated financial reasons as the main obstacle (sors 2010), hence our proposal that tourism expenditure research is a first priority.

Many papers have been published analyzing tourism's contribution to a country's gdp. In this context, the expenditure of all tourists in a country is counted (both domestic and foreign). However, tourists who travel abroad spend their travel budget in another country, which makes only minor contributions to domestic gdp. Domestic travel, however, is very important (Nyaupane and Andereck 2008, 433) especially in times of economic crisis. One would expect the tourism population of a country would have attracted greater interest among academics. In this context, the present study is prepared. Our research focuses on the travel propensity and expenditures of Slovenes and Taiwanese tourism population. Gross travel propensity equates to the total number of trips made by a population in a given period and is reported as the number of trips per 100 head of population. It provides a useful indicator of travel intensity. The length of stay, as one of the effects of the tourism expenditure and the expenditure per gdp and trips made per capita were further researched and compared. The objective of our study is to provide an integrated view on the consequences and future perspectives of Taiwanese and Slovene tourists.

### Methodology and Data

The research methodology was based on quantitative survey data using a comparison of two national tourism databases. Surveys from Slovenia and Taiwan were used and the comparisons between them were made in the context of residential tourism and travel. They investigated travel habits of the all residents in these two countries.

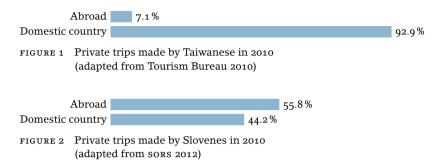
The surveys were:

- 1. Survey of Tourism Travels of Domestic Population in 2010, the sample represents Slovenian residents.
- 2. Survey of travel by ROC Citizens in 2010, the sample represents Citizens of Taiwan ROC.

The Survey of Tourism Travels of Domestic Population is an annually survey prepared by Statistical Office of the Republic of Slovenia (sors), with the aim of collecting data on travel behavior and

attitudes of the Slovenian population: why, when, where, how long and how much they spend. In addition, the survey also determines why some people never leave their homes for the purpose of tourism travel. The survey is carried out quarterly, but merged in one single report on the annual basis and is collected by a computer assisted telephone survey (CATI). The sampling frame is the directory of private telephone subscribers in Slovenia. The sample is selected by systematic stratified approach. Strata are defined for the twelve statistical regions and the type of urban/rural settlement within the region (6 types). Amongst household members, the respondent is selected randomly using to the 'first birthday method' for those over 15+ years old. For 2010, the initial sample size was 15,000, with an overall response rate of 58.6%. The data are weighted according to the sors recommendations. Besides this basic weighting, additional weighting (calibration) is used, which adjusts the distribution of control variables to the known population structure. For adjustment, the following variables are used: sex, age, level of education, household size, statistical region and size of settlement. As the survey includes both leisure and business travel activities the questionnaire is divided into two parts: with questions about business trips and questions about private trips. For the present study, only information from second part (private trips) was used. Data presented in this study represent the results for the most recent survey year available from sors (2010).

Survey of tourists by Roc citizens is a research conducted by Tourism Bureau of Taiwan with the objective of understanding citizens' business and private travel activities, degree of satisfaction and amounts spent on different types of vacation expenses on each trip and to learn the mutual effects of domestic tourism and outbound travels. It also provides estimates on domestic tourism expenditures and foreign exchange spent on overseas travel. The survey interviews were also conducted by telephone (CATI). A stratified random sampling was used to select the sample. The population of this survey includes all Roc citizens who were 12 years or older in 2010. The total initial sample was divided into four panels; and a rotation scheme was instituted so that each respondent was interviewed once every quarter for four consecutive quarters. However, sample for each quarter is selected from four panels so that first panel was interviewed the first time; second panel was interviewed the second time; third panel was interviewed the third time; and the fourth panel was interviewed the fourth time. The present study also uses data for travel behavior in 2010, the numbers of completed



domestic tourism interviews were as follows: first quarter 5,567 persons, second quarter 5,572 persons, third quarter 5,559 persons and fourth quarter 5,572 persons. The completed outbound interviews were fewer: first quarter 380 persons, second quarter 414 persons, third quarter 471 persons and fourth quarter 401 persons (Tourism Bureau 2010).

Using the data from both these surveys the analyses of Slovenes and Taiwanese vacation expenditure in 2010 has been carried out. Economic data from the same period has been used when comparing the expenditure per capita and the percentage that travel expenditure represents of the country's gdp.

### Results

In total, 1,026,000 Slovenes or 58% of the Slovenian population went on tourism trips in 2010, of which 44% were private trips made in Slovenia and 56% were abroad. On the other hand, we find 93% of Taiwanese travelled within their country in 2010 and 7% of Taiwanese undertook outbound travel in 2010. Taiwanese clearly travel more in their own country than Slovenes do (see figure 1 and figure 2.)

In addition, length of travel made by Slovenian and Taiwanese in own country and abroad in 2010 shows some large differences between average number of nights per trip made when traveling abroad; Taiwanese, on average made 9.3 nights per trip in a foreign country, but Slovenes stayed only 5.6 nights. In contrast, trips made by Slovenes domestically are considerably longer than those made by Taiwanese. The results are shown in the table 1.

Analysis of daily average expenditure data showed that Slovenes spend 38 Euro per person and Taiwanese tourist spends the equivalent to 33 Euro while traveling domestically. Greater differences are noted comparing the expenditure when traveling abroad; Taiwanese

TABLE 1 Average number of nights per trip made by Taiwanese and Slovenes in 2010

Average number of nights per trip	Slovenes	Taiwanese
Domestic	2.9	1.5
Outbound	5.6	9.3

NOTES Adapted from Tourism Bureau (2010) and sors (2010).

TABLE 2 Average daily expenditure per person in Euro in 2010

Average daily expenditure per person (€)	Slovenes	Taiwanese
Domestic	37.8	33.2
Outbound	50.7	128.5

NOTES Adapted from Tourism Bureau (2010) and sors (2010).

spend more than twice than Slovenes do. In fact, the results shows Taiwanese spend 128 Euros per person compared to only 51 Euros by Slovenes.

Expanding our interest on to expenditures per trip one sees that multiplication of an average length of stay (number of nights per trip) and the average daily expenditure per person can be made. The results for both Taiwanese and Slovenes in Euro are shown below (see table 3). Taiwanese tourists spend almost 1,200 Euro per trip abroad, but only around 50 Euro per trip in Taiwan, or 24 times less than the expenditure for the average outbound trip. The results becomes even more interesting when looking at the expenditure of a Slovenian tourist who spends 110 Euro per trip made in Slovenia, but more than twice as much when travelling abroad (284 Euro). These large differences between Slovenes and Taiwanese suggest some major factors are affecting travel behavior between the respective populations.

Based on the data on per trip expenditure the total Slovenes and Taiwanese trips expenditures can also be calculated. For getting this data, the multiplication of average expenditure per person per trip and the total number of trips provides a gross measure of expenditure. It was found out that Slovenes gross trip expenditure in total is 878.5 million Euros, compared to Taiwanese who spend more

TABLE 3 Average expenditure per person per trip in euro in 2010

Average expenditure per person per trip (€)	Slovenes	Taiwanese
Domestic	109.7	49.4
Outbound	284.0	1,194

NOTES Adapted from Tourism Bureau (2010) and sors (2010).

TABLE 4 Total expenditure on travel made by Slovenes and Taiwanese in 2010

Total expenditure on travels (€)	Slovenes	Taiwanese
Domestic travel	205,755,000	6,122,487,800
Outbound travel	672,739,144	11,241,598,356
Total	878,494,144	17,364,086,156

NOTES Adapted from Tourism Bureau (2010) and sors (2010).

TABLE 5 Number of Taiwanese and Slovenes trips per capita in 2010

Number of trips per capita	Slovenes	Taiwanese
Domestic travel	0.9	5.3
Outbound travel	1.1	0.4

NOTES Adapted from Tourism Bureau (2010) and sors (2010).

than twice as much, at 17,364 million Euros. Both, Slovenian and Taiwanese populations, spend more for outbound trips than for domestic trips as shown in the results in table 4.

From the calculation of the trip expenditures in this study, it is possible to estimate data about the number of trips made per capita in 2010, for both tourist populations (Taiwanese tourists and Slovene tourists). The number of all trips made by Slovenes and Taiwanese were divided by the number of residents for each country separately. Doing that, the results show Taiwanese made 5.3 trips per capita domestically while Slovenes made only 0.9 trips while traveling in their own country. On the other hand the outbound trips shows opposite results, but with some minor differences; Slovenes traveling abroad make 1.15 trip per person, but Taiwanese make only 0.41 outbound trips per person on average. These results are shown in the table 5.

Finally, proportion that expenditure on tourist travel (both domestic and outbound) represents of total country Gross Domestic Product (in continuing: gdp) in Slovenia and Taiwan was analyzed. Using the data in table 4 the total expenditure of Slovene and Taiwanese tourists has been divided by the gdp in 2010 for each country to calculate the percentages shown in table 6.

It is noted that total travel expenditure (counting all private trips made by those who travelled in 2010) represents 2.5% of Slovenia's

TABLE 6 Total expenditure on travel as a percentage of gdp

Travel Expenditure/GDP	Slovenia	Taiwan
Total trips	2.5%	4.9%
Outbound trips	1.9%	3.2%

NOTES Adapted from Tourism Bureau (2010) and sors (2010).

and 4.9% of Taiwan's GDP. This means Taiwanese spend two times more than Slovenes when allowing for differences in GDP. When traveling abroad Slovenes expenditure represent 1.9% of the country's GDP, compared to Taiwanese outbound travel expenditure that represents 3.2% of Taiwanese GDP. But domestic travel is a greater proportion for Taiwan compared to Slovenia. As this much of this expenditure is made in overseas countries the effect on the economy through balance of trade figures is significantly more for Taiwan than Slovenia.

### **Interpretation and Implication**

Based on the results presented here the differences in travel behavior between Taiwanese and Slovenes are significant. Without doubt, Taiwanese travel more than Slovenes; only 6% of Taiwanese did not take any domestic travel compared almost half of Slovenes who did not take any trips in 2010 although the remainder, who travelled, typically made a trip abroad.

The explanation for this is partly in the geographical and cultural makeup of the two countries. Taiwan is a small island, with limited resources and isolated geographical location (Chang 2009 165), and due to its contentious political history is not recognized by the un as a sovereign and independent country, which is possibly one of the main reasons that Taiwanese do not travel abroad. However, many other reasons could be suggested which stem from the unique Taiwanese history and culture. The history of Taiwan is a story of both frustration and miracles. Until the early years of seventeenth century, aboriginals and some limited number of Chinese migrants from mainland China populated the island (Rubinstein 2007). Portuguese (who named it Ilhas Formosas – Beautiful Island), Spanish, Dutch, Chinese and Japanese, who colonized Taiwan, each had an influence on Taiwan's development. In 1979, Taiwan's government relaxed its ban on overseas travel, and by 1987 even permitted residents to travel to mainland China for the purpose of visiting relatives (Huang et al. 1996, 223). Consequential, Taiwanese started to travel abroad in numbers only just recently, which explain a relatively low share of Taiwanese who travel abroad today. Further growth in outbound travel remains constrained by the uneasy political relationships with mainland China, as well as the relatively small size of the population in terms of generating increased demand (Bailey 1996). However, travel is an increasingly important aspiration for young Taiwanese. Work and travel overseas combines three fundamental elements: traveling, learning, and experiencing (Lin, Lee, and Wang 2012). It not only offers the Taiwanese some leisure and vacation, but traveling abroad can 'improve their language skills, expand their international viewpoints and experience different cultures' (Lin, Lee, and Wang 2012). With more and more residents traveling abroad people expand their horizons and develop new ideas that may contribute to a country's development. With increased exposure to international information, the opportunities to form organized mental representations of countries are frequent (d'Astous and Boujbel 2007). Consequential, Taiwan's outbound market still has plenty of growth potential and its economic prospects look good (Bailey 1996).

Slovenes travel abroad more frequently than they do in their own country. Although Slovenia has a complicate history, too, the development of outbound travel of Slovenes was faster than Taiwanese. Slovenia was part of a former Yugoslavia and gained its independence in 1991. From that moment on, although there are still difficulties (Bokros 2002), Slovenia has developed dramatically and is modernizing at a fast pace. Here, traveling abroad could be either a reason or a result. However, it cannot be ignored that Slovenes mainly travel to Croatia, a neighbor country to Slovenia and a former Yugoslavian country as well, which is now independent. It is a country with strong inbound tourism potential with a fairly well recognized and beautiful coastline. Although Slovenian has a unique coastline of 46 km and many Slovenes still travel to Croatia for their summer vacation, which is now counted as travel abroad. Of course, it has to be pointed out, that traveling abroad is easier and faster for Slovenes than for Taiwanese for many reasons, but most important is that Taiwan is an island. Travelling abroad from Slovenia is possible by land transport (car, train, bus).

