The Problems of the Insolvency Register in the Czech Republic from the Perspective of Information Technology

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Abstract. The study concerns the situation in the Czech Republic, where the new *Insolvency Act* was accepted in 2006 and took effect from the beginning of 2008. One of the aims of the acceptance of the legislation was the creation of conditions for improved use of information technology in the area of insolvency proceedings. It was intended to bring about a state where a third party would easily acquaint itself with details concerning individual cases so as to compile sufficiently substantiating statistics on insolvency proceedings. While the first goal has been accomplished and it is now possible to access a range of information online and follow a concrete case practically simultaneously to the development of the insolvency proceedings, the second goal has remained unfulfilled. The fault lies in inadequate technological and jurisdictional solutions which have not paid sufficient attention to the possibilities of using information technology in insolvency practice in the Czech Republic.

Keywords: insolvency, information technology, statistics, bankruptcy, reorganisation.

1 The Significance of Information on Insolvency Proceedings

Insolvency proceedings are economic events that are frequently overlooked by economic theory. We cannot avoid the impression that they are often considered marginal events. This is evidently the real reason for the fact that relatively little attention is devoted to them in professional literature and when their procedures and impacts are examined more broadly, it is undertaken mostly by attorneys, law theorists or judges. But economic theory merely takes their existence into account for the most part.

Despite this, the last ten years in particular have seen the increasingly frequent emergence of studies concerning the significance of insolvency proceedings on the basic phenomena of national economy. In particular, research has been conducted on the relationships between the efficiency of insolvency proceedings and realities such as the average interest rate in loans provided to commercial companies, dependant on the risks undertaken on the creditors' sides and on their position in the actual insolvency proceedings, and similarly, the influence of the efficiency of insolvency proceedings on other aspects of the behaviour of financial institutes [1]. Another

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area is research regarding the degree to which the regulations on bankruptcy of commercial companies influence the development of enterprise from the perspective of globalisation [2].

It is interesting to note that these studies used and use as their departure point knowledge of general legal norms and detailed analyses of mere samples of bankrupt companies as our knowledge of complex statistical data on these lawsuits is markedly limited. As can be seen from the diction of the previous sentence, this fact does not concern the situation in the Czech Republic only; rather, we must assume that this is a phenomenon usual in most developed countries. For instance, in their studies, authors Lee, Yamakawa, Peng and Barney [2] appeal to the comparative statistics of *Doing Business* prepared by the World Bank together with the IFC [3]. However - as we shall show in the following passages – we cannot consider these statistics reliable as the resultant data does not command much trust upon closer scrutiny. By contrast, Davydenko and Franks [1] clearly do not trust the statistics provided by multinational institutions and have based their unusually inspirational studies on the samples of 2600 small businesses. They were able to do this primarily thanks to the fact that ten large banks representing significant market shares in markets of researched states provided a range of specific data.

But the question remains: Why do we actually need to know certain data on insolvency proceedings? The answer could be a remark made by Frank Borman, American astronaut and later director of Eastern Airlines: "Capitalism without bankruptcy is like Christianity without hell." This is because the demise of a commercial company due to its inability to achieve adequate economic results, due to the incompetence of the management, or owing to criminal activity is a thoroughly logical part of the whole economic system. In most cases (let us leave aside criminal acts for the time being) it is a question of correct allocation of resources and especially the free allocation of resources. We can express the thesis that the bankruptcy of a debtor and insolvency proceedings (which is essentially bankruptcy, thus the demise of a business and the liquidation of its assets in favour of its creditors) are mechanisms for freeing assets from the structure of an economic subject who is no longer able to fulfil its function. This is followed by providing these assets to such subjects who will put these assets to better use. From the creditor's point of view, the simpler, more controlled, faster and more profitable the process, the less the creditor (let us say a financial institution) will implement its risk of loss to a third party – in the given context, to other debtors. A logical and proven approach in the case of banks in an environment of poor and slow insolvency law is that they operate restrictively with a larger number of their clients and limit their loaning or require further collateral for loans. In all cases this means that creditors (investors, banks) assume higher potential expenses when enforcing receivables in the event of a debtor's default and also a higher risk that the whole transaction will make a loss. Let us take it as proven that high risks during the process of enforcing receivables and ineffective insolvency proceedings (that is, ineffective from the creditor's point of view) lead to a general price increase for loans [1-2], [4-5]. Davydenko and Franks [1] arrive at a clear conclusion arising from analysis of the research results of their sample of businesses – in countries where the creditor is better protected and in which the right of creditors to decide about insolvency

