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The pro-debtor and pro-creditor models – comparison of the effectiveness of bankruptcy law

Model prodłużniczy i model prowierzycielski – porównanie skuteczności prawa upadłościowego

Abstract

Research background: Bankruptcy in court proceedings has been of interest to researchers for many years. Researchers look for internal and external factors which influence the effectiveness and efficiency of bankruptcy proceedings; for example, the impact of the country's level of development on the efficiency of bankruptcy proceedings, a system of incentives for the active participation of creditors in bankruptcy proceedings to increase their recovery rate, and mechanisms which encourage the early filing of an application for bankruptcy. Against the background of the research to date, a research gap was identified in the scope of the impact of the bankruptcy (pro-debtor/pro-creditor) law model on the effectiveness of the calculated recovery rate for creditors. The research fills a cognitive gap in New Institutional Economics by examining formal institutions in action, i.e. whether bankruptcy law meets its objectives in practice.

Purpose of the article: The aim of the article is to answer the question of which model answers the expectations of stakeholders – creditors who expect the highest possible rate of return. Poland is an example of a country where since 2016 there has been a change in the model of bankruptcy law from pro-creditor to pro-debtor.

Methods: The authors of the article conducted constant monitoring of the effectiveness of bankruptcy law in Poland through the examination of bankruptcy proceedings filed in bankruptcy and restructuring courts. The research on the efficiency of bankruptcy proceedings was based on the analysis of files from bankruptcy proceedings conducted at the District Court in Warsaw. The analysis covered the period i) from 01.01.2004

to 31.12.2015 n=150 files of the pro-creditor model of bankruptcy proceedings and ii) from 01.01.2016 to 31.12.2019 n=66 files of the pro-debtor model of bankruptcy proceedings. The statistical analyses were conducted using IBM SPSS Statistics Program Version 26. The Kruskal–Wallis H non-parametric test was employed.

Findings & Value added: The results of the research show that the new pro-debtor model of bankruptcy proceedings implemented in Poland after 31 December 2015 is less effective than the previous pro-creditor model of bankruptcy proceedings. In the pro-creditor model, creditors' interests are managed more effectively. Practice shows that frequent changes in the law and model of bankruptcy law do not contribute to its effectiveness and efficiency. It seems that the stabilization of legal solutions is an important factor. The legal activity should be aimed at improving the solutions in force and their consolidation in the case law. Unfortunately, in Poland, entrepreneurs as well as citizens, due to its communist past, do not trust the legal system, formal institutions or other people (ESS 2020). For this reason, the pro-debtor model of bankruptcy proceedings may also have a negative impact on the development of Polish entrepreneurship in the future. To the best of our knowledge, no previous studies have made a comparison of the effectiveness of the pro-creditor and pro-debtor models of bankruptcy proceedings in a transition country such as Poland. Research data encompassing 16 years over the period of 2004–2019 used in the analysis is unprecedented in bankruptcy procedure studies in the post-transition economies. Also, a set of indicators showing the effectiveness of bankruptcy proceedings employed in the research is unique.

Keywords: Efficiency; Poland; Transition economy; Recovery rate; Managing creditors' interests

JEL: K4

Streszczenie

Tło badawcze: Upadłość w postępowaniu sądowym od wielu lat interesuje badaczy. Poszukują oni czynników wewnętrznych i zewnętrznych, które wpływają na skuteczność i efektywność postępowań upadłościowych, np. wpływ poziomu rozwoju kraju na efektywność postępowań upadłościowych, system zachęt do aktywnego udziału wierzycieli w postępowaniu upadłościowym w celu zwiększenia ich odzysku czy mechanizmy zachęcające do wcześniejszego składania wniosków o bankructwo. Na tle dotychczasowych badań zidentyfikowano lukę badawczą w zakresie wpływu modelu prawa upadłościowego (prodłużniczy / prowierzycielski) na efektywność wyliczanej stopy odzysku dla wierzycieli. Badania uzupełniają lukę poznawczą w Nowej Ekonomii Instytucjonalnej, biorąc na warsztat instytucje formalne w działaniu, tj. czy prawo upadłościowe spełnia w praktyce swoje cele.

Cel artykułu: Celem artykułu jest odpowiedź na pytanie, który model odpowiada na oczekiwania interesariuszy – wierzycieli, którzy oczekują najwyższej możliwej stopy zwrotu. Polska jest przykładem kraju, w którym od 2016 r. nastąpiła zmiana modelu prawa upadłościowego z prodłużniczego na prowierzycielskiego.

Metody badawcze: Autorzy artykułu prowadzili stały monitoring skuteczności prawa upadłościowego w Polsce poprzez badanie postępowań upadłościowych prowadzonych w sądach upadłościowych i restrukturyzacyjnych. Badanie efektywności postępowań upadłościowych oparto na analizie akt postępowań upadłościowych prowadzonych w Sądzie Okręgowym w Warszawie. Analizą objęto okres i) od 1 stycznia 2004 r. do 31 grudnia 2015 r., $n = 150$, akt w prowerzycielskim modelu postępowania upadłościowego oraz ii) od 1 stycznia 2016 r. do 31 grudnia 2019 r., $n = 66$ akt, w przedłużniczym modelu postępowania upadłościowego. Analizy statystyczne przeprowadzono przy użyciu programu IBM SPSS Statistics, wersja 26. Zastosowano nieparametryczny test Kruskala–Wallisa H.