Perhaps as a logical consequence of these geographical issues it was found that Taiwanese travel abroad for a relatively long trip (9.3) nights in average), whereas Slovenes travel abroad for 5.6 nights on average. In contrast, Slovenes trips in domestically are longer (2.9 nights) than Taiwanese (1.5 nights). The reason for the length of stay differences may be found in the reason and purpose given for traveling. People who traveled abroad easily define the purpose for traveling and travel with the active content (activity, shopping, etc.) is usually longer, since people are doing exactly what they like (push motivation). Ryan (2003) also affirms that there is a link between income and motivation for traveling; when material needs are satisfied, experiential needs become important. Residents from Taiwan and Slovenia at the beginning of the 'independent' period needed to establish their normal life, but nowadays they can afford to finance themselves for relatively long trip abroad. Continuing with that theme our findings shows that both Taiwanese and Slovenes have a relatively low budget when traveling in their own country (33.2 and 37.8 EUR per person per day), but an extreme different position is noted in the budget Taiwanese (1,194 EUR per trip per person) and Slovenes (284 EUR per trip per person) allow when traveling abroad. Because of long period of isolation is understandable that Taiwanese afford longer trips to themselves when travel abroad. On the other hand being isolated has allowed the potential tourists to get older and hence accumulate more money for the future generations. In the 1979 there were only 312,446 outbound departures of Taiwanese, in 1994 this number increase to 4.7 million (Huang, Yung, and Huang 1996, 225), but in 2010 we find 9.4 million of trips made by Taiwanese abroad and has the potential to grow much more (Bailey 1996). As a result of Taiwan's rapid economic growth and the increasing amounts of disposable personal income (Huang, Yung, and Huang 1996, 223) the number of Taiwanese traveling abroad is increasing dramatically. Even if the average expenditure per trip of a Taiwanese were to remain at the same level as it was in 2010 (it probably that is actually growing) then the number of Taiwanese trips abroad will continue to increase, which makes obvious how important the Taiwanese are as a tourism market.

It is the opposite situation when we consider Slovenia. Slovenia is a small market with an average expenditure for trips made abroad that is four times less, when looking at expenditure per person, than Taiwan. The results of Novakovič (2009) study reveals that real Slovenian outbound tourism expenditures have not exceeded growth in real gdp in the period 1995–2005. Although much higher percentage of Slovenian residents travelled abroad (55.8%) economic comparison between Taiwanese residents and Slovenes shows higher average annual income for the Taiwanese population as well as higher potential. This is an important finding for tourism destinations that are trying to attract tourists (especially those from small countries); and deciding which marketing campaign will be successful, Taiwan or Slovenia, the answer is clear.

Taking into the consideration the number of residents in each country a greater number of trips per capita was for the Taiwanese whose travel in their home country (5.3), is greater than Slovenes (1.9%). Our conclusion is that Taiwanese probably travel mainly by the weekends, taking short trips between the major cities on the island. This could be also related to what some call 'a Taiwanese lifestyle', since they do not treat this local travel as serious travel.

As Chen, Huan, and Cheng (2009) suggested the vacation lifestyle construct could be employed by tourism marketers to identify the heterogeneous and homogenous characteristics of distinct groups of domestic tourists, thus making it viable for tourism marketers to predict tourist preference and vacation behavior. In addition, the combination of the vacation lifestyle variable and social-demographic information could provide a better general understanding of travel behavior.

This paper suggests a number of future research opportunities. Since the Taiwanese present an important market for themself further research for a deeper understanding of domestic Taiwanese tourists is necessary. On the other hand other tourism destinations would need an understanding of the differences between Taiwanese who are travelling domestically and those who are travelling abroad. As Huang and Tsai (2003, 563) reported, a changing trend is evident suggesting that Taiwanese senior tourists are becoming more attracted to historical and beautiful sights, and that cultural and eco-tourism could be attractive products for them. This information helps, but the differences in travel motivation between domestic tourists and those who travel abroad are still necessary for both Taiwan and Slovenia. Knowing the characteristics of the Taiwanese tourists may help tourism marketers to better serve these Asian tourists who have become an important target market for many countries (Chang 2009, 166). In Slovenia's case, understanding the motivations and characteristics of tourists may help as foreign tourism destinations as Slovenia as a tourism destination itself. Slovenia as a tourism destination has to find a way to keep their tourists in their domestic country. Finally, it was found out that Taiwanese spend much more (4.9%) of their gdp for the purpose of travel than Slovenes (2.5%), which is another indicator how the future potential for Taiwanese as tourists are in comparison with the Slovenes.

### Conclusion

To summarize, the present paper address to analyze and compare Taiwanese and Slovenes as tourists. Despite the similarities between these two countries on economic, geographical and social measures, there is no doubt that Taiwanese and Slovenian travel differs in many respects. Firstly, the Taiwanese predominantly travel in their own country, whereas most Slovenes travel abroad. It should be pointed out that Taiwanese spend more time and money when traveling abroad than Slovenes. This is an important finding for national

tourism promoters, which are trying to attract tourists (from small countries); or perhaps deciding between a marketing campaign in Taiwan or in Slovenia. However, in the conclusion of the present study has also demonstrated that much more literature about Taiwan and Taiwanese outbound tourism can be found and research literature about Slovenian outbound tourism remains scarce. This, to some degree, confirms our conclusion that Slovenes are not an interesting target group or market, when researching potential for outbound tourism. Taking into consideration the results of this research future research on Slovenes traveling abroad is strongly encouraged where comparisons should be made with countries that are of similar size and economic activity.

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# **Analyzing Systemic Risk** in cee Markets in 2007-2008 Financial Crisis

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The purpose of the article is to attempt to answer the question of how the crisis affected the banking systems of CEE countries, with special emphasis on liquidity risk. It seems that this problem has particularly affected emerging economies. First, the liquidity risk began to exert considerable influence on the functioning banking system and, indirectly, the whole economy. In this paper author wanted to answer the following questions: What are the channels of transmission systemic risk on CEE markets? What is the role of big world banking groups in these financial systems? This concept is applied to ten Central Eastern European countries, which experienced a financial crisis. In the research author hypothesized about interconnectedness of liquidity in financial systems and solvency problems of big banking groups operating in CEE.

Key words: liquidity risk, financial crisis, contagion effect

### Introduction

The banking sectors of CEE countries have gone through a profound transformation since the second half of the 1990s. Foreign ownership levels are the highest in the world and bank credit to the private sector has expanded rapidly in recent years. This well-documented process, which was already apparent at the beginning of the decade, became even stronger from 2004.

Most of the banking sectors of CEE countries are dominated by similar and aggressive business strategies of Western European banking groups.

Rising LTD (Loan-to-Deposit) ratios therefore have required increasing reliance on foreign funding channeled through the banking sector. The relatively undeveloped state of domestic capital markets, as a funding source in these countries, and easy access by the mostly foreign-owned banks to cheap funding from their parents. The differences in funding structures suggest that some countries are more exposed than others to financial market disturbances originating from advanced markets or to spillovers from problems in other countries in the region. Banking systems that are heavily dependent on foreign funding to support credit growth could face a sudden short-fall or costly access to funds and experience difficulties in expanding credit. While reputational risks and long-term business plans may render it unlikely that parent banks would not support their daughters, the degree of their support depends on market conditions; as funding conditions in home countries become more difficult. Liquidity or solvency problems in a parent (which is measured by CDS spread in the market) could hence be transmitted to local banks in a concentrated and largely foreign-owned banking system.

Financial stability is a base of each financial system to cope with shocks and market imbalances, thus reducing the likelihood of disruption of financial intermediation process. Protection of financial stability requires the identification of major sources of risk and vulnerability, such as the inefficiency of the allocation of financial resources from savers to investors, valuation and bad financial risk management. Identification of risk and sensitivity is needed, because overseeing financial stability must be a pre-emptive. Inefficiency in the allocation of capital or shortcomings in the valuation and risk management could undermine the future stability of the financial system, and therefore economic stability.

The depth and scale of the current financial crisis has shown clearly that the globalization of markets financial economic system has created a lot of dangerous.

Particular importance for financial system stability is to maintain stability of the banking system. Banks play a key role in financing the economy and settlements of payment. The important function of banks is also creating products that enable financial risk management for others. For these reasons there will be especially strong emphasis on analysis and evaluation of stability of banking system.

Due to the very low level of interest rates in major world economies to tackle the feedback process indicated by conventional monetary policy tools are limited. The realization of such a negative scenario could lead to the materialization of credit and liquidity risk in the CEE banking sector. Under conditions of increased global risk aversion, banks could face difficulties with the renewal of swap operations to safeguard the risks, associated with foreign currency loans portfolio, as well as the renewal of funding derived from the financial markets in a different form. Strong growth in risk aversion also would involve the intensification of market pressure on European banks deleveraging, particularly visible in a further increase in the cost of market financing, the reduced availability and shorter maturity. Under such conditions, the cost and availability of funding pro-

vided by the subsidiaries of strategic investors in the CEE countries could become worse. An additional cause of deleveraging European banks may be increased capital adequacy requirements, especially in a situation, when banks were not able to raise capital by issuing shares, or conversion of other liabilities items (e.g. subordinated debt) in capital quality. Deleveraging may take the form of changes in the structure of assets in the direction of growth of low risk weights items, which may induce banks to reduce their exposures to subsidiaries operating in other countries. Existing still uncertainty about the implementation of fiscal consolidation in the euro area countries with high debt also indicates that the likelihood of worsening debt crisis in these countries, combined with an increase in volatility in financial markets has increased and remains at elevated levels. The strength of disorder may depend on the changes in financial position of strategic investors, banks operating in the CEE countries, as well as the actions taken by the economic authorities of home countries of these institutions. Banks do not have sufficient liquidity buffers, which could cover a possible outflow of funds associated with the scenario withdrawal of foreign capital. It leads to systemic liquidity problems in CEE banking systems. There is also the risk of changes in ownership in cee banks. Some banks, strategic investors in the CEE region, despite the high profitability, it may decide to sell the subsidiaries under the restructuring of its activities. As the financial situation of some dominant shareholders of the banks operating in the CEE countries, is a difficult decision to sell its shares may also be enforced by the regulator of the home country (in response to large capital requirements) or (in case of involvement of public funds) by the European Commission. The process of any changes of ownership, however, is associated with the risk of decline in confidence in banks that are in the process of selling, due to the increased likelihood of changes in ownership in cee countries.

### Literature Review

The last global financial turmoil provoked debates about controlling systemic risk with financial monitoring, regulations and network approach. In many countries the financial crises can be considered as realizations of the systemic risk in the financial system. Lo (2008) proposes a set of measures for systemic risk, which are leverage, liquidity, correlation, concentration, sensitivities and connectedness. The systemic risk studies have generally focused on interbank markets; exposures among different banks have the strong potential for

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contagion in the case of a banking failure (Rochet and Tirole 1996). Another presents systemic liquidity approach, which takes into account the liquidity of banks in the interbank market linkages (Allen and Gale 2000). It has a dual character. First – the banks respond similarly to changes in the macroeconomic environment. This is due to the similarity of the structure of the balance sheets of banks and their functions in the economy (withdrawal of bank deposits may occur at the same time and in extreme cases leads to the so-called run on banks). Second, the lack of ability to discharge liabilities of the bank to other banks may lead to liquidity problems in banks-creditors. This phenomenon is called domino effect of the lack of liquidity.

There is a lot of research describing difficulty in maintaining liquidity in banking system. For example Diamond and Dybvig (1983) construct a model of the economy which allowed them to analyze the dynamics of deposits in banks, deposit insurance role in preventing phenomenon of 'run on the banks,' and the role of lender of last resort. Allen and Gale (2000) enrich the model Diamond and Dybviga (1983), adding the interbank market. This allows answering the question, whether the banking system can deal with liquidity problems itself, without assistance such as the central bank. Assumptions of the model described by Diamond and Dybviga (1983) and Allen and Gale (2000) were subjected to criticized and modified in many publications (e.g. Diamond and Rajan 1999; Kiyotaki and Moore 1997; Postlewaite and Vives 1987; Acharya 2009).

Another study investigated systemic risk and contagion by using network theory (Nier et al. 2007; Árvai, Driessen, and Öther-Robe 2009). Banks were modeled as nodes of a network and they have two types of assets that were interbank assets and external assets. A shock was given to the external assets of one bank and the effects of this shock were observed by simulation.

Interbank credit lines are introduced as a channel of contagion (Müller 2006). A bank's failure creates contagion not only through its liabilities but also through the dry up of credit lines of the failed bank to other banks. Interbank exposures and credit lines channels are modeled distinctly.

Recent global financial crisis raised new questions. New methods on financial modeling and systemic risk calculation have been searched to increase the foresight of academic work. Most disturbances move in a particular group of countries, and the mechanism of contagion model assumes a correlation between market volatility of countries with similar macroeconomic risk.

## Purpose of the Study and Methodology

In my study I aim to find out how the solvency crisis of big banking groups, operating in the European market, caused the liquidity problem in CEE financial systems. To the best of my knowledge the analysis of the role of institutional factors in liquidity and stability problems bank operating in the CEE was not conducted thus far.

The analysis is based on data of financial systems available in the Reuters Thomson database. The study sample is based on ten countries (selected due to limited accessibility of data for at least 7 years time span – 2005–2011 years) – Bulgaria, Czech Republic, Slovenia, Hungary, Lithuania, Latvia, Estonia, Poland, Slovakia, Romania. For each country there was selected particular variables of its financial system, which has influence on the banking system and economy: main stock index changes, real effective exchange rate, interbank short term interest rate 3M, CDS spread of banking group operating in CEE financial systems, real GDP growth (table 1).