proceedings for a debtor in default is upheld, there are generally more liberal conditions on the financial asset markets and interested parties thus have less difficulty finding and utilising outside resources. It is of substantial importance that lower prices for these resources are also set (pp. 605 – 607).

We can therefore close this introductory passage by asserting that the quality and especially the efficiency of insolvency proceedings are basic attributes of the economic environment of a given country; when these processes are ineffective and of poor quality, an increase in the cost of outside resources for all economic subjects results. This is because all (if they use outside resources) who take loans must pay not only the price conditioned by the economic reality of the country and by the objective state of the relevant market, but must also pay a sort of "regional risk surcharge". Its amount (among other aspects) depends also on the extent of risk undertaken by a creditor in insolvency proceedings.

From the perspective of governments and states, the matter can be viewed from a different angle. Preferences expressed by the mechanisms and regulations of insolvency proceedings are at the same time a certain political problem, whereas like many political problems, this question does not have a single, specific economic answer. From the point of view of national economy, it is highly probable that in the long term the most effective procedure for insolvency proceedings would be to place the bulk of decision-making authority into the hands of the actual creditors within the boundaries of certain general guidelines laid down in a relevant act.

(We could lead a relatively sophisticated discussion as to whether the actual principle of collective enforcement of receivables as represented by insolvency proceedings is sufficiently effective. That is, whether it would not actually be more convenient to leave this area solely to the individual activities of the creditors regardless of, or with a certain non-dogmatic consideration of, the question of the prisoner's dilemma or to the problem of the "common pool" [6]. But let us take it as a given that this doubt is solved politically and a change of viewpoint on this area is impossible within the context of developed countries in the historically relevant time.)

In reality, however, this purely rational solution is not dominant as its economic basis surprisingly does not succeed in competition with other variants which are also able to pursue political goals. The most usual and frequently attacked of these goals is the retention of employment [7]. The result of the endeavour to include such a goal into insolvency law, then, is several more necessary steps. The authority of the courts must be strengthened and it is necessary to assign them the task of preserving the operation of the debtor's business for as long as possible. But this means that it is necessary to limit the rights of the creditors as the interest of the creditor is often completely different than cooperating to accomplish a political aim. On the contrary, it is also necessary to strengthen the rights of debtors - it is in the interests of a debtor in bankruptcy that the creditor be forced to cooperate in the retention of the business. Insolvency law then becomes an instrument for politically shaping economic reality, which necessarily leads to the growth of transactional costs of creditor subjects and, among others, to these costs and risks being implemented into the cost of money.

In general practice, most preferences incorporated into relevant laws (and possibly regulations) during the legislative process are far less manifest. We refer to the

favouring of certain creditors. Employees (whose receivables are most often unpaid wages) in particular are at issue; in several insolvency systems employees' receivables have a special status which is often defended in the language of the 19th century and theses on the "powerlessness" of employees. Let us grant that we can understand this at least from a human perspective insofar as the insolvency of the employer can in several cases subject employees to truly unreasonable losses. In reality, however, this is part of the social system created by the government, whereas this part is involuntarily prescribed to other creditors, which is otherwise nonsensical as these creditors have no responsibility towards the state social system and do not bear any responsibility for the debtor not having paid its employees their wages. The preferential treatment given to the receivables of state institutions is totally unfair. Where tax or insurance is concerned, for example, there is a possibility to get a better ranking for satisfying receivables compared to other creditors through the institute of judicial right of lien.

As a result, a range of models for organising insolvency law and the adjustment of the whole insolvency system (which more or less fulfils a political goal) are used instead of a clean economic solution of the problem. This mostly means that short-term economic goals are favoured; for instance, retention of employment positions and the debtor's business operations rather than opting for a long-term strategy of lowest possible creditor expenses, minimisation of risks for creditors and thus reduction of capital prices. Whereas a focus on short-term goals has an advantage from a political point of view insofar as its results can be quantified and proven, and that in a certain, brief period such a course of action leads to the retention of employment and production, opting for a purely economic solution brings clear success only after sustaining a particular adjustment of the system over a longer period. In comparison to the usual political cycle of four years, the medium-term horizon of ten or twenty years is at a significant disadvantage.

2 The State of Use of Information Technology

If states favoured a purely economic solution of the insolvency problem, we would probably not have any major difficulties with statistical data. Such a government itself would have to assemble the necessary data to a reasonable degree and verify the results of its policy. In reality, however, we see the exact opposite in many developed countries. In fact, there are no other official statistics on the course of insolvency proceedings other than those which probe the number of cases, number of individual methods of settlement, usual duration of proceedings and other essential albeit (in reality) descriptive information. In truth, we have no knowledge of insolvency proceedings that would enable systematic analysis of the course of these proceedings and an evaluation of their efficiency.

The situation in the Czech Republic can serve as an example. In the context of discussions regarding the concept of insolvency law, which took place at the turn of the last and this century, one of the main themes was also the implementation of information technology into the whole insolvency system. The aim was primarily to

strengthen the knowledge of participants and non-participants regarding its procedures. Statistics were a further theme of discussion, that is, the creation of a method of providing information about the course of insolvency proceedings as a whole, which would enable the quantification of results from proceedings into outputs of a statistical character.

On the primary level, legislation assented to the complete publication of data on all insolvency proceedings regardless of their general societal relevance. Act 182/2006 Coll., *on Bankruptcy and Ways of its Solution* (the *Insolvency Act*) implemented the institute of the insolvency register [8] as a publically accessible "stockpile" of all operations registered by insolvency courts in every individual insolvency proceeding. As of the coming into effect of the act (1 January 2008), it has been possible to find all relevant steps in this information system via the internet without having to register or take any further steps. From an awareness point of view, this represents significant progress and, without doubt, a textbook example of the use of information technology for increasing the transparency of insolvency proceedings. Interested and professional public can now follow proceedings "online", and thanks to the existence of deadlines the danger of information being misused by insiders, although not entirely eliminated, has certainly been considerably reduced. All information is accessible to all who are prepared to outlay the relatively negligible expenses (for instance, in terms of time) necessary to access the information. In comparison to previous practice, this represents a fundamental change.

Procurement of information is very simple from the angle of information technology – the search form makes it possible to enter the name of the company or name and surname of a natural person in insolvency, the identification number (Id. No.) of the company or date of birth (or birth certificate number) of a natural person, or file number; it is also possible to search according to individual legal acts during insolvency proceedings (actions) or according to the state of the proceedings (last actual defined shift given by a court ruling). So one can, for instance, search commercial companies or individuals which the court has declared bankrupt within a specific defined period. Yet the search system itself is very problematic as we shall soon demonstrate.

After searching for a concrete case, the interested party can open all documents the court has stored in the insolvency register, that is, not only documents compiled directly by the court, but also those submitted to the court by participants of the proceedings or other relevant parties connected with the proceedings in question. In the vast majority of cases, these are documents in pdf. format. Where more complex cases are concerned, this leads to the opposite extreme – in the flood of data it is almost impossible to find relevant information. For instance, on the 19 November 2012 the insolvency register contained a total of 4454 documents in the case of the proceedings with the Sazka lottery company, whereas 3182 of these were applications filed by creditors and steps concerning these applications. The difficulty lies in the fact that these documents are generally divided only into those concerning the proceedings before declaration of bankruptcy, proceedings after declaration of bankruptcy, documentation of incidental lawsuits, a section of "other" and finally "receivables". Inside these individual sections the system offers no further search

possibilities in terms of organising the insolvency register. Searching is therefore possible only by using the regular Ctrl+F browser function used by the party interested in the information. But owing to the fact that document titles placed in the insolvency register are often only partially standardised, searching by terms is problematic. Individual steps of proceedings have their own identification code. But in order to use these, the interested party would have to have at its disposal a list of these codes and their specifications.

Most importantly, however, the name of the participant (who filed the document and whom the document concerns) of the proceedings is not stated in the actual document titles. The name of the creditor is only exceptionally stated in the column of valid creditors, but this is only the case in a minimum out of the entire number of entries in the insolvency register. It is not possible to identify creditors from code identifications. In the case of Sazka this then means that it is unusually difficult to find a specific application for a receivable and the correspondence around this application (for example, its partial or complete withdrawal) as it is impossible to use a full-fledged term search. Searching according to the date of filing the item into the insolvency register works well, so finding the appropriate documents will be far easier if we know the date of the steps being searched.

Although the insolvency register was intended to be a common, modern and innovative information channel, even a perfunctory survey of the way it works shows many ways in which the information technology used does not allow the public to utilise the potential of the insolvency register in an effective way. Here we find a rather incomprehensible divergence between intention and result, whereas the result simply does not correspond with the possibilities offered even by a cheap technological design of the information system. A somewhat aggressive explanation for this divergence is offered – that it serves to fulfil a political task, that is, that the system on the face of it does indeed fulfil the demand for openness; this openness is, however, to a certain extent annulled by other circumstances. The intention would then be that the information provided should prevent effective assessment of the true state and quality of insolvency proceedings. This is obviously a tempting construction which is, however, almost certainly untrue. Pointing out standard bureaucratic procedure in similar cases offers a far more likely explanation. Political will in the area of the legislative process ended in the expression of the requirement that the insolvency register objectively and very quickly make public all information on investigations underway. In reality no clearly defined political assignment existed as to how such awareness should be, what parameters it should have, and to what extent is should enable the analysis of the real state of insolvency proceedings as a whole. The *Insolvency Act* itself contains no details that would more precisely define the properties of the insolvency register. In §2 letter i), it is only stipulated that for the purposes of this law "the insolvency register is understood as the information system containing data according to this law." There are in numerous other places requests for speed in entering new information into the insolvency register and several other details concerning its functioning; we nevertheless find no other request for information over and above the making public of files from insolvency proceedings or other processing of information entered.

The result is thus a system which fulfils the political assignment in the literal sense, but in reality offers practically nothing more. In the terminology of project managers we could say that this project was never pulled through to the end. An objective observer must admit that the bureaucratic apparatus acted highly economically when it clearly chose the cheapest solution which would incur the lowest expenses in terms of cost and effort for its implementation.

Hence the result of fulfilling requirements at a secondary level, defined by the discussion underway before the acceptance of the *Insolvency Act*. In it, the requirements were defined for collecting information and processing it into statistical data of a type which would enable the meaningful analysis of the development of insolvency proceedings as a system. The insolvency register fulfils absolutely none of these requirements. When searching according to the state of the proceedings or action, it is not possible to enter a period longer than two weeks. This means that if we wanted to ascertain all proceedings during the calendar year which progressed to the approval of the insolvency administrator's closing report, we would have to repeat the search at least 26x. But the situation would be still worse – the system of search is underdimensioned, so it is capable of selecting only a rather limited amount of cases from the entire number of proceedings. With the majority of actions or states of proceedings it is therefore necessary to select an interval still shorter than 14 days as the amount of outputs during an interval of 14 days is too high and the system cannot handle it. Most of the time, therefore, the possibility of search is limited even to a mere week, but if we were to search certain quite regular steps which courts or participants of proceedings frequently perform, we would have to shorten the search interval even more.

Concrete cases attained in this way, where approval of the insolvency administrator's closing report from the sides of the creditors and the insolvency court was obtained, cannot be processed at all within the system. It is possible to study them, but further searching, specification of selection and so on is not made possible. The obtained file, moreover, contains both commercial companies and natural persons – entrepreneurs listed in the commercial register on the one hand, and also natural persons in insolvency on the other hand. In this way, the results of searching become markedly unclear.

