DETERMINANTS OF INVESTMENT DECISIONS IN A CRISIS: PERSPECTIVE OF CROATIAN SMALL FIRMS

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Received: 14. 7. 2014
Accepted: 2. 10. 2015

Preliminary communication
UDC 330.322:005.71-022.51>(497.5)

The aim of the paper is to determine the investment activity of small firms in Croatia during the crisis year 2012 and further analyse the effect of selected factors on capital investment decisions. For this purpose, an on-line survey of small businesses was conducted. The research sample consisted of small firms in Primorsko-Goranska County that earned the highest revenue in 2011, because it was assumed they would have greater investment potential in 2012. Research results show that almost half of the firms invested in new fixed assets in 2012. Their investment decisions were primarily motivated by mere "survival" purpose, since the investment activities were mostly oriented toward the replacement of worn-out assets.

Keywords: investment, small enterprises, crisis, managers, Croatia.

1. INTRODUCTION

Investments significantly affect the intensity of overall economic activity and growth in general. Changes in size, structure and purpose of investment may indicate forthcoming conjuncture changes, but also longer-term developmental characteristics of the economy. Therefore, investment decisions are of special interest not only to policy makers and researchers, but also to firm managers and owners. Spending money on fixed assets is not an essential

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expenditure in the short term, but is vital for long-term success and could secure a competitive advantage for an organisation. If a firm fails to invest, its products could become out-of-date and it may even lose business to competitors that can deliver goods and services more efficiently. However, investment activities and profitability of projects are strongly affected by some internal and external factors. The recent, and in some countries still existing, financial crisis has additionally emphasised a number of factors that have an effect on investment decisions. The general influence of the 2008 crisis has been a steep decline in business confidence, which translated into falling investments as a percentage of Gross Domestic Product (GDP) (Geels, 2013).

The economic crisis started in Croatia later than in other countries, but its negative effects are still present. In the past five years there has been a negative trend in almost all major macroeconomic indicators. The last year with a positive growth rate of GDP was 2008, and since then GDP has fallen by over 11% (CBS, 2013). The realized gross investment in new fixed assets of firms has recorded negative growth since 2008 (CBS, 2013), with the average value of investment per company in 2012 two times lower than in the pre-crisis year of 2008 (CCE, 2013). At the same time, the number of investors dropped to below 30% relative to the total number of entrepreneurs (CCE, 2013).

Since small and medium businesses account for 99.5% of all businesses in Croatia and generate over a half (53.3%) of total investment in fixed assets in 2012 (FINA, 2012b), it is reasonable to analyse their investment activities in more detail. The aim of the paper is to determine the investment activity of small firms in Croatia during the crisis year 2012 and further analyse the rationale behind it, i.e., the effect of selected factors on capital investment decisions.

2. LITERATURE REVIEW

A large and growing empirical literature explains firm investment determinants and firm investment during recession periods. From the technical point of view and the point of view of the character of investment, world theory has identified renewal of worn out assets, acquisition of additional assets to expand the business and increase output, and innovation to reduce costs and/or to create new value as the main motives for investment (Levy & Sarnat, 1994; Nikić, 1997; Runyon, 1983). In practice, an investment decision is often a combination of all three factors as complementary, although some may have priority.

Furthermore, according to Mendes et al. (2014), firm investment theories can be divided into two major groups: theories considering that investment depends more on external conditions in which a company operates, and theories considering that investment depends more on a firm's internal conditions. Early studies within the first group indicate a positive relation between future demand and investment (Keynes, 1936; Kalecki, 1937) on the one hand, and sales and investment (Hall & Jorgenson, 1967; Eisner, 1978; Chirinko, 1993) on the other. However, sales are found to be a determinant promoting investment in small and medium enterprises (SMEs) when they have high levels of investment. In general, the importance of sales is expected to be lower for SMEs than for large firms (Maçãs Nunes et al., 2012). Furthermore, Fazzari et al. (1988) and Carpenter and Guariglia (2008) find a positive relationship between growth opportunities and investment. Growth opportunities, as an important sign of vitality and possibilities for growth, may contribute to weakening financial constraints (Carpenter & Guariglia, 2008). Regarding macro-economic conditions, SMEs are more exposed to fluctuations in the economic climate (Chenery, 1952; Gertler & Gilchrist, 1994; Vermeulen, 2002) meaning that firms take advantage of favourable conditions by increasing their investment while in periods of economic recession firms reduce the investment adjusting it to lower rate of business opportunities. Calcagnini and Iacobucci (1997), Bernanke and Gertler (1995) and Gilchrist et al. (2005) conclude that increases in interest rates and interest rate uncertainty mean diminished investment. GDP is also a determinant stimulating investment in SMEs, especially when they have moderate and high levels of investment (Maçãs Nunes et al., 2012).

The second group of theories explaining firm investment is mostly focused on firms' internal conditions, such as internal finance, liquidity, cash flow, and leverage. Investment is positively influenced by both internal and external finance (Keynes, 1936; Kalecki, 1937), liquidity (Kuh, 1963), and cash-flow (Fazzari et al., 1988; Fazzari & Petersen, 1993; Maçãs Nunes et al., 2012), while it is vulnerable to weak balance sheets and debt (Vermeulen, 2002; Aivazian et al., 2005; Maçãs Nunes et al., 2012). Indeed, managers are more inclined to use internal funds to finance the investment, since managing this type of finance is more flexible compared to external finance (Baumol, 1967). Additionally, firm owners/managers are usually better informed than creditors about their firms' specific characteristics. This is particularly important because it could lead to restrictions in loans granted and, consequently, to firms reducing investments. This conflict is to some extent contrary to perfect market conditions, i.e., a market without asymmetric information or financial constraints, where capital investments should not be affected by a firm's cash

flow but should be solely determined by the firm's investment opportunities (Wei & Zhang, 2008). Consequently, the importance of cash flow increases as firms are more restricted in the access to credit (Fazzari et al., 1988; Fazzari & Petersen, 1993). Regarding the SMEs, it would be expected that they have less possibility of obtaining a loan due to reduced capacity to provide collateral (Gertler & Gilchrist, 1994; Vermeulen, 2002). However, different conclusions are also evidenced suggesting that cash flow-investment sensitivity is generally highest in the large-firm size group and smallest in the small-firm size group (Kadappakam et al., 1998) and that medium-sized firms appear to be more liquidity-constrained in their investment behaviour than either the smallest or largest firms (Audretsch & Elston, 2002). Furthermore, firm's age could also serve as a proxy for their financial constraints (Beck et al., 2006) as well as firm's reputation (Diamond, 1989) meaning that young firms invest less due to liquidity constraints while well-established firms use acquired reputation and past success to get more favourable terms of external finance thus facilitating investment. Other endogenous determinants of firm investment are mainly focused on manager characteristics, for instance, managerial optimism (Glaser et al., 2008) and risk aversion (Parrino et al., 2005), leading to the conclusion that firms with optimistic and less risk-averse managers invest more.

In periods of economic growth, SMEs will have easier access to debt and a higher level of cash flow thus stimulating investment (Fuss & Vermeulen, 2004), while during crisis market conditions are different. Vermeulen (2002) and Kunc and Bandahari (2011) argue that firms with greater financing restrictions and operating in imperfect markets, as is the case of SMEs, are more affected by periods of economic recession. We can expect credit markets to be more restrictive in recession and therefore affect firm investment negatively, particularly the SME investment. In these situations, Belgium SMEs, particularly new ones, chose to postpone investment (Fuss & Vermeulen, 2004) while German and UK SMEs were forced to finance themselves through their own cash flow, which may suffer due to their difficulty in retaining earnings and the recessive behaviour of the market (Kaufmann & Valderrama, 2008).

In the context of the financial crisis 2008-9, literature shows that the crisis has negatively affected the investment of SMEs (Liu, 2009; Buca & Vermeulen, 2012; to list only a few). Firms that were financially constrained during the crisis and had a larger part of their long-term debt maturing within the next year, cancelled or postponed valuable investment, experiencing a significantly larger drop in investments (Campello et al., 2010; Buca & Vermeulen, 2012; Vermoesen et al., 2013). This further confirms that credit contraction and debt have negatively affected the performance and investment of private firms.