Rezultaty badania: Wyniki badania wskazują, że nowy przedłużniczy model postępowania upadłościowego, wprowadzony w Polsce po 31 grudnia 2015 r., jest mniej efektywny niż dotychczasowy prowerzycielski model. W modelu pro-wierzycielskim skuteczniej zarządza się interesami wierzycieli. Praktyka pokazuje, że częste zmiany prawa i modelu prawa upadłościowego nie sprzyjają jego skuteczności i efektywności. Wydaje się, że ważnym czynnikiem jest stabilizacja rozwiązań prawnych. Działania prawne powinny mieć na celu doskonalenie obowiązujących rozwiązań oraz ich utrwalenie w orzecznictwie. Niestety, w Polsce zarówno przedsiębiorcy, jak i obywatele, ze względu na komunistyczną przeszłość, nie ufają systemowi prawnemu, instytucjom formalnym ani innym ludziom [ESS, 2020]. Z tego powodu przedłużniczy model postępowania upadłościowego może mieć również negatywny wpływ na rozwój polskiej przedsiębiorczości w przyszłości. Zgodnie z naszą najlepszą wiedzą, żadne wcześniejsze badania nie porównywały skuteczności prowerzycielskiego i przedłużniczego modelu postępowania upadłościowego w kraju postkomunistycznym, będącym w procesie transformacji, jakim jest Polska. Wykorzystane w analizie dane badawcze obejmujące 16 lat z lat 2004–2019 są unikalne w badaniach postępowań upadłościowych w gospodarkach posttransformacyjnych. Unikalny jest również zastosowany w badaniu zestaw wskaźników pokazujących skuteczność postępowań upadłościowych.

Słowa kluczowe: efektywność, Polska, transformacja gospodarcza, wskaźnik odzysku, zarządzanie interesami wierzycieli

The aim of the article is to answer the question of which bankruptcy law model (pro-debtor or pro-creditor) better addresses the expectations of stakeholders – creditors who expect the highest possible rate of return, and thus which model is more effective. For the purpose of this paper, we distinguish between two concepts: effectiveness and efficiency. By effectiveness we mean whether the law meets its objectives, and by efficiency we mean the outcome of the work of the judiciary involved in the bankruptcy proceedings described by four indicators outlined in the Research method section. This distinction is in line with Marciano et al. (2019).

The aim of this research is to provide empirical evidence of the impact of the bankruptcy law model on the efficiency of the calculated recovery rate for creditors in Poland.

In order to answer the above question, the authors conducted a quantitative survey of bankruptcy proceedings in Poland in the period before and after the change in the model of bankruptcy law. We studied 216 bankruptcy cases of Polish companies and receivers' reports. All data was uniquely manually collected. Our research data encompassed 16 years over the period of 2004–2019 and was based on the analysis of files from bankruptcy proceedings conducted at the District Court in Warsaw. The analysis covered the period i) from 01.01.2004 to 31.12.2015 $n = 150$ files of the pro-creditor model of bankruptcy proceedings and ii) from 01.01.2016 to 31.12.2019 $n = 66$ files of the pro-debtor model of bankruptcy proceedings. The statistical analyses were conducted using IBM SPSS Statistic Program Version 26. The Kruskal-Wallis H non-parametric test was employed.

In principle, bankruptcy law should eliminate unprofitable entrepreneurs and prevent further bankruptcies that result from the bankruptcy of an insolvent debtor. There are two basic models of bankruptcy law. The first of these is pro-creditor, which means that the creditor and his right to recover the debt from the debtor is the priority of bankruptcy law. The other model is pro-debtor, where the priority is to secure the debtor's interest.

Poland is an example of a country where since 1 January 2016 there has been a change in the model of bankruptcy law from the first model to the second one. Numerous Polish studies have confirmed the inefficiency of regulations in the pro-creditor model. It turned out that bankruptcy proceedings did not fulfill their basic debt reduction function. The restrictive, creditor-friendly model of bankruptcy proceedings also failed to shape certain patterns of behavior among entrepreneurs, which could be defined as the attitude of a reliable entrepreneur. Bankruptcy law did not eliminate unprofitable entrepreneurs; in other words, it did not perform a preventive function. Thus, the question arises as to whether the solutions adopted in the pro-debtor model are more effective.

This means a unique opportunity to verify the efficiency of both models on the basis of data from the same country while minimizing the risk of the influence of additional factors in the case of comparative analysis with other countries.

To the best of our knowledge, no previous studies have made a comparison of the effectiveness of the pro-creditor and pro-debtor models of bankruptcy proceedings in a transition country such as Poland. Our study contributes to the literature on bankruptcy by delivering robust empirical evidence of the efficiency of Polish bankruptcy procedures.

The remaining part of the article is organized as follows: in section two we discuss the literature review; section three outlines changes in the bankruptcy law in Poland

after 31 December 2015; in section four we present our methodological approach and data sets; section five discusses the findings; and the last section concludes the paper.

Literature review

Bankruptcy proceedings have been of interest to researchers for many years. Such researchers look for internal and external factors influencing the effectiveness and efficiency of bankruptcy proceedings (López-Gutiérrez, Torre-Olmo, Sanfilippo-Azofra 2009; Lopez Gutiérrez et al. 2011; García-Posada, Mora-Sanguinetti 2014). Research on bankruptcy proceedings focuses on the following issues: the impact of the country's level of development on the efficiency of bankruptcy proceedings (Smrčka et al. 2017, Cepec 2014), the system of incentives for active participation of creditors in bankruptcy proceedings in order to increase their recovery rate (Froute 2007, Pacchi 2017), creditor protection (Claