Analysis of the Relation Between Liquidity and Selected Indicators From the View of Solvency in Selected Business Branches

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Abstract
From the view of the everyday operation of a company, the basic risk is customer´s insolvency. For this reason when analysing companies, it is necessary to mainly focus on securing of a liquid position of a company. Liquidity is usually measured by means of many indicators from which the most persuasive being considered quick ratio (L2 – acid test). The paper deals with the relation of liquidity and indicators which participate on the assessment of solvency of a company. The attention was drawn to the liability turnover time, claim turnover time and supplier credit time. The aim of the paper is to evaluate whether the situation of liquidity in the Czech Republic is similar to the situation in the rest of Europe and, whether the prolonged due date of liabilities is caused by the potential of insolvency or by unwillingness to pay. In this context we will verify the hypothesis that financial deferment of payments is caused by insufficient liquidity in individual business branches. A partial aim is a finding whether the global economic situation influences the development of liquidity. This fact will be verified on the relation of quick ratio L2 and development of gross domestic product in the Czech Republic from 2000 to 2011.

Keywords: liquidity, claims, liabilities, supplier credit time, development of the economic cycle
JEL codes: G30, G32

1. Introduction

Liquidity is important from the view of financial balance of a company as only a sufficiently liquid company is able to meet its obligations. On the other hand, too high level of liquidity is unfavourable for company owners because financial means are kept in assets not working in favour of considerable valorization of financial means and so they "cut off" from profitability. Thus it is important to preferably seek balanced liquidity that guarantees sufficient valorization of means as well as ability to keep one´s obligations. Out of the commonly used indicators, the indicator of quick ratio (L2 – acid test) will be used for the analysis. In the relation to liquidity it is also necessary to consider business-credit policy as it also seeks a demonstration of potential of secondary insolvency. Activity indicators measure the efficiency of business activities and the use of sources according to rate of turnover of selected balance items, their analysis should enable us to search for answers to the question—how we manage the assets and how this management influences the rate of return and liquidity. In this category we will use indicators of liability and claim turnover times as well as supplier credit time.

Liquidity also has a direct sequence to the use of external sources of financing. Mutual relation between liquidity of a company and optimal leverage effect, thus the use of finance sources, has been a subject of studies for many years. Liquidity is perceived as an aspect that enables to grasp opportunities in unexpected investments in a better way, possibly to enable companies to outlast unfavourable business and economic conditions in a better way. Williamson (1988) and Shleifer and Vishny (2001) in their studies claim that there is a positive relation between liquidity of a company and the use of debt. On the contrary, Morellec (2001) and Myers and Rajan (1998) claim that the relation is seen as negative. The positive relation is explained by an idea that highly liquid assets are less efficient from the position of financial distress costs, as their sale (with the exception of finance) is realized with loss (we mainly speak about claims and stock). However, a lower level of liquid assets

increases the risk of not providing finances. If a manager wants to increase the value of debt under favourable conditions, he must have them covered by a sufficient volume of liquid assets.

Morellec assumes that liquidity of assets (i.e. ability to include them into sale of property when liquidating) decreases the value of a company and thus, it decreases its debt capacity, too. He also claims that disproportional liquidity of assets in a company leads to insufficient investments and problematic development of the company. On the contrary, Kim, Mauer and Sherman (1998) claim in their study that sufficient liquidity ex-ante cares for the availability of finance in the future in case of investment realization. They examined the relation in American industrial companies from 1975 to 1995. The explaining variables for the relation of liquid assets to the total book value of the company were: growth of investment opportunities, cash flow and its volatility, indebtedness and bankruptcy risk. According to their study, the positive relation between growth of investment opportunities and liquidity was verified. However, at the same time they found that there is a negative relation between indebtedness, or its growth, and liquidity of the company.

Opler, Pinkowitz, Stulz and Williamson (1999) also carried out an empirical analysis on a sample of American non-financial companies, but for a longer period of time – from 1952 to 1994. They came to the same finding regarding the relation to growth opportunities, however, they also verified the conclusion of Williams´ study (1988) regarding the positive relation between indebtedness and liquidity of the company. However, according to all these studies, the effect of liquidity is positive only when the managers have no decision-making powers regarding the sale of assets, which decreases the risk of expropriation of property. Sibilkov (2007) found that liquidity increases costs of managerial decision-making and that the influence of assets liquidity on the leverage effect is conditioned by a combination of secured claims and by direct relation between the effect of liquidity on the unsecured debt. He also confirmed that liquidity increases together with growth of indebtedness in highly indebted companies and in companies with low interest cover as well as in companies with low value of fixed assets to the value of unpaid debt.

We should also realize that higher liquidity decreases expected financial distress costs in creditors and thus, it enables companies to reach higher indebtedness ex-ante and it increases optimal volume of debt. This positive relation is in accord with some trade-off models of capital structure. Harris and Raviv (1990) claim that when choosing the right level of debt, investors seek for a compromise between the existing situation and the future expected situation under conditions of improvement of efficiency of company operating activities. Thus liquidity and efficiency are compared with contributions of debt financing. Besides, Anderson (2002) claims that companies with high liquid assets prefer higher level of indebtedness without changes in the property structure. He also confirmed the negative relation between short-term help and liquidity in case it comes in times when the company lacks cash. He focused on comparison of Belgian and British companies and in empirical studies he found out that 25 per cent of Belgian companies report a share of liquid assets above 23 per cent, while in Britain the same share of liquid assets is reported by only 14 per cent of companies.

The aim of the paper is to find out whether the situation from the view of liquidity and total solvency in the Czech Republic is the same as in the rest of Europe, and whether the prolonged due date of liabilities is caused by the potential of insolvency or by unwillingness to pay. Thus the main issue is whether higher liquidity may lead to lower probability of bankruptcies of companies.

2. Situation from the view of solvency in Europe and in the Czech Republic

A basic risk from the view of everyday operation of a company is a customer´s insolvency. It is a situation when a company is officialy considered as insolvent, mainly in the following cases (or analogy according to foreign laws):

- Court imposed bankruptcy of the debtor´s property;
- Court refused a proposal to bankruptcy imposition for shortage of the debtor´s property;
- Court confirmed a settlement between the debtor and supplier who suffered property damage;

- Supplier agreed on an officially certified settlement with the debtor out of court, while he suffered property damage;
- By executing the decision against the debtor, the insured claim was not fully paid.

Fast deterioration of insolvency development may be also seen in Europe. Western Europe has witnessed many cases of insolvency this year, the data of 2012 report the total of 177,000 cases of insolvency (which means increase by 2.7 per cent). As usual, the highest level of insolvency in companies is seen in France, where it is assumed that this year as well as in the next year the number of cases will increase by 12 per cent to the total of 62,7000. (Euler Hermes, 2008) However, last year—for the first time in five years—France reported a 2 per cent decrease in number of companies going bankrupt. In German companies the risk of irrecoverable claims also significantly increases, yet the growth of number of companies going bankrupt already stopped in 2010 and it has been decreasing since then. (Creditreform, 2012)

If we focus on Central and Eastern Europe, there were reported 72,630 bankruptcies in 2012, which is a 3.5% increase in comparison to 2011. The biggest year-on-year increase happened in Bulgaria (243.3 per cent), in Croatia (174.2 per cent) and in Slovenia (39.2 per cent). However, if we express the share of bankrupting companies in total number of economically active companies, then the biggest relative share was reported in Serbia (7.93 per cent), Romania (5.67 per cent) and in Hungary (3.84 per cent). The Czech Republic reported a year-on-year increase by 26.7 per cent (7,142 bankrupting companies in 2012), in a relative expression of number of economically active companies it means 0.47 per cent. When assessing the performance of individual economic branches we may reach the following results that are shown in Chart 1.

Figure 1 Contribution of key economic sectors to overall insolvency in Western Europe (right chart) and in Central and Eastern Europe (left chart)

Source: own calculations and processing based on branch analyses of the Ministry of Industry and Trade

It is obvious from the Chart that the biggest share of bankrupting companies in Western Europe is different from the biggest share in Central and Eastern Europe. The only common fact is just that trade and services create almost two thirds of the share of bankrupting companies. In Western Europe services with share of 38.2 per cent predominate, in Eastern Europe it is services including gastronomy. Shares in these key sectors are generalized in the pie chart, however the structure also differs in individual countries. For example, unlike the average values where services generally predominate, then in Spain, Portugal and Italy what predominates are bankruptcies in the processing industry which is considered as the most stable one, in France and Finland there are most bankruptcies in building. Services are dominant in Luxembourg, Germany and Denmark (Creditreform, 2013). In Eastern Europe the biggest increase in bankruptcies from the view of business branches was reported in the processing and building industries, although, as it was said, the greatest share is with trade.

The situation when the customer does not pay for the invoice on time is a frequent situation in the Czech as well as in foreign markets. Many companies deliberately dodge payments and try to escape from some of their suppliers. However, these companies are not overextended and it is not usually possible for them to go bankrupt. Thus it is a demonstration of unwillingness to pay which is usually defined as not paying for the claim by the debtor (even partial) before the defined time after the due date (unless there is a dispute over completeness or quality of the supply).
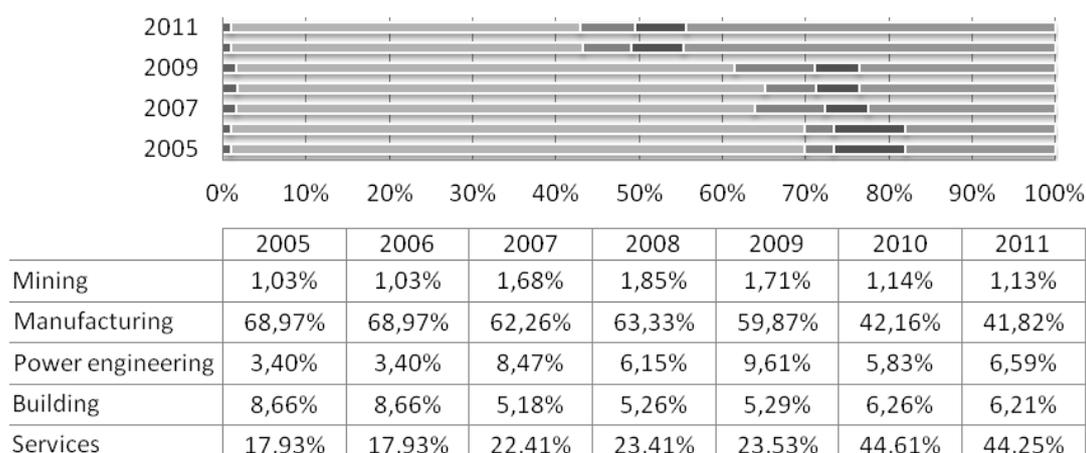
In the Czech Republic, there are 70 per cent of problematic businesses connected with unwilligness to pay, only the remaining 30 per cent with insolvency. However, compared to the last year in the Czech Republic, entrepreneurs and companies get paid three days earlier. Last year customers paid for goods and services after 72 days on average, this year it is 69 days. (Finexpert, 2011)Generally, according to the results of the analysis, the worst situation is in the health service. There is recoverability of claims up to 101 days there. However, in this area there has also been some improvement as this period was seven days longer last year. On the contrary, the most significant prolongation of payments may be registered in the food-processing industry, where the recoverability has prolonged by 13 days up to 82 days since last year. The analysis has also verified the ongoing recession in building where a supplier waits for his money for 80 days. Compared to the neighbouring countries, the Czech Republic is an average with its 69 days. (Finexpert, 2011) Considering payment practice of companies in the neighbouring countries, the best situation is in Germany which is one of the best in Europe in this view. German companies pay within 44 days on average, which is one day prior to the due date. Another country with a very good payment practice is Austria. There companies pay under the conditions agreed and they usually do it within 58 days. It is said that in Slovak companies we may observe a positive tendency in payments for claims. Last year they paid within 72 days on average, thus they equaled Czech companies. The worst results are in Polish companies—on average they pay within 3 months from issuing the invoice. (EurActiv, 2012)

The analysis of ČSOB Factoring shows that on average entrepreneurs and companies get paid within 76 days from delivery of goods or service. The statistics might significantly change next year. At the end of June the Government discussed a proposal of an amendment of the Commercial Code which should also consider the European directive 2011/7/EU. It states that invoices for goods and services will have to be paid within 30 days at the latest. In relations between entrepreneurs the debtor will have to pay for goods and services within thirty days from the moment when the creditor asks him/her. Entrepreneurs may agree on a different period, however, it may be longer than 60 days only when it is not "grossly unfair" to the creditor. (Peníze.cz) In the Czech Republic, it has been treated in an amendment of the Commercial Code since 1 July 2013.

3. Development of solvency in selected business branches in the Czech Republic

The following analysis deals with the development of solvency and business-credit policy in selected branches of the Czech economy. Some branches are monitored as agreggated and it may also be stated that a share of companies in individual branches varies. This is shown in Chart 2.

Figure 2 Structure of business branches in the Czech Republic from 2005 to 2011

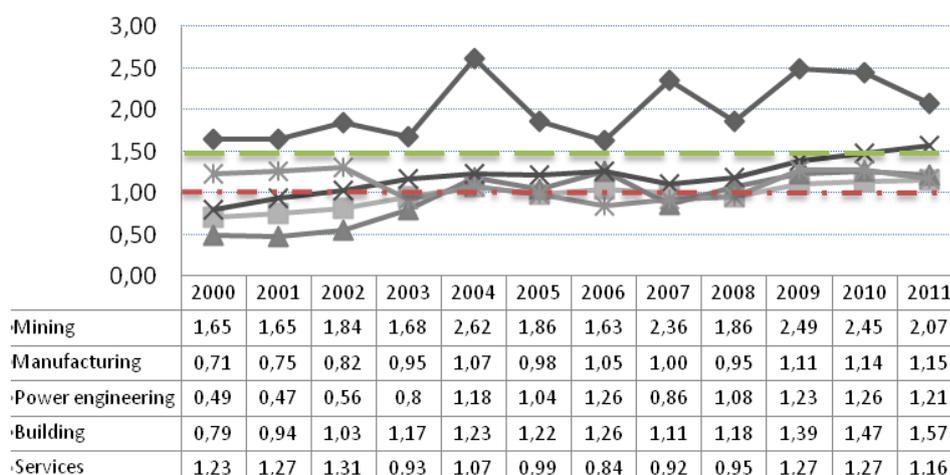|	2005	2006	2007	2008	2009	2010	2011
Mining	1,03%	1,03%	1,68%	1,85%	1,71%	1,14%	1,13%
Manufacturing	68,97%	68,97%	62,26%	63,33%	59,87%	42,16%	41,82%
Power engineering	3,40%	3,40%	8,47%	6,15%	9,61%	5,83%	6,59%
Building	8,66%	8,66%	5,18%	5,26%	5,29%	6,26%	6,21%
Services	17,93%	17,93%	22,41%	23,41%	23,53%	44,61%	44,25%

Source: own calculations and processing based on branch analyses of the Ministry of Industry and Trade

It is obvious from Chart 2 that in all monitored years, the processing industry has a significant position, although its share in total number of companies falls at time and thus, the share got from the value of 69 per cent to the value below 42 per cent. At time there is a significant increase in the share

of companies in services where the value from the level below 18 per cent in 2011 reached 44 per cent. For purposes of the analysis financial companies were not included in the category of services. In this context, a share of other branches is insignificant. This influences another analysis when the greatest scope from the view of influence of factors will be given to the processing industry and services. The structure corresponds to the number of companies registered in the relevant business branches as well as to the structure from the view of total assets of companies in individual business branches. A deviation of the two criteria in individual branches is maximum ± 1 %.

If we focus on the basic indicator related to the evaluation of liquidity, we shall work with the indicator of quick ratio (L2) as it is an indicator where stock convertible into cash with difficulties shall be excluded. The development of the indicator from 2000 to 2011 is documented in Chart 3.
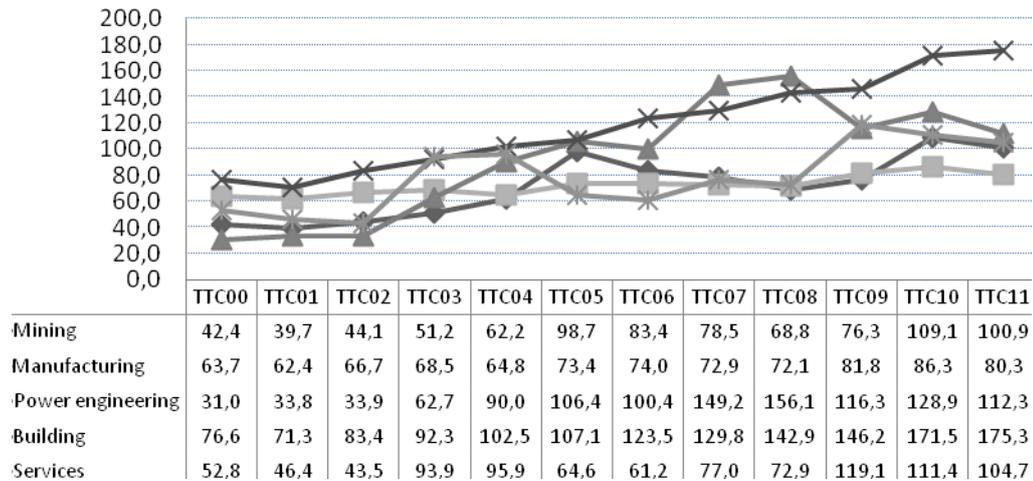
Figure 3 Development of L2 indicator in individual business branches in the Czech Republic from 2000 to 2011

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Mining	1,65	1,65	1,84	1,68	2,62	1,86	1,63	2,36	1,86	2,49	2,45	2,07
Manufacturing	0,71	0,75	0,82	0,95	1,07	0,98	1,05	1,00	0,95	1,11	1,14	1,15
Power engineering	0,49	0,47	0,56	0,8	1,18	1,04	1,26	0,86	1,08	1,23	1,26	1,21
Building	0,79	0,94	1,03	1,17	1,23	1,22	1,26	1,11	1,18	1,39	1,47	1,57
Services	1,23	1,27	1,31	0,93	1,07	0,99	0,84	0,92	0,95	1,27	1,27	1,16

Source: own calculations and processing based on branch analyses of the Ministry of Industry and Trade

Considering the development of liquidity, it is obvious from the Chart that since 2008 the values of quick ratio have been kept in the recommended range from 1 to 1.5 (it is marked by the lines in the Chart). There is an exception in the area of mining where the values are high above the level of the upper limit of the zone. Thus it might be concluded that companies in this branch will have potential problems with recoverability of financial means from claims or that companies in this branch keep excessive amount of cash. Both possibilities mean a problem as the first possibility may threaten companies with secondary insolvency and the latter possibility may decrease the efficiency of management of the entrusted financial means. An increasing tendency of L2 is also reported in building which reached above the value of 1.5 in the last year observed. In this branch, the problem lies on the side of the increasing value of claims according to the input parameters. Last year the other business branches reported almost identical values within the restricted recommended scope. At the same time, it results from the Chart and the text above that the increase in liquidity itself does not mean a lower rate of bankruptcies of companies. It also results from the development of liquidity that the problem will be the unwillingness rather than the insolvency, as there have been no extreme deficiencies reported in any of the business branches. However, the indicator itself does not have a sufficient information value because claims—which are a part of the numerator of the indicator—may also have a potential problem from the view of convertibility back into cash. Therefore, this part will be verified by a of the claim turnover time (TTC) and the liability turnover time (TTL) in the following charts.
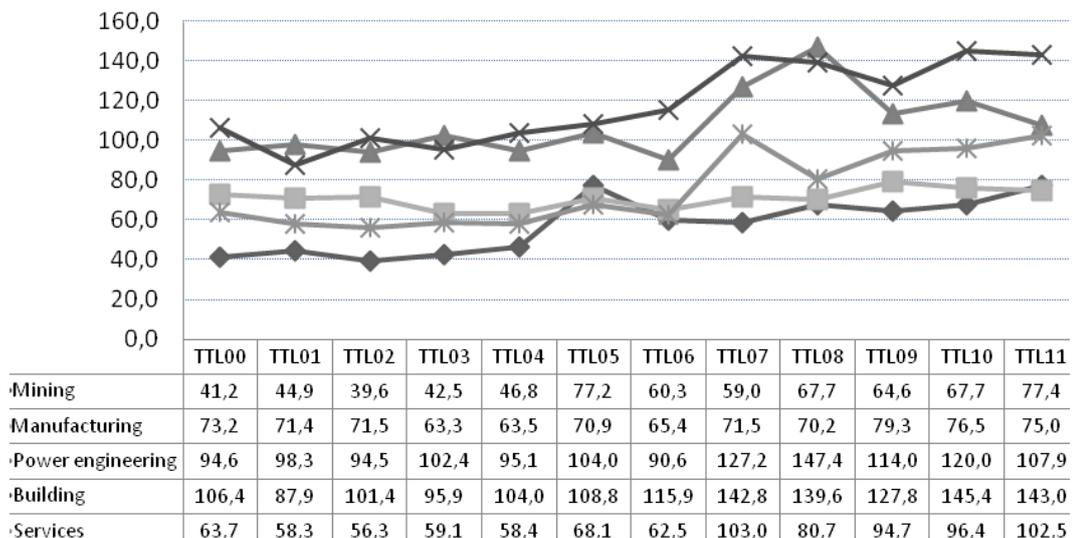
Figure 4 Average claim turnover time from 2000 to 2011 in selected business branches in the Czech Republic

	TTC00	TTC01	TTC02	TTC03	TTC04	TTC05	TTC06	TTC07	TTC08	TTC09	TTC10	TTC11
Mining	42,4	39,7	44,1	51,2	62,2	98,7	83,4	78,5	68,8	76,3	109,1	100,9
Manufacturing	63,7	62,4	66,7	68,5	64,8	73,4	74,0	72,9	72,1	81,8	86,3	80,3
Power engineering	31,0	33,8	33,9	62,7	90,0	106,4	100,4	149,2	156,1	116,3	128,9	112,3
Building	76,6	71,3	83,4	92,3	102,5	107,1	123,5	129,8	142,9	146,2	171,5	175,3
Services	52,8	46,4	43,5	93,9	95,9	64,6	61,2	77,0	72,9	119,1	111,4	104,7

Source: own calculations and processing based on branch analyses of the Ministry of Industry and Trade

If we follow the development of an average value of the claim turnover time in selected branches, then we may state that the claim turnover time was prolonged in all branches from 2000 to 2011. All branch average values differ from the average values reported in the Czech Republic for the last two years observed, as all reached the value above 70 days. The watershed years may be considered those of 2005 and 2006, which are the years when the majority of branches reached the level above 70 days. Therefore, implementation of the system of payments for claims within 30 days seems hardly achievable. According to the survey by the Confederation of Industry, only one fifth of customers (21 per cent) pays for the invoices in time. Thus, compared to the last year, the situation slightly worsened, 23 per cent of companies paid for the invoices in time at that time. It is also clear from Chart 4 that the longest distance from the due date of 60 days is in building and power engineering. However, these business branches works with the system of advance payments, which may mean that prolongation of the claim turnover time should not cause rather serious problems.

Figure 5 Average liability turnover time from 2000 to 2011 in selected business branches in the Czech Republic

|	TTL00	TTL01	TTL02	TTL03	TTL04	TTL05	TTL06	TTL07	TTL08	TTL09	TTL10	TTL11
Mining	41,2	44,9	39,6	42,5	46,8	77,2	60,3	59,0	67,7	64,6	67,7	77,4
Manufacturing	73,2	71,4	71,5	63,3	63,5	70,9	65,4	71,5	70,2	79,3	76,5	75,0
Power engineering	94,6	98,3	94,5	102,4	95,1	104,0	90,6	127,2	147,4	114,0	120,0	107,9
Building	106,4	87,9	101,4	95,9	104,0	108,8	115,9	142,8	139,6	127,8	145,4	143,0
Services	63,7	58,3	56,3	59,1	58,4	68,1	62,5	103,0	80,7	94,7	96,4	102,5

Source: own calculations and processing based on branch analyses of the Ministry of Industry and Trade

There is a better situation in average values for reported liability turnover time (see Chart 5). Generally, a more problematic area is the area of power engineering and building. The building branch is generally considered as problematic from the view of payments for liabilities in the whole zone of the European Union. The area of power engineering is distorted by the system of accounting the costs of the energy provided to customers and the system of advance payments for the energy consumption. However, there was a significantly decreasing tendency in the power engineering industry for the last year. Moreover, power engineering may be influenced by other business branches, as when the payment practice of energy consumers gets worse, payments for liabilities may get worse, too.

A problematic issue is mainly considered the fact (as shown in the Chart below) that by comparing the liability turnover time and the claim turnover time we get information about the significant potential of secondary insolvency in all the branches monitored since 2008.

Figure 6 The average period of time of supplier credit from 2000 to 2011 in selected business branches in the Czech Republic
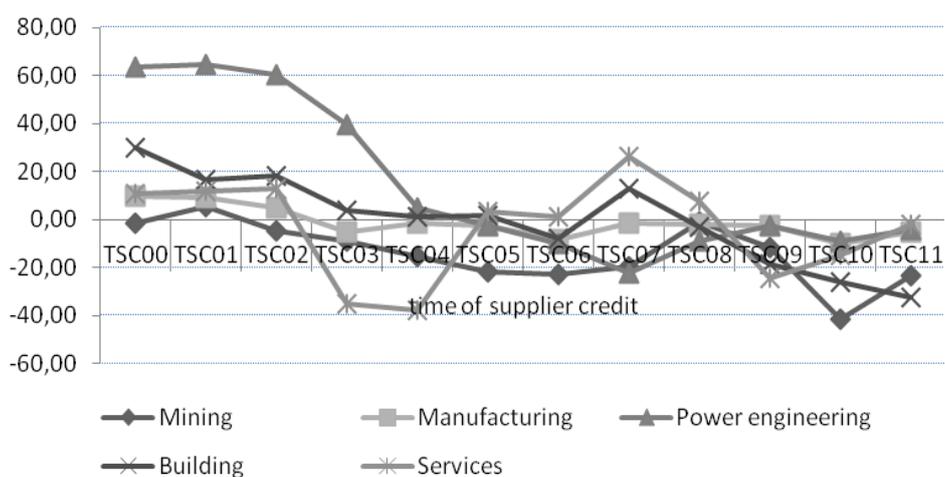
Source: own calculations and processing based on branch analyses of the Ministry of Industry and Trade

As the most dramatic may be considered the situation in mining where negative values of the supplier credit time have been reported since 2002. Czech Chamber of Commerce quotes that almost 30 per cent of companies stated that these were tens of thousands of Czech crowns, for more than a half of the companies (54.1 per cent) it was hundreds of thousands of crowns and every tenth company (11.9 per cent) stated it was millions of crowns. Every other company (47.6 per cent) stated that they paid for the invoices late or they asked for deferring the due date due to shortage of finances caused by the impact of the economic recession on activities of the company. This fact is also verified by data for individual business branches. Although it is obvious from the Chart that the least painful situation is in the processing industry, according to the COFACE survey of spring 2013 related to the survey of development of insolvencies of companies in Central European countries, it is just the processing industry in the Czech Republic that has been affected by the largest share of bankruptcies of companies. Out of total of 8,129 companies going bankrupt, 3,800 belong to the area of the processing industry. It may be also said that while the liability turnover time was longer than the claim turnover time by 2002, the situation has been reversed since 2003. The worsened payment practice contributed to the increase in potential of secondary insolvency, while the worst values were reached in 2010.

4. Relation of liquidity and development of the economic cycle

To a certain extent, the development of liquidity is or may be influenced by the global economic situation, as in times of the economic growth there are investment opportunities increasing and the company focuses on valorization of finances and, on the contrary, in times of the economic

crisis there is an effort to "survive" directed to keeping the liquid position of the company. In this context it may be interesting to what extent the development of liquidity is or is not correlated with the development of the economic cycle. However, from the economic point of view, there would be a negatively correlated relation expected, because when the economic situation gets worse, it should be a priority for a company to ensure its solvency. (Růčková, 2012)

Chart 7 Relation of the development of liquidity and the development of the economic cycle in individual business branches
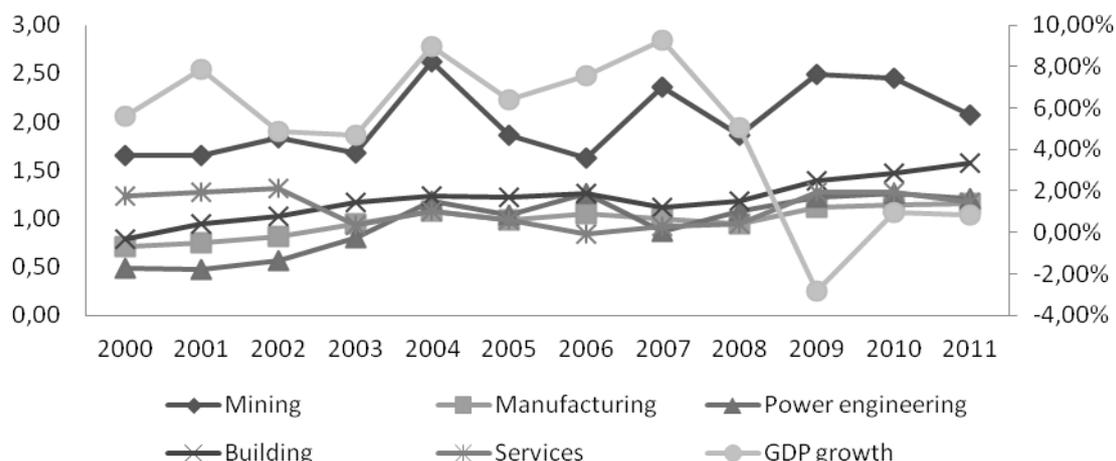
Source: own calculations and processing based on branch analyses of the Ministry of Industry and Trade

It is apparent from Chart 7 that L2 values in relation to gross domestic product report a positive correlation in all branches with the exception of services. It may be explained by growth of sales and thus, by an increase in claims in the period of the economic growth, or by an effort to ensure sufficient finances for times when the companies do not do very well. However, it needs to be emphasized that it may be caused by delaying the payments from customers, when liquidity of companies grows together with increasing claims. A negatively correlated relation that would result from the theoretical approach is only reported in the area of services (the value of correlation is -0.24). The negatively correlated relation may be recorded mainly because services, or customers in the area of services, will react to a change in the economic situation in a more sensitive way, and many services will appear in the category of dispensable expenditures. In other business branches the influence of the worsened global economic situation will probably appear with a certain delay.