Additionally, those prevailing attitudes lead to the same conclusion as the one that Kitching et al. (2009) made – during a recession firms might focus more strongly on survival strategies and less on investment strategies seeking out new opportunities because the latter are more risky. Nevertheless, Kahle and Stulz (in press) come to a different conclusion and find that the proportional decrease in capital expenditures of no-leverage firms and of high-cash firms after the Lehman bankruptcy is higher than the proportional decrease in capital expenditures for highly levered firms and similar to the proportional decrease of bank-dependent firms.

On the other hand, existing literature documents also that the economic crisis provides good opportunities for the SME sector (Bartlett, 2008). This is especially true for those that identify the changes in the market and react promptly (Hodorogel, 2009). Some authors claim that investment of firms was not restricted due to the non-availability of funds (Allen & Carletti, 2008; Bakke, 2009). Moreover, Campello et al. (2011, 2012) find that credit lines provided liquidity for the companies who needed to invest during the crisis and ease the impact of the financial crisis on corporate spending. Zenghelis (2012) concluded that there is plenty of money in the private sector, because firms have been hoarding cash rather than spending it. So, the problem is not the lack of money, but the lack of investor confidence.

As far as Croatia is concerned, there are official statistical data (CBS, 2004-2013) that prove the above mentioned statements regarding considerable investment decrease during the financial crisis. Table 1 represents this effect for the European Union (EU) and Croatia.

The financial crisis affected Croatia one year later than it did the EU (in 2009), but unlike the EU, the negative trend of investment is still present. Investment falls significantly faster than GDP which, according to Inklaar and Yang (2012), is a characteristic of countries with a low tolerance for uncertainty. Table 1 shows that the value of gross investment in fixed assets of legal entities in 2012 was nominally lower by 7.3% than in 2011 and by 49.6% than in pre-crisis 2008. Construction works accounted for 50.6% of gross investment, and equipment, for 38.3%. In absolute amounts, however, they dropped by 47.1% and 51.9%, respectively, when compared to pre-crisis 2008. In addition, less than 30% of the total number of entrepreneurs made investments in 2012, primarily in new fixed assets, and the average value of investment per company was halved compared with pre-crisis 2008 (CCE, 2013).

Table 1. Gross fixed capital formation and gross investment in EU 27 and Croatia, 2004-2012

Item/ Year	2004	2005	2006	2007	2008	2009	2010	2011	2012
EU 27:									
GFCF[a]	2080,6	2212,8	2420,8	2644,0	2630,4	2228,0	2272,9	2350,5	2317,5
Index	100,0	106,4	109,4	109,2	99,5	84,7	102,0	103,4	98,6
Croatia:									
GFCF[a]	8,17	8,91	10,35	11,38	13,00	10,95	9,23	8,51	8,1
Index	100,0	109,0	116,2	110,0	114,2	84,2	84,3	92,2	94,9
GFCF,% of GDP	24,80	24,70	26,00	26,20	27,40	24,50	20,80	19,20	18,40
GDP real growth rates in %	4.1	4.3	4.9	5.1	2.1	-6.9	-2.3	0	-2
GI[a] of which:	7,53	8,00	9,70	10,66	11,59	9,19	6,63	6,32	5,85
Construc--tion[a]	3,79	4,22	5,05	5,26	5,59	5,10	3,64	3,30	2,96
Equip--ment[a]	3,04	3,04	3,55	4,05	4,66	3,27	2,21	2,34	2,24
Other[a]	0,69	0,74	1,10	1,35	1,34	0,82	0,77	0,68	0,65

Source: Eurostat (2013), Croatian Bureau of Statistics (CBS, 2004-2013) and authors' calculation.

Note: GFCF = Gross Fixed Capital Formation:
GI = Gross Investment in fixed assets of legal entities:
[a] In current prices, billions of euro.

Although small firms generate over a third (35.7%) of gross investment in fixed assets (FINA, 2012b), in the existing literature there is limited evidence of Croatian small private firms during the crisis period, especially when investments are concerned. Klačmer Čalopa et al. (2011) discuss the causes and consequences of the financial crisis as well as the survival of Croatian SMEs in the global economic environment. Borovac Zekan et al. (2011) analyse the success story of a small Croatian firm in the textile industry that expanded into new markets and reported a remarkable growth in turnover despite the crisis. Butigan et al. (2012) find that firms in Croatian metal and wood-processing industries (of which 93.8% were SMEs) during recession focused mainly on survival of their operations and financial savings while investments, as a type of development breakthrough, were less pronounced. However, in their research these authors do not focus on the investment determinants of Croatian small firms.

Regarding SMEs' access to financing as a precondition for investment, conservative lending policies towards SMEs that existed in the pre-crisis period (Kolaković et al., 2008; Vidučić et al., 2009) became even worse during recession when SMEs were confronted with a lack of liquidity and reduced access to business loans. For the whole period 2002-2012, SMEs were focused more on traditional sources of financing (i.e., bank loans), considering access to financing more as an obstacle than an incentive (Singer & Alpeza, 2013). Cost of finance and access to finance are the most important constraining factors in setting up and running SMEs (Vidučić et al., 2014) which are still deeply embedded in the crisis, and do not have the development potential to change the current trends (Čengić, 2014).

The above presented review suggests that the majority of firm investment determinants are related to financial issues, especially when it comes to the recession period. However, conclusions are a matter of debate. Research on the investment activity of Croatian SMEs and its determinants during recession is particularly rare, thus reinforcing the need for further research in this area.

3. METHODOLOGY

To give a new perspective to this issue, an on-line survey of small businesses was conducted during the period of April to June 2013. The sample consisted of 400 small firms in Primorsko-Goranska County with the highest revenue in 2011. According to the Croatian Accounting Act, small firms are those which do not exceed two of the following conditions: total assets of more than HRK 32.5 million (EUR 4.3 million), over HRK 65 million (EUR 8.6 million) in revenue, and an average number of 50 employees during the financial year. In defining the sample we followed the logic of Archibugi et al. (2013) who argue that firms with strong internal resources are in a stronger position to invest, i.e., we assumed that higher revenue in 2011 meant stronger internal resources and greater investment potential in 2012. Primorsko-Goranska County was selected because it contributes significantly to the Croatian economy. It accounts for 9.1% of the total number of small firms and 8.4% of the total number of small firms' employees in Croatia (FINA, 2012a). In addition, Primorsko-Goranska County is the second major investor among Croatian counties with a share of 5.1% (after the City of Zagreb) when ranked by investor's location (FINA, 2012a).

The survey was prepared in the Croatian language only and was divided into three parts. The first part of the survey includes the analysis of the firm and

the respondent's profile (gender of respondent, position within the firm, and identification of the responsible person/s for making investment decisions).

The second part of the survey intends to determine whether the firm invested in 2012 or not and, if so, the type of investment they have made. According to the Croatian statistical standards (template POD-BIL) we distinguish between intangible, tangible, and financial assets. For the purpose of this study, i.e., to make it better suited to real small firms' investment, within tangible assets we further divided the category *tools, plant inventory and transportation equipment* into the categories of *IT equipment*; *cars and other transportation assets*; and *tools, plant inventory and office equipment*. Also, we decided to add the category *permanent working capital* since it refers to actual investment, i.e., assets permanently immobilized in the reproduction cycle (Bendeković et al., 2007). Thus, we have ten different categories of types of investment: (1) *intangible assets (software, licenses, etc.)*, (2) *land*, (3) *buildings/structures*, (4) *plants and plant equipment*, (5) *IT equipment*, (6) *cars and other transportation assets*, (7) *tools, plant inventory and office equipment*, (8) *financial assets*, (9) *permanent working capital*, and (10) *other assets*.

The third part of the study examines the impact of selected factors on investment decisions. Depending on respondents' answers in the second part of the survey (firm did or did not invest in 2012) we prepared two sets of variables. We first considered variables for the investing firms. In line with previous studies (Levy & Sarnat, 1994; Nikić, 1997; Runyon, 1983) we used and modified three technical variables: *Replacement of worn-out assets*, *Need for expansion*, and *Follow-up of technological progress*. Because the current economic crisis has a financial origin (Archibugi, 2013), we wanted to further explore whether the accessibility of financial resources hampered investment during the crisis. Therefore, according to Baumol (1967), Fazzari and Petersen (1993), Gertler and Gilchrist (1994), and Vermeulen (2002), we considered two variables: *Sufficient amount of internal finance* and *Accessible sources of external finance*. Furthermore, we proposed two variables in line with Chenery (1952), Gertler and Gilchrist (1994), and Vermeulen (2002) related to overall economic climate: *Favourable current market situation* and *Favourable economic forecast*. The variables *Business opportunity* and *Firm size* were formulated independently, i.e. by authors, for the purpose of this research.

