Factors of a Successfully Implemented Compulsory Settlement

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Abstract

In Slovenia, many companies try to avoid bankruptcy with the introduction of a compulsory settlement procedure, but only a handful of companies successfully complete the compulsory settlement in the sense of a final repayment of creditors in accordance with the adopted financial restructuring plan. The article identified the factors affecting the confirmation of a compulsory settlement as well as the factors affecting the final repayment of creditors and, thus, permanently eliminated the causes of insolvency. The factors were divided into internal and external, whereby the impact of factors on a successfully completed compulsory settlement was verified using quantitative and qualitative research methods.

Keywords: compulsory settlement, insolvency, financial restructuring plan, business restructuring, ownership restructuring

Introduction

A compulsory settlement procedure typically begins after the occurrence of insolvency of the debtor and allows the prevention of bankruptcy with the reorganization of the debtor's assets and the overall reduction of the claims incurred up to the beginning of the procedure. From a legal point of view, compulsory settlement is a contract concluded between the debtor and creditors before the court, which reduces the claims of the debtors and/or suspends their payment (Šinkovec & Škerget, 1999, p. 17). The purpose of a compulsory settlement is to annul insolvency—that is, the economic situation as a result of which a bankruptcy proceeding may be initiated against the debtor. Under Article 136 of ZFPPIPP (2014), the compulsory settlement procedure is carried out to implement financial restructuring of the debtor's undertaking, which ensures that debtor's partners can only retain such a portion of the debtor's share capital that corresponds to the value of the remaining assets of the debtor that would be given to them if a bankruptcy proceeding was initiated against the debtor. At the same time, it is necessary to ensure more favorable terms of payment of the claims to creditors as

if a bankruptcy proceeding was initiated against the debtor; in addition, the sense of a compulsory settlement procedure is the continued operation of the debtor's undertaking or the profitable part of this undertaking. Compulsory settlement is accepted and confirmed by the creditors, but is only successfully implemented when the debtor repays all the creditors in accordance with the financial restructuring plan.

Numerous factors affect the compulsory settlement procedure; therefore, we tried to identify factors of key importance, which we divided into internal and external factors. External factors are independent from the company (the management has no direct impact on them) whereas internal factors are those that arise in the company (the management has a direct impact on them).

The purpose of this article is complex in that it aims to provide an (i) analysis and definition of the factors affecting the successful implementation of the compulsory settlement; (ii) a formulation of recommendations for the company to successfully implement the compulsory settlement, and (iii) a formulation of recommendations for the holders of the economic policy in the field of support for the successful restructuring of the companies.

Literature Overview and Hypotheses

External factors. External factors include macroeconomic factors, such as fluctuations of the gross domestic product, interest rates, inflation, and other performance categories or criteria of a particular national economy. Manavald (2010) defined a close correlation between the decline of GDP and the increased number of insolvency proceedings in the case of Estonia; similar conclusions were also reached by Halim, Mohd Daud, Rizal Mazlan, and Marzuki (2008), whereby the latter analyzed corporate insolvency and fluctuations of GDP in the case of Malaysia. Gaffeo and Santoro (2009), Archambault and Laverdière (2005), and Moravec (2010) confirmed in their studies the impact of the fluctuations of GDP as well as interest rates and inflation on the number of initiated insolvency proceedings. The link between the fluctuations of GDP and the number of insolvency proceedings is in the form of a negative correlation between the aforementioned variables.

Fluctuations of GDP are closely associated with the changes in the amount of the interest rate and inflation. The review of the literature revealed that authors put the interest rate in the foreground as a key factor for the changing number of initiated bankruptcy proceedings and compulsory settlements. Sharabany (2004) statistically confirmed that the number of bankruptcy proceedings increases with the rise of the nominal interest rate. Yet the rise in nominal interest rate does not affect the financial stability of major export companies as they are not limited to the acquisition of capital on the domestic market. Statistical analysis results also showed that the number of bankrupt companies grows with unexpected inflation and positive changes in the nominal and the real interest rate. As a general rule, there is a positive correlation between the fluctuations of the interest rate and the number of initiated insolvency proceedings, but it must be pointed out that the positive correlation is stronger if several years of delay are taken into consideration. This means that the consequences of an increased interest rate in the economy are only visible after a few years. In the case of the Czech Republic, Moravec (2010, p. 6) established a strong positive correlation between the interest rate and the number of insolvency proceedings by a delay of three years. Kaplin et al. (2009, p. 11) also established a positive correlation between the fluctuations of the short-term interest rate and the degree of non-payment by companies. A positive correlation is visible in the long term, while in the short term a negative correlation is evident among the aforementioned variables.

Important external factors in successful financial restructuring of a company are also insolvency legislation (Armour, 2003; Ayotte & Skeel, 2009; Pindado, Rodrigues, & de la Torre, 2008; Succurro, 2008; Tarantino, 2009) and the role of the banking system (Brunner & Krahnen, 2001; Davydenko & Franks, 2006; Franks & Sussman, 2003; Huang & Huang, 2009; Levine, 1998; Senbet & Seward, 1995).

Internal factors. Internal factors are factors that apply to an individual company and can be influenced by the management of the company. In the event of a vote for confirmation of a compulsory settlement, the amount of the repayment and the period in which the creditors would be repaid are very important factors. The higher the percentage of repayment offered by the debtor to the creditors and the shorter the deadline for the execution of the payment, the greater the chances are that the creditors will agree with the proposal for compulsory settlement. There is an existing belief that a high repayment of creditors should be possible over a longer period, while lower repayments should be feasible in a shorter period.

Internal factors also include the size of the company. Larger companies may have a better negotiating position, given their ability to persuade creditors on the soundness of a compulsory settlement (Constantini, 2009; Ohlson, 1980; Sengupta & Faccio, 2011). On the contrary, Sun (2010) demonstrated a positive correlation between the size of the company and the chance of bankruptcy, whereby it is emphasized that a positive correlation could be attributed to the fact that, when a financial crisis appears in a larger company, this reflects quite serious problems that had accumulated over the years

and are therefore more difficult to solve than they would have been in smaller companies.

The research also revealed that the financial situation and the operation of the company before the compulsory settlement are also important internal factors. The starting point from which the company works to solve the crisis in the company is extremely important for the continued development of events, while the company's financial situation also influences the formation of a proposal for compulsory settlement. Financial indicators are an important tool in assessing the performance of companies and forecasting their potential insolvency (Back, Laitinen, Sere, & Wezel, 1996; Branch & Xu, 2008; Heine, 2000; Stanišić, Mizdraković, & Knežević, 2013).

An agreement with the creditors is a factor that we believe is extremely important for the successful implementation of a compulsory settlement. In addition to an agreement with the creditors, the restructuring method of the liabilities of the debtor, which is enabled by the legislation, is important (i.e., the conversion of a creditor's claims in the equity of an insolvent company). A key element of any conversion of claims into equity is thus the balance sheet restructuring of a corporate debtor so that important creditors—usually mostly financial creditors (i.e., banks)—receive equity in a reorganized capital structure in return for a reduction of their claims toward the debtor. This restructuring method comes from the American economy, where the conversion method is well established (Baird, 1997; Fuller, 1940; Lubben, 2004). In Slovenia, the increase in share capital with in-kind contributions is governed by ZGD-1, while we only received the legal basis (in ZFPPIPP) to increase the share capital by substantial or new cash contributions without the consent of the shareholders within the framework of a compulsory settlement a few years ago (Plavšak, 2011, pp. 28–34). Clowry (2008) also offered some examples of European companies that have successfully gone through the process of reorganization using the conversion of debts.

We listed internal factors, which are more or less related to financial and ownership restructuring, but it is also necessary to point out the factor of the implementation of other measures of business restructuring. The methods of business restructuring eliminate the causes leading companies to insolvency and essential for the companies to operate successfully after a confirmed compulsory settlement (solvent in the short and long term; Dubrovski, 2004).

Given the fact that companies' decision-makers are people who do not always follow the principle of rationality, but often operate emotionally, the psychological aspect of crisismanagement in a company and the communication among stakeholders are extremely important factors in the

successful completion of a compulsory settlement (Berk, Peterlin, & Ribarič, 2005, pp. 39–48; Pearson & Clair, 1998, pp. 4–6).

