

Effects of Legislation about Financial Management of Enterprises: Evidence of the Restructuring in the Slovene Economy

Ales Berk, MSc.

University of Ljubljana, Faculty of Economics, Ljubljana
Center for Central European Financial Markets, Vienna University, Vienna
ales.berk@uni-lj.si

Summary

Article deals with the inability to pay and inadequate financial discipline in Slovene economy. Main provisions of the new Law about Financial Management of Enterprises dealing with the issues, became fully effective in January 2000. The law should besides decreasing the number of enterprises which were unable to meet their financial liabilities and had blocked accounts, have motivated members of the boards to more frequently file for restructuring or bankruptcy. In the year after the introduction of the law the number of enterprises with blocked account significantly decreased and the number of proceedings at courts significantly increased. However, those were still minimally dependent on newly occurring blocks. In addition, management teams in Slovene enterprises didn't manage to significantly restructure financial distressed enterprises and thereby improve their competitive capacity. However, two the most frequently used measures were write-offs, in smaller enterprises also debt-to-equity swaps, and lay-offs.

Key words: Restructuring of Enterprises, Bankruptcy Laws, Inability to Pay, Inadequate Payment Discipline, Financial Analysis

JEL Classification: K2, G3

Introduction

The inability to pay and inadequate payment discipline are common features in modern market economies. However, countries in transition face them even more frequently. Regarding the changes in economic environment hard budget constraints were being increasingly introduced. Former frameworks of non-transparent government subsidies, loans and inefficient tax systems were being replaced by non-voluntary commercial crediting and wage arrears (Kornai, 2001). After the introduction of restrictive monetary policy and consistent bank regulation schemes in Russia, amounts of past due liabilities increased hundred-fold and reached the double amount of corporate loans (Perotti, 1998).

Until third quarter of the year 2000 Agency for Payments (APP) had a complete authority over the all inter-company payments in Slovenia. Afterwards banks started to perform settlements without APP intermediation as enterprises were allowed to freely move their account to any bank. APP maintained the records of all blocked accounts.* Number of blocked accounts after the 1991, when number didn't exceed one thousand, increased significantly. By the end of the year 1999 there were almost ten thousand enterprises whose accounts were blocked. That was also the case by amounts under block. During the 1999 increased by a quarter and by the end of the year reached 100 billion of tolar (\$500 mio).† On February 28, 1999 there were 6,587 enterprises with blocked accounts for the period longer than one year. Among those 6,083 didn't employ any workforce. Their aggregate amount under block summed up to 63.6 billion of Slovene tolar (\$260 mio), which at the time equaled to about two

* Enterprises were not allowed to overdraft the account. If the funds on the account were not sufficient, it was blocked until cash was additionally deposited.

† In 1999 the average amount in blocked accounts was 6 billion Slovene tolar (\$30,5 mio).

thirds all the blocked amounts in the economy. The sum of blocked accounts of the rest 504 enterprises which employed workers was 20.8 billion tolar (\$86 mio) (Porocevalec, 1999). Those figures lead to the conclusion, that majority of firms with blocked accounts for the longer than one year at the time, were out of the operation.

In addition the number and the structure of bankruptcy and reorganization procedures show the critical conditions on a field of protection of creditors' rights in the Slovene economy. Firstly, bankruptcy is much more frequently used procedure than restructuring compared to modern worldwide trends (Sodna statistika, 1996-2001).[‡] That means enterprises can no longer be kept going concern and are therefore sold and liquidated. Secondly, debtors of enterprises filing for bankruptcy could not be paid off. Moreover, creditors were in the period 1995-99 not paid off at all in about 60 percent of cases. The average share of stopped bankruptcy procedures due to insufficient assets amounted to 40.5 percent, reaching 60 percent level in the year 2000. Additionally, there were on average 17.5 percent bankruptcy procedures refused by the courts, peaking to 19 percent in 2000. In the 1998 there was record number of regular closed bankruptcy cases, representing 24 percent (Sodna statistika, 2000). Even in those cases claims of creditors could not be paid off in total. There are some factors in the Slovene economy enabling boards of directors of corporations and adequate representatives of other organizational forms to by-pass cash flows to newly established enterprises leaving the old ones exhausted. From the auditors report it can be seen majority of wealth erosions of Slovene enterprises in the period from 1993 to 2001 was done after the legally registering the ownership transformation in judicial

[‡] The proportion of bankruptcies in all procedures at courts is about ten times greater than in the U.S.A., where the restructuring under Chapter 11 of the 1978 Bankruptcy Code is the far most frequent procedure (Salerno et.al., 2001). In the period 1995-00 it represented 85 percent.

register of enterprises. The amount of the wealth erosion was 86 billion Slovene tolar (\$437 mio), only 15.5 billion (\$79 mio) due to transformation of ownership (Porocilo o delu Agencije za revidiranje..., 2002).[§]

Bankruptcy legislations among countries differ significantly. After the 1978 when Bankruptcy Code as part of the common law system was adopted in U.S., there has been a very low proportion of bankruptcy procedures filed at courts.** Authors from the field argue that the Code protects interests of the debtor at a very large extent. In addition, they are the party with largest power (Miller, 2001 and Salerno et.al., 2001). The so called *Debtors-in-possession* once the restructuring is filed are under protection of the court and they can stay in power and further easily manage the enterprise (Miller, 2001). The cornerstones of U.S. system are suspension of lawsuits which normally are quite spread across the country and their centralization under the legislation of the bankruptcy court, and very specifically determined issue of additional financing of the debtor. The sources of finance are in those cases of crucial importance, since the debtor needs additional funds to continue its core operations (Salerno et.al., 2001).

The majority of European countries have founded their bankruptcy legislation on the notion of French regulation from the beginning of 19th century treating the debtor as a criminal (Kaiser, 1995). As a result bankruptcy is much more common procedure at courts than the restructuring. Common feature of those legislative systems is

[§] The most frequent sources of wealth erosion were incorrect write-offs (24.9 percent), signed harmful contracts (23 percent), formed by-pass enterprises (13.9 percent), diluted enterprise's assets (10.4 percent) and incorrect profit sharing (6.2 percent) (Porocilo o delu Agencije za revidiranje..., 2002).

** The proportion of bankruptcies is 70.2 percent if one includes private individuals, but less than ten only, if just legal persons are taken into the account (OECD, 1994, p. 72).

supposedly high degree of creditor protection. On the other hand though, overly protection of rights of creditors can cause high costs of premature liquidating the debtor's assets. Additionally, managers of the debtor are much more motivated to manage the enterprise under cover. They want to mask the incurring financial distress and postpone the filing at the bankruptcy court. In acting this way they cause huge additional costs. There is classical textbook mechanism of moral hazard at work, since top management employs increasingly risky projects with potentially brilliant pay-offs, but at minor probabilities (Brealey, Myers, 1988 and Jensen and Meckling, 1976).

Kaiser and Kaiser (1993) attribute high importance of the estimation of the possibility of a turnaround before filing either for bankruptcy or restructuring procedure, which countries seem to allow for very differently. Even once the restructuring procedure is under way they quite differently distribute the power to negotiate. While American Bankruptcy Code forces creditors into negotiations with the debtor, the French legislation transfers all the power to the reorganization court. They have the discretion to shape the restructuring plan for the debtor. Although the same interests of creditor protection two frameworks follow, the two systems end up with totally different outcome. French system assumes there would be serious violation of rights of the employees, had the court not intervened. German legislature mandate for shaping the restructuring plan confer to banks, which represent the main group of creditors. The legislative systems in Japan, Italy and Great Britain are somewhere in between the US and German one, while Netherlands, Belgium and Switzerland on the other hand,

have the system very similar to the German (Kaiser and Kaiser, 1993). Common European directive does not exist so far.^{††}

The important distinction between the more frequently used restructuring proceedings and more often filing bankruptcies is about ability to separate the potentially sound parts of each bankrupt enterprise. In the case of filing bankruptcy assets are typically sold by usually low gone-concern liquidation values. The prerequisite for achieving prices close to market values is liquid market affirmed by the system of auctioning (Salerno et.al., 2001). The creditors can be in that case instead of sharing the operational cash flow, paid off only from liquidation proceeds. Regardless of that obvious advantage, further research is much oriented in comparing the efficiency of the American and other European legislative frameworks (Eckbo, 2001 and Franks and Torous, 1993). Thorburn (1998) argues that enterprises after the chapter 11 restructuring in US show lower impact on management turnaround and the level of their compensation as their Swedish counterparts.^{‡‡} In addition, they on average also achieve worse performance in the future than their peers do. Hotchkiss (1995) found that 40 percent of the enterprises studied continued to experience operating losses in the three years after the emergence from Chapter 11 in the period from 1979 to 1988. Further, almost one-third subsequently filed for bankruptcy again or had to again restructure their debt. Despite the advantages of paying off debtors from current cash flows and allowing the US enterprises to restructure in the large extent, there were

^{††} The only obligatory document which is universal in nature is the regulation of the Council (Council Regulation 1346/2000, 2000), which prohibits aversion of the national bankruptcy law provisions for the debtors who don't only operate assets in their own country. Insolvent debtor is therefore not allowed to shift the headquarters to the country where his status as a debtor would be more advantageous.

^{‡‡} Swedish system is based on auctions and selling-off the assets.

numerous pressures posed and certain amount of lobbying launched, arguing an overly stressed power of debtors (Claessens, Djankov and Ashoka, 2001).

Countries in transition additionally encounter obstacles on their path of strengthening national bankruptcy legislative systems. Those countries have made big progress in adopting market oriented bankruptcy concept. Unfortunately, it happened only sufficient on books. Efficiency of bankruptcy legislation is poor. The reason are underdeveloped and weak institutions, banks and other creditors, solicitors, lawyers, judges, bankruptcy managers, exactors and other officials. Gray, Schlorke and Szanyi (1996) for the Hungarian case of adopting new legislation in the beginning of the nineties state, that the change brought about positive results, but that only meant the first steps made toward more frequent use of restructuring procedures in cases of corporate financial distress. Just as Gray, Schlorke and Szanyi (1996) Pistor, Raiser and Gelfer (2000) also argue that efficient system of solving the financial distress of enterprises crucially depend on proactive role of the sufficiently developed institutions. Those are unfortunately conditioned upon tradition and can by no means be successfully transformed over night. Once financial institutions are capable of achieving pay-offs in the very market-oriented way, they impose lower risk premiums, causing interest margins to narrow and interest rate to fall. The former environment of soft budget constraints (Kornai, 2001) is being gradually substituted by actions driven on market forces. The cornerstone of consistent and efficient system is a need that institutions are willing to fight for their rights and must have the opportunity of monitoring and screening ratings of their debtor enterprises they are exposed to. Above all they must be motivated to collect due payments (Gray, 1997). Only the transformation of institutions, that is based on active protection of creditors'

rights and spurs on their market orientation, can bring long-term utility. As a consequence creditors are willing to contribute enough external sources of financing (Giannetti, 2000). If this is not the case all the enterprises are limited in the same way as small enterprises, with low interest of investors (Osteryoung et.al., 1997).

In Slovenia, the issues concerning the inability to pay were already dealt with in Law of Enterprises (LE) adopted in the year 1993. The boards of directors were according to the provision written in the Article 257 obliged to call the assembly meeting and reveal the information in case incurred loss reached one half of the common stock. Time period allowed to react was set to 48 hours after ascertaining the loss. Such strict provisions are not common in the comparable legal systems, which points to a demand of Slovene legislator towards swift actions (Ivanjko, 2002). In addition to that, the boards were according to paragraph 3 of the same article prohibited to perform any payments not complying with prudent business rules (Paragraph 3, Article 257 of the LE, 1993). Second paragraph also defined the immediate obligation to whether file bankruptcy or restructuring procedure according to Law on Restructuring, Bankruptcy and Liquidation (Paragraph 2, Article 257 of the LE, 1993) when enterprises becomes insolvent.^{§§} Maximum time period allowed to still comply with the law was three weeks. Another article posed obligations on members of the boards and their deputies (Article 260 of the LE, 1993) to act in a prudent manner and to keep records confident. In the case of not fulfilling this provision and not being able to pay the creditors, LE would make them jointly liable to the enterprise and the creditors (Article 258 of the LE, 1993).

^{§§} The provision defines, that a bankruptcy procedure must be filed “when the debtor has for longer period been unable to pay or has become insolvent, over-indebted and in other cases, determined by the law” (Article 2 of LRBL, 1993).

Because the numerous legal entities had had blocked accounts Slovene legislator adopted the supplement of LRBL in June 1997. There was its third article that stated that all the enterprises with accounts blocked for more than twelve successive months and simultaneously not paying wages for the period of last three months must file for bankruptcy (Paragraphs 2 and 3 of Article 3 of the LRBL, 1997).^{***} That provision has not been effectively enforced, since it would cause delays if not totally hinder the judicial system. The number of enterprises which would satisfy that provision would come up to about 6,500 (Sinkovec and Skerget, 1999). In the period 1995-99 the average number of processed cases at courts was approximately 250 per annum. Despite of their small number courts were already faced with delays. In addition, there would be the need for putting about 150.000 Slovene tolar (\$760) aside from the budget per case, amounting to almost one billion (\$5 mio) (Porocevalec, 1999). Additionally, the issue about enterprises not complying with the provisions of LE (Article 580 of the LE) was much the same. The article defined minimum amount of capital enterprises must have on disposal according to be registered as single legal organizational form. Slovene government had in the beginning of transitional period allowed and motivated start-ups without obliging them to provide any money besides administrative costs. Article 580 of the LE was similar to the whole Article 3 of the LRBL (1997), not enforced as 13,000 liquidations according to legal duty would surely surpass the capacity of courts (Sinkovec and Skerget, 1999).

^{***} The Slovene legislator uses different meaning of the term liquidation as is defined in US Bankruptcy Code. According to it liquidation provisions cover the procedure where an enterprise ceases to exist upon the free will of owners because of completion of mission of the enterprise.

Those two reasons and rapidly worsening situation in a field of unmet due liabilities - blocked accounts) led the Slovene government to put into the legislative procedure Law about Financial Management of Enterprises (LFME). It introduced new legal mechanism of deleting the enterprise from the register of enterprises without the procedure of liquidation aimed at removing inactive enterprises and those non-complying ones from the economy.^{†††} LFME invalidated article 257 and 258 of the LE, containing provisions about covering the damage, and introduced new provisions regarding personal liabilities of members of the boards and sanctions for violating them. The main provisions make them liable for proper employing of sound financial principles and immediate informing the supervisory board and stockholders about inability to pay, insufficient capitalization and/or overindebtedness. Should they not act according to the provisions and creditors could not be paid off completely in the case of bankruptcy filed in the period of two successive years, would they have been jointly personally liable. The liability is limited to 15 mio Slovene tolar (\$76,000) per member of the board of a large enterprise, in the case damage should not have been done on purpose.^{‡‡‡}

The LFME has not introduced new concepts of personal liabilities of the members of boards, but has substituted the ones not being enforced. New feature by all means was mechanism of deleting the enterprises out of the register, which seem to be of great importance. Definitively, another newly determined issue was applicability to sole proprietorships, limited companies, corporations, associations and establishments, and

^{†††} Provisions on deleting enterprises from the register can also be found in German or Austrian legislation (Bundesgesetz über die Reorganisation von Unternehmen, 1997).

^{‡‡‡} Personal liability is 10 mio Slovene tolar (\$50,000) for members of boards of middle and 5 mio Slovene tolar (\$25,000) for members of small enterprises.

not just to corporations as before was the case. Legislator has in the procedure of approving the LFME taken into consideration (Porocevalec, 1999):

- principles of sound financial operations, which would because of personal liability of members of the boards be better followed,
- principle of equal treatment of all classes of creditors, which had also been defined in the LRBL (1993),
- principle of ceasing to exist of legal entities without previous liquidation procedure,
- principle of defending the interests of creditors and shareholders, which is fulfilled by legal means in procedures of deleting, public announcements and legal consequences of the deleting the enterprises from the register.

The paper deals with direct and indirect effects of the adopted and introduced legislation. The former include dynamics of the blocked accounts combined with their characteristics, structure and the dynamics of bankruptcy and restructuring procedures and their correlation with newly occurring blocked accounts. The later include restructuring of Slovene enterprises. Namely, enterprises are not in danger of liquidity problems in the case their performance is stable. Therefore the members are motivated to provide for the situations where they are less likely to be obliged to reveal the financial distress or being personally liable when not complying with the law.

2. Hypotheses

The main hypotheses cover the direct as well as also indirect effects of the LFME.

Besides assuming no differences in dynamics of blocked accounts and legal

procedures at courts, they also assume no differences in four fields of operation of enterprises – liquidity, capital structure, efficiency/productivity and performance. The hypotheses are as follows:

Hypothesis 1:

H₀: As the LE and the LRBL so far, the LFME did not provoke any changes in the field of removing the non-competitive enterprises from the economy. Number of bankruptcy procedures as well as number of deletions from register of enterprises in the year 2000 didn't significantly increase.

Hypothesis 2:

H₀: Despite the strict provisions of the LFME the ability to pay in Slovene economy did not significantly improve. Number of enterprises with blocked accounts, sum of all amounts under block, average amount of blocks, median as well as total days blocked did not decrease.

Hypothesis 3:

H₀: Ratios, measuring liquidity – current and quick ratio, did not improve in the year post-legislation. Differences are neither significant by those enterprises which by the time of introduction of the LFME were in financial distress and felt stronger impact of its provisions.

Hypothesis 4:

H₀: The LFME should have motivated the management groups to restructure their enterprises, specially the ones face financial difficulties. Number of enterprises in

moderate financial distress didn't decrease post-legislation, neither did in those enterprises come to more efficient use of assets and better performance. Despite the personal liability the members of the boards of directors didn't lower the probabilities of incurring the financial distress. Enterprises were not significantly restructured. Turnover, profitability and capital structure ratios didn't improve significantly. Indirect effects of the adopted LFME on Slovene economy are therefore weak at best.

Hypothesis 5:

H₀: In the enterprises which produced sound products and/or services and occasionally had difficulties in meeting their financial liabilities, restructuring did not take place in the significant extent. Neither were among creditors and stockholders agreed arrangements about debt restructuring. The stockholders also did not provide for additional equity capital. Enterprises consequently don't show any significant differences by efficiency and profitability ratios, neither by the structure of capital.

3. The Data and the Methodology

The Data

The empirical research rests on the database comprising financial statements, administered by APP. According to the law, enterprises registered in Slovenia, are obliged to annually report financial data to APP (Article 70 of the LE). The database contains 37 items from balance sheet, 44 items from income statement and 14 additional items referring to distribution of earnings and covering the loss incurred in previous years. In the year 1999 37,553 enterprises supplied the data, of which 7,830 had had at least five employees. There were 37,696 enterprises in the database for the

year 2000, of which 7,752 had at least five employees, and 37,210 enterprises for the year 2001, 9,065 of them employing more than five employees. For the computation of commonly used efficiency and performance measures for the year ante- and both years post-legislation data from balance sheets from the year 1998 was also prerequisite (White et.al., 1998, Reilly and Brown, 2000; Brigham and Houston, 1998). Although, computed averages of balance sheet items, computed according to financial theory do not correctly account for the level of each specific asset employed, the more precise calculus would have demanded information on additional capitalizations during each year under consideration.

The second database comprises data upon blocked accounts, also administered by APP as an authority to perform inter-company payments in the economy. The data for each month in the year covers number of blocked accounts, number of days each enterprise could not perform payments and the average amount under block. Additionally, median and aggregate sum of all amounts in the economy has been derived. The enterprise was included in the database only if its account had been blocked for more than five consecutive days. There were 12,072 enterprises having blocked account in the year 1999, and 11,868 in 2000. 6,804 enterprises were blocked every day in 1999, and 3,253 of those, being blocked every day in the year 2000.

A database "GVIN", managed by the eGV, Limited, comprises data upon 3,132 legal procedures at Slovene courts. It covers the period from the beginning of 1998 to the end of the year 2001. For the empirical research of crucial importance was data upon procedures of restructuring, bankruptcy, confirmations of bankruptcies, deletions of enterprises from the register of enterprises, bankruptcies done via quick procedure,

deletions of enterprises by employing the short bankruptcy procedure and break-ups of restructuring procedures.

Grouping the Enterprises

The LFME brought about strict requirements for swift reporting for the top management of financially distressed enterprises. Additionally, they have become obliged to undertake specific actions, i.e. proposing the restructuring plans and employing specific steps toward lowering incurred financial difficulties. Therefore, significant differences could be expected between those enterprises, facing financial distress by the time of law introduction, and those of stable financial position. The later were not under direct pressure of the LFME. By the purpose of testing the differences those two groups of enterprises were separated and the results thereafter compared.

In theory one can find different characterization of enterprises facing financial distress among authors. Kang (1997) for the separation uses the ratio of earnings from operation to total assets and defines the threshold as 50 percent fall in the value of median. Wruck (1990) for example finds separation on the times interest earned. Enterprise is grouped in the financial distressed group by having the value of the ratio lower than 1 for two successive years. Others, exploring relations in the capital market, frequently take annual yields, with or without payment of dividends as accountable. Gilson (1990) for example, as a financially distressed company labels each enterprise performing in the lowest fifth percentile for three successive years. While a goal of the research has been testing the response of the whole economy to newly adopted legislation, as also for the limitation of availability of market data for majority of Slovene firms, two groups were aggregated as follows:

- First one the name “Financial Distressed Enterprises” has been given. The group consists of those enterprises, whose accounts were blocked in December 1999, i.e. a month before legislation was made effective. However, grouping was done under the additional restrictions. Enterprise had not filed for any legal procedure at court meaning exiting from business activities.^{§§§} Additionally, enterprise could not have account blocked for more than ten days per month. Argument for such an exclusion was that those enterprises face too-large-to-manage a financial distress.^{****}
- The second group comprises of the enterprises, not having encountered financial difficulties and therefore their top representatives were not directly obliged to respond. In the analysis they have been given the name “Control Enterprises”.

Testing was done using the data for enterprises which had had five or more employees only. The reason for that was different nature of those, many times family owned enterprises, and consequently their impact on financial ratios. All the enterprises with at least five employees are the so called “larger enterprises”. The rationale for the use of such a threshold is to find in literature on entrepreneurship.^{††††} Enterprises having less than five employed workers represent the group of the so called “the smallest enterprises”. Just as “nonfunctioning enterprises” those are only used by testing for direct effects. Nonfunctioning enterprises are those which did not submit the financial statements to the APP for the previous year. When size of those is under consideration

^{§§§} Those procedures are bankruptcies, liquidations, bankruptcies done via the quick procedure or deletions from the register. Enterprises filing for restructuring are nevertheless included in the group.

^{****} At the end 55 enterprises were excluded.

^{††††} Separation of enterprises is in most cases done by the number of employees, where five is commonly used criteria.

they can be grouped in each specific group of enterprises and are of no in-advance-prescribed size.

The separation of enterprises by size has been done accordingly to Law about Amendment and Supplement of the Law on Enterprises (ZGD-E, 1999) except that “small enterprises” are additionally divided into two subgroups. Thus, size-groups were as follows: “large enterprises”, “middle enterprises”, and the two subgroups, defined solely by the number of employees – “small enterprises” and “micro enterprises”.^{****} Analysis included 288 “Financial Distressed Enterprises” and 7,372 “Control Enterprises”.

The Ratios and the Methodology

Effects of adopted LFME were approximated by measuring and testing the changes in values of four following groups of ratios: liquidity ratios, ratios about capital structure, efficiency/productivity and profitability ratios.

For the purpose of testing the change in the liquidity of enterprises current (*CR*) and quick ratio (*QR*) are applied. The computation follows the common formulation (Reilly and Brown, 2000 and Brigham and Houston, 1998), but measures are adjusted for the long-term claims from operation (*AOP 014*), which are according to the Slovene Accounting Standards (SRS, 1993) included in the current assets. While measuring long-term coverage of the current assets, both also indicate the capital adequacy of an enterprise. The greater the current ratio, the greater the coverage of current assets with a mix of capital. Both ratios are used to test Hypothesis 3 dealing with ability to pay in the whole economy.

^{****} See Appendix I for the exact description of each size-group.

Capital structure ratios used in the analysis are contributed capital – common stock and additionally paid-in capital, to total equity (*CC*) and total equity to total capital (*ETC*). *CC* shows level and dynamics of primary equity investments of the owners. A low ratio indicates greater importance of other components of capital, whereas greater one corresponds with newly founded enterprise or with the situation where loss from previous years almost entirely eroded accumulated retained earnings and reserves. Increase in the value of the ratio can on the one hand indicate that owners have contributed new equity, and on the other that the current loss has additionally decreased total equity and the enterprise hasn't yet decreased the common stock. Decrease in the value of the ratio can be consequence of good performance and retained earnings. For the correct interpretation one must combine knowledge about initial value of the ratio and performance measures and the dynamics of the common stock and additionally paid-in capital. The ratio *ETC* measures in what portion enterprise is funded by equity capital. Because of the peculiarities of the relations among enterprises and Slovene banks short-term financial liabilities are also accounted for when calculating total capital. Slovene enterprises mainly use short-term sources for long-term purposes and are in the minor extent financed by long-term bank loans. Additional argument is easily obtained in the statistics of commercial banks. Ratio of short-term loans in the aggregated balance sheet of the Slovene banking sector amounts to 59 percent, of which only 3 percent representing various short-term credit lines (Monthly Bulletin, BS, 2002). Majority of short-term loans is refinanced at maturity and therefore can be regarded as long-term arrangements.

The following ratios are employed to test the efficiency of operations and labor productivity: accounts receivable turnover (*ARTO*), inventory turnover (*ITO*), gross margin return on investment (*GMROI*)^{§§§§}, fixed assets turnover (*FATO*), assets turnover (*ATO*), sales to employee (*SE*), assets to employee (*AE*) and labor productivity (*PR*). Although consistent with mainstream definitions (White et.al., 1998; Reilly, Brown, 2000, Brigham, Gapensky, 1999), corrections have to be made in order to appropriate address common principle of revaluating the items in balance sheets in times of relative high rates of inflation. All the items are inflated and expressed in prices at the end of each year – balance sheet items from the beginning of the year for the whole year and items from income statement for the period of the last half a year.^{*****} For the inflating retail price index is used.^{†††††} A special correction was needed when calculating labor productivity (*PR*) and ratios of efficiency of inventory investments (*SE* and *AE*). *PR* is expressed as quantitative measure, taking in account the costs of goods, material, services and differences in all parts of inventories - work in process, finished goods and merchandise goods, per employee. The ratio for the year 2000 is calculated applying domestic inflation rates – producer price index $\frac{I - XII2000}{I - XII1999}$. There a disproportion between the enterprises, which buy material abroad, and those in Slovenia, could have appeared. That would have been the case if the exchange rate did not follow the pace of rates of inflation and differences did occur between domestic and foreign prices in those markets.

^{§§§§} Gross margin return on investment for every Slovene tolar, invested in the inventory shows the amount of gross profit earned, measured as earnings before interest and taxes, depreciation and amortization (Armstrong, 1985 and Parkinson and Kallberg, 1993).

^{*****} For details see Appendix II.

^{†††††} Retail price index was set in the Slovene Accounting Standards (1993) in effect in the period covered.

Earnings before interests, taxes, depreciation and amortization to sales (*EBITDAS*), net income to sales (*NIS*), adjusted net income to sales (*ANIS*), return on assets (*ROA*), adjusted return on assets – return on assets before depreciation and amortization (*AROA*), return on equity (*ROE*) and adjusted return on equity (*AROE*) are used measures of profitability. Adjusted ratios are calculated with the intention to test the importance of extraordinary items and different amounts of depreciation charged.

Limiting the Values of the Ratios

Errors in the database and improper reporting cause the need to correct or limit the calculated ratios.^{****} The purpose is to reshape the distribution of each ratio in order to get closer to normality. Three the most frequently applied methods Mramor and Mramor Kosta (1997) cite are exclusion the values from the analysis - trimming, adjusting the values to some minimal or maximal value - windsorising and use of some transformation function to dampen extreme values - noise elimination. For the reasons just mentioned the first method seems to best suite our case. Enterprises, whose values of *CC* or *ETC* ratios are limited, are entirely discarded from the analysis. Those enterprises, whose values are limited by any other ratio, are just left out of the calculus for the limiting ratio. The rationale is that enterprises showing extreme values by the capital structure ratios most probably face relatively harsh financial distress. After the trimming there were 222 financial distress enterprises and 6,969 control enterprises in the analysis.

^{****} In addition to lack of conceptual meaning, extreme values also pose significant impact on robustness of performed discriminant analysis and independent *t-tests*.