Second, we considered variables for the firms that did not invest in 2012. From the technical point of view we proposed two variables: *Investment needs were mostly met in previous years* and *There was no need for investment (existing fixed assets fully meet)*. Regarding the accessibility of financial

resources we formulated negations of the previously explained investors' variables: *Lack of internal finance to enter the investment cycle* and *Inability to provide favourable external financing*. According to Buca and Vermeulen (2012) and Maçãs Nunes et al. (2012), we also added the variable *High bank debt leverage*. We also formulated as negations (i.e., in a negative context) variables related to overall economic climate: *Unfavourable current market situation* and *Pessimistic economic forecast*. The variable *Difficulties to find qualified staff to work on the new property* was formulated independently for the purpose of this research. Respondents were asked to assign a score on a five-point Likert scale (1 = no impact, 2 = small impact, 3 = medium impact, 4 = large impact, 5 = very large impact) to each proposed factor. Basic descriptive statistical analysis was performed using SPSS Statistics software.

4. RESULTS

During the research period 78 valid questionnaires were obtained (a response rate of 19.5%). There were 40 male (51.28%) and 38 female (48.78%) respondents. Among them, there were 23 (29.85%) owners who are also general managers of the firms (owners & CEOs), 13 (16.42%) owners, 13 (16.42%) managers and 29 (37.31%) employees. In most cases (44.44%), the owners & CEOs make decisions on investment. Managers as prime decision makers participate with an additional 27.78% and give recommendations to owners in 9.26% of the cases.

Table 2 provides summary statistics on investment activity for the total sample. In total, 36 (46.15%) firms invested in 2012 and, in most cases (52.78%), they invested less than EUR 13,500.00.

Table 2. Investment activity

Type of investment	**Answer**	**N**	**%**
Did you invest in fixed assets in 2012?	Yes	36	46.15
	No	42	53.85
What was the total amount of investment for your company in 2012?	<1,330.00 euro	4	11.11
	1,330.00 – 13,300.00 euro	15	41.67
	13,301.00 – 133,300.00 euro	12	33.33
	133,300.00 – 666,600.00 euro	5	13.89
	>666,600.00 euro	0	0.00
	Total	**36**	**100.00**

Note: N = Number of responses.

One third (33.33%) invested between EUR 13,300.00 and EUR 133,300.00 and the rest (13.89%) up to EUR 666,600.00. Although the percentage of firms that invested is higher in the sample (46.15%) than on the average national level (<30%), this can be explained by the fact that respondents were familiar with the purpose of the survey and were more willing to complete the questionnaire.

Table 3 provides summary statistics on types of investment. The majority of firms (29 or 80.56%) invested in IT equipment (computers, etc.) while around 40% invested in other kinds of equipment too. Although this research did not measure each investment in particular but only the total investment, the results indicate a significant amount of investment in equipment. Only eight firms (22.22%) invested in buildings/structures but a closer analysis of the results shows that four out of the five largest investors, i.e., whose total investment were between EUR 133,000.00 and EUR 666,000.00, actually invested in buildings/structures. Not a single company invested in land and financial assets.

Table 3. Type of investment

Type of investment	**N[a]**	**%[b]**	**%[c]**
IT equipment	29	80.56	29.90
Intangible assets (software, licenses etc.)	15	41.67	15.46
Cars and other transportation assets	15	41.67	15.46
Plants and plant equipment	14	38.89	14.43
Tools, plant inventory and office equipment	11	30.56	11.34
Buildings/structures	8	22.22	8.25
Permanent working capital	5	13.89	5.15
Land	0	0.00	0.00
Financial assets	0	0.00	0.00
Other	0	0.00	0.00
Total	**97**		**100.00**

Note: N = Total number of chosen options.
[a] Possible multiple answers;
[b] In relation to number of respondents (36);
[c] In relation to total number of chosen options.