There will apply two types of econometric models. The first for testing the association between liquidity problem in CEE banking systems and changes in interbank short term interest rates, stock exchange index, real effective exchange rate as well as CDS spread of big banking groups operating in CEE countries. Liquidity is measured as changes in relation of interbank assets to liabilities. The other model, to find out whether variable from financial system affect macroeconomy, measured as GDP growth. I apply GMM estimators developed for dynamic models of panel data (Greene, 2012). The

TABLE 1 Summary description of data

Country	Short te	rm ir	Stock in	ıdex 1	REE	R	Time span
	М	SD	М	SD	М	SD	
Bulgaria	-0,25	0,61	-0,09	0,70	0,03	0,03	2005-2011
Czech Republic	-0,35	0,67	-0,02	0,38	0,04	0,06	2005-2011
Slovak Republic	-0,37	0,96	-0,06	0,18	-0,01	0,03	2005-2011
Hungary	0,00	0,27	0,02	0,43	0,01	0,06	2005-2011
Estonia	-0,37	0,96	0,02	0,54	-0,01	0,03	2005-2011
Latvia	-0,40	1,37	-0,02	0,41	0,03	0,05	2005-2011
Lithuania	-0,18	0,69	0,00	0,54	0,02	0,04	2005-2011
Poland	0,00	0,21	0,05	0,40	0,02	0,09	2005-2011
Romania	-0,05	0,21	-0,00	0,58	0,03	0,08	2005-2011
Slovenia	-0,37	0,96	-0,05	0,56	-0,01	0,03	2005-2011
Total	-0,23	0,75	-0,01	0,46	0,02	0,05	2005-2011

Continued on the next page

Country	съs sp	read	Liq. in	terb.	GDP gr	owth	Time span
	M	SD	M	SD	M	SD	
Bulgaria	0.45	0.97	0.03	0.59	0.03	0.05	2005-2011
Czech Republic	0.43	0.83	0.08	0.44	0.03	0.04	2005-2011
Slovak Republic	0.23	0.91	0.92	0.31	0.05	0.05	2005-2011
Hungary	0.34	0.93	0.32	0.14	0.01	0.04	2005-2011
Estonia	0.35	0.97	0.29	0.32	0.03	0.09	2005-2011

0.12

0.56

0.34

0.37

0.35

0.64

0.24

0.24

0.19

0.18

0.32

0.61

0.10

0.08

0.02

0.05

0.05

0.06

0.02

0.03

0.05

0.03

0.02

0.03

2005-2011

2005-2011

2005-2011

2005-2011

2005-2011

2005-2011

TABLE 1 Continued from the previous page

Latvia

Poland

Romania

Slovenia

Country

Lithuania

NOTES M - median, SD - standard deviation.

0.23

0.25

0.23

0.32

0.25

0.31

0.93

0.94

0.91

0.98

0.92

0.93

liquidity (equation 1) and macroeconomy (equation 2) models, respectively, read as:

$$\begin{aligned} Liquid\_interbank_{i,t} &= \alpha_0 + \alpha_1 Short\_ir_{i,t} + \alpha_2 Stock\_inx_{i,t-1} \\ &+ \alpha_3 Reer_{i,t} + \alpha_4 \texttt{CDS\_spread}_{i,t} \\ &+ \texttt{GDP\_growth}_{t,i} + \sum_{t=2005}^{2011} T_t + \vartheta_i + \varepsilon_t, \end{aligned} \tag{1}$$

$$\begin{split} \text{GDP\_}growth_{t,i} &= \alpha_0 + \alpha_1 Short\_ir_{i,t} + \alpha_2 Stock\_inx_{i,t-1} \\ &+ \alpha_3 Reer_{i,t} + \alpha_4 \text{CDS\_}spread_{i,t} \\ &+ Liquid\_interbank_{i,t} + \sum_{t=2005}^{2011} T_t + \vartheta_i + \varepsilon_t, \end{split}$$

where, indices i and t refer to country and time, respectively;  $Liquid_{\_interbank_{i,t}}$  – a relation of interbank assets to liabilities;  $Short_{\_ir_{i,t}}$  – a logarytm of interbank short rate (3M);  $Stock_{\_inx_{i,t-1}}$  a logarytm of main country stock index;  $Reer_{i,t}$  – real effective exchange rate;  $CDS_{\_spread_{i,t}}$  a logarytm of average bank  $CDS_{\_spread}$  (Unicredit; Raiffeisen; Erste; Societe Generale; Swedbank; Citibank; Commerzbank;  $EFG_{\_spread_{i,t}}$  is real  $EFG_{\_spread_{i,t}}$  and  $EFG_{\_spread_{i,t}}$  is real  $EFG_{\_spread_{i,t}}$  and  $EFG_{\_spread_{i,t}}$  is real  $EFG_{\_spread_{i,t}}$  is real  $EFG_{\_spread_{i,t}}$  and  $EFG_{\_spread_{i,t}}$  is real  $EFG_{\_spread_{i,t}}$  and  $EFG_{\_spread_{i,t}}$  is real  $EFG_{\_s$ 

TABLE 2 Estimation results for CEE countries

Dependent	Liquidity (equ	ation 1)	Marcoeconomic (	equation 2)
variable	Coefficient	<i>p</i> -value	Coefficient	<i>p</i> -value
Const	0,002	0,1634	0,01023	0,14684
Short_ir	-0,456	0,0037***	0,02067	0,00943***
Stock_inx_1	0,0204	0,0912**	0,17307	<0,00001***
Reer	0,8376	0,0002***	0,70312	0,00145***
cds_spread	-0,915	0,0045***	-0,8440	0,0012***
Liquid_interbank			-0,0125	0,1010*
GDP_growth	0,0400	0,7500		
AR(1)Z	1,2392	[0.2153]	0,1607	[0.5488]
AR(2)Z	1,7987	[0.0456]	0,2164	[0.6509]
$R^2$	0,9313		0,6898	

NOTES Significance: \*\*\* p < 0.001, \*\* p < 0.01, \* p < 0.05. First and second lags of dependent variable were included but not reported.

### Results

Whereas table 2 reports findings of the study, the analysis shows that CDS\_spread exerts negative impact on GDP growth and interbank liquidity. Real effective exchange rate seems to be an important and significant enhancing determinant of liquidity and macroeconomy (coefficients for Interbank liquidity and gdp growth are, 0.8376 and 0.70312, respectively). This can be due the increase (decrease) in foreign capital flows during upturns (downturns) and stock market boom (bust). Stock exchange changes does not affect so hardly on liquidity decisions of banks. It is not surprising the result obtained on the changes in interest rates, as in all countries can be observed significant growth 3M rates accompanying decline in banking system liquidity.

The research supports hypothesis about interconnectedness of liquidity in financial systems and solvency problems of big banking groups operating in CEE.

As the results show one of the potential sources of systemic risk in the CEE countries is the financial situation of European banking groups, particularly those with their subsidiaries in CEE. The deterioration of European banks may affect the banking sector, among others by reducing the availability of funding parent companies and other financial institutions and by increasing the cost of market financing. Difficulties in obtaining capital from market sources and the limited possibilities of recapitalization of banks due to the difficult fiscal situation will cause home countries, that parent banks may be forced to intensify the deleveraging process by reducing the

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scale of operations, and sales subsidiaries. Parent banks that have received state aid may also be forced to sell some assets. Market financing costs are high, especially for banks from countries with public finance crisis risk. Banks' funding costs are highly dependent on risk assessment and cost of financing the government sector of their home countries. Strong growth in profitability and cds premiums of some Euro area countries in the second half of 2011 resulted in increased funding costs of banks. This illustrates the significant increase in the cds premium during the same period for most European banks. As a result of the deterioration of the fiscal situation of some Euro area countries, the rating agencies downgraded their credit assessment, which led to a reduction in the ratings of banks operating in these countries. Concerns about the fiscal situation of some countries of the Euro area resulted in an increased risk of bank losses in the event of fall in the value of Treasury bonds, and also limited the possibility of providing further public support for endangered financial institutions. Share prices of most European banks recorded a strong decline, especially banks with significant exposures to risk of Euro area countries and banks perceived as having an unstable situation of liquidity.

Also, the CDS premium quotations of parent companies are strongly associated with CDS premiums on their government debt. The solvency problem of some Euro area countries can decrease market assessments of financial sector companies, which worsen the conditions for the functioning of both parent companies and their affiliates. The reduction in lending will further restrict economic activity leading to a negative feedback loop between the financial and real sectors. Ratings of parent companies for CEE banks persist at low levels, especially in comparison with the period before the outbreak of financial crisis. High levels of CDS premium of certain parent companies has a significant influence liquidity in banking system, due to the high probability of insolvency of parent companies.

The results of the estimation models (equations 1 and 2) show that the most important influence on liquidity in CEE interbank market have: CDS spread on major banking group operating in Europe and the real effective exchange rate (coefficients of CDS spread and real effective exchange rate are, -0.91 and 0.83, respectively). Much smaller influence presents GDP growth (0,04) and changes in the capital markets (0,02) (see table 2). The reason of this situation was in the past. Years 2007–2008 is a dynamic growth in loans and growing at a relatively lower rate of bank deposit base contributed to the widening funding gap (the ratio of loans to deposits on the interbank

market). Banks 'closing' the gap by borrowing funds in the interbank markets both at home and abroad, attracting deposits from nonbank financial institutions. The stability of such a model of funding was disrupted in September 2008, the collapse of us bank Lehman Brothers, which contributed to a significant increase in counterparty risk in global markets, reducing transaction limits and decline the interbank liquidity in financial markets. The consequence of disturbances in the international markets was reducing the mutual limits of the interbank transactions in local markets in the CEE region. The liquidity of the interbank market increased the market price of short-term transactions (up to 3M). The study of short-term interest rates in the interbank market in CEE region showed a significant increase in rates at this time. Low limits on interbank transactions could also due to the increased difficulties in assessing the credit risk of local banks' customers and hence, future financial position of banks themselves. It was difficult to determine security of credit portfolios and capital adequacy in particular banks. This was reflected in the increase in risk premiums and the cost of obtaining financing. Banks earn a lot of resources at a price above the level of interbank rates. Lack of trust between banks led to a increasing risk premium in interbank rates. The reaction of banks to reduce the possibility of 'closing' the funding gap in the wholesale markets was similar, and practically uniform across CEE countries.

The fast convergence in credit ratios is mainly driven by similar and aggressive business strategies of Western European banking groups that dominate the banking sectors of most CEE countries. For the banks with smaller relative presence in the region, vulnerability to contagion from mother to subsidiary banks is more relevant, while in the case of truly regional banks contagion is likely in both directions with potential spillover across subsidiaries as well.

### Conclusion

The focus has been on how the statistical characteristics of a market's constituents and the nature of their interconnectedness affect the tradeoff between banks for contagion. It has been proven that in CEE parent model of banks leads to the contagion and liquidity problems, in interbank lending market. The process of internationalization in the banking sector in CEE countries has facilitated the development of banking and integration into the global system of capital flows. The presence of foreign capital in the banking sector, however, are related to concerns about: the deterioration of domestic banks operating conditions due to intense competition from foreign

institutions, the difficulties in conducting monetary policy, system instability, the reluctance to finance investments by foreign banks.

The study shows that the situation and solvency problem in big banking groups operating in Central and Eastern Europe, measured by CDS spreads exerts negative impact on liquidity in local financial systems, where they have subsidiaries. There is not connected with economic problem in particular countries, but it was so called contagion effect This can be due the increase (decrease) in foreign capital flows during upturns (downturns) and stock market boom (bust). Stock exchange changes does not affect so hardly on liquidity decisions of banks. It is not surprising the result obtained on the changes in interest rates, as in all countries can be observed significant growth 3M rates accompanying decline in banking system liquidity. The research supports hypothesis about interconnectedness of liquidity in financial systems and solvency problems of big banking groups operating in CEE.

The high degree of financial interlinkages in the region and the risk of regional contagion argue strongly for a more regional approach to managing potential vulnerabilities. In addition to strengthening bank supervision and prudential regulation is needed close cooperation between home and host supervisory authorities. Initiatives are needed to develop cooperative arrangements for crisis management, some of which are already taking place. At a minimum, this calls for conducting coordinated inspections of internationally active banks and undertaking joint risk assessments.

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# Impact of Euro Adoption on **Emerging European Countries**

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We study the impact of the euro on emerging European countries by investigating three country groups: (1) seventeen Eurozone countries, (2) seven EU Eastern and Central European (ECE) members using local currencies, and (3) six EU Candidates. We analyze macroeconomic indicators and propose models to investigate whether similar or different indicators influence sovereign debt for each group. We find that exports and unemployment are positively related to sovereign debt while market capitalization shows negative relation with sovereign debt. We argue that the recent European sovereign debt crisis has raised serious challenges for the Eurozone, and propose that EU ECE members and EU candidates delay the adoption of the euro.

Key words: euro adoption, economic and monetary union, emerging european countries, economic convergence

### Introduction

The creation of the European economic and monetary union had been a long and carefully planned process intended to embrace the historically fragmented European countries and, among other benefits, increase their international productivity and trade competitiveness. Not a small task in itself, the creation of the euro has brought some positive and some challenging developments for the European Union (EU).

The EU has been instrumental in promoting peace, prosperity, productivity, economic integration, free movement of factors of production and economies of scale amongst its member states (Chang 2010). However, the recent financial crisis and the possible impact it might have on the stronger members of the union and on the world economy has raised concerns of whether the unique social, economic and political partnership earlier envisaged is indeed sustainable.

In this work we study the relationships between macroeconomic indicators for three different groups of countries: (1) seventeen Eurozone countries, (2) seven EU ECE members that still use their local currencies, and (3) six EU candidate countries. We investigate

TABLE 1 Illustration of significant changes in selected macroeconomic indicators for EU ECE members currently in the pipeline for adoption of the euro, and EU candidate countries

Indicators	Groups	Countries	1999-2000	2010-2011
Sovereign Debt	EU ECE countries	Bulgaria	74	15
(% of gdp)		Hungary	60	80
	Eu candidates	Macedonia	47	28
		Iceland	43	99
Inflation	EU ECE countries	Poland	7.3	2.7
		Romania	45	6
	Eu candidates	Serbia	42	6
		Croatia	4	1
		Turkey	65	8.5
Market	EU ECE members	Romania	2	20
Capitalization		Bulgaria	5	15
	Eu candidates	Croatia	11	41
		Macedonia	0.2	29
GDP per	EU ECE members	Lithuania	-0.4	3
capita growth		Romania	-1	1.1
	Eu candidates	Montenegro	-9	2.2
		Serbia	-11	1.4
		Turkey	-4.8	1.4

fourteen macroeconomic indicators: research and development, government debt, imports, exports, inflation, foreign direct investment, market capitalization of exchange-listed companies, gross domestic product per capita growth, unemployment, tertiary education, and representation of women in national parliaments, use of electricity, energy consumption, and  $CO_2$  emissions. We develop three multiple regression models, to understand which macroeconomic indicators lead to sovereign debt for each group of countries that we study.

We test the following hypotheses: (1) that market capitalization of exchange-listed companies leads to sovereign debt, (2) electricity use leads to sovereign debt, (3) exports lead to sovereign debt, and (4) unemployment leads to sovereign debt.

Our results show that there are convergences among the three groups of countries analyzed here in sense that similar macroeconomic indicators are significant for explaining the sovereign debt for different country groups. This shows that the European Union has achieved an important cohesion level, which also can be used as an argument that imminent joining of the monetary union may not be necessary for the EU ECE members that still use their local currency

and for the EU candidate countries. We argue that delaying of the euro adoption may be beneficial for all three groups of countries analyzed in this study. Upholding the local currencies could give monetary flexibility to the EU ECE and EU candidate countries and position them better to curb the current global financial and sovereign debt crisis, and it may give the Eurozone breathing space to focus on the current euro problems instead of adding new countries into the monetary union and increasing the probability of new emerging problems.

The questions that we are tackling in this study are whether and when should EU ECE countries that still use their local currencies and the EU candidate countries adopt the euro.

In the next section we provide background literature review addressing the advantages and disadvantages of common currency. and the challenges for the EU ECE and EU candidate countries. In the third section we describe the data and methodology including regression analysis and hypothesis testing results for the three different groups of European countries investigated in this study, in the fourth section we discuss policy implications, and in the fifth section we offer brief concluding remarks.

### **Literature Review**

### COMMON CURRENCY: A PANACEA OR A PANDORA'S BOX

Research studies have shown many benefits of monetary integration and use of common currency. Among the benefits, increased trade, measured as combined imports and exports among the countries that use common currency has been prominently studied (Frankel and Rose 2002; Micco, Stein, and Ordonez 2003; Bun and Klaasen 2007). Inter-country trade of goods and services significantly enhances overall economic performance of a country and it is an important determinant of growth in GDP as well as real income growth. Another benefit of joining a monetary union is the prospect of price stabilization, which is quite desirable after turbulent periods of structural price changes that countries experience during the transitional pre-Eu accession period. Also, joining a common currency is beneficial if EU candidate countries have experienced high inflationary periods and seek stability for their currencies (Frankel 2004; Wdowinski 2005). However, while the common currency can provide a safety harbor, it is also the one to be blamed for precipitating financial crisis. For example, within a monetary union, when investors expect any member country to not meet its sovereign debt obligations, they will be motivated to sell-off that country's government bonds and invest the proceeds in securities of other countries using the same currency. As a result, the country in trouble will further be pushed into economic downfall since it will experience difficulties in rolling over its debt obligations. On the other hand, if the country uses its own currency, not all lenders would pull out their investments at the first sign of trouble, since the country's Central Bank could offer interim solutions by repurchasing the government bonds or restructuring the sovereign debt. In addition, if the investors sell the bonds, they will either have to sell the country's currency in the foreign exchange market or invest in other parts of the same country's economy. As such, the crisis could be contained to a certain extent. In a monetary union, however, member nations relinquish control over the currency of their borrowing and hence are more vulnerable to economic distress (De Grauwe 2011; Kopf 2011).

### FINANCIAL AND ECONOMIC INTEGRATION

Deeper financial integration was one of the main reasons why European countries have joined and continue to join the Eurozone. However, financial integration is considered as one of the main culprits behind the Eurozone Sovereign debt crisis. Adoption of the euro led to opening up of the financial and banking sectors in the EU countries. Hence, the developed nations of the region, that were flush with funds, could invest in the emerging and developing Eurozone members. Interest rates and inflation were low throughout the euro region. Capital and factors of production could potentially move freely. More developed countries like Germany invested significantly in Greece, Spain and other developing members of the EU. However, with Greece at the brink of default, German balance sheet was severely impacted by being populated with almost worthless investments. This spillover effect could have fatal consequences for the entire Eurozone. (Arezki, Candelon, and Sy 2011). As an extension of the Sovereign debt crisis spillover effect, it would not be surprising if in the future, when investors forecast economic difficulties in one Eurozone country, they flee not only the troubled country, but also other countries that have stakes in this country's Sovereign debt or are involved in significant business relations with the troubled country. This will have an effect of catalyzing and exacerbating the crisis.

One of the reasons for the members of the Eurozone to adopt a common currency was to strive to increase productivity and to not use the currency as a competitive tool. While this is a very noble cause to adopt the euro, it is fraught with its own problems (Chang 2010). For a developing economy that experiences slowdown, giving up control of its currency means that it cannot use currency devaluation to stay competitive in the world market. Rather, the country will need to adopt deflationary measures or renegotiate labor contracts, which can be very difficult socially and politically. This can lead a nation to a downward economic spiral, making the recovery from the trough even more painful (Krugman 2012).

Furthermore, while deeper integration of the factors of production provides for free factor migration to any region where production factors can be most useful (Chang 2010), in crisis situations such as the most recent 2008 global economic downturn, the free movement of production factors also contributes to a greater outflow of labor to countries that potentially have more opportunities for employment. This can temporarily ease the problem of unemployment in the troubled nations but in the long run, it will result in lower tax revenue for the troubled governments. In addition, the working age population that remains in the distressed developing countries will probably not be very productive, further reducing the competitiveness of these nations and making austerity measures even more difficult to implement.

Thus, despite the benefits of using common currency such as eliminating foreign exchange risks and promoting significant economic growth and development, there are important advantages for some countries to maintain local currencies and to retain the monetary policy flexibility when needed. For example, in times of significant downturns, if a country uses its local currency, the government can reduce the real interest rate to encourage investments in domestic businesses or to depreciate its currency to boost the exports towards the countries with stronger currencies. This is only beneficial if the domestic economy is not correlated with the economies of the countries in the prospective common currency area. Otherwise, similar monetary policies will be pursued for the specific country and the monetary union (Frankel 2004). On the other hand, while a common currency area is expected to bring further relative price and wage convergence, there would still be incidences of asymmetric economic shocks throughout the union due to country-specific events. A common currency would implore on the stronger economies to bear the burden of the shocks in their weaker counterparts. For the weaker members, common currency also comes at a high cost of not being able to adjust relative prices and wages by depreciating their local currency. Thus, due to asymmetric shocks requiring compensating transfers within the common currency area, and reducing member flexibility to adjust their local economies, monetary unions, besides the advantages, have potentially high costs as well (Barro 2012; Krugman 2012). Furthermore, a relatively strong economy might have to deal with the moral hazard issues arising from less fiscally responsible countries, and be asked to pay for the negligent financial behaviors of other countries in the monetary union.

# CHALLENGES FOR EU ECE MEMBERS USING LOCAL CURRENCIES AND EU CANDIDATE COUNTRIES

The member states that have joined the EU since 2004 are on the path of adopting the euro as part of their accession plan. The timing of adopting the euro will depend primarily on satisfying the Copenhagen criteria, the Maastricht core economic requirements, and whether the economic convergence process could be more successful while outside or inside the Eurozone (Allam 2009; Lee 2012). The EU ECE member countries have emerged as market economies from former Eastern European communist regimes, and are progressing towards the euro in a very different environment, taking into consideration the globalization pace and the faster financial market integration in the last 10–15 years (Darvas and Szapary 2008b). The challenges to joining the EU for the former communist countries are at least two-fold. Besides the required changes in the economic environments and the conversions of property rights from centralized to private, the accession to the EU also represents an important cultural, societal and political transformation for most EU ECE member countries.

Until recently, before experiencing the severity of the sovereign debt crisis propagation in the Eurozone, the euro was very desirable and the public expectations were that almost all of Europe will adopt the common currency. This sentiment has since changed, and none of the seven Eu Ece countries that are required to adopt the euro is enthused by the prospect of relinquishing their local currencies. Instead, the Eu Ece countries are seriously reexamining their requirement to adopt the euro. United Kingdom and Denmark, on the other hand, have an explicit option not to adopt the euro which they can readily exercise. In addition, even though Sweden does not have a specific provision for not adopting the euro, the country has purposefully been delaying satisfaction of one of the requirements necessary to join the monetary union (Barro 2012).

Darvas and Szapary (2008a) have shown that after the privatization and development of the banking sectors in the EU ECE countries,

the lending capacity of the banks as well as the competition among the banks has greatly increased. Along with these trends, and the decreased interest rate margins, the banks have offered more and larger loans to not only the commercial but also the retail sector in order to stay profitable. Mortgages and other household loans have been the fastest growing products in the lending market, with the highest growth rates achieved in Lithuania, Latvia, Bulgaria, and Romania. It is worth noting that most of the credit expansion was denominated in euro since the interest rates were lower in the Eurozone (Allam 2009). Also, Germany and other Eurozone countries with stronger balance sheets were the ones infusing most of the capital in the developing Europe.

Financial liberalization studies have examined the credit extension and growth for European emerging countries and the results have demonstrated that in general credit levels are below equilibrium indicating further expansion capabilities. However, the credit growth rate, rather than the credit level, is the important trend to follow in order to maintain low inflation and high macroeconomic stability (Egert, Halpern, and MacDonald 2006; Sirtaine and Skamnelos 2007).

Generally, high inflation negatively affects the currencies, so keeping it in check is extremely important for currency stability and a country's economic prosperity. A weak domestic currency worsens the problems of the country when much of its credit expansion is funded in euro. Inflation can be exacerbated by high non-fd (Foreign Direct Investment) capital inflows in the European emerging countries, originally attracted by significant growth prospects, higher nominal interest rates, and expectations of yield convergence in anticipation of euro adoption. In addition, the non-fd capital inflows can place upward pressure on the currencies of countries with floating rate regimes, could erode the competitiveness of these countries, and force the policymakers to lower interest rates to levels that create price instabilities (Darvas and Szapary 2008b). This trend could potentially create an aftershock bubble in the real estate market and in the emerging European financial markets, which could increase the severity of the current economic situation in the euro area. Financial market integration usually means integration of financial markets, inter-relations of different countries' banking systems, and uniformity of rules for investment market access for different market participants (Baele 2004).

Table 2 shows that between 1989 and 2006, the European Union has allocated significant funds to support its members' development

TABLE 2 Distribution of structural and cohesion funds, 1989–2006

Group	Country	(1)	(2)
Cohesion countries	Spain	111,564.0 (6,198.5)	1.10
	Portugal	46,283.4 (2,571.3)	2.50
	Ireland	16,000.8 (895.1)	1.60
	Greece	50,922.0 (2,829.3)	3.10
Other EU countries	Austria	3,096.0 (258.1)	0.11
	Belgium	4,753.8 (264.1)	0.10
	Denmark	1,818.0 (101.0)	0.06
	Finland	3,459.6 (288.3)	0.26
	France	36,275.0 (2,015.3)	0.13
	Germany	58,181.0 (3,232.3)	0.14
	Italy	61,905.6 (3,439.2)	0.30
	Luxembourg	255.0 (14.2)	0.08
	Netherlands	6,035.4 (335.3)	0.09
	Sweden	3,153.6 (262.8)	0.12
	United Kingdom	33,827.4 (1,879.3)	0.16

NOTES Column headings are as follows: (1) total funds – annual average, millions of ECUS (European currency unit), (2) funds as a percent of GDP (for 1996). Adapted from Pastor (2001).

efforts of poor regions in form of structural and cohesion funds. Spain, Portugal, Greece, Italy and Germany are among the largest recipients of structural and cohesion funds, closely followed by France and the United Kingdom.

### FINANCIAL STABILITY IN EUROPE

More recently, in light of the 2008 financial crisis and 2010 sovereign debt crisis, the European Union established support and stabilization mechanisms such as the European Financial Stabilization Mechanism (EFSM) and the European Financial Stability Facility (EFSF) to contribute towards financial stability in the midst of the European sovereign debt crisis. Moreover, in October 2012, the European Stability Mechanism (ESM) was created to focus on Eurozone sovereign debt sustainability and prevention of a future crisis emergence. These mechanisms offered financial assistance funds to help European troubled countries such as Greece, Portugal, and Ireland. While these are smaller economies, the real upcoming threat for Europe could be the significant indebtedness of Italy and Spain as significantly larger economies compared to Greece, Portugal and Ireland. Spain has already asked for 100 billion Euros through EFSF, and will receive the funds contingent upon specific policy implemen-

tations in the realm of its financial sector (European Commission 2013; IMF 2012). Possibly, Italy will be the next country to require assistance from these newly formed Eurozone mechanisms. Furthermore, we argue that the European sovereign problems are not contained to the GIPSI (Greece, Ireland, Portugal, Spain, and Italy) countries, but rather could extend to countries such as Germany and France as well, given that the trend of sovereign debt levels as percentage of GDP (Gross Domestic Product) for these countries continues to increase as shown in table 3.

If the observed upward trend of sovereign debt as percentage of gdp continues, especially for the larger economies such as Italy, Spain, Germany and France, this could prolong the current sovereign debt crisis and prove more troublesome for Europe. This possibility is explored in scenario analysis and forecasting of the Spanish and Italian debt for the period of 2012 to 2020 (Cline 2012) showing that under certain scenarios, the debt levels may continue to increase. The other groups that we study, EU ECE countries that use their local currencies and Eu candidates, have significantly lower sovereign debt levels compared to the Eurozone average, with exception of Iceland (Eu candidate) with sovereign debt at 99 percent of gdp and Hungary (ECE country that uses local currency) with 80 percent of gdp. We argue that if the countries from these two groups join the European Monetary Union, they will be adversely affected by the increasing European debt and will have to participate in resolving the debt issue as donor countries, which might increase their sovereign debt to unsustainable levels. On the other hand, the EU ECE countries that use local currencies such as Latvia, Hungary, and Romania have already benefited from the newly formed European Mechanisms for Financial Stability and a counter argument can be made that they could benefit even further by becoming members of the European Monetary Union.

Table 4 shows high volatility in Irish growth from positive 10 percent in 1999 down to negative 8 percent in 2009. Greece has experienced relatively stable positive growth prior to the 2008 financial crisis, and has not shown signs of recovery afterwards, but rather has hovered in the negative growth region, which could continue to further depress the Greek economy. While European countries in general experienced negative gdd growth after 2008, Germany, France, Belgium, Portugal, and Italy show faster growth recovery and have already moved towards positive growth in 2010 compared to Greece, Ireland, and Spain, which still show negative growth in 2010.

In light of the current challenges faced by the Eurozone network

Sovereign debt as percentage of GDP for selected Eurozone countries showing universal upward trend in the range between 68 percent for Spain and 16E percent for Greece in 2011 (%) TABLE 3

9	8 percent	tor Spain a	and 165 pe	68 percent tor Spain and 165 percent for Greece in 2011 $(\%)$	ireece in :	2011 (%)							
Country	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Belgium	113.78	107.88	106.64	103.55	98.55	94.33	92.02	88.03	84.19	86.78	96.25	29.96	97.81
France	58.89	57.33	56.89	58.98	63.14	65.13	66.73	63.89	64.19	68.27	79.00	82.39	86.01
Germany	06.09	59.74	58.83	60.44	63.94	65.75	67.97	67.56	64.90	66.25	73.44	83.23	80.56
Greece	102.51	103.44	103.72	101.45	97.27	98.84	100.29	106.11	105.41	110.72	127.10	142.76	165.41
Ireland	48.50	37.78	35.50	32.12	30.94	29.63	27.35	24.81	25.01	44.34	65.10	94.84	106.46
Italy	113.70	109.17	108.79	105.69	104.42	103.90	105.94	106.65	103.62	106.30	116.07	119.00	120.11
Portugal	49.55	48.48	51.20	53.84	55.88	57.65	62.75	63.92	68.27	71.58	83.01	92.92	107.76
Spain	62.34	59.26	55.50	52.55	48.74	46.22	43.03	39.56	36.12	39.85	53.26	60.11	68.47
TABLE 4 GDP per capita growth for selected Eurozone countries (%)	рР per caț	oita growtk	h for selec	ted Eurozo	ne countr	ies (%)							
Country	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	
Belgium	3.30	3.42	0.46	0.91	0.39	2.82	1.17	2.03	2.15	0.16	-3.62	1.33	
France	2.97	2.98	1.10	0.20	0.19	1.80	1.07	1.76	1.66	-0.64	-3.26	0.93	
Germany	1.81	2.92	1.34	-0.16	-0.43	1.18	0.74	3.82	3.41	1.28	-4.89	3.85	
Greece	2.97	4.14	3.89	3.09	5.60	4.01	1.89	5.12	2.59	-0.55	-3.64	-3.80	
Ireland	9.48	7.79	3.14	4.10	2.48	2.61	3.07	2.83	2.85	-4.48	-7.69	-0.79	
Italy	1.43	3.61	1.80	0.13	-0.82	0.73	0.19	1.62	0.94	-1.91	-5.62	1.05	
Portugal	3.64	3.37	1.31	0.03	-1.60	0.97	0.32	1.11	2.13	-0.14	-3.00	1.33	
Spain	4.21	4.17	2.48	1.23	1.40	1.60	1.93	2.33	1.81	-0.64	-4.46	-0.50	

of financial institutions, in December 2011, the European Central Bank has committed to provide €1 trillion of funds for the European banks for up to three years in an attempt to stem the effects of the most recent financial crisis. This injection of liquidity intends to give the European governments three years to make necessary fiscal adjustments, and only time could tell whether this added liquidity into the European banking system will end the European sovereign debt crisis. However, for a longer-term solution to this crisis, the liquidity infusion needs to be in the form of recapitalization of the struggling banks instead of getting into the vicious cycle of increasing the sovereign debt of the faltering economies.

The above mentioned difficulties that currently plague the EU are becoming more relevant as additional countries are considering or will be required to adopt the euro. We discuss these questions based on regression analyses of economic indicators on one hand and sovereign debt as percentage of GDP on the other for the EU ECE members and EU candidate countries compared to the Eurozone and we test the following 4 hypothesis.

### HYPOTHESIS TESTING

- H1 Market capitalization of exchange-listed companies leads to increase in government debt.
- н2 Electricity use leads to increased government debt.
- нз Exports lead to increase in government debt.
- н4 Unemployment leads to increase in government debt.

# Data, Models, and Methodology

### DATA

This section describes the data and outlines the methodology used in the selection of the macroeconomic indicators. In this study we use the World Bank Development Indicator (wdi) database, containing approximately one thousand macroeconomic indicators reported annually from 1960s until present for approximately 200 countries. In addition, since the government debt data was incomplete in the wdi database, we use the International Monetary Fund Fiscal Affairs Department Public Debt Database containing annual public debt data for approximately 180 countries since 1960s until present. The definitions of the data below are taken from the wdi database indicator description.

*Sovereign Debt.* Central government debt, total (% of gdp), is the entire stock of direct government fixed-term contractual obligations to

others outstanding on a particular date. It includes domestic and foreign liabilities such as currency and money deposits, securities other than shares, and loans. It is the gross amount of government liabilities reduced by the amount of equity and financial derivatives held by the government.

*Inflation.* Measured by the consumer price index, inflation reflects the annual percentage change in the cost to the average consumer of acquiring a basket of goods and services that may be fixed or changed at specified intervals, such as yearly.

*Unemployment*. Refers to the share of the labor force (% of total labor force) that is without work but available for and seeking employment.

*Imports*. Refers to a total of imports of goods and services (% of gdp). Imports of goods and services represent the value of all goods and other market services received from the rest of the world.

*Exports* . Represents the value of all goods and other market services provided to the rest of the world (% of gdp). Exports include the value of merchandise, freight, insurance, transport, travel, royalties, license fees, and other services, such as communication, construction, financial, information, business, personal, and government services. Exports exclude compensation of employees and investment income (formerly called factor services) and transfer payments.

Market Capitalization. Represents total market capitalization (share price times the number of shares outstanding) of listed companies (% of gdp). Listed domestic companies are the domestically incorporated companies listed on the country's stock exchanges at the end of the year. Listed companies do not include investment companies, mutual funds, or other collective investment vehicles. The sample is restricted to the period for which annual data are available: from 1961 to 2010 (50 observations for country). The above time series data are collected and retrieved from the World Growth Indicator database published by the World Bank.

Gross Domestic Product (GDP) Per Capita Growth. Annual percentage growth rate of GDP per capita based on constant local currency. GDP per capita is gross domestic product divided by midyear population. GDP at purchaser's prices is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources.

Foreign Direct Investments represent net inflows of investment to acquire a lasting management interest (10 percent or more of voting stock) in an enterprise operating in an economy other than that of the investor. It is the sum of equity capital, reinvestment of earnings, other long-term capital, and short-term capital as shown in the balance of payments. This series shows net inflows (new investment inflows less disinvestment) in the reporting economy from foreign investors, and is divided by gdp.

Research and Development. Expenditures for research and development are current and capital expenditures (both public and private) on creative work undertaken systematically to increase knowledge, including knowledge of humanity, culture, and society, and the use of knowledge for new applications. R&D covers basic research, applied research, and experimental development. Research and development is expressed as percentage of GDP.

*Electric Power Consumption.* Expressed as kWh per capita, it measures the production of power plants and combined heat and power plants less transmission, distribution, and transformation losses and own use by heat and power plants.

 $CO_2$ 

*Emissions*. Expressed as metric tons per capita, carbon dioxide emissions are those stemming from the burning of fossil fuels and the manufacture of cement. They include carbon dioxide produced during consumption of solid, liquid, and gas fuels and gas flaring.

*Energy Use* (kg of oil equivalent per capita). Refers to the use of primary energy before transformation to other end-use fuels, which is equal to indigenous production plus imports and stock changes, minus exports and fuels supplied to ships and aircraft engaged in international transport.

*Education*. School enrollment, tertiary (% gross) or gross enrolment ratio in tertiary education (ISCED 5 and 6), regardless of age, expressed as a percentage of the total population of the five-year age group following secondary school (ISCED is International Standard Classification of Education. Level 5 is first stage of tertiary education and level 6 is second stage of tertiary education including active research involvement).

Women Representation in National Parliaments. Indicates the percentage of parliamentary seats in a single or lower chamber held by women.

### MODELS AND METHODOLOGY

In this study we examine fourteen macroeconomic indicators described in the previous section to determine which factors might be most importantly related to increase in government debt, which was the main culprit for the precipitous financial crisis in the Eurozone. We divide the countries in three analytical groups, Eurozone, EU ECE members that use local currencies, and Eu candidate countries. We obtain the regressors for different groups by starting with the original fourteen macroeconomic indicators and by using a stepwise regression approach with backward elimination of variables until we reach the optimal model with fewer independent variables to avoid over-fitting. We first check for variable significance and methodically exclude the non-significant variables to continue the model selection process with only effective variables. We eliminate variables with large AIC values and test whether after variable elimination the model has improved (lower) are value. Are is the Akaike Information Criterion test that measures relative goodness of fit of a statistical model. The lower the AIC, the better the goodness of model fit. We test for multicollinearity by checking VIF (Variance Inflation Factor) values for each variable and we exclude the variables with VIF>10. As a rule of thumb, VIF larger than 10 signifies existence of muilticollinearity. We then perform the t-test for individual coefficient significance and the *F*-test for joint coefficient significance. We analyze the anova table to compare the quality of the original and the resulting simplified model and accept the simplified model if there is insufficient evidence to reject it. Lastly, we plot the residuals to check the fitting and to ensure no serial correlation exists in the residuals.

Using the above methodology, we develop the following models for the three different groups that we study:

*Group 1* includes seventeen Eurozone countries of the European Union: Austria, Belgium, Cyprus, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Malta, Netherlands, Portugal, Slovak Republic, Slovenia, and Spain.

The model for Group 1:

$$SD = \alpha + \beta_1 \cdot Inf + \beta_2 \cdot Cap + \beta_3 \cdot Unemp + \beta_4 \cdot Elc.$$
 (1)

*Group 2* includes seven Eastern European countries of the European Union that still use their respective local currencies: Bulgaria, Czech Republic, Hungary, Latvia, Lithuania, Poland, and Romania.

The model for Group 2:

$$SD = \alpha + \beta_1 \cdot Exp + \beta_2 \cdot FDI + \beta_3 \cdot Unemp + \beta_4 \cdot WIP$$
 (2)

*Group 3* includes six European Union candidate countries: Croatia, Iceland, Macedonia, Montenegro, Serbia, and Turkey.

The model for Group 3:

$$SD = \alpha + \beta_1 \cdot Exp + \beta_2 \cdot Cap + \beta_3 \cdot Elc + \beta_4 \cdot CO_2. \tag{3}$$

Where, sd – Sovereign Debt as percentage of gdp,  $\alpha$  – intercept,  $\beta_{(1,n)}$  – regressors' coefficients, Inf – inflation, Cap – market capitalization of exchange-listed companies, Unemp – unemployment, Elc – electricity consumption, Exp – exports, fd – Foreign Direct Investments, wip – women representation in National Parliaments,  $CO_2$  – Carbon Dioxide emissions.

### REGRESSION ANALYSIS AND HYPOTHESIS TESTING RESULTS

In table 5 we report the coefficients of the regressors in the models, the *t*-statistics for the coefficients, standard errors, and the *p*-values for the three different groups of countries. The regression models have Sovereign debt as percentage of GDP as a regressand and a set of macroeconomic indicators as regressors obtained as explained in the Models and Methodology section.

In testing hypothesis 1, which states that market capitalization of exchange-listed companies leads to government debt, table 5 shows that market capitalization has a negative direct effect on the increase of government debt and is statistically significant at the 0.001 level for the Eurozone and the EU candidate countries.

In testing hypothesis 2, which states that increased use of electricity leads to government debt, table 5 shows that use of electricity has negative relation with increase of government debt and is statistically significant at the 0.05 level for the Eurozone and at 0.001 level for the Eu candidate countries.

In testing hypothesis 3, which states that higher exports lead to government debt, table 5 shows that exports are positively related to government debt and is statistically significant at the 0.001 level for EU ECE countries that still use their local currencies and is also positively related to government debt for the EU candidate countries with statistical significance of 0.05.

In testing hypothesis 4, which states that unemployment leads to government debt, table 5 shows that unemployment has positive direct effect on an increase of government debt and is statistically sig-

TABLE 5 Sovereign debt as percentage of gross domestic product

Item	Group 1	Group 2	Group 3
Intercept	-0.02811	0.002018	-0.05455
t-value	(-0.480)	(0.028)	(-0.744)
Std. Error	0.05861	0.073129	0.07335
<i>p</i> -value	0.6321	0.978056	0.461491
Inflation	-0.30205***		
t-value	(-4.486)		
Std. Error	0.06733		
<i>p</i> -value	$1.36e^{-5}$		
Market cap	-0.26449***		-o.37375***
t-value	(-4.358)		(-4.207)
Std. Error	0.06069		0.08884
<i>p</i> -value	$2.31e^{-5}$		0.000129
Unemployment	0.27323***	0.309432***	_
t-value	(4.025)	(3.906)	
Std. Error	0.06788	0.079218	
<i>p</i> -value	8.69e <sub>-5</sub>	0.000198	
Electricity use	-0.15221*		-0.41441**
<i>t</i> -value	(-2.45)	(-4.14)	
Std. Error	0.06213	0.10009	
<i>p</i> -value	0.0153	0.000159***	
Exports		0.327971***	0.19505*
<i>t</i> -value		(3.94)	(2.253)
Std. Error		0.083251	0.08657
<i>p</i> -value		0.000177	0.029401

Continued on the next page

nificant at the 0.001 level for the Eurozone and for the Eu ECE countries that still use their local currencies.

## **Discussion and Policy Implications**

Previous studies show that it is questionable whether it is better to encourage economic convergence given the possibility of future economic shocks, and the relatively high probability of being swept by the crisis contagion phenomenon as experienced in some past instances if the economies are highly correlated. Examples of recent crises contagions include Western Europe during 1992–1993, Latin America in 1982, 1994–1995, and 1998–1999, East Asia in 1997–1998, and the Russian default crisis of 1998 (Frankel 2004). With high mutual economic convergence, even if the Eu candidate countries or the Eu Ece countries that still use their local currencies can escape

TABLE 5 Continued from the previous page

Item	Group 1	Group 2	Group 3
FDI		-0.466379***	
<i>t</i> -value		(-5.908)	
Std. Error		0.078944	
<i>p</i> -value		$8.6e^{-8}$	
Women in Parliament		0.175091*	
<i>t</i> -value		(2.070)	
Std. Error		0.0846	
<i>p</i> -value		0.041797	
CO <sub>2</sub> emissions			-0.24089*
<i>t</i> –value			(-2.697)
Std. Error			0.0893
<i>p</i> -value			0.009939
N	169	82	47
Multiple R <sup>2</sup>	0.344	0.545	0.6689
Adjusted $R^2$ 0.328	0.521	0.6381	
F21.62	23.33	21.72	
RSE	0.7599	0.6661	0.5243

Notes *Group 1* includes seventeen Eurozone countries of the European Union: Austria, Belgium, Cyprus, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Malta, Netherlands, Portugal, Slovak Republic, Slovenia, and Spain. *Group 2* includes seven Eastern European countries of the European Union that still use their respective local currencies: Bulgaria, Czech Republic, Hungary, Latvia, Lithuania, Poland, and Romania. *Group 3* includes six European Union candidate countries: Croatia, Iceland, Macedonia, Montenegro, Serbia, and Turkey. Significance: \*\*\*p < 0.001, \*\*p < 0.01, \*p < 0.05).

the direct impact of e.g. the European sovereign debt crisis, they will most likely be affected indirectly. For example, while the European Commission, the European Central Bank, and the International Monetary Fund (the Troika) currently support Greece, a new Greek government may reject the bailout agreement and the Troika may withdraw the support. If Greece exits the Eurozone, as hypothesized by Citigroup and Morgan Stanley's economic teams (Elliott 2012), among others, this will adversely affect not only Europe, but also the United States and China. Europe may enter severe recession, the us may be pushed into a milder recession, and the growth of China will slow down significantly.

To that effect, it is important that besides the Treaty of Rome of 1957, The Maastricht Treaty of 1992, and the Stability and Growth Pact of 1997, which define the criteria for a country to become a member of the Eu and EMU, a well-defined process should be in

place for situations when a country ought to exit the Eurozone. Another missing part of these treaties is the fact that even though European countries have to move in the right direction to meet required economic criteria while they are in the process of negotiation to enter the EMU, once they become part of the Eurozone, their fiscal discipline tends to disappear. Under these circumstances, the EMU and the euro may encounter more and larger crisis in the future, so a question remains whether the EU ECE and EU candidate countries should advocate for use of their local currency.

Some Eurozone countries, once part of the EMU, considerably increased their borrowing to unsustainable national government debt to GDP ratios. The Greek and the Irish debt crisis were merely a wake-up call for the EU as these economies are relatively small, with GDPs of €215 billion and €156 billion respectively, and combined, smaller than the GDP of Pennsylvania. The bigger problems are luring from debt issues of much larger economies such as Italy and Spain. Italy has close to €2 trillion debt outstanding, of which, 50 percent is financed externally. Spain has over €700 billion of public debt outstanding combined with its dire unemployment rate of 22 percent (Federal Reserve Bank of St. Loius 2011).

The European integration is intended to stabilize the use and allocation of resources, to make the job market more efficient, to streamline investment opportunities, and to pool the opportunities and risks of the common marketplace. Financial integration allows investors to improve their capital allocation decisions and benefit from improved liquidity and efficient asset allocation. While the prices of tradable goods are usually determined by international competition, it is more difficult to achieve price convergence for non-tradable goods that are only traded and consumed in one country's local economy. This can cause big price differentials in different economies and contribute to devaluation of domestic currencies, distortion of prices, or reduced competition during the country's transformation process. Even though price arbitrage can accelerate the price convergence, in an environment where there are obstacles, such as restrictions on movement of labor, high transportation costs that restrict tradability, regulations, or quotas, price differentials can last for prolonged periods of time (Zdarek 2008). These considerations are especially important when analyzing the timing and benefits or difficulties of euro adoption for the EU ECE countries that use local currencies and EU candidate countries.

Previous studies show that openness and increased trade among countries is one of the main attributes of economic convergence (Fatas 1997; Clark and van Wincoop 2001; Calderon, Chong, and Stein 2007). In the case of Eu ece countries, Fidrmuc and Iikka (2004), using data through 2001, reports that correlations for Poland and Hungary with the German economy have increased throughout the 1990s. Darvas and Szapary (2008b) have reported that the Slovenian economy exhibits high degree of synchronization with the economy of the European Monetary Union (EMU), while examples of countries with lower historical correlations with the EMU economy include the Baltic countries, and the Czech and Slovak Republics.

It is arguable that sometimes countries should join the EMU even if they have not reached the desired economic convergence. By joining the EMU, the country will naturally increase the trade with the other members, and will reach economic convergence, which means not only convergence in business cycles, but also narrowing the gaps in productivity, real income, and other macroeconomic indicators (Frankel 2004). This is only desirable if countries that have not satisfied the economic criteria for EU accession are steering the required macroeconomic indicators in the right direction. Otherwise, not having satisfied the economic requirements for EU accession and having wrong directional movement of the same, signalizes no economic, monetary or fiscal discipline and could later create a potential problem for the Eurozone like in the case of Greece (Federal Reserve Bank of St. Loius 2011).

## Conclusion: To Adopt Or Not to Adopt the Euro, That Is the Question Now

In this paper we analyzed three groups of countries (1) the seventeen Eurozone countries that have adopted the euro, (2) the seven Eu ece member countries that still use their local currencies, and (3) the Eu candidate countries. We studied temporal dynamics of selected macroeconomic indicators such as central government debt, inflation, market capitalization of exchange-listed companies, and GDP per capita growth for selected Eu ece members and Eu candidate countries to understand significant changes that occurred between 1999, at the beginning of the euro era, up to 2011.

We investigated the relationships between a group of macroeconomic indicators on one hand and sovereign debt as percentage of gdp on the other, for the three groups of countries that we study. By analyzing the regression results we studied potential benefits or difficulties stemming from adopting the euro for the EU ECE countries and EU candidates. We conclude that even though the European Monetary Union is strategically, politically and economically important, and its enlargement is well intended, the most recent European sovereign debt crisis has created additional challenges that need to be taken in consideration by the EU ECE member countries and EU candidate countries when considering the replacement of their local currencies with the euro. Improving the economic stability of the European Union may be achieved more rapidly if no new members are added to the European Monetary Union for the time being. We believe that it could be advantageous for both, the EU ECE countries still using their local currencies and the EU candidate countries to consider delaying the replacement of their local currencies with the euro. To defer adopting the euro may be mutually beneficial for all, the Eurozone, the EU ECE and EU Candidate countries. Once the sovereign debt crisis is subdued, the adoption of the common currency may be reconsidered based on the economic parameters and framework at the future time.

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# The Dynamic Internationalization Model of Slovenian Born Global SMES

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Small and medium sized enterprises (SMES) are important business actors in the Slovenian, as well as European economy. In addition to the current global market conditions, reflecting a severe economic downturn, the smes in Slovenia and other transition economies operate under additional extensive external pressures, arising from the opening of their domestic markets. Under such conditions, companies, including smes, perceive internationalization as an inevitable, or even urgent step in the process of their business operations. However, companies pursue different paths in their internationalization efforts, one of them being a rapid internationalization strategy, denoted as the Born Global concept. In the paper, we explore the internationalization process of Slovenian Born Global SMES. We employ an exploratory qualitative case study analysis of selected Slovenian smes in order to grasp the key characteristics of their internationalization process. On the basis of the latter we construct a dynamic internationalization model that might be used as a conceptual framework for empirical research of dynamic smes market behavior in Slovenia and other transition countries.

Key words: born global enterprise, internationalization, small and medium sized enterprises, transition economies

#### Introduction

Globalization can be characterized as a phenomenon that especially in the last few decades has had an essential influence on the internationalization of enterprises, changing its dynamics and thus creating new patterns. The classical models explain the internationalization as an incremental process, based on the gradation of the international activities of an enterprise. In contrast to these models, the Born Global concept denotes enterprises, that encounter a rapid process of internationalization, since they start with their international activities within a short time of their inception, simultaneously entering several geographically, as well as culturally distant markets,

where they obtain a substantial part of market outlet for their total sales.

Although most enterprises that comply with the Born Global concept emerge from developed economies, there are several examples of such enterprises being found in transition economies, such as Slovenia. The transition process creates conditions that are mostly associated with a higher level of risk and limited resources, therefore seeming less beneficial. In addition to the transition process, trade liberalization in form of global or regional integration, such as European Union (EU), has a major impact on the internationalization process. Along with monetary, taxation and customs aspects, that essentially alleviate business operations in the EU area, the EU members also benefit from the European policy measures that additionally support the internationalization process of its enterprises. The characteristics of transition economies and the EU membership are therefore the components that affect the internationalization process of enterprises, and to a certain extent define its course.

Another factor, influencing the enterprises' internationalization process is their size. Larger enterprises tend to be more internationalized than smaller, because they possess more financial and managerial resources, they have greater production capacity, attain higher levels of economies of scale and are more likely to be associated with lower levels of perceived risks in exporting operations (Glas et al., 1999). Since small and medium sized enterprises (SMES) represent more than 99 percent of all European, as well as Slovenian businesses, it is crucial to elaborate their internationalization process in accordance with the specificities that can be ascribed to their size.

Our research is based on a qualitative case analysis of selected Slovenian smes with two main objectives. First, we wish to deepen the insight into the international behavior of rapidly internationalizing smes in order to draw some guidelines for future research on market behavior of smes, and, second, to broaden our understanding of key aspects of smes' international behavior in transition countries as a starting point for designing a dynamic model of smes' internationalization.

#### Definition of a Born Global SME

#### THEORETICAL BACKGROUND

The classic models explain the internationalization as a gradual process that progresses in incremental stages. The most commonly cited

stage model of internationalization is the Uppsala model, developed by Johanson and Vahlne (1977). The latter explains the internationalization process as the gradual acquisition, integration and implication of foreign market knowledge through the increasing commitments to those markets. Similarly, the innovation related stage internationalization models (Cavusgil 1980) explain the internationalization as an innovative course of action. Although the stage models of internationalization were, especially due to their deterministic nature, often subjected to substantial criticism (Andersen 1993), they still remain the basis for empirical research and several new internationalization models that emerged in the last decades.

During the last two decades, several empirical researches have opposed the classical internationalization models by putting forward the cases of enterprises, which start with their international activities soon after inception, entering several distant markets at once. and thus overleap stages, proposed by the classic models. Such enterprises are known as International New Ventures - INVS (Oviatt and McDougall 1994), or Born Globals (Rennie 1993).

In order to comprehend the characteristics of the internationalization process, theories that focus on explaining causes and channels of the process also need to be taken into account. Whilst older theories, such as transaction cost (Williamson 1975) and internalization theory (Buckley and Casson 1976), focus on overcoming market imperfections by establishing a multinational enterprise, and eclectic paradigm (Dunning 1988) emphasizes the exploitation of specific international advantages, several new theories such as networkbased (Bell 1995; Chetty and Blankenburg Holm 2000; Sharma and Blomstermo 2003), resource-based (Teece, Pisano, and Shuen 1997; Ruzzier, Antoncic, and Konecnik 2006) and opportunity-based view (Shane and Venkataraman 2000) emerge, that explain internationalization process focusing on more subjective factors, such as business and personal network contacts, managerial characteristics, opportunities recognition etc.

Whilst older theories were often criticized due to their static and deterministic nature (Andersen 1993), newer work on Born-Global firms' internationalization process mainly focuses on the pre-internationalization and early internationalization stages, neglecting the continuance of the internationalization process in time. The dynamics of the internationalization process therefore remains relatively understudied gap in literature that we wish to fulfill by constructing a dynamic internationalization model as a conceptual framework, useful for conducting further empirical research.

#### DEFINING ELEMENTS OF A BORN GLOBAL CONCEPT

The aspects, which separate the enterprises, that can be subordinated to the Born Global concept, from those, internationalizing with accordance to classic models, are primarily concerned with the time frame from the enterprise's inception to the start of its international activities, the number of foreign markets and their distances, the international market entry modes and the extent of international activities of the enterprise. The time frame aspect is defined by the time from the inception of the enterprise, to the undertaking of its first international activities. Most researches consider Born Global enterprises to start with their international activities right after or within two or three years after their inception (Gabrielsson and Kirpalani 2004), while some of them allow for longer periods, that can extent up to five, or even eight years (Zahra, Ireland, and Hitt 2000). Elaborating the time frame aspect, possible existence of enterprise's predecessors must be taken into consideration, since the latter can essentially ease the complexity of the situation, with which the enterprise is faced, when starting its international activities (Gabrielsson and Kirpalani 2004; Fan and Phan 2007).

The foreign market aspect captures the number of foreign markets, on which the enterprise decides to enter, as well as their geographic and psychical distance. Although some of the researches define the minimal extent of foreign markets or cultural clusters, in which the enterprise must perform their operations in order to be subordinated to the Born Global concept, the definitions remain disunited. Regardless to that, it is indisputable, that the geographic or psychical proximity of the foreign market diminishes entry barriers and therefore essentially alleviates the internationalization process.

The ownership aspect mainly encompasses the demand, that the enterprise represents a legally independent entity, and is therefore not a subsidiary or a branch office of another enterprise, which could potentially influence the procurement of its resources and subsequently their ability to undertake international activities. Furthermore, the ownership aspect relates to the foreign markets entry modes, separating equity entry forms from the non-equity ones. It is a common view in the economic literature, that the enterprises usually start with their international operations through exporting and later move to more complex equity forms of internationalization, although there are several cases of enterprises, many of which can be subordinated to the Born Global concept, that start with complex and demanding equity forms of foreign market entry right at the beginning of their international activities.

The extent of the enterprise's international operations is connected to the number of value chain activities, performed on the international markets, and can be expressed as the ratio of sales on foreign markets to total sales. Whilst some authors, such as Oviatt and McDougall (1994), classify enterprises according to the number of value chain activities, which the enterprises perform on foreign markets, most of other authors focus on the share of sales on foreign markets in total sales. The latter ratio agitates from as low as 5 or 10 percent (Zahra, Ireland and Hitt 2000), to as high as more than 90 percent (Sharma and Blomstermo 2003).

In some previous empirical research, additional defining elements are incorporated in the definition of the Born Global concept, such as size and industry. Present research focuses on smes, since they represent around 99 percent of all European businesses. The definition of SME's is summarized from the European Commission Recommendation 2003/361/EC (Commission of the European Communities, 2003) that uses the staff headcount ceiling and the turnover or alternatively the balance sheet ceiling as the qualifying criteria. As for the industry, several previous researches focused entirely on the high technology enterprises, whose products are sold on niche markets. Consecutively, small domestic markets do not enable them to achieve the economies of scale, which forces them into fast internationalization (Zahra, Ireland, and Hitt 2000; Sharma and Blomstermo 2003; Gabrielsson and Kirpalani 2004). On a contrary, some other authors do not contradict the presence of Born Global enterprises in more traditional industries (Rennie 1993; Oviatt and McDougall 1994).

Next to the measurable defining elements of the Born Global concept, so called vision of internationalization is commonly mentioned in previous theoretical and empirical work. The latter can be defined as a consciousness of the necessity of internationalization, which should be present at the enterprise's inception, and is expressed in the incorporation of international operations in the mere vision of the enterprise (Oviatt and McDougall 1994; Gabrielsson and Kirpalani 2004). Primarily, it encompasses the awareness of the founder or manager of the enterprise of the necessity of ensuring the competitive advantages by international operation. Regardless to the fact, that the vision of internationalization presents a rather soft and immeasurable component, its presence is necessary for the subordination of the enterprise to the Born Global concept.

#### **Internationalization Process in Transition Economies**

The term transition economy denotes an economy, which is changing from a centrally planned economy to a free market economy, and

applies to several Eastern and Central European countries, including Slovenia. After gaining sovereignty by exiting the former Yugoslav Federation in 1991, and becoming a full member of the Eu in 2004, Slovenian enterprises were faced with the possibility, as well as the urge of finding additional foreign markets. Changes in the business environment strongly influenced the internationalization processes of proactive and internationally oriented enterprises, several of which can be subordinated to the Born Global concept and therefore manifest its form, characterized by the influences of transition process (Peljhan, Tekavcic, and Sevic 2009).

Smaller transition economies are often characterized by factors that can be less beneficial for doing business, such as higher level of risk and limitedness of resources. It has been recognized by several authors, that such home market conditions represent an important triggering factor for undertaking international activities, whilst some of them even propose, that nations with small domestic markets have a much higher propensity to generate Born Global enterprises in order to exploit economy of scale and scope of global markets than in larger economies where domestic market is often the first growth base for most of the new ventures (Dana 2004). Furthermore they propose, that on a contrary to the fact, that Born Global enterprises from larger, developed economies, are mainly found in high technology or manufacturing industry, Born Globals from smaller and/or transition economies can emerge in a variety of industries, where the economy of scale is an important efficiency factor (Peljhan, Tekavcic, and Sevic 2009).

Nevertheless, the same authors warn about the need of intensified learning in the field of international business, that must be adequately supported by the home country (Dana 2004). The entrepreneurship in general, as well as the internationalization of European smes, is supported by Small Business Act for Europe (sba) that grasps a comprehensive sme policy framework for the Eu and its member states (Commission of the European Communities, 2008). The measures intended for the alleviation of the internationalization process of Slovenian smes are captured in a special governmental program for the encouragement of internationalization of enterprises (see http://www.mgrt.gov.si/si/delovna\_podrocja/podjetnistvo\_konkurencnost\_in\_tehnologija).

#### ENTREPRENEURIAL ENVIRONMENT IN SLOVENIA

Since the gain of independence in 1991, the conditions for entrepreneurship in Slovenia have changed significantly. The deregulation of the former Yugoslav economy, that enabled the privatization of enterprises and liberalization of the economy, and the presence of several market niches, resulted in the growing numbers of small businesses and enabled them substantial revenues. As for already established enterprises, and for those, emerging after the filling of most profitable gaps, the economic crises as well as the loss of the common unified traditional Yugoslav market soon caused the need of finding substituting and/or complementary foreign markets that would enable the newly established enterprises to continue their operations

Especially at the beginning of their operations, newly established firms require a large amount of financial sources, yet at the same time, they are exposed to substantial entrepreneurial risks. Ever since the spread of entrepreneurship in the 1990's, Slovenian businesses are facing problems with acquiring adequate financial sources, which are mainly the result of the incapacity of the entrepreneurs, to finance their businesses themselves, as well as the uncooperativeness of commercial banks, which were unfamiliar with the new entrepreneurial ways. Another characteristic of the financial support of Slovenian enterprises has been a lack of equity, as well as venture capital, which has mainly been the consequence of the underdeveloped capital market and lack of inward foreign direct investment (Rebernik and Sirec 2012).

Government policies present an important factor in creating the entrepreneurial environment. After the dissolution from the former Yugoslav Federation, the government was focused on supporting previously publicly owned large enterprises, whilst the support of smaller businesses lagged behind, which resulted in an entrepreneurial standstill (Rebernik and Sirec 2012). With the goal of fulfilling the criteria for the EU accession, the main focus of the policy makers was on solving the transition-caused macroeconomic issues, but neglected the entrepreneurship policies (Rebernik and Sirec 2012). The most noticeable object of criticism is the complexity, duration and cost of administrative procedures. Furthermore, tax, administrative and social transfers' burdens are perceived as one of the biggest barriers for newly established and growing enterprises.

## **Case Study Analysis**

#### RESEARCH QUESTION

The main focus of the paper was the construction a dynamic model of smes' internationalization, which indicates the characteristics of the internationalization process of enterprises, originating in a small transition economy, namely Slovenia.

#### METHODOLOGY AND DATA

A case study analysis was carried out in order to comprehend the internationalization profile of Slovenian smes. The studied population consisted of 125 smes, identified from the Finance database in 2011, and analyzed with the use of national enterprise databases. companies' websites and additional secondary sources. The choice of studied smes was not random, since the criteria for the selection reflected the idea of the construction of the Slovenian smes' internationalization model. The first decisive criterion was the companies' size, which had to comply with the SME definition, as administered in the European Commission's Recommendation 2003/361/Ec, according to which companies qualify as smes, if they employ less than 250 employees, with their turnover smaller or equal to 50 million EUR, or their balance sheet total smaller or equal to 43 million EUR (Commission of the European Communities, 2003). Similar to most other researches, the criterion of the number of employees was used for the smes classification. The second decisive criterion concerned the companies' ownership. All the selected companies should represent a legally independent entity, and therefore not a subsidiary or a branch office of another company. The third decisive criterion was the indication of the companies' internationalization activities. The time frame from the companies' inception to the undertaking of its international activities, as well as the extent of its operations on the foreign markets and the foreign markets entry modes were taken into consideration. Since one of the main subjects of the analysis is to delineate the key characteristics and management practices of selected Slovenian rapidly internationalizing SMES, the study includes companies, which started their international activities up to approximately five years after their inception (Zahra, Ireland, and Hit 2000; Gabrielsson and Kirpalani 2004), with the exception made in some cases, where the company launched a completely new product, very different from their former product range, with which it immediately entered foreign markets. Out of approximately 600 examined enterprises, 125 of them were identified, that met the preset conditions for case study selection.

The selected enterprises were further studied with the use of national enterprise databases, companies' websites and additional secondary sources, mainly available articles and analyses. With the aim of constructing a dynamic internationalization model, information

TABLE 1 Classification of selected smes according to the industry

Industry	Number of enterprises	Share (%)
Agriculture, forestry and fishing	1	0.8
Manufacturing	67	53.6
Electricity, gas, steam and air conditioning suppl	у 3	2.4
Water supply; sewerage, waste management and remediation activities	2	1.6
Construction	4	3.2
Wholesale and retail trade; repair of motor vehicle and motorcycles	cles 1	0.8
Transportation and storage	1	0.8
Information and communication	37	29.6
Professional, scientific and technical activities	6	4.8
Administrative and support service activities	2	1.6
Other service activities	1	0.8
Total	125	100

regarding internationalization triggers, namely inner and outer factors, initial foreign market entry and further market position development were searched out and compared in order to distinguish commonalities and differences between studied enterprises.

#### FINDINGS

The first step of the research was the classification of selected SMES according to the industry in which they are operating. Considering the International Standard Industrial Classification of All Economic Activities (ISIC Rev. 4) (United Nations 2008), the results indicate the largest share of the studied SMES are in manufacturing, followed by the share in the information and communication activities, whilst other industries represent a much smaller share.

Out of the 67 manufacturing SMES, 28 of them are involved in the manufacturing of computers, electronics and optical products. Out of the 37 smes, that operated in the field of information and communication, 34 of them deals with computer programming, consultancy and related activities. The predominant share of computer-related SMES can be attributed to the fact, that their global market is relatively unsaturated or at least open for new penetrating ideas. Given the innovativeness of their products or services, they are able to connect with large global partners, which enable them to launch their produce worldwide.

Furthermore, identified smes were classified according to the technological intensity of their activities. The OECD classification

Table 2 Classification of selected SMEs According to the technological intensity of their activities

Technological intensity	Number of enterprises	Share (%)
High technology	76	60.8
Medium-high technology	17	13.6
Medium-low technology	10	8
Low technology	7	5.6
Other	15	12
Total	125	100

(OECD 2005), that uses research and development (R&D) intensity as a criterion for defining high, medium-high, medium-low and low technology sectors, and high technology products, was adjusted to also grasp the information and communication, as well as professional, scientific and technical activities. The results indicate a dominant share of smes that operated in the high technology sector, followed by the medium-high and medium-low sectors.

The predominant share of high technology smes complies with previous research, which puts out the fact that their products are mostly sold on niche markets. Consecutively, small domestic markets do not enable them to achieve the economies of scale, which forces them into fast internationalization (Zahra, Ireland, and Hitt 2000; Sharma and Blomstermo 2003; Gabrielsson and Kirpalani 2004). Although 27 of the identified high technology smes were founded or started their operations with the help of university incubators or technology parks, the smes' founders still emphasized the lack of the connection between the universities, researches and enterprises, with knowledge transfer being the main issue, since the latter is considered highly difficult due to administrative barriers.

As for the foreign market entry mode, export represents the predominant form amongst the identified smes. Especially mediumhigh and medium-low technology smes mostly relies on direct export, which is upgraded with the establishment of a network of representatives or subsidiaries further on in the internationalization process. On the other hand, high technology smes more often searched for larger foreign partners in order to obtain access to foreign output markets. The reason for such an internationalization pattern can be found in the fact that due to the domination of large multinational companies on a global market, and independent penetration is harder to achieve. The managers of high technology smes are also aware of the fact, that the innovativeness of their product together with the need for financial resources makes them more

attractive as an easier target for potential takeovers from larger companies.

Another distinctive feature between higher and lower technology SMES is the fact, that especially medium-low and low technology SMES tend to start their internationalization activities on geographically closer foreign markets, with the markets of former Yugoslav republics being the primary focus of internationalization activities, whilst high technology smes try to enter several disperse geographically distant foreign markets simultaneously. Especially for the SMES dealing with computer programming, the USA represents the crucial foreign market for companies' breakthrough. Such behavior can to a certain extent be attributed to the fact that the global market of computer technology is persistently open for innovative products and therefore remains relatively unsaturated, and the mere physical barriers of internationalization are diminished in the case of computer programming and similar activities, allowing their global outsourcing. Nevertheless, several cases of medium-low and low technology smes emerged recently suggesting internationalization behavior similar to the high technology smes. In most of those cases the companies detected a product niche on a foreign geographically and psychically distant market, where they sold their products. The majority of analyzed smes created more than 40% of total sales on foreign markets, with the average share being 80% of total sales, and with several cases of smes, that created almost entire, or more than 90% of total sales on foreign markets.

Especially amongst newly established high technology smes a concern regarding abilities of finance acquisition is noticed. Only a few smes were able to acquire national or foreign risk capital sources. The founders or managers of such enterprises call the attention to the fact that the acquisition of foreign capital often demands a moving of the company or its part into foreign locations, since the high administrative barriers for foreign investment often discourage potential investors.

In the majority of the smes they emphasized the importance of exposition attendance for the acquisition of new customers and potential partners. However, only a few smes used the advantages of the governmentally supported events, whilst others attended larger international expositions. In opposition to several previous researches, the founders or managers of the smes rarely emphasized the importance of previous experience of doing business in foreign markets, as well as the importance of social networks. In most cases, the ability to easily market their products or the existence of a niche

market was the decisive factor for a certain foreign market entry. In most of identified smes they put a great importance in the reinvestment of the profit in R&D, since the innovative technology or product is often their key success factor. In addition to the R&D intensity, highly educated and highly productive employees in terms

of high value-added per employee represented the distinctive char-

acteristic of most of the identified smes.