Based on the review of theoretical foundations, we defined the following hypotheses, which were verified in the research:

H_1: The fluctuations of macroeconomic indicators influence the number of confirmed compulsory settlements.

H_{1a}: A decline in economic growth influences the decreased number of confirmed compulsory settlements.

H_{1b}: A decline in inflation influences the decreased number of confirmed compulsory settlements.

H_{1c}: A reduced interest rate influences the decreased number of confirmed compulsory settlements.

H_2: The proposed deadline to repay the creditors is affected by the amount of repayment, company size, and the amount of working capital (on the cut-off day before compulsory settlement).

H_3: Key features that distinguish companies for which compulsory settlement was confirmed and those for which compulsory settlement was not confirmed are the amount of working capital, the deadline for repayment of ordinary creditors proposed in the financial restructuring plan, and the amount of the proposed repayment.

H_4: The long-term rehabilitation of a company demands simultaneous financial, ownership, and business restructuring.

H_{4a}: For a successful final repayment of creditors from the compulsory settlement, in addition to an agreement with ordinary creditors, the debtor also has to reach an agreement with the secured creditors about the restructuring of their claims so that the debtor can achieve a sustainable debt (financial restructuring).

H_{4b}: The conversion of debts in equity shares or the acquisition of management (under Articles 144, 199.a or 199.b) allows a successful final restructuring of a company.

H_{4c}: Business restructuring in the context of the implementation of all measures referred to in the financial restructuring plan depends on the amount of working capital available to the company and is essential for the long-term rehabilitation of the company.

H_5: Good communication among the management of the company, creditors, the administrator, and other stakeholders

of the company and the preparedness of all stakeholders of the company to rescue the insolvent company enable successful long-term rehabilitation.

Research Methodology

Hypotheses H_{1a} to H_{1c} were verified with a simple linear regression analysis. Hypothesis H_2 was verified with a multiple regression analysis. One of the multivariate methods is also the discriminant analysis, which was used to examine the H_3 hypothesis. The discriminant analysis was used to determine and explain the differences between a group of companies for which a compulsory settlement was confirmed and a group of companies for which the compulsory settlement was not confirmed and ended in bankruptcy.

When verifying hypotheses H_{1a}–H_{1c}, we used secondary data obtained from publicly available databases—namely, Surs, Ajpes, Umar, Eurostat, Bank of Slovenia, Ministry of Justice of the Republic of Slovenia, and others. In hypotheses H_{1a}–H_{1c}, the number of confirmed compulsory settlements appeared in the role of a dependent variable. The variable of the number of confirmed compulsory settlements is in the form of a time series, as it included companies in Slovenia according to individual consecutive years for which a compulsory settlement was initiated and also voted for. This variable refers to the 2001–2014 period, whereby the period can vary for some hypotheses (e.g., 2002–2014 or 2003–2014) due to the availability of data on independent variables. Data for the annual number of confirmed compulsory settlements were acquired from the annual publications of court statistics, which are published on the website of the Ministry of Justice of the Republic of Slovenia.

To test hypotheses H_2 and H_3, we used data that we gathered on our own from databases by Audit & Co. (i.e., Družba za Revizijo in Svetovanje) and Zo-fing, d. o. o. (i.e., Svetovalno in Trgovsko Podjetje); we also used the database found on the website of Ajpes. The sampling method we used represents non-random sampling; 82 companies for which compulsory settlement was initiated were selected for the sample. The non-random sampling method was used because we randomly selected companies from the available data (there are no data available for the entire statistical set) for which compulsory settlement was initiated since 2008 and either completed with voting or stopped and changed to bankruptcy proceedings. Data on individual variables were obtained from the financial statements that are part of the financial restructuring plan, and they reported on the financial position and business operations of the debtor. In the selection of units for the sample, we focused on companies that had gone through a compulsory

settlement between 2008 and 2013 because, in 2008, the new Financial Operations, Insolvency Proceedings and Compulsory Dissolution Act (ZFPPIPP) went into effect.

Hypotheses H_4 and H_5 were examined with a qualitative method, using a multiple holistic case study. Only a few companies successfully finished the compulsory settlement, and some repaid their creditors only to later go bankrupt. Kotnik (2014) also pointed out the extremely low percentage of successfully completed compulsory settlements. When verifying hypotheses H_4 and H_5, which refer to business operations after the confirmed compulsory settlement, we also used primary data in addition to secondary data, such as non-structured and in-depth interviews with the management of insolvent companies and the stakeholders of these companies as well as experts in the field of finance and law. At the same time, we also used an observation technique, such as with the discussions of creditor committees, communication between the debtor and creditors, and the functioning of the administrator in the compulsory settlement procedure. The sample included three companies that successfully completed the compulsory settlement procedure, meaning they repaid the creditors: Iskraemeco, d.d., Steklarna Rogaška, d.d., and KG-EKO, d.o.o. We analyzed the following in each case:
– causes of insolvency
– the proposed compulsory settlement offered by the debtor in the financial restructuring plan
– the business operation and the implementation of the measures written in BRP after the confirmed compulsory settlement
– the repayment of liabilities from the confirmed compulsory settlement, and the analysis of the financial situation after the completed compulsory settlement

Case studies of companies against which the compulsory settlement was finally confirmed, but not yet completed, were used for the additional verification of the hypotheses. These companies had undergone the compulsory settlement procedure a few years earlier, but the deadlines to repay the creditors had not yet expired. We analyzed the following companies: LIV Kolesa, d.o.o., Beti tekstilna industrija, d.d., and Semenarna Ljubljana, d.d.

Research Results

In the research, we analyzed the macroeconomic factors in connection with the changing number of confirmed compulsory settlements. In the linear regression analysis for the example of hypothesis H_{1a}, we came to the following conclusions. The correlation coefficient R shows a strong linear relationship between GDP and the number of confirmed

compulsory settlements (Table 1). The coefficient of determination shows that 81.6% of the variation of the dependent variable was explained by the variation of the independent variable. The variables are in the form of a time series, so we checked the presence of autocorrelation between residuals using the Durbin-Watson test. We discovered no autocorrelation between the residuals of the sample.

Based on the F-test, we established that the obtained regression function was of good quality because the null hypothesis about the coefficient of determination being zero can be turned down at a significance level lower than 0.05 (Table 2).

The negative sign before the regression coefficient indicates that, if GDP increases one unit, confirmed compulsory settlements decrease by 0.008 unit, which means that the set hypothesis H_{1a} has to be rejected (Table 3). When setting up hypothesis H_{1a}, we derived it from a practical point of view—namely, that the uncertain economic conditions further complicated the survival of the companies during the compulsory settlement procedure, causing many compulsory settlements to fail and end in bankruptcy. At the same time, the creditors were quite careful when confirming compulsory settlement proposals, which were too optimistic given the economic situation. A statistical analysis showed the opposite, which can be attributed to the overall increase in insolvency proceedings

Table 1. Description of the Model, Correlation Coefficient, Coefficient of Determination, and Durbin-Watson Test

Model summary[b]					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.903[a]	0.816	0.801	9.319	1.518

Note: a. Predictors: (Constant), gross domestic product (per resident in euro, current prices and prices according to the current exchange rate)
     b. Dependent variable: confirmed compulsory settlements
Source: Authors' calculations, extracted from SPSS

Table 2. Analysis of Variance and the F-test

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	4,627.981	1	4,627.981	53.296	0.000[b]
1	Residual	1,042.019	12	86.835		
	Total	5,670.000	13			

Note: a. Dependent variable: confirmed compulsory settlements
     b. Predictors: (Constant), gross domestic product (per resident in euro, current prices and prices according to the current exchange rate)
Source: Authors' calculations, extracted from SPSS

Table 3. Regression Coefficient Values and the t-test

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
	(Constant)	168.617	17.657		9.549	0.000
1	Gross domestic product (per resident in euro, current prices and prices according to the current exchange rate)	-0.008	0.001	−0.903	−7.300	0.000

Note: Dependent variable: confirmed compulsory settlements
Source: Authors' calculations, extracted from SPSS

during the economic crisis and consequently a greater number of confirmed compulsory settlements.

Hypothesis H_{1a} was rejected, but we can say that changes in GDP affected the changes in the number of confirmed compulsory settlements.

The correlation coefficient in the case of hypothesis H_{1b} showed a medium strong correlation between changes in inflation and the number of confirmed compulsory settlements (Table 4). The assumption that the dependent variable residuals were uncorrelated cannot be confirmed as the value of the Durbin-Watson test fell under the lower reference limit of 1.5. Autocorrelation occurred more often in data in the form of a time series due to the inertia. The presence of autocorrelation reduced the reliability of the obtained results.

From the point of view of the analysis of variance and the calculated F-test, the regression model was of good quality

because the null hypothesis ($H_0 : r_{xy}^2 = 0$) could be rejected at a significance level lower than 0.05 (Table 5).

The t-test demonstrated that the calculated regression coefficient was statistically significantly different from zero, as the calculated significance level was lower than 0.05 (Table 6). The sign of the calculated regression coefficient was positive, indicating a positive correlation between the change in inflation and the number of confirmed compulsory settlements. Hypothesis H_{1b} was not rejected.

From the theoretical point of view, a reduction in the rate of inflation encourages economic activity and, thus, GDP growth. However, the time delay should also be mentioned in the change of inflation. This delay could be particularly felt in the recent economic crisis, in which—despite the low inflation rate—there was no significant economic recovery, which was also reflected in the lower number of confirmed

Table 4. Description of the Model, Correlation Coefficient, Coefficient of Determination, and Durbin-Watson Test

Model summary[b]					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.716[a]	0.512	0.468	14.539	0.717

Note: a. Predictors: (Constant), inflation, annual
　　　b. Dependent variable: confirmed compulsory settlements
Source: Authors' calculations, extracted from SPSS

Table 5. Analysis of Variance and the F-test

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	2,439.128	1	2,439.128	11.539	0.006[b]
1	Residual	2,325.180	11	211.380		
	Total	4,764.308	12			

Note: a. Dependent variable: confirmed compulsory settlements
　　　b. Predictors: (Constant), inflation, annual
Source: Authors' calculations, extracted from SPSS

Table 6. Regression Coefficient Values and the t-test

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	16.671	7.654		2.178	0.052
	Inflation, annual	6.973	2.053	0.716	3.397	0.006

Note: Dependent variable: confirmed compulsory settlements
Source: Authors' calculations, extracted from SPSS

compulsory settlements. The recent economic crisis showed that changes in inflation and interest rates did not cause an immediate impact on the economic activity, but other important factors still emerged—mainly political events in the country and around the world.

The regression analysis in the case of hypothesis H_{1C} revealed a medium strong relationship between the change in interest rate and the number of confirmed compulsory statements (Table 7). As with hypothesis H_{1b}, the Durbin-Watson statistics did not allow us to confirm the assumption about the residuals being uncorrelated.

The regression model was of good quality because the null hypothesis could be rejected at the significance level lower than 0.05 (Table 8).

The regression coefficient was statistically significantly different from zero at the significance rate lower than 0.05 (Table 9). The sign of the mentioned regression coefficient was positive, indicating that an increase in the interest rate effected an increase in confirmed compulsory settlements. Thus, hypothesis H_{1C} was not rejected.

Changes in the interest rate were thus indicated in the changes of GDP, but it was necessary to consider several years of delay—the same as in the event of changes in inflation. Although interest rates have decreased in recent years, no detectable larger scope of loans to companies and, thus, increases in economic activity could be identified in Slovenia. Banks have become extremely careful when granting loans to companies because of previous negative

Table 7. Description of the Model, Correlation Coefficient, Coefficient of Determination, and Durbin-Watson Test

Model summary[b]				
Model R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1 0.683[a]	0.467	0.413	14.186	0.760

Note: a. Predictors: (Constant), interest rate for loans of up to 1 million euro, variable and fixed interest rate of up to 1 year (in %)
        b. Dependent Variable: confirmed compulsory settlements
Source: Authors' calculations, extracted from SPSS

Table 8. Analysis of Variance and the F-test

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	1,761.759	1	1,761.759	8.754	0.014[b]
1	Residual	2,012.491	10	201.249		
	Total	3,774.250	11			