Table 4 provides summary statistics on factors that affected investment decisions in 2012. The replacement of worn-out assets had a major impact on firm investment (mean 3.47). In addition, when asked to choose only one factor with the greatest impact, 29.17% of respondents chose the replacement of worn-out assets. This finding is in line with Kitching et al. (2009) and Butigan et al. (2012) suggesting that firm investment activity was primarily motivated by mere survival purposes. Small firms' investment was also highly influenced by

a desire to follow-up technological progress. This implies that small firms, i.e., their decision makers, are aware of how important it is to be up-to-date with modern trends and technologies. Strong internal finance had a significant impact on firm investment too. A need for expansion is ranked fourth, suggesting that even in the recession period there were investment opportunities that asked for increased capacity. On the other hand, current market situation, accessible external finance, firm size, and economic forecast did not have influence on firms that invested in 2012. We could conclude that firms that invest did not find external finance as an incentive for investment but had sufficient amounts of their own funds to finance investment.

Table 4. Impact of selected factors on positive investment decisions

Factors	N	Mean	Std.Dev.	Minimum	Maximum
Replacement of worn-out assets	36	3.47	1.58	1	5
Follow-up of technological progress	36	3.42	1.59	1	5
A sufficient amount of internal finance	36	3.11	1.51	1	5
Need for expansion	36	2.94	1.57	1	5
Business opportunity	36	2.53	1.42	1	5
Favourable current market situation	36	1.86	1.13	1	5
Firm size	36	1.69	1.12	1	5
Accessible sources of external finance	36	1.69	1.09	1	4
Favourable economic forecast	36	1.56	0.97	1	5

Note: N = Number of responses.

Table 5 provides summary statistics on factors that influenced firms not to invest in 2012. An unfavourable market situation had the greatest negative impact on investment (mean 3.42). Shortage of both internal and external financing was a significant problem preventing firms from investing too. Firms that did not invest found external finance an impediment, i.e., bank loans were difficult to obtain. This is not a surprise because not only is it evidenced in theory and practice (e.g., Vermeulen, 2002; Kaufmann & Valderrama, 2008) but it is also a constant characteristic of the Croatian economy (Singer & Alpeza, 2013). We could surmise that Croatian small firms, due to the overall economic situation (five years of crisis), had weak cash-flow, difficulties in retaining earnings and lower accessibility to credit markets, as claimed by Vermeulen (2002) and Kaufmann & Valderrama (2008). On the other hand, the fact that the existing bank debt leverage was not perceived as a limiting factor for investment could suggest two things. First, that small firm bank leverage was initially low and did not cause problems for business in general and, second, since credit distribution in the recession period was restricted, firms

rarely engaged in additional bank debt. Human resources were not considered as a limiting factor for firm investment at all.

Table 5. Impact of selected factors on negative investment decisions

Factors	N	Mean	Stand.Dev.	Minimum	Maximum
Unfavourable current market situation	42	3.42	1.73	1	5
Lack of internal finance to enter the investment cycle	42	2.92	1.88	1	5
Inability to provide favourable external financing	42	2.75	2.00	1	5
Pessimistic economic forecasts	42	2.67	1.72	1	5
Investment needs were mostly met in previous years	42	2.42	1.78	1	5
There was no need for investment (existing fixed assets fully meet)	42	2.33	1.72	1	5
High bank debt leverage	42	1.75	1.14	1	5
Difficulties to find qualified staff to work on the new property	42	1.35	0.67	1	3

Note: N = Number of responses.

Table 6 provides insight into the results of the selection of a single factor that was crucial for investment decision.

Table 6. Selection of key factor for investment decision

Key factor	Owner	Owner & CEO	CEO	Manager	Employee	Total
Replacement of worn-out assets	1	4	0	0	6	**11**
Follow-up of technological progress	2	4	0	2	1	**9**
A sufficient amount of internal finance	2	1	2	0	1	**6**
Need for expansion	1	1	1	0	1	**4**
Favourable current market situation	1	1	0	1	0	**3**
Business opportunity	1	1	0	0	0	**2**
Firm size	1	0	0	0	0	**1**
Accessible sources of external finance	0	0	0	0	0	**0**
Favourable economic forecast	0	0	0	0	0	**0**
Total	**9**	**12**	**3**	**3**	**9**	**36**

The managerial staff within companies (owner & CEOs, CEOs, managers) account for exactly 50% of the sample. They find follow-up of technological progress to be the most important factor for investment decision, followed by replacement of worn-out assets and sufficient amount of own funds. On the other hand, most of the employees who completed the survey (6 out of 9) consider replacement of worn-out assets the most important factor of investment decision.