The majority of identified SMES faced the consequences of the most recent economic recession, with only a few left completely unaffected. In their tries to compete, the affected smes emphasized the meaning of reducing the dependency on only a single or few key customers and denoted the diversification of customers and markets as one of the crucial measures for the diminishment of the economic recession consequences. In addition to diversification, the implementation of new technologies and products is used to gain new customers and consecutively bridge by the economic recession induced income gap. The smes that remained unaffected from economic recession are mainly those with a unique niche component in a manufacturing process of the final product as they were still dealing with undiminished demand.

## **Dynamic Internationalization Model**

We synthesize the findings of the exploratory study in a dynamic model of smes' internationalization that might be used as a conceptual framework for empirical research on dynamic smes market behavior in Slovenia and other transition countries.

According to the results of the performed survey, internal and external triggers of Slovenian smes' internationalization are identified. Amongst the internal ones, the firms' founders or managers exposed the importance of the experiential knowledge as a key source of usable knowledge. As such knowledge is not easy to attain, both due to the firms' limited resource base and its personal and tacit nature, firms are mostly experimenting during a foreign market entry stage in order to craft a proper strategy of developing an initial market position without excessive exposure to risks in a new foreign market context. Consecutively, as a managerial response to high-risk perception during the initial foreign market entry, exporting through independent agents is a common entry mode. Especially amongst high-tech start-ups, finding a strategic partner that contributes knowledge of placing the product on the key market is another favorable internationalization strategy. With such a limited access to market learning especially Born Global firms have to act more proactively to develop a strong and differentiated market position for which, usually, a direct control over its marketing and product positioning is required. As for the external triggers, unfavorable business environment and the ability, or even necessity, to achieve economies of scale and scope on a foreign, or even a global market, are the main factors of influence, the latter being the most noticeable in the cases of firms, producing high-tech niche market products.

Due to the dynamic nature of internationalization process, the time needed for market position development and the gap between the partaking of different international activities should be considered in detail, as they affect the continuance of the internationalization process (Jones and Coviello 2005). At this point, a time aspect of internationalization of SMES should be seen as an ongoing strategy of internationalization (Ruzzier, Antoncic, and Konecnik 2007), as a firm's evolving process of building its market presence in foreign markets, starting with market entry and followed by various episodes of market position development in accordance with the firm's evolving growth ambitions and market circumstances. A firm's post-entry period of presence in a foreign country is seen as a comprehensive set of market development activities, both at the strategic and operational level, set to develop a comprehensive distribution network for firm's products, a desired market coverage, brand recognition, relationship with key market actors and the expected market share and share of foreign sales.

A realized market position strategy is thus not always a result of deliberate managers' actions, but may rather occasionally develop as an emergent strategy. Consecutively, the smes' internationalization process is largely dependent both on their learning and absorption capacities, as well as adaptation capabilities. The firm's post-entry market activities are thus a result of managers' perception of market opportunities and risks, as well as of their vision of a firm's desired position in a foreign market as a guide for resource commitment to the exploitation of its market opportunities.

#### **Conclusions**

The paper focuses on the dynamic aspect of the SME internationalization process, trying to grasp the phases after the initial access on the foreign market and the firm's activities therein into a dynamic internationalization model.

By theoretically and empirically examining the internationalization process of Slovenian smes, we clarified the mechanism and dynamics of smes' internationalization strategy. One of the key con-

clusions of this exploratory research on the internationalization of Slovenian smes is that in an increasingly open and internationally competitive business context of the transition economy, new options, as well as new challenges emerge for strategic management of smes both in their local context and in a wider EU region. Since they are increasingly exposed to competitive pressure of new, domestic and foreign market entrants in their home market, firms are urged to improve their competitiveness and motivation for extending their operation across their home country borders. Especially high-tech start-ups are aware of the urgency of early and successful internationalization and are proactive in recognizing opportunities since their inception. But, as the appropriate institutional support is vital for firms' accelerated internationalization, the latter is still relatively ineffective. Therefore, a greater effort should be made by governments to develop better public support mechanisms for promoting the smes' internationalization.

Taking into account the dynamics of the internationalization process, the post-entry speed of developing a market position is dependent on both the firm's foreign market knowledge absorption capability and its international competitive profile. The smes' internationalization is seen as an ongoing dynamic managerial and resource commitment process of market position development, its maintenance and strengthening or even expanding, and, in certain situations, also withdrawing from the market.

The paper summarizes the distinctive features of Born Global smes internationalization in a small transition economy. It grasps the predominant internationalization path as well as key difficulties that enterprises are faced with in their internationalization effort. The findings are summarized in a theoretical model that provides a framework for understanding the complexity and dynamics of the internationalization process. Detected specificities in the Slovenian smes' internationalization process imply for a detailed empirical research of Slovenian smes, as well as the smes from other transition countries in the cee region in order to validate the results in different country environments and gain a more comparative insight into smes' international behavior in transition countries in consideration to differences in their national market and institutional settings.

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## Abstracts in Slovene

### Romunska mala in srednje velika podjetja med krizo: gospodarski rezultati in njihovo dojemanje

Luminița Nicolescu, Irina Alina Popescu in Ciprian Nicolescu

Članek obravnava razvoj romunskih malih in srednje velikih podjetij v obdobju 2004–2011. Glavni namen članka je primerjati položaj malih in srednje velikih podjetij pred začetkom gospodarske krize in med njo. Raziskava je bila narejena z dinamičnega zornega kota, analiza pa vsebuje dva vidika: (a) spremembe večjega števila gospodarskih pokazateljev, ki se nanašajo na romunska mala in srednje velika podjetja, v obravnavanem obdobju ter (b) mnenja o vplivu gospodarske krize na dejavnost malih in srednje velikih podjetij ter njihovo dojemanje teh vplivov. Članek ponuja tudi nekaj predlogov možnih strategij, ki bi malim in srednje velikim podjetjem lahko pomagale pri lažjem premagovanju sedanje gospodarske krize.

Ključne besede: mala in srednje velika podjetja, Romunija,

gospodarska kriza

Management 8 (1): 5-19

## Turistična potrošnja Tajvancev in Slovencev: primerjalna analiza Nataša Slak Valek in Tai-Chi Wu

Slovenija in Tajvan sta si v marsičem podobni državi: raznolik relief, pestra turistična ponudba, razvijajoče se gospodarstvo. Primerljivi pa so tudi povprečni prihodki prebivalcev: povprečen letni dohodek je v letu 2011 na Tajvanu znašal 28.500 usp, v Sloveniji pa 29.000 usp. Povprečna neto plača je v Sloveniji istega leta znašala 1.328 usp, na Tajvanu pa 1.541 usp. Obe državi se pojavljata na spiskih razvijajočih se turističnih destinacij; v letu 2011 so na Tajvanu zabeležili nekaj več kot 6 milijonov prihodov, v Sloveniji pa 3,2 milijona. Glede na omenjene in druge neomenjene podobnosti smo se odločili pripraviti primerjalno analizo Slovencev in Tajvancev kot turistov.

Ključne besede: odhodni turizem, primerjava, BDP, Tajvan, Slovenija Management 8 (1): 21-35

## Analiza sistemskega tveganja na srednje- in vzhodnoevropskih trgih med gospodarsko krizo v letih 2007-2008

Renata Karkowska

Namen članka je poskusiti odgovoriti na vprašanje, kako je kriza vplivala na bančne sisteme srednje- in vzhodnoevropskih držav, s posebnim poudarkom na likvidnostnem tveganju. Zdi se namreč, da je ta problem posebej prizadel gospodarstva v vzponu, saj je likvidnostno

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tveganje začelo imeti pomemben vpliv na delovanje bančnega sistema in posredno na celotno gospodarstvo. Avtorica članka je želela odgovoriti na naslednji vprašanja: kateri so kanali prenosa sistemskega tveganja na srednje- in vzhodnoevropskih trgih in kakšno vlogo imajo velike svetovne bančne skupine v teh finančnih sistemih? Obravnavanih je bilo deset srednje- in vzhodnoevropskih držav, ki so občutile finančno krizo. V raziskavi je avtorica postavila hipoteze o medsebojni povezanosti likvidnosti v finančnih sistemih in plačilne sposobnosti velikih bančnih skupin, ki delujejo v srednje- in vzhodnoevropskih trgih.

Ključne besede: likvidnostno tveganje, finančna kriza, liquidity risk, financial crisis, učinki okužbe

Management 8 (1): 37-47

### Vpliv uvedbe evra na evropske države v vzponu

Irena Vodenska in Lou Chitkushev

Vpliv uvedbe evra na evropske država v vzponu obravnavamo s preučevanjem treh skupin držav: (1) sedemnajst držav območja z evrom, (2) sedem srednje- in vzhodnoevropskih držav, ki uporabljajo lokalne valute, ter (3) šest držav, ki se potegujejo za članstvo v Evropski uniji. Analiziramo makroekonomske kazalnike in predlagamo modele, s katerimi bi ugotovili, če podobni oziroma različni kazalniki vplivajo na javni dolg držav v posamezni skupini. Ugotavljamo, da sta izvoz in nezaposlenost pozitivno povezana z javnim dolgom, tržna kapitalizacija pa kaže negativno povezavo z javnim dolgom. Dokazujemo, da je sedanja kriza javnega dolga v Evropi resen izziv za območje z evrom, in predlagamo, da bi srednje- in vzhodnoevropske države, ki uporabljajo lokalne valute, ter šest držav, ki se potegujejo za članstvo v Evropski uniji, odložile prevzem evra.

 $\it Ključne\ besede$ : prevzem evra, gospodarska in denarna unija, evropske države v vzponu, gospodarsko zbliževanje

Management 8 (1): 49-70

## Dinamični model internacionalizacije slovenskih malih in srednje velikih »born global« podjetij

Ina Leiko in Štefan Bojnec

Mala in srednje velika podjetja (MSP) predstavljajo pomemben člen celotne slovenske kot tudi evropske ekonomije. Razen trenutnega stanja na svetovnem trgu, ki ga zaznamuje predvsem izrazit padec ekonomske aktivnosti, se slovenska MSP, kot tudi MSP iz drugih tranzicijskih držav, soočajo z zunanjimi pritiski, ki so posledica odprtja domačih trgov tuji konkurenci. Podjetja, med katera sodijo tudi MSP, internacionalizacijo dojemajo kot neizogiben oziroma nujen korak v svojem poslovnem procesu. Pri tem uporabljajo različne modele internacionalizacije, med katere sodi tudi strategija pospešene internacionalizacije,

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kot jo opisuje koncept »born global«. Članek obravnava proces inernacionalizacije slovenskih »born global« podjetij. S pomočjo eksploratorne kvalitativne študije primerov slovenskih мѕр ugotavljamo poglavitne značilnosti procesa njihove internacionalizacije, na podlagi katere konstruiramo dinamični model internacionalizacije, ki predstavlja konceptualni okvir za nadaljnje empirične raziskave dinamike tržnega obnašanja slovenskih мѕр in мѕр iz drugih tranzicijskih držav.

Ključne besede: »born global« podjetje, internacionalizacija, mala in srednje velika podjetja, tranzicijske ekonomije.

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Jezikovna pravilnost in slog. Pričakuje se, da so rokopisi jezikovno neoporečni in slovnično ustrezni. Uredništvo ima pravico, da zavrne prispevke, ki ne ustrezajo merilom knjižne slovenščine.

Slog naj bo preprost, vrednostno nevtralen in razumljiv. Pregledna členjenost besedila na posamezne sestavine (poglavja, podpoglavja) naj sledi sistematičnemu miselnemu toku. Tema prispevka naj bo predstavljena zgoščeno, jasno in nazorno, ubeseditev naj bo natančna, izražanje jedrnato in gospodarno. Zaželena je raba slovenskih različic strokovnih terminov namesto tujk. Logične domneve naj bodo utemeljene, sklepi dokazani. Razpravna oblika je praviloma prva oseba množine.

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Naslovi poglavij in podpoglavij naj bodo oštevilčeni (1, 2, 2.1 itn.) in napisani z malimi črkami v krepki pisavi, poudarki v besedilu naj bodo v ležeči pisavi. Daljši navedki so ločeni od drugega besedila, izpusti pa označeni z oglatim oklepajem.

Opombe pod črto se ne uporabljajo, končne opombe pa naj bodo pred seznamom literature. Preglednice in risbe se vstavijo v besedilo, toda v članku naj ne bo preglednic ali risb, ki bi bile v celoti povzete po že objavljenih delih.

Bibliografski sklici in seznam uporabljene literature. Pri navajanju bibliografskih sklicev med besedilom se zapišejo samo priimek avtorja oz. avtorjev, letnica izida dela in številka strani oz. obseg strani, npr. (Gomezelj Omerzel, Biloslavo in Trnavčevič 2010, 14–15). Vsakemu bibliografskemu sklicu v besedilu naj ustreza navedba dela

v seznamu literature, v njem pa naj ne bodo navedena dela, na katera se avtor v besedilu ne sklicuie.

Pri oblikovanju seznama literature se ravnajte po *The Chicago Manual of Style* (University of Chicago Press 2010; glejte tudi http://www.chicagomanualofstyle.org/tools\_citationguide.html), vendar navajajte samo začetnice imen in upoštevajte slovenska pravopisna pravila:

Anderson Analytics. 2007. »Brands and Countries.« http://www.andersonanalytics .com/reports/BrandAndCountries.pdf
Catana, S. W. 2003. »Vital Approach to Transition: Slovene Multiple Case Study.«
Managing Global Transitions 1 (1): 29–48.
Gomezelj Omerzel, D., R. Biloslavo in A.
Trnavčevič. 2010. Management znanja v visokošolskih zavodih. Koper: Fakulteta za management.

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ur. T. A. van Dijk, 181–205. London: Sage.
University of Chicago Press. 2010. The
Chicago Manual of Style. 16. izd. Chicago
in London: University of Chicago Press.

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