5. Relation of selected indicators of activity and quick ratio

Another hypothesis that may be formulated in relation to the topic is that financial delay of payments is caused by insufficient level of liquidity in individual business branches. The survey of the European Payment Index of Intrum Justitia found that "over 90 percent of addressed financial managers claim that the main reason for delaying the payments are financial problems of customers. And 77 per cent is convinced that deferring payments happens deliberately. These are much higher values than in previous years and alarming expectations of companies. This is also emphasized by estimates that risks of payments deferred by customers will be still increasing. Last year, 23 per cent of respondents thought so, this year it is already one third," says Viktória Grossová, General Manager of Intrum Justitia. (Intrum Justitia, 2012)

In this respect, average values of liquidity L2 in individual business branches will be analysed in context with values of liability turnover time. First, the analysis will be again focused on the two largest business branches from the view of number of companies, and only then the other business branches mentioned above will be analysed.
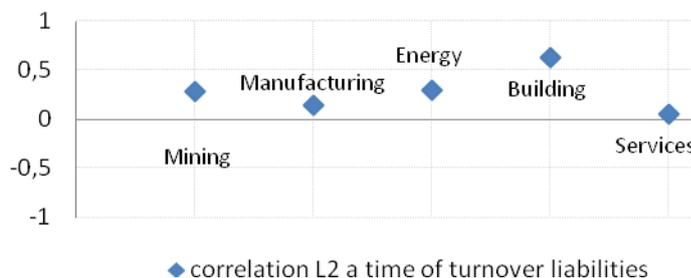
Chart 8 Relation of liquidity and liability turnover time in the processing industry (left) and in services (right)
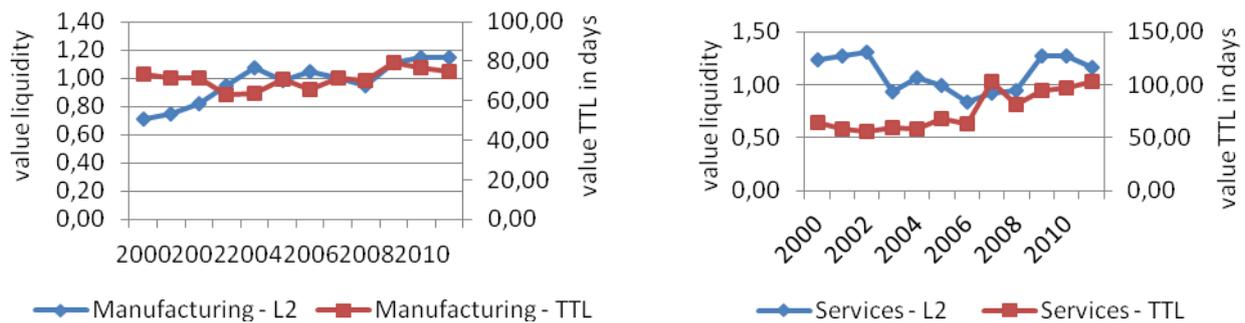
Source: own calculations and processing based on branch analyses of the Ministry of Industry and Trade

In the period observed we may record values of liquidity L2 of the processing industry (left chart) on the level of average 0.97, which almost corresponds to requirements for liquidity. Very weak values from the beginning of the observed period were replaced by values on the level of recommended values in 2004. Moreover, for the last four years there has been growth of the indicator recorded. For the liability turnover time we may record only a slightly increasing tendency which is around the average level usual in the conditions of the Czech Republic, i.e. from 63 to 79 days. Concerning the relation of liquidity and the liability turnover time, then we would expect when the liability turnover time grows, then liquidity of the company will also grow in order to ensure some means in case it is necessary to pay for some liabilities immediately. But this relation has not been verified, as the mutual correlation of the two quantities is around 0.14, which is almost an uncorrelated relation, although we may record the same development tendency in the last four years. In the area of services (right chart), the situation is different. Since 2008 there has been a significantly increasing tendency from the view of the liability turnover time, thus decreasing willingness to pay and liquidity L2 just on the lower limit of the recommended zone for this type of liquidity. Moreover, in the last three years we may also notice a drop of the L2 indicator. The value of the average liability turnover time is 4 days longer than in the processing industry (in the period observed it is between 53 and 103 days, which is a much greater span than in the processing industry). Just as in the processing industry, the positive correlation of the quantities has not been verified, as the relation is again uncorrelated (values of the correlation coefficient are on the level of 0.05). The other business branches are included in the following chart.

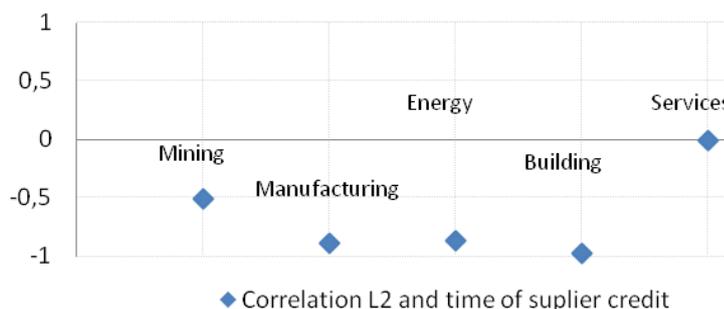Chart 9 Relation of L2 liquidity and the liability turnover time from 2000 to 2011

Source: own calculations and processing based on branch analyses of the Ministry of Industry and Trade

It is apparent from the Chart that the greatest dependence from the view of development of the quick ratio (L2) indicator and the development of the liability turnover time may be seen in building. The fact mainly results from the type of orders realized, as the claim turnover time will also be longer in the context, which increases the value of quick ratio. Generally, when the claim turnover time

increases, liquidity of company grows, too. Monitoring of the relation of L2 and the claim turnover time would seem counterproductive, as claims and their size are a direct part of the assessment of L2 in the sense of increasing the level of L2. However, the claim turnover time may not be completely omitted, for that reason we include it into the mutual comparison of periods of claim and liability turnover. If we consider the relation of liabilities, claims and liquidity together, then for the purposes of correlation we use the supplier credit time (thus the difference of the liability turnover time and the claim turnover time) and liquidity L2. From this point of view, there should be a negative correlation, as when the period of availability of free finance falls, then liquidity of companies should increase as not to threaten their solvency.

Chart 10 Relation of liquidity L2 and supplier credit time from 2000 to 2011

Source: own calculations and processing based on branch analyses of the Ministry of Industry and Trade

A negative correlation of the stated quantities has been confirmed in all branches, there is an uncorrelated relation in services only. The most striking negative correlation is in building, where the correlation comes close to -1. Thus it may be stated that the relation of L2 and the supplier credit time has confirmed theoretical expectations in almost all business branches. While the other relations were seen as practically unsupported or supportable with difficulties from the view of theory, these two categories show a positively convincing result from the view of statistic significance, too. However, there are claims significantly prevailing in the numerator of the L2indicator. A decreasing period of usability of finances (in some years there is a negative period of availability – i.e.companies pay faster than they collect) signals problems with collecting of finances and it is a reason for significantly negative correlation of almost all business branches.

6. Conclusion

The aim of the paper was to find whether the situation of companies concerning liquidity and global solvency in the Czech Republic is the same as in the rest of Europe, and whether the prolonged due date of liabilities is caused by the potential of insolvency or unwillingness to pay. Thus the main issue is whether a higher liquidity may lead to a lower probability of bankruptcies of companies. This fact has not been unambiguously verified. Based on the analysis performed it may be stated that the Czech Republic is in a similar situation from the view of development of liquidity and companies going bankrupt in Western and Central Europe. Mainly business branches getting into potential financial problems are identical. The most affected from this view may be considerd the areas of trade and services, where the impact of the aggravated economic situation is felt in a more striking way. Distribution of insolvencies in Western and Central Europe slightly differs. While there is a more significant impact on services in Western Europe, it is mainly the area of trade in Central and Eastern Europe. However, from the view of dynamics of increase of insolvency proceedings the largest growth is recorded in the processing industry in Eastern and Central Europe, while Western Europe again has the greatest dynamics in the area of trade. Moreover, the most affected branch in the Czech Republic is building.

It may be stated about the Czech Republic that in all business branches, the quick ratio values were kept on the lower level of the recommended zone from 2008 to 2011. A deviation may be only

noticed in mining where the values are high above the upper limit of the recommended zone. By comparing the periods of claim and liability turnovers, we have found that all business branches reported longer claim turnover time than the liability turnover time for the last five years, and the worsened payment practice contributed to the growth of potential of secondary insolvency, the worst values being reached in 2010. From the view of liquidity in relation to development of the economic cycle it may be stated that a positive correlation has been mainly recorded, which, however, indicates that development negates theory. According to the theory we would expect a negative correlation, because when the economic situation grows worse, the need to secure a company from the view of solvency should increase. Moreover, the growth of liquidity in times of the economic growth may be considered as inefficient management of finances. A negative correlation is recorded in services only.

The relation of liquidity and the liability turnover time was the base of verification or refutation of the hypothesis that financial deferment of payments is caused by insufficient level of liquidity in individual business branches. In two largest business branches the hypothesis has not been verified, as the correlation was zero for the analysed period of twelve years. A significantly correlated relation is only seen in building whose strategy of solvency differs from the largest business branches. And while in services the uncorrelated relation has been verified also in the context of comparison of periods of claim and liability turnovers and L2, the situation is different in the processing industry. From the view of relation of the three quantities, there has been a negatively correlated relation verified in the processing industry, thus when the period of availability of finances decreases, liquidity of a company increases. However, this may threaten operation of companies in the branch, as the volume of claims significantly increases and in this way companies get into secondary insolvencies. The situation is apparent in all business branches. It results from the affirmation that the reason for deferring payments is rather secondary insolvency, or possibly unwillingness to pay resulting from the first situation.

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