5. CONCLUSION

In this paper we have tried to identify the key factors that influenced small firm investment decisions in Croatia during the recession year 2012. The empirical evidence obtained through the conducted study indicates that nearly half of small firms (46.15%) invested in new fixed assets while investment decisions were mostly survival oriented, i.e., towards the replacement of worn-out equipment. However, the fact that small firm investment was also highly influenced by a desire to follow-up on technological progress provides optimism.

On the other hand, the negative market situation and pessimistic economic outlook prevented many small firms from making investments. When considering financial crisis as a major source of uncertainty and a complex phenomenon, we agree with the majority of authors (Fuss & Vermeulen, 2004; Inklaar & Yang, 2012; etc.) and conclude that the crisis generated various factors which negatively affected investment decisions. For instance, external funding through banks was not available to everyone thus making a strong investment determinant. In this situation small firms are forced to finance themselves through their own cash flow. Therefore, for firms that invest, a sufficient amount of internal finance is a must, and when a firm lacks its own funds, this greatly restricts the investment activities.

This research complements the existing literature on small firm investment during the crisis by providing evidence from the perspective of Croatian small firms. The empirical evidence obtained in this paper has important implications for both policy makers, financial institutions and small firms' managers as well. Avoiding a large drop in investment is important because a possible drop would be particularly harmful for long-term economic growth as it hampers capital accumulation. Although some market-based measures already exist (e.g., beneficial lines of credit), it might be desirable to provide additional confidence-building measures to that particular business segment in order for the Croatian SMEs, as the backbone of the Croatian economy, to play a crucial

role in recovery from global crisis. On the other hand, understanding the process and the variables that grant or constrain firms' investment allows managers to develop appropriate business strategies. These strategic options are not only a question of survival during recession but also a question of expansion plans.

Some limitations of this paper need to be addressed in order to rule out possible mistakes in generalizing the results outside their specific empirical context. Getting the small firms to participate in the research was a major problem that this study faced. Therefore, the limitation of the study was related to the relatively small number of firms surveyed in the study. Due to the fact that all the firms belong to Primorsko-Goranska County region, there might be some cultural constraints affecting investments decision making that might prevent generalization of results. Also, this study analysed the subjective opinions of respondents, rather than objective (financial) sources. The inclusion of objective data and comparison with actual investment decisions would certainly improve the quality and scope of the analysis. These limitations might be overcome in the future by conducting larger research oriented towards a wider geographical sample and by using official financial data. Furthermore, this paper does not distinguish between new and existent firms nor does it distinguish between industries. Consequently, the findings may be limited due to their generalizability and lack of focus on specific industries. Therefore, it can be suggested that a line of future research should narrow the research scope to specific industries. Finally, it would also be interesting to examine the investments by Croatian SMEs in pre-crisis years as well as in the light of accession to the EU in order to compare the overall conclusions.

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DETERMINANTE INVESTICIJSKIH ODLUKA U KRIZI: PERSPEKTIVA MALIH HRVATSKIH PODUZEĆA

Sažetak

Cilj ovog rada je utvrditi investicijsku aktivnost malih poduzeća u Hrvatskoj tijekom 2012., kao krizne godine te analizirati efekte izabranih čimbenika na odluke o kapitalnim investicijama. U ovu je svrhu provedena internetska anketa malih poduzeća, s uzorkom malih poduzeća Primorsko-goranske županije, koja su u 2011. godini imala najveći prihod (uz pretpostavku većeg investicijskog potencijala u sljedećoj godini). Rezultati istraživanja pokazuju da je gotovo polovina poduzeća investirala u nova stalna sredstva u 2012. godini. Njihove su investicijske odluke bile utemeljene na usmjerenju prema preživljavanju, odnosno zamjeni dotrajalih stalnih sredstava.