As we can see, the whole mechanism clearly prevents generalisation of available information and its aggregation; this is especially so when we become aware that government institutions do not have any further data on insolvency proceedings, and if they do, this data is not made public according to a clearly defined and reliable standard. From the point of view of the insolvency administrator and also the courts, no obligations are set which would allocate one or another group the task of gathering and providing data on individual cases in such a format that would enable further work with this data.

We again find a marked divergence from public interest, which would be much better handled if reliable statistical data existed regarding the course and results of insolvency proceedings. These would enable far better definition of the need to modify insolvency law so that it could be clear to the highest degree and cheapest for the creditor, so that risks could at the same time be reduced and a contribution be made towards the expedient solution of insolvency proceedings.

3 Departure Points for the Czech Republic

In the same way that insolvency law is constantly developing, it is clear that it will be necessary to revise the activity of the Czech insolvency register and also of similar institutions in other countries. The example of the Czech Republic is very significant and it is possible to consider it as a model. Numerous developed countries have in recent years moved towards the liberalisation of access to information on insolvency proceedings; in few places, however, has it been accompanied by the generation of mechanisms which allow information gained to be used otherwise than for research of (sometimes even rather complex) concrete cases.

As far as our knowledge on the course and efficiency of insolvency proceedings is concerned, we rely on the statistics issued by the World Bank and IFC in the regular publication *Doing Business* [10]. In reality, however, we are highly sceptical of these numbers, both regarding the environment of the Czech Republic and also as far as the data for other states are concerned. Although this publication presents itself as a set of information of a statistical type, in numerous matters these are mere estimates; estimates, moreover, the methodology of which could be cast into doubt. As regards data on insolvency proceedings, this is precisely the case.

Table 1. Duration of proceedings from declaration of bankruptcy and creditor yields in the CR

Year	Duration of insolvency proceedings (in years)	Creditor yields from debtor bankruptcy (% receivables)
2002	**9,2**	**15,4**
2003	**9,2**	**15,4**
2004	**9,2**	**16,8**
2005	**9,2**	**17,8**
2006	**9,2**	**18,5**
2007	**6,5**	**21,3**
2008	**6,5**	**20,9**
2009	**6,5**	**20,9**
2010	**3,2**	**55,9**
2011	**3,2**	**56,0**

Source: Doing Business 2012, http://www.doingbusiness.org/custom-query, [11].

As we can see from the table, according to the statistics of the World Bank and IFC, the yields for creditors from insolvency proceedings in the Czech Republic at the given time should be 56 percent, which must be considered a highly improbable possibility. In reality, the yield from insolvency proceedings are much lower – even though no relevant statistical substantiation exists at the given time for this, all practical experiences with the development of bankruptcies and reorganisations suggest that this is the case. It is improbable that yields would be higher than thirty or forty percent as a yield less than fifty percent is attained only in exceptional cases, whereas in a marked number of cases there is in fact zero financial fulfilment for the creditor.

If we were to take the data of the World Bank and IFC for the assessment of the development of insolvency proceedings in the Czech Republic over the last ten years,

we would have to deduce considerable progress and a positive improvement of the situation. In reality, though, there has been no such development.

These misleading signals about positive development are somewhat confusing and could lead to completely erroneous conclusions in the area of other political decisions. Similar assessments are totally irrelevant from the angle of economic practice, however, given the fact that subjects operating on the Czech markets are acquainted with the true situation. Without needing any more precise statistics, they know from personal experience that the data given in international comparisons is not relevant.

What does occur, however, is a broadening of the divergence between world economics and political decisions which unfortunately are not usually classified on the basis of economic practice, but far more on the basis of statistical data.