Empirical Tests Used

Four different methodologies are used to empirically test for direct and indirect effects of the new legislation. By all of them null hypotheses contain the assumption of no differences in values of each specified ratio between the two groups – financial distressed and control enterprises. Implicit assumption of the independent *t- tests* is univariate normal distribution of financial ratios. That is also the case by discriminant analysis, which in addition to multiple normality of distributions, assumes equality of the covariance matrices and no correlation among variables. However, those assumptions are rarely satisfied. By means of obtaining more robust results, non-parametrical *Mann-Whitney U test*, *Wilcoxon W test* and logistic regression are additionally used.^{§§§§§} Both non-parametrical tests contrary to *t-tests*, which as a main parameter take mean value, are based on the medians. Initially, values of the two groups by each separate ratio are ranked. *Mann-Whitney U test* compares numbers of units from the larger group, having larger value of the ratio as the unit from the smaller group of the same rank. It can be written as follows:

$$U = N_1N_2 + \frac{N_1(N_1 + 1)}{2} - T_1, \quad [1]$$

where N_1 and N_2 represents number units in each group, and T_1 sum of the ranks of the larger group. Because of the relation to the equation [1]^{*****} value of *Wilcoxon W statistics* can be written as:

^{§§§§§} See Hair et.al., 1998, p. 259-260 to learn more about assumptions and limitations of the discriminant analysis.

^{*****} Both statistics always sum to one.

$$W = \frac{m(m+2n+1)}{2} - U, \quad [2]$$

where m stands for the number of units in the smaller group and n for the number of units in the larger one. Both test the null hypothesis of equal median values of both groups.^{†††††}

Serious drawbacks of the multivariate – discriminant analysis led to the application of the logistic regression. Namely, all the assumptions had been seriously violated, which had caused instability of the results. In such circumstances there is impossible to determine an objective solution, just as in the multiple regression analysis is the case. After the inclusion of another highly correlated variable, variance^{‡‡‡‡‡} increases by the large amount.^{§§§§§} Logs of determinants, measuring the size of the ellipsoids and variances, and Box-M test indicate an inequality of variances in both groups. Consequently the model can not properly separate the units into two determined groups of enterprises.

Logistic regression is a more robust method, not dependant on assumptions about normality of distributions, multicollinearity and unequal variances between the two groups. It is similar to multiple regression with an important difference in

^{†††††} Use of non-parametrical tests is covered by Walpole, Myers and Myers (1998, p. 619-622) and SPSS Base 10.0 Applications Guide, 1999, p. 236-239.

^{‡‡‡‡‡} $Var[b_1] = \frac{\sigma^2}{(1-R_1^2)S_{11}}$, where R_1^2 represents determination coefficient of added variable and

(dependant) variable with the highest correlation.

^{§§§§§} See Greene, 1991, p. 277-285 for details.

optimization procedure applied. Instead of minimizing the sum of the squared residuals, it uses maximization of probabilities. The concept of *R-square* is substituted by χ^2 or R^2_{logit} . Testing for the significance of each regression coefficient is instead by *t-tests* done by *Wald's test*.*****

4. Inability to Pay in the Slovene Economy

The Structure and the Dynamics of Blocked Accounts

One month before introduction of the LFME (in December 1999) there were 335 larger and 773 the smallest enterprises with blocked accounts in the economy. Comparing the structure of blocked accounts by the size of the enterprise, amounts under block, total assets employed and revenues earned, one can easily conclude that the accounts of smaller size groups were less frequently blocked, but that their relative amounts under block were much larger.

The dynamics of the number of blocked accounts after the LFME was put into effect was almost entirely determined by non-functioning enterprises. That means that the provision regulating the deletion of enterprises from the register was being successfully implemented. It removed the enterprises with accumulated unmet financial liabilities or those which had not align with the provisions of minimal required capital determined by the LE. Decrease in the numbers of blocked accounts came in two explicit waves, in February and in July 2000. First was a consequence of the obligation of courts to trace the enterprises because of the second reason (Article 37 of the LFME), and the second one because of the obligation of APP to trace those enterprises which had not performed any payments (Article 25 of LFME, 1999).

***** See Hair et.al., 1998, p. 276-325 for details.

However, the efficient provision about deletion of enterprises from the register didn't provide for settlement of due amounts. The claims under default were in accordance to common accounting principle of conservatism already written off. On the other hand, the dynamics of the number of blocked accounts within the larger enterprises was different by all means. After the general decrease in all size-groups of enterprises at the beginning of the year 2000, there was a period of losing the grips. At the end of the year those enterprises recorded even higher number of blocked accounts as a year before.

Despite the fact, that the number of blocked accounts in February 2000 decreased significantly in all groups of enterprises - on average by 15 percent of average number for the year 1999, only the group of large and middle enterprises retained the lower number of blocked accounts until the end of 2000. At the end of 2000 just 17 large enterprises had blocked accounts, which represented only slightly more than one half of the number from one year ago, and 58 middle enterprises – 79 enterprises at the end of the year 1999. There were also 185 small enterprises with blocked account – 161 at the end of 1999, and 851 micro enterprises – 773 a year ago. Despite the greater number of recorded blocked accounts, the last two groups of enterprises demonstrate larger amount of varying in the year post-legislation. One could find the reason in greater motivation for settlement of their liabilities. Because of the unavailability of external sources of finance, greater impact of the defaulted payments and much smaller potential to negotiate, those enterprises are much more limited in assuring fulfillment of their own liabilities than the enterprises of larger sizes. Arrears are therefore passed forward to the suppliers.

Micro and small enterprises have demonstrated quite a bit smaller average amount under block post-legislation. That means that those enterprises managed to decrease the largest amounts. On the other hand, the mean values have even increased for the middle and large enterprises, even though median stayed at the same level. Obviously, some of those enterprises from the two groups in financial distress encountered larger difficulties in the year 2000. That could either be aligned with the notion of longer time period required to restructure those companies (Chowdhury and Lang, 1996) or the fact that some enterprises are in the state to be ready for filing the bankruptcy procedure.

The Correlation Between Blocked Accounts and Court Proceedings and the Legislative Efficiency

The year 2000 brought about the significant increase in procedures at courts. The number of bankruptcies filed surged by 183, and the number of restructuring procedures magnified even by 193 percent. But, the more detailed analysis reveals that there was extremely weak correlation between the procedures and the newly encountered inability to pay. Enterprises filing for reorganization at courts in 2000 were in most cases having accounts occasionally blocked in every month during the year 1999. The required period for filing for restructuring procedure, stated in the LFME, were not met in Slovene juridical practice. The law caused the removal of those enterprises from the economy, which had been already non-functioning in the year ante-legislation and had already caused large chain-effect in arrears. The members would have borne personal liability, should they not decided to fill just at the time of making the law fully effective. The results allow for the reasoning that adoption of the LFME did not cause more frequent and faster solving of financial distress.

The comparison of dynamics of number of accounts under block and number of procedures at courts shows, that the so called “autonomous” factors drove the number of account to the lower levels. The decrease was not a consequence neither of filed bankruptcies nor restructuring procedures.^{††††††††} Those can be easily seen in February 2000. In the months that followed, enterprises were not any more in the position or willing to maintain the positive record on the account. The reason for such a short-term outcome could be found in lax enforcement of the law by weak legal system and too small power of creditors.

One could argue that also the provision of deleting the enterprises from the register was to some extent inefficient. Despite the large number of enterprises being deleted, the number and the structure of accounts under block in August 2001 serve with a fact, that there should have been even more of them. At that time there were 61 percent of all 5,586 enterprises with blocked accounts not solving the blocks, lasting for more than a year. Article 25 of the LFME obliges APP to report to the register courts about the enterprises not having done any payments (Article 25 of LFME). In addition, in such cases APP also has to report to the Tax Administration Office and return non-executable decrees for coercive settlement (Article 54 of the Law on Taxing Proceedings, 1996), as also to report to the courts and return the decrees for non-executable involuntary collection (Article 147 of the Law on Enforcement and Insurance, 1998). The obligation is tied to performing payments and not, as one would reasonably thing to blocked status of the account. There always exists the possibility of paying a small amount once in a year and consequently not qualify for the APP list

^{††††††††} Autonomous actions of the boards are calculated by subtracting the filed restructuring and all types of bankruptcy procedures from the changes of the number of blocked accounts.

of enterprises to be submitted to the court. It is obvious, that in August 2001 3,426 enterprises set such a strategy into operation. Their amounts due summed up to 22.1 billion of Slovene tolar (\$ 91 million), which represented 75 percent of all unmet financial liabilities.

Hypothesis 1 and hypothesis 2 can be rejected only in part. The number of bankruptcy cases as also number of deletions from the register increased significantly, but the LFME did not consistently consider all the non-functioning enterprises.

5. Restructuring

The Strategies of Restructuring

In theory the restructuring strategies are commonly divided into defensive and strategic (Prasnikar, Svejnar and Domadenik and Chowdhury and Lang, 1996). Regardless of the strategy employed, first step always comprises of gaining financial stability. Restructuring of financial liabilities is crucial, as enterprises in financial distress often find themselves overindebted. Creditors are only willing to approve the plan if there is a sound restructuring plan to be followed and the sufficient probability of long-term survival exists.^{*****} Usually, the existing liabilities are in part paid-off, some are reprogrammed to the more long-term ones, some written-off and some converted into the equity (Salerno et.al., 2001). Consequently, immediate improvement in performance is achieved, although it is by itself not a stable one. It is based on extraordinary items of the balance sheet.

^{*****} The Slovene obligatory framework for the restructuring plan is defined in Article 47 of the LRBL (1993).

Defensive Restructuring

Defensive restructuring is based on two basic strategies. Those are cost-reducing strategies and asset-reducing strategies.

Enterprises try to lower higher costs in comparison to peers regarding to their cause. They can be a consequence of either disadvantageous relative position, where the enterprise can not reach the extent of exploring the economy of scale, or absolute position, when peer enterprises have better access to resources. Additionally, too wide a diversification of activities, inefficient organizational structures^{§§§§§§§§}, inefficiencies by managing assets and regulation could also be the cause (Slatter, 1984).

Variable costs are normally dealt with in relatively short period and in quite large an extent. Strategies to follow include negotiations about the prices of the materials, searching for supplementary suppliers, optimization of inventories and ordering processes, better utilization of material and use of alternative inputs. Definitely, an important role plays lowering the costs of labor per employee (DePamphilis, 2001). That can be achieved by increasing the productivity and by lowering total amount of paid wages, perks, bonuses, etc. The later can include hard situations of firing, introducing night shifts, lowering the absolute paychecks and bonuses, moratoriums on wage increases, reemployments among the enterprises of the same holding or a group, incentives to retire early, incentives to voluntarily leave, etc. The productivity on the other hand, can be improved by changing the leadership style, making changes in organizational scheme, introducing incentive plans bound to performance or efficiency, changed methods, improved working conditions, employment of proper

^{§§§§§§§§} The inefficient organization structure effect most the level and distribution of fixed costs (Slatter, 1984).

recruitment procedures and continuous education of the employees (Slatter, 1984). The later already partly integrates into strategic restructuring strategies. Lowering the fixed costs, like overhead, marketing, distribution, R&D, etc., is also of great importance, but before taking them to grips greater amount of reasoning is required. Some of those costs have large demonstrative effect. On the other hand though, some of them are vital for long-term survival and sufficient competitive position of the enterprise.

Asset reducing strategies mainly include techniques for improving efficiency of asset management - achieving higher turnovers, which basically means gaining better control over the processes and selling-off worse performing units or assets. The later is specially the case when the enterprise not solely faces financial, but also economic distress (Gertner and Sharfstein, 1991), while there are lots of excessive assets due to the movement of the investment opportunity curve (Kang and Shivdasani, 1997). Since the beginning of eighties it has been quite common for management to buy the divested unit or asset (Altman, 1983). In the field of managing the current assets enterprises study the possibilities of decreasing the stock of inventories, sell-off of the receivables, changing less reliable suppliers in order to avoid building the safety stock, make analyses of payment habits, try to negotiate longer payment periods, etc (Slatter, 1984). In the crisis also the possibility of sale-and-lease-back could be of great value (Brigham and Houston, 1998).

Strategic Restructuring

Strategic restructuring is actually represented by strategies of generating revenue. The cornerstone of those is general marketing strategy, which is subdivided into smaller segments. At that part enterprises analyze the possibilities of price changes in order to

explore as large a consumers' surplus as possible, set the policy of volume and special discount pricing, determine the optimal payment periods and focus on the major customers. In theory one can also find changing of product range, investing in human capital and R&D, setting merger, acquisition and growth strategies with combining the synergic effects as part of strategic restructuring (Buccino, 1993, Chowdhury and Lang, 1996 and Slatter, 1984).

Combining the Strategies

The decision upon a choice of appropriate strategies is primarily dependant on the degree of the crisis the enterprise faces. At times when the enterprise performs close to the break- even point, employing just cost-reducing strategies could provide it with sufficient improvements in performance. When one faces more of a distress, she could recognize, that employment of additional - revenue generating strategies is a prerequisite of achieving stable operations and consequently the sound performance. At the times when there are signs of acute economic distress, finally all the strategies of divesting units/assets have to be called for. Acting in such a way, enterprises refocus on the main activities, strengthen position on the market and therefore achieve better operational results. Slatter (1984) argues, that the harsh situation sometimes even forces to sell-off the most profitable units of the enterprise. One could easily observe that in European telecommunication industry at the turn of the century.

The economies in transition have since the beginning of the nineties employed too large an extent of assets regarding their competitive capacity. Enterprises in these countries have thereafter faced significant loss of foreign markets and simultaneous liberalization of domestic ones (Svejnar, 1999). They have employed too many employees and have not been in the position of competing with much more

productive foreign enterprises. When one additionally considers the fact, that the majority of the products of those enterprises, according to Pucko and Lahovnik (1997) lies on the mature part of the product life cycle curve – 67 percent, and only 2 percent of them are at the market-introduction stage, then it becomes obvious that strategies, which are normally quoted to be applied at latest, are thereby given far greater meaning. Therefore, the strategies of divesting units/assets are expected to represent an usual building block of restructuring plans in many enterprises in Slovenia.

On the choice of the sequencing the strategies causes of crisis, divergence and the power to negotiate of different interest groups in the enterprise, attributes of the previous functioning, type of industry itself, cost structure, etc., also play important roles (Slatter, 1984). However, no matter what strategies and their sequence, of greatest importance is the possibility to control for the effects of the strategies employed and to react when correction are needed to be done.

DiNapoli and Fuhr (1999) and Buccino (1993) argue that a restructuring process is a gradual one, and that results are to be achieved in subsequent steps. At first, the measures to achieve financial centralization and to restore stability of operations are needed. In that stage it is prerequisite to cut all the unnecessary costs. Managing the enterprise at that stage requires a good knowledge of cash flow statement, because balance sheet and income statements are for some months of secondary importance only. Namely, out of cash almost surely also means out of operation (Salerno et.al., 2001). At the second stage thorough analysis of permanent and sustainable rent-seeking is in place. At the last one however, organizational and financial repositioning has to be achieved. In the normal circumstances, owners are the ones to govern the

enterprise. For the situation of distress and restructuring it holds on a contrary, that the governing power is transferred to the main bank (Gophinath, 1995 and Gilson, 1990). Many authors agree that is a case in very different financial frameworks also, i.e. regardless of more or less market versus bank orientation.*****

6. Results

At the end of the year 1999 – a month before LFME was made effective, there were large differences between the two groups of enterprises. The distressed enterprises earned relatively much lower revenues and on average had value of loss six times bigger than the value of net income. On average they employed more employees and used almost double amount of fixed assets and achieved only half of labor productivity of the control enterprises.††††††††

The distressed enterprises performed significantly worse than the control ones by all ratios used. Differences were significant at less than one percent. The only ratio by which level was somewhat above three percent was the contributed capital to total equity capital - *CC* ratio. The distressed companies had lower current and quick coefficients, used more debt financing and poorly managed their assets – inventory, fixed as well as total assets. The receivables turned into money less frequent, as the customers were paying them at a somewhat slower pace.

The analysis of impact of the LFME that follows is based on testing the differences in values of ratios in the year 1999 – before the legislation was put into effect, and in the year 2000 – a year post-legislation. The null hypotheses assume same amounts of

***** Allen and Gale (2000) cover the comparison of different financial systems.

†††††††† Median of the first group exceeds median of the second one.

changes between the two groups. Having in mind a new burden - liability on the boards of directors and supervisory boards, one could expect greater effects by those enterprises facing financial distresses at the enactment of the LFME comparable to the control enterprises.

The Ability to Pay and Capital Adequacy

By all Slovene larger enterprises the level of working capital in general increased by approximately five percent in the year 2000 (Appendix 3, Table 6). Empirical tests could not reveal any statistically significant changes between the financial distressed and control enterprises. Therefore, the former did not manage to increase neither current nor quick ratio by more than the later. In fact, the ratios increased by a slightly smaller extent. Large and partially middle enterprises did the major improvement, measured by the coverage of short-term liabilities. Differences were significant only by quick ratio in the first year though. In the second year ratios worsened, especially to enterprises facing financial distress at the time of the LFME enactment.

Therefore, hypothesis 3 can not be regarded as invalid as a whole. The ability to pay in general increased, but in the largest extent by large and middle enterprises. In addition to smaller initial increase in the first year by the distressed enterprises, their ability to pay further worsened in the following year.

Capital Structure

The ratio of contributed capital didn't significantly change during the year of the LFME enactment (Appendix 3, Table 7). There were no changes in the values of the CC ratio in either year worth paying attention to for the whole and separate groups of control enterprises. Financial distressed enterprises though, demonstrated different

extent of changes, but in the year 2000 significant by small and middle enterprises only. In the following year differences are significant by micro enterprises also. Large, though insignificant difference for the group as a whole, is a result of huge effect in the group of large distressed enterprises. The reason for insignificance could be due to large degree of varying.

The decrease of the contributed capital ratio for the group of large enterprises could be the consequence of the large-scale write-offs and the following surge in extraordinary income. It is reasonable to assume that large companies more often used the measure of decreasing the level of common stock. All smaller groups of companies moderately increased the *CC* ratio.^{*****} The results point to the notion of different position of different size groups of enterprises. Smaller enterprises had to allow for the debt-to-equity swaps when achieving the write-offs. Additionally, there were large significant differences in 2001 by the micro and moderate, also significant effects by the middle enterprises. Distressed enterprises increased the *CC* ratio more than the control enterprises in both groups. For the micro enterprises that could be the result of significant loss of revenue already mentioned when describing the direct effects of the LFME. The owners of those enterprises were also very likely to be persuaded to provide for additional capital. The results support the previous findings of their weaker power to negotiate.

The large financial distressed enterprises statistically significant lowered the leverage – increased the equity to total capital ratio. *ETC* increased by 4.26 percentage points in the year 2000 and by 6 percentage points in the year 2001 (Appendix 3, Table 7).

^{*****} Except micro in the year 2000, whose *CC* ratio insignificantly decreased.

The ratios, additionally supporting increased *ETC* ratio are increased current - *CR* and quick ratio - *QR*. The changes in the return to equity – *ROE*, adjusted return to equity – *AROE* and adjusted net income to sales – *ANIS*, show that enterprises in financial distressed from all size-groups recorded large amounts of extraordinary income. §§§§§§§§

The financial distressed enterprises increased the common stock by 5.5 percent in the year 2000, which was approximately twice as much as by the control group. Obviously, the total amount – gross amount of capitalizations was larger, as enterprises also had to comply with the LE and decrease the amount of common stock. For their exact extent one would have to precisely study the records of assembly meetings. That kind of analysis would provide for the gross effects of capitalizations. The changes in the capital structure and profitability ratios show that increase in the common stock is mainly due to debt-to-equity swaps and not to large-scale capitalizations of the owners, especially by the small and middle enterprises. That imposes an obstacle in rejecting the hypothesis 5.