Note: a. Dependent Variable: confirmed compulsory settlements
        b. Predictors: (Constant), interest rate for loans of up to 1 million euro, variable and fixed interest rate of up to 1 year (in %)
Source: Authors' calculations, extracted from SPSS

Table 9. Regression Coefficient Values and the t-test

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
	(Constant)	−33.673	23.985		−1.404	0.191
1	Interest rate for loans of up to 1 million euro, variable and fixed interest rate of up to 1 year (in %)	11.164	3.773	0.683	2.959	0.014

Note: Dependent Variable: confirmed compulsory settlements
Source: Authors' calculations, extracted from SPSS

experiences. Stricter banking terms for the operation of companies have also hindered the operation of companies during compulsory settlements, causing many to declare bankruptcy. The decrease in interest rates resulted in a reduction in the number of confirmed compulsory settlements.

When checking hypothesis H_2, we used the multiple regression analysis, which revealed medium strong dependencies between the dependent and independent variables (Table 10). The multiple determination coefficient of determination was low and showed that only 24% of the total variance could be explained by the variability of independent variables. The Durbin-Watson test indicated no autocorrelation between the residuals of the sample because the value of the mentioned statistics was within the limits ($1.5 < d < 2.5$).

The significance level in the F-test was lower than the reference significance level of 0.05, indicating that the coefficient of determination was statistically different from zero and that the multiple regression function was of good quality (Table 11).

T-tests for individual regression coefficients demonstrated that the regression coefficients for the variables of company size and amount of repayment were statistically different from zero whereas, regarding working capital, we could not reject the null hypothesis that the regression coefficient was different from zero (Table 12). The larger the company and the higher the proposed repayment, the longer the deadline for the repayment of creditors in accordance with the proposal described in the financial restructuring plan. For

Table 10. Description of the Model, Multiple Correlation Coefficient, Multiple Coefficient of Determination, and the Durbin-Watson Test

Model summary[b]					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.518[a]	0.268	0.240	0.16407	1.957

Note: a. Predictors: (Constant), logsize, loglevel, working capital/net revenue from sales
           b. Dependent variable: logdeadline

Source: Authors' calculations, extracted from SPSS

Table 11. Analysis of Variance and the F-test

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.769	3	0.256	9.527	0.000[b]
	Residual	2.100	78	0.027		
	Total	2.869	81			

Note: a. Dependent variable: logdeadline
           b. Predictors: (Constant), logsize, loglevel, working capital/net revenue from sales

Source: Authors' calculations, extracted from SPSS

Table 12. Regression Coefficient Values, t-tests, and Multicollinearity Test (VIF)

Coefficients								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	0.384	0.189		−2.031	0.046		
	Working capital/net revenue from sales	4.741E-006	0.000	0.055	0.533	0.596	0.878	1.140
	loglevel	0.256	0.075	0.352	3.409	0.001	0.879	1.138
	logsize	0.078	0.027	0.300	2.860	0.005	0.850	1.176

Note: Dependent variable: logdeadline

Source: Authors' calculations, extracted from SPSS

the variable of working capital, we could not confirm that it affected the length of the deadline to repay the creditors, as proposed by the debtor. The presence of multicollinearity was checked with the factor of variance inflation, whereas the factor values were very low (close to 1), meaning that the independent variables were not strongly correlated among each other and the regression model was, thus, stable.

Hypothesis H_2 could be partially accepted, because we were unable to statistically confirm the effect of the independent variable of working capital on the dependent variable during the period for the repayment of creditors.

H_3 was checked with the discriminant analysis for two groups. The eigenvalue revealed that the obtained discriminant function did not allow for a good distinction between the group of companies with confirmed compulsory settlements and the group of companies with unconfirmed compulsory settlements (Table 13). The low eigenvalue indicated that the calculated discriminant function only captured 7.4% of the total variance of measured variables. The value of the canonical correlation also suggested that only 26.3%

of the variation between groups could be explained with the discriminant function.

Poor differentiation between the groups was also indicated by the high Wilks' lambda value (Table 14). The high significance level in the chi-square test speaks in favor of the null hypothesis about the equality of average values of the discriminant function in groups, meaning that hypothesis H_3 was rejected because the discriminant function did not allow for a good distinction between the two groups.

Table 15 summarizes the standardized discriminant function coefficients, showing that—in the distinction between groups—the most important variable was the size of the company, followed by the capital coverage of long-term assets, on the basis of which the level of capital prior to filing a compulsory settlement and the level of working capital on the cut-off day before filing the proposal for a compulsory settlement were indicated (Table 15).

Hypothesis H_3 was rejected, because the calculated discriminant function was not of good quality. The reasons for

Table 13. Eigenvalues

Eigenvalues				
Function	Eigenvalue	% of variance	Cumulative %	Canonical correlation
1	0.074	100.0	100.0	0.263

Note: First, 1 canonical discriminant function was used in the analysis.
Source: Authors' calculations, extracted from SPSS

Table 14. Wilks' Lambda and Chi-square Test

Wilks' lambda				
Test of function(s)	Wilks' lambda	Chi-Square	df	Sig.
1	0.931	5.534	5	0.354

Source: Authors' calculations, extracted from SPSS

Table 15. Standardized Discriminant Function Coefficients

Standardized Canonical Discriminant Function Coefficients	
	Function
	1
Working capital/net revenue from sales	0.325
coefficient of coverage of long-term assets = capital/long-term assets	0.663
logsize	-0.762
loglevel	0.158
logdeadline	0.304

Source: Authors' calculations, extracted from SPSS

the poor quality of the calculated discriminant function can be attributed to the violation of the basic assumptions on which the discriminant analysis is based. These violations are (Marinšek, 2015, p. 95):

– the units in each group are not selected at random because there are no data available for the entire statistical set;

– not all independent variables are distributed normally; and

– there is multicollinearity between independent variables.

The discriminant function did not allow for a good distinction between the groups, which resulted from the fact that the distinction between companies with confirmed compulsory settlement and the companies with unconfirmed compulsory settlement was also affected by factors not included in the discriminant analysis. These factors of agreement mostly occurred with the creditors seeking to restructure their claims and communicate with stakeholders and the psychological aspect of solving the crisis in the company. Due to the difficult measurability of these factors, the latter had to be left out of the implementation of the discriminant analysis, and their effects on the course of the procedure of compulsory settlement were discussed when checking the hypotheses with the quality research methods.

The qualitative research method of a case study was used to analyze six Slovenian companies that have successfully undergone the compulsory settlement procedure. Among them, three companies also finally repaid their creditors in accordance with the proposed compulsory settlement. An analysis of the focus group of companies showed that the successful implementation of a compulsory settlement requires an agreement with the secured creditors on the restructuring of their claims, conversion of creditors' claims in equity shares of the company, business restructuring, and communication among all stakeholders of the company. Case studies have shown that all companies for which banks acted as secured creditors entered into an agreement with these banks on the restructuring of their claims within the meaning of a moratorium on the repayment of the principal and control of the amount of the annual interest rate. Ownership restructuring was also carried out in the analyzed companies, either with the conversion of debts into the share capital of the company during the compulsory settlement procedure and/or recapitalization after the compulsory settlement. At the same time, business restructuring measures were implemented in all companies and are still being implemented, thereby ensuring that the company releases its potential for further development while eliminating the causes of insolvency in the long term. Hypothesis H_4 was confirmed.

Given that companies' decision-makers do not always follow the principle of rationality, but often operate emotionally, the psychological aspect of crisis management in the company and the communication among their stakeholders are extremely important factors in the successful completion of the compulsory settlement. During the compulsory settlement procedure, numerous conflicts arose in all the analyzed companies, either between the management and the creditors or between the owners and the creditors or even among all the stakeholders. An important observation was that conflicts were promptly resolved with good communication, which enabled the successful implementation of the procedure. Hypothesis H_5 was confirmed.

Discussion

Manavald (2010), Halim et al. (2008), Gaffeo and Santoro (2009), Archambault and Laverdière (2005), Moravec (2010), Sharabany (2004), Kaplin et al. (2009), and many other researchers have established a link between the change in the macroeconomic indicators and the number of insolvency procedures around the world. When checking the partial hypotheses H_{1a}–H_{1c}, we found that the macroeconomic indicators also affected the number of confirmed compulsory settlements. Despite the fact that hypothesis H_{1a} was rejected, the regression analysis indicated a strong link between changes in GDP and the number of compulsory settlements. The regression analysis of changes in GDP and the number of confirmed compulsory settlements for the 2001–2008 period also confirmed the negative correlation; thus, we can draw parallels between our findings and those of other authors. The regression analysis of changes in GDP and the number of confirmed compulsory settlements for the 2009–2014 period revealed that the economic crisis strongly affected the relationship between GDP and the number of confirmed compulsory settlements. In his book, Krugman (2012, p. 40) discussed the so-called Minsky moment that supports our findings. Krugman described the economic situation in which over-indebted subjects are forced to sell their property to pay their liabilities, which causes a fall in real estate prices and a sharp decline in market liquidity. At the same time, it indicates that the deleveraging cannot bring economic growth, but only deepens the crisis, which induces an increase in the number of bankrupt companies. Sun (2010), Constantini (2009), and Sengupta and Faccio (2011) established a link between the size of the company and the success of financial restructuring. Large companies are in a better negotiating position, so they may propose a longer period to repay their creditors. Regarding the level of working capital, the case is therefore exactly the opposite of that with the size of company and the amount of repayment: The more working capital that is available in the company during a compulsory settlement, the more likely the financial restructuring will be successful with a shorter period to repay the creditors.

A qualitative analysis of selected companies revealed that several factors are essential for a confirmed compulsory settlement as well as the consequent final repayment of creditors and the long-term rehabilitation of the company—namely, an agreement between the debtor as well as the ordinary and secured creditors about the restructuring of their claims (financial restructuring), the conversion of claims into equity shares or the acquisition of management by the creditors (ownership restructuring), and the implementation of business restructuring measures. Our findings support the basic thesis established at the beginning of the research. Financial, ownership, and business restructuring efforts are crucial for long-term crisis resolution in the company and the resolution of insolvency. A successfully implemented compulsory settlement is only possible if the restructuring measures are carried out in the company on all three of these levels, otherwise it is very likely that the process will fail sooner or later.

Conclusions

Our research could form the basis for the formulation of recommendations for the management of companies and the formation of an appropriate economic policy in the field of support for successfully restructuring companies. By defining the basic factors for successfully rescuing companies through compulsory settlement, we also opened many new issues and ideas for further investigation. Our research showed that the psychological aspect of solving the crisis is an extremely important factor as well, but it is often ignored in economic sciences. Therefore, it would be reasonable to extend the research in the direction of an in-depth analysis of the psychological factors, which are important for solving crises in companies. In the next phase, each factor could be researched in more detail individually or in groups, depending on the type of restructuring. As rescuing a company in crisis requires interdisciplinarity, the compulsory settlement procedure could also be discussed from other aspects—for example, as a compulsory settlement procedure from the legislative aspect alone and, thus, as the constituting of proposals for improving the Slovenian insolvency legislation. It would also be very interesting to perform a more detailed analysis of the impact of the Slovenian banking system in solving a company crisis. Further research could also be performed in the direction of the annual collection of data on successfully executed, finished compulsory settlements. These data could later form the basis for the performance of statistical analyses, such as with a discriminant analysis, to help us analyze the key differences between companies that ended in bankruptcy and those that successfully restructured during the compulsory settlement process.

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Analiza dejavnikov uspešno izvedene prisilne poravnave

Izvleček

V Sloveniji se veliko podjetij poskuša izogniti stečaju z uvedbo postopka prisilne poravnave, vendar le peščica od njih prisilno poravnavo uspešno zaključi v smislu dokončnega poplačila upnikov s skladu s sprejetim načrtom finančnega prestrukturiranja. V članku smo opredelili tiste dejavnike, ki vplivajo na potrditev prisilne poravnave, in tudi tiste, ki vplivajo na dokončno poplačilo upnikov in s tem trajno odpravo vzrokov insolventnosti. Dejavnike smo razdelili na notranje in zunanje, njihov vpliv na uspešno dokončano prisilno poravnavo pa preverili s kvantitativnimi in kvalitativnimi metodami raziskovanja.

Ključne besede: prisilna poravnava, insolventnost, načrt finančnega prestrukturiranja, poslovno prestrukturiranje, lastniško prestrukturiranje