4 Conclusion

For a correct and detailed knowledge of the course and efficiency of insolvency proceedings it will in the future be necessary to reform the insolvency register to a certain degree, improve its search and selective capabilities, but it will especially be necessary to change certain duties of insolvency administrators and entrust them (on pain of penalty) with statistic-type information duties. This would enable finding a range of data in a separate report, especially the following information: identification of the debtor; identification of the insolvency administrator; date of filing the petition for bankruptcy; date of ruling on bankruptcy; date of decision on the manner of settling the bankruptcy with denotation of the manner in which the bankruptcy is to be settled; date of possible changes in the manner of settling the bankruptcy with a variant identification of the type of change; amount of deposit for costs of the insolvency proceedings if it was paid, and who paid it; the number of days that elapsed between the making public of the insolvency proposal and the making public of the ruling on the bankruptcy (a ruling which has come into legal force); the number of applications of secured creditors and the number and amount of their receivables (whether recognised or unrecognised); the amount of satisfaction for secured creditors; the number of applications from unsecured creditors; the amount of receivables beyond the property base or receivables deemed equal to them and their volume; the number of incidental lawsuits conducted by the insolvency administrator; the volume of receivables in the lawsuit; duration of individual lawsuits; the volume of receivables arising after the announcement of the manner in which the bankruptcy is to be settled (including costs of the preliminary insolvency administrator); estimate of the property base: cash + estimate of liquid assets + estimate of fixed assets + other; yield of liquidated assets (liquid and fixed), remuneration and costs of the administrator. Subsequent processing of this data by means of information technology would enable one to gain outputs which would analyse the course and efficiency of insolvency proceedings in a relevant way.

Owing to the ever-increasing complexity of economic relationships and the fact that cooperative links are extremely unclear, developed countries will sooner or later have to significantly change their approach to gaining information from insolvency

proceedings and especially to gaining information on the course and efficiency of insolvency proceedings. Insolvency law is a highly sensitive mechanism where every intervention into its functioning could lead to unexpected and especially to unintended effects. It would be highly irresponsible to decide for a change in insolvency law without knowing the mechanism and efficiency of the present system very precisely at the same time. This will entail substantially more operative and, most of all, more thorough integration of information technology into the whole system, whereas (using the example of the Czech Republic) it can be proven that the present state is unsatisfactory and thoroughly inadequate.

Even though we have been witnesses in the past few years of a considerable facilitation in sharing information about insolvency proceedings, thanks among others to the internet and other modern media, inadequate political assignments have resulted in these endeavours ending in a mere general declassification of data on individual insolvency proceedings. As in other areas, information technology could also enable further reductions of transactional costs for creditors in the insolvency system, which could potentially lead to a marked increase in the efficiency of these processes.

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References

1. Davydenko, S.A., Franks, J.R.: Do Bankruptcy Codes Matter? A Study of Defaults in France, Germany, and the U.K. The Journal of Finance LXIII(2), 565–607 (2008)
2. Lee, S.-H., Yamakawa, Y., Peng, M.V., Barney, J.B.: How do bankruptcy laws affects entrepreneurship development around the world? Journal of Business Venturing 26(5), 505–620 (2011)
3. International Finance Corporation and The World Bank: Doing Business, http://www.doingbusiness.org/
4. Richter, T.: Insolvenční právo. ASPI Walters. Kluwer, Prague (2008)
5. Brealey, R.A., Myers, S.C.: Principles of Corporate Finance, 9th edn. McGraw-Hill (2007)
6. Smrčka, L.: Filosofické aspekty vztahu insolvenčního a exekučního práva. Komorní Listy 1(4), 27–33 (2012) (in Czech)
7. Blazy, R., Chopard, B., Fimayer, A., Guigou, J.D.: Employment preservation vs. creditors' repayment under bankruptcy law: The French dilemma? International Review of Law and Economics 31(2), 126–141 (2011)
8. https://isir.justice.cz/isir/common/index.do
9. Kotoučová, J. a kol.: Zákon o úpadku a způsobech jeho řešení (insolvenční zákon) - komentář. C.H.Beck, Praha (2010)
10. http://www.doingbusiness.org/
11. http://www.doingbusiness.org/custom-query