Efficiency and Labor Productivity

All the tests confirm the statistical significance of changes by the ratios of efficiency between the two studied groups (Appendix 3, Table 8). The financially distressed enterprises managed total assets relatively more efficient than the control ones. However, both groups recorded lower turnovers, demonstrating weakened control over the total assets in the year 2000. The differences were also significant by fixed assets turnover. The enterprises with the financial distress manage to increase the

§§§§§§§§ Alternative ratios exhibit more negative values than commonly used ratios, showing the large impact of extraordinary items.

fixed assets turnover ratio, while the control enterprises recorded lower values of the ratio. The same dynamics repeated itself in the year 2001. The effects of higher efficiency are almost entirely due to micro enterprises, regardless of the fact that those enterprises encountered most problems with the loss of sales. They seem to be relatively more efficient in sell-offs. Two years after legislation was enacted, the differences became smaller. That is aligned with the theoretical framework stating that larger enterprises need more time to react to the encountered financial difficulties (Chowdhury and Lang, 1996 and Buccino, 1993).

If the middle and large financially distressed enterprises were relatively less efficient in managing the fixed assets, but they performed better within the current assets management though. Their inventory turnovers and profitability of inventory investment, measured by *GMROI*, increased more in larger size-group, even more in a two years time post-legislation. Managing the current assets was on the other hand poor within the group of micro enterprises, although financially distressed micro enterprises performed slightly better than control micro ones. Less efficient current asset management caused total asset turnovers to worsen, as the current assets represent the majority of total assets of the micro enterprises.

The enactment of the LFME didn't bring much better performance of the financially distressed firms. They somehow managed to improve the current asset management. In the largest extent they adopted to the sharpened circumstances by lay-offs. Micro enterprises decreased the average number by one employee, which meant about ten percent of all workforce employed. Despite relatively sizeable correction, those enterprises didn't demonstrate higher productivity (Appendix 3, Table 9). They despite lower proceeds from sales though, managed to increase sales per

employee.***** That points to the possible cause for the lower productivity – higher costs. In the next – year 2001, there was another decrease in the productivity in the group of micro enterprises.

According the coincidence of lay-off and large amounts of extraordinary income it is plausible to assume that the later caused the former. Enterprises were forced to reduce the redundant workforce if they were to achieve the preferable settlement and reprogramming arrangements with the creditors. They made it to the first precondition. Besides those two most obvious effects, next steps, usually written in those arrangements could not yet be put into effect so far and therefore tests do not reveal much differences between the two groups. On the other hand, large enterprises need more time to restructure, as do their smaller counterparts (Chowdhury and Lang, 1996 and Buccino, 1993). Confirmation of these in Slovene economy seems to especially happen in the fixed assets management framework. Putting all together, one could argue though, that post-legislation the large enterprises achieved greater restructuring improvement. Reasons for that she could easily find in their to-a-large-extent-greater negotiation power.

Profitability

As by the efficiency measures, many statistically significant differences also occur in the profitability framework (Appendix 3, Table 10 and Table 11). *EBITDAS* significantly worsened for the group of small enterprises and significantly improved for the group of large enterprises. On the one hand, large enterprises, which to the largest extent reduced the number of employees, recorded significantly lower labor costs. On the other, however, greater positive differences between mean and the

***** The increase was much smaller than by the control group of enterprises.

median value by the distressed enterprises further confirm the explanation that the sales proportionately decreased in the group of smaller enterprises. Statistically significant changes by the *ROA* are consequence of more efficient management by the distressed enterprises. The effects are somehow smaller if one accounts for greater amounts of greenfield investment by the control group. The differences are smaller by the ratio *ROABDA*, defined as cash flow measure of rate of return on total assets. Namely, the ratio excludes higher levels of depreciation due to new market valued fixed assets. Relations were still very similar in a year 2001. Control enterprises to some extent additionally worsened the situation. Mostly, the differences are still significant.

The write-offs of claims i.e. liabilities of enterprises facing financial distress brought about large extent of extraordinary income. That caused the ratios measuring the adjusted profitability to be much worse than at the first glance one could observe by the conventional ones. On a basis of testing the ratios of ability to pay, capital structure, efficiency/profitability and profitability, she could further argue that the effects of the studied legislation in Slovene economy are not very impressive. In the year 2001 the gap between ordinary and extraordinary items in the income statement narrowed. Especially micro enterprises achieve the greatest improvement in the field. The situation worsened for the small and middle enterprises. The theory only for the next periods assumes better adaptation of all enterprises to the financial distress. That should will have been done via lower costs, more extensive asset sale-offs, more narrow focusing on the main activities and strengthening of strategic management.

The last argument concerning the relationship between ordinary and extraordinary item is put in the following way. Larger relative differences between both profitability measures by the financially distressed enterprises and their control counterparts, could also be the result of larger amount of reservation write-offs.^{††††††††} However, the analysis shows this was actually not the case. Comparison of the increases of the average amounts of extraordinary income as a part of total income and the average amounts of reservation write-offs as a part of total income demonstrates, there were even significant less reservation written-offs in the group of financially distressed enterprises.^{††††††††} The same conclusion one could also draw from the analysis of relations between conventional *NIS* and adjusted *ANIS* for the two groups between the years as well as between conventional and adjusted *ROE*.

7. Discussion and Conclusion

Empirical testing reveals that Slovene enterprises facing financial distress didn't exhibit significant improvement in the period of two years post-legislation. However, two the most frequently used measures were write-offs and lay-offs. Smaller enterprises to some extent managed fixed assets more efficiently than their larger counterparts, which is not to support the typical argument of financial lack available for smaller firms. When achieving settlement with creditors, smaller enterprises had to also be in accordance with debt-to-equity swaps. Larger enterprises exhibit somewhat larger improvements on some segments of operation in the second year post-legislation, but majority of them does not show many signs of rigorous actions

^{††††††††} According to Slovene Accounting Standards the category of extraordinary income (AOP 081) comprises reservation write-offs (AOP 082) and other extraordinary income (AOP 083).

^{††††††††} The ratio fell by about 0.15 of a percentage point, while the ratio of extraordinary income increased by 2 percentage points.

being undertaken. That may support the arguments they need more time to restructure (Chowdhury, Lang, 1996) or that they have court procedures pending.

Besides, there are two other rigorous research papers dealing with restructuring of enterprises in Slovene transitional economy. Domadenik, Prasnikar and Svejnar (1999) and Prasnikar, Svejnar and Domadenik (2000) presented factors determining restructuring actions and subsequent achievements in the field in the period 1996-98, but they included small sample of enterprises only. The paper tests for the restructuring activities of the whole economy with emphasis on distressed enterprises. Prasnikar, Svejnar and Domadenik (2000) examined 130 enterprises which underwent the privatization procedure between 1993 and 1995. Regardless of the fact of being to a large extent export-oriented, defensive restructuring strategies relied heavily on rigidity and slowly paced restructuring of labor contracts. Workforce was proved to be a quasi-fixed asset. Strategic restructuring was also just moderate even not significant in all the segments. The greatest achievement that narrows the gap between the Slovene and western enterprises seems to be in investing cash flow into fixed assets. Namely, the ratio of revenue to capital shows as significant. However, in that period even largest Slovene firms still faced well-known investment-wages trade-off in transition economies.

Research that takes all the enterprises in Slovene economy into consideration sheds light on a degree of efficiency of the legislative provisions in the case of Slovenian evolution in transitional circumstances. It also provides for valuable insights for policymakers in other economies facing gradual transition toward more market-oriented economies.

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Appendix 1

Figure 1: Separation of Enterprises by Size

All enterprises				
Functioning Enterprises				
The smallest	Larger Enterprises			
	Micro	Small	Middle	Large
Employees: less than 5	Employees: 5 to 20	Employees: 21 to 50 Revenue: less than \$ 1,42 mio (280 million SIT) Total Assets: less than \$ 0.71 mio (140 million SIT)	Employees: 51 to 250 Revenue: less than \$ 5.58 million (1,100 billion SIT) Total Assets: less than \$ 2,97 million (550 million SIT)	Employees: more than 250 Enterprise can neither be classified as micro, small nor middle
Nonfunctioning Enterprises				

Note: Threshold values are transformed into dollars using the official exchange rate of Bank of Slovenia on December, 31 1999 (1 \$ = 197 SIT).

Source: Author.

Appendix 2

Table 1: Variables used in the Analysis

	Symbol	Variable
1	<i>aop008tl</i>	<i>Current Assets</i>
2	<i>aop009tl</i>	<i>Inventory</i>
3	<i>aop011tl</i>	<i>Work in Process</i>
4	<i>aop012tl</i>	<i>Finished Goods</i>
5	<i>aop013tl</i>	<i>Merchandise goods</i>
6	<i>aop014tl</i>	<i>L-T Accounts Receivable</i>
7	<i>aop015tl</i>	<i>S-T Accounts Receivable</i>
8	<i>aop021tl</i>	<i>Equity</i>
9	<i>aop022tl</i>	<i>Common Stock</i>
10	<i>aop023tl</i>	<i>Additional Paid-in Capital</i>
11	<i>aop025tl</i>	<i>Retained Earnings from Previous Years</i>
12	<i>aop031tl</i>	<i>L-T Liabilities/Debt</i>
13	<i>aop032tl</i>	<i>S-T Liabilities</i>
14	<i>aop034tl</i>	<i>Notes Payable</i>
15	<i>aop035tl</i>	<i>Accruals/Prepaid Expences</i>
16	<i>aop050tl</i>	<i>Revenue</i>
17	<i>aop060tl</i>	<i>COGS without Labor Cost</i>
18	<i>aop064tl</i>	<i>Cost of Labor</i>
19	<i>aop072tl</i>	<i>EBIT (Earning before Interest and Taxes)</i>
20	<i>aop073tl</i>	<i>LBIT (Loss before Interest and Taxes)</i>
21	<i>aop079tl</i>	<i>Profit from Regular Activities</i>
22	<i>aop080tl</i>	<i>Loss from Regular Activity</i>
23	<i>aop090tl</i>	<i>NI (Net Income)</i>
24	<i>aop091tl</i>	<i>NL (Net Loss)</i>
25	<i>aop092tl</i>	<i>Average Number of Employees</i>
26	<i>CPIFF00</i>	<i>Price Index for Flows in Year 2000</i>
27	<i>CPISF00</i>	<i>Price Index for Stocks in Year 2000</i>

Note: Variables ending by “tl” represent the item in the year 2000, the ones ending by “pl” however in the 1999.

Source: Decree on Compulsory Submission of Statistical Data..., Official Gazette of the RS, No. 8/95 and 11/95, Author.

Table 2: Liquidity Ratios §§§§§§§§§§

	Ratio	Formula
1	<i>CR00</i>	$\frac{aop008tl - aop014tl}{aop032tl + aop035tl}$
2	<i>QR00</i>	$\frac{aop008tl - aop014tl - aop009tl}{aop032tl + aop035tl}$

Source: Author.

§§§§§§§§§§ Ratio *CR00* represents current ratio for the year 2000.

Table 3: Ratios of the Capital Structure

	Ratio	Formula
3	<i>CC00</i>	$\frac{aop022tl + aop023tl}{aop021tl}$
4	<i>ETC00</i>	$\frac{aop021tl}{aop021tl + aop031tl + aop034tl}$

Source: Author.

Table 4: Efficiency and Productivity Ratios

	Ratio	Formula
5	<i>ARTO00</i>	$\frac{aop050tl * (1 + CPIFF00)}{aop015tl + aop015pl * (1 + CCISF00)}$
6	<i>ITO00</i>	$\frac{aop060tl * (1 + CPIFF00)}{aop009tl + aop009pl * (1 + CCISF00)}$
7	<i>GMROI00</i>	$\frac{aop050tl - aop060tl - aop064tl}{aop050tl} * \frac{aop060tl}{aop009tl + aop009pl * (1 + CPISF00)}$ $\left(1 - \frac{aop050tl - aop060tl - aop064tl}{aop050tl} \right)$
8	<i>FATO00</i>	$\frac{aop050tl * (1 + CPIFF00)}{aop003tl + aop003pl * (1 + CCISF00)}$
9	<i>ATO00</i>	$\frac{aop050tl * (1 + CPIFF00)}{aop019tl + aop019pl * (1 + CCISF00)}$
10	<i>SE00</i>	$\frac{aop050tl}{aop092tl}$
11	<i>AE00</i>	$\frac{aop019tl}{aop092tl}$
12	<i>PR00</i>	$\frac{aop060tl + (aop012tl - aop012pl) + (aop013tl - aop013pl) + (aop011tl - aop011pl)}{aop092tl}$

Source: Author.

Table 5: Profitability Ratios

	Ratio	Formula
13	<i>EBITDS00</i>	$\frac{aop050tl - aop060tl - aop064tl}{aop050tl}$
14	<i>NIS00</i>	$\frac{aop090tl - aop091tl}{aop050tl}$
15	<i>ANIS00</i>	$\frac{(aop079tl) * 075}{aop050tl}$, when profit from regular operations is positive; $-\frac{aop080tl}{aop050tl}$, when profit from regular operations is negative.
16	<i>ROA00</i>	$\frac{(aop072tl - aop073tl) * (1 + CPIFF00)}{aop019tl + aop019pl * (1 + CPISF00)}$ 2
17	<i>ROABDA00</i>	$\frac{(aop050tl - aop060tl - aop064tl) * (1 + CPIFF00)}{aop019tl + aop019pl * (1 + CPISF00)}$ 2
18	<i>ROE00</i>	$\frac{(aop090tl - aop091tl) * (1 + CPIFF00)}{aop021tl + aop021pl * (1 + CPISF00)}$ 2
19	<i>AROE00</i>	$\frac{(aop079tl) * 075 * (1 + CPIFF00)}{aop021tl + aop021pl * (1 + CPISF00)}$, when profit from regular operations is positive ; $\frac{-(aop080tl) * (1 + CPIFF00)}{aop021tl + aop021pl * (1 + CPISF00)}$, when profit from regular operations is negative.

Source: Author.

Appendix 3 - Results of Empirical Testing for Indirect Effects of the LFMoE *****

Table 6: Effects of the Law about Financial Management of Enterprises on Ability to Pay

			Δ (2000-1999)		Δ (2001-1999)		
			CR	QR	CR	QR	
<i>t-test</i> (averages of differences in values)	All Enterprises	Financial Distressed	0,0565	0,0410	0,0456	0,0329	
		Control Enterprises	0,0723	0,0689	0,1203	0,1008	
	Micro	Financial Distressed	0,0075	0,0040	0,0247	0,0315	
		Control Enterprises	0,1119	0,1044	0,1620	0,1320	
	Small	Financial Distressed	0,0742	0,0958	-0,0136	-0,0155	
		Control Enterprises	0,0549	0,0426	0,0953	0,0729	
	Middle	Financial Distressed	0,1167	0,0536	0,0959	0,0395	
		Control Enterprises	0,0003	0,0061	0,0997	0,0901	
	Large	Financial Distressed	0,1127	0,0812	0,0988	0,0881	
		Control Enterprises	-0,0419	-0,0302	-0,0462	-0,0248	
	<i>Wilcoxon W</i>	All Enterprises		-	-	-	-
		Micro Enterprises		-	-	-	-
Small Enterprises			-	-	-	-	
Middle Enterprises			-	-	-	-	
Large Enterprises			-	*	-	-	
<i>Discriminant Analysis</i> (unstandardized coefficients)	All Enterprises		-	-	-	-	
	Micro Enterprises		-	-	-	-	
	Small Enterprises		-	-	-	-	
	Middle Enterprises		-	-	-	-	
	Large Enterprises		-	-	-	-	
<i>Logistic Regression</i> (coefficients)	All Enterprises		-	-	-	-	
	Micro Enterprises		-	-	-	-	
	Small Enterprises		-	-	-	-	
	Middle Enterprises		-	-	-	-	
	Large Enterprises		-	-	-	-	

Sources: Database of blocked accounts of APP, 1999, 2000; GVIN Database, 1999-2001; Database of financial statements of APP, 1998-2000; Author.

Table 7: Effects of the Law about Financial Management of Enterprises on Capital Structure

			Δ (2000-1999)		Δ (2001-1999)		
			CC	ETC	CC	ETC	
<i>t-test</i> (averages of differences in values)	All Enterprises	Financial Distressed	-0,3694	0,0003	0,6318	0,0121	
		Control Enterprises	0,0722	-0,0003	-0,0108	-0,0040	
	Micro	Financial Distressed	-0,1919	-0,0074	1,0095	0,0189	
		Control Enterprises	0,0429	0,0034	-0,0124	0,0010	
	Small	Financial Distressed	0,2170	-0,0046	0,6299	-0,0022	
		Control Enterprises	-0,0150	-0,0099	0,0472	-0,0174	
	Middle	Financial Distressed	0,1741	-0,0024	0,3120**	-0,0150	
		Control Enterprises	0,0097	0,0008	-0,0068**	-0,0010	
	Large	Financial Distressed	-2,9027	0,0426	-0,1052	0,0604	
		Control Enterprises	0,3471	-0,0158	-0,0376	-0,0244	
	<i>Wilcoxon W</i>	All Enterprises		-	-	*	-
		Micro Enterprises		-	-	-	-
Small Enterprises			-	-	-	-	
Middle Enterprises			-	-	*	-	
Large Enterprises			-	*	-	*	
<i>Discriminant Analysis</i> (unstandardized coefficients)	All Enterprises		-	-	0,304**	-	
	Micro Enterprises		-	-	0,415**	-	
	Small Enterprises		2,371*	-	-	-	
	Middle Enterprises		-1,174**	-	-	-	
	Large Enterprises		-	6,681*	-	5,028**	
<i>Logistic Regression</i> (coefficients)	All Enterprises		-	-	-	-	
	Micro Enterprises		-	-	0,540*	-	
	Small Enterprises		-	-	-	-	
	Middle Enterprises		-	-	-	-	
	Large Enterprises		-	6,989**	-	4,101**	

Sources: Database of blocked accounts of APP, 1999, 2000; GVIN Database, 1999-2001; Database of financial statements of APP, 1998-2000; Author.

***** Significance in the tables below is marked as follows:
 '* - Significant at less than 5 %; '** - Significant at less than 1 %; ' - Not significant.

Table 8: Effects of the Law about Financial Management of Enterprises on Operating Efficiency

		Δ (2000-1999)					Δ (2001-1999)				
		ARTO	ITO	GMROI	FATO	ATO	ARTO	ITO	GMROI	FATO	ATO
All Enterprises	Financial Distressed	-0,8674	-2,4942	-0,9334	0,2346	-0,1388**	-1,4131	6,0690	-0,1029	3,8785	-0,1346**
	Control Enterprises	-6,7147	-20,199	-1,9952	-0,9892	-0,2825**	-8,1934	-5,1833	-2,9435	0,3346	-0,4103**
Micro	Financial Distressed	-1,0961	-6,3227	-2,9146	1,5139	-0,2151*	-2,2500	-8,1396	-4,0179	8,1157	-0,2120**
	Control Enterprises	-9,1294	-18,5755	1,3347	-1,0433	-0,3326*	-11,8840	-35,0645	-5,1303	1,7349	-0,4815**
Small	Financial Distressed	-0,3057	1,6419	-0,2782	-1,3909	-0,0674**	0,4345	17,2571	-0,7754	1,4132	-0,03608**
	Control Enterprises	-3,0504	9,2983	4,1731	0,0871	-0,295**	1,3980	-31,3885	0,4577	0,5718	-0,4471**
Middle	Financial Distressed	-0,7451	-1,5329	1,0083	-0,6148	-0,0816*	-0,9946	19,7047	5,1764	-0,0557	-0,0830**
	Control Enterprises	-1,7186	-23,8198	-9,6929	0,7006	-0,1709*	-1,9733	142,1759	12,1390	-2,5217	-0,2653**
Large	Financial Distressed	-0,9619	1,6243	0,3919	-0,8673	-0,0446	-1,6036	1,9308	0,0902	-0,0672	-0,0865
	Control Enterprises	-1,9397	-33,6068	-9,5905	-3,2761	-0,1412	-2,4639	-39,2638	-11,8544	-3,3544	-0,2088
All Enterprises		**	**	*	**	**	**	**	-	**	**
Micro Enterprises		-	-	-	-	*	*	**	-	-	**
Small Enterprises		-	*	-	**	*	*	-	*	*	*
Middle Enterprises		-	-	**	-	-	-	-	**	-	*
Large Enterprises		-	-	*	-	-	-	-	-	-	-
All Enterprises		-	-	-	-	-0,545**	-	-	-	-	0,402**
Micro Enterprises		-	-	-	-	-	-	-	-	-	-
Small Enterprises		-	-	-	-	-	-	-	-	-	-
Middle Enterprises		-	-	-	-	-	-	-	-	-	-0,772*
Large Enterprises		-	-	-	-	-	-	-	-	-	-
All Enterprises		-	-	-	-	0,956**	-	-	-	-	-
Micro Enterprises		-	-	-	-	-	-	-	-	-	-
Small Enterprises		-	-	-	-	-	-	-	-	-	-
Middle Enterprises		-	-	-	-	4,063**	-	-	-	-	-
Large Enterprises		-	-	-	-	-	-	-	-	-	-

Sources: Database of blocked accounts of APP, 1999, 2000; GVIN Database, 1999-2001; Database of financial statements of APP, 1998-2000; Author.

Table 9: Effects of the Law about Financial Management of Enterprises on Labor Productivity

		Δ (2000-1999)			Δ (2001-1999)			
		SE	AE	PR	SE	AE	PR	
	All Enterprises	Financial Distressed	36,7913*	11270,5471	6634,3889	943,6169**	2403,7748	-94,0237**
		Control Enterprises	783,5663*	22562,8657	16841,1021	2031,3843**	4735,2390	-1529,6105**
<i>t-test</i>	Micro	Financial Distressed	-266,8982	3461,1854	-319,3779	334,8522*	2296,1987	-500,3297**
		Control Enterprises	817,6981	2222,1633	-939,1414	1775,0010*	4706,3897	-1960,1841**
	Small	Financial Distressed	16,8924	679,8017	-146,6857	890,9457	3152,0835	332,8722*
		Control Enterprises	21,0188	356,8552	-397,3349	645,0715	1441,4344	-265,3778*
<i>(averages of differences in values)</i>	Middle	Financial Distressed	221,2676	975,3564	-304,1406	1674,9009	1565,0699	246,9579
		Control Enterprises	-618,0857	1899,6817	-1500,4548	717,6925	4225,9085	-1521,7116
	Large	Financial Distressed	919,1148	1243,7119	246,7940	1773,0654	3498,0165	151,0928
		Control Enterprises	2667,1015	3458,4246	34,3355	5540,9396	7194,8096	-93,1438
All Enterprises		-	-	-	*	**	**	
Micro Enterprises		-	-	-	*	*	-	
Small Enterprises		-	-	-	-	-	*	
Middle Enterprises		-	-	-	-	*	-	
Large Enterprises		-	-	-	*	-	-	
All Enterprises		-	-	-	-	-	-	
Micro Enterprises		-	-	-	-	-	-	
Small Enterprises		-	-	-	-	-	-	
Middle Enterprises		-	-	-	-	-	-	
Large Enterprises		-	-	-	-	-	-	
All Enterprises		-	-	-	-	-	-	
Micro Enterprises		-	-	-	-	-	-	
Small Enterprises		-	-	-	-	-	-	
Middle Enterprises		-	-	-0,032*	-	-	-	
Large Enterprises		-	-	-	-	-	-	

Sources: Database of blocked accounts of APP, 1999, 2000; GVIN Database, 1999-2001; Database of financial statements of APP, 1998-2000; Author.

Table 10: Effects of the Law about Financial Management of Enterprises on Profitability (1)

			Δ (2000-1999)			Δ (2001-1999)			
			EBITDS	ROA	ROABDA	EBITDS	ROA	ROABDA	
<i>t-test</i> (averages of differences in values)	All Enterprises	Financial Distressed	-0,1992	0,0053*	-0,0094	-0,2737	-0,0050*	-0,0265	
		Control Enterprises	-0,6654	-0,0156*	-0,0296	-0,2157	-0,0245*	-0,0406	
	Micro	Financial Distressed	0,0305	0,0025	-0,0159	-0,0705	-0,0182	-0,0350	
		Control Enterprises	-0,0754	-0,0198	-0,0363	-0,3444	-0,0272	-0,0481	
	Small	Financial Distressed	-0,0287	0,0338	-0,0115	-0,0942	0,0343*	-0,0420	
		Control Enterprises	0,1149	-0,0217	-0,0225	0,1119	-0,0276*	-0,0422	
	Middle	Financial Distressed	-0,9257	-0,0091	-0,0046	-0,9050	-0,0112	-0,0032	
		Control Enterprises	-0,0137	-0,0058	-0,0189	-0,0124	-0,0190	-0,0305	
	Large	Financial Distressed	0,0293	0,0054	0,0096	0,0124	0,0052	-0,0234	
		Control Enterprises	0,0035	-0,0015	-0,0109	0,0041	-0,0161	-0,0146	
	<i>Wilcoxon W</i>	All Enterprises		-	*	*	-	**	*
		Micro Enterprises		-	-	-	-	-	-
Small Enterprises			*	-	-	-	**	-	
Middle Enterprises			-	-	*	-	*	-	
Large Enterprises			*	-	-	-	-	-	
<i>Discriminant Analysis</i> (unstandardized coefficients)	All Enterprises		1,277**	-	-	-1,070**	-	-	
	Micro Enterprises		-	-	-	-	-	-	
	Small Enterprises		-	-	-	-	-	-	
	Middle Enterprises		,444**	-	-	0,582**	-	-	
	Large Enterprises		-	-	-	-	-	-5,030*	
<i>Logistic Regression</i> (coefficients)	All Enterprises		-	-	-	-	-	-	
	Micro Enterprises		-	-	-	-	-	-	
	Small Enterprises		-	-	-	-	-	-	
	Middle Enterprises		-	-	-	-	-	-	
	Large Enterprises		-	-	-	-	-	-	

Sources: Database of blocked accounts of APP, 1999, 2000; GVIN Database, 1999-2001; Database of financial statements of APP, 1998-2000; Author.

Table 11: Effects of the Law about Financial Management of Enterprises on Profitability (2)

			Δ (2000-1999)				Δ (2001-1999)				
			NIS	ANIS	ROE	AROE	NIS	ANIS	ROE	AROE	
<i>t-test</i> (averages of differences in values)	All Enterprises	Financial Distressed	0,0097	-0,0179	-0,0108	-0,0521	-0,0413	-0,2576	-0,0119	-0,0332	
		Control Enterprises	-0,0056	-0,0010	-0,0669	-0,0682	0,3893	-0,5582	-0,1123	-0,0703	
	Micro	Financial Distressed	0,01379*	0,0103	-0,0496	-0,0594	-0,0218	-0,2882	-0,0069	0,3883	
		Control Enterprises	-0,0073*	-0,0009	-0,0798	-0,0786	0,6197	-0,7927	-0,1203	-0,0734	
	Small	Financial Distressed	0,0073	0,0070	-0,1119	0,1128	-0,0873	-0,1466	-0,1167	-0,9017	
		Control Enterprises	-0,0099	0,0011	-0,0541	-0,0939	0,0444	-0,0906	-0,0951	-0,1806	
	Middle	Financial Distressed	-0,0186	0,0140	-0,0496	0,0594	-0,0913	-0,2955	-0,0763	-0,1848	
		Control Enterprises	0,0007	-0,0035	-0,0798	-0,0786	-0,0314	-0,1413	-0,1433	-0,0594	
	Large	Financial Distressed	0,0555	-0,0166	0,0496	-0,0594	0,0475	-0,1868	0,2354*	0,0026	
		Control Enterprises	-0,0024	0,0005	-0,0798	-0,0786	-0,0660	-0,0717	-0,0463*	-0,0119	
	<i>Wilcoxon W</i>	All Enterprises		-	-	*	*	-	**	-	*
		Micro Enterprises		-	-	-	-	-	**	-	-
Small Enterprises			-	-	-	-	-	*	-	-	
Middle Enterprises			-	*	-	*	-	**	-	-	
Large Enterprises			-	*	-	-	-	**	-	-	
<i>Discriminant Analysis</i> (unstandardized coefficients)	All Enterprises		-	-	-	-	-	-	-	-	
	Micro Enterprises		-	-	-	*	-	-	-	-	
	Small Enterprises		-	-	-	-	-	-	-	-	
	Middle Enterprises		-	-	-	-	-	-	-	-	
	Large Enterprises		-	-10,817*	-	-	-	-	1,268**	-	
<i>Logistic Regression</i> (coefficients)	All Enterprises		-	-	-	-	-	-	-	-	
	Micro Enterprises		-	-	-	-	-	-	-	-	
	Small Enterprises		-	-	-	-	-	-	-	-	
	Middle Enterprises		-	-	-	-1,165*	-	-	-	-	
	Large Enterprises		-	-4,846*	-	-	-	-	-	-	

Sources: Database of blocked accounts of APP, 1999, 2000; GVIN Database, 1999-2001; Database of financial statements of APP, 1998-2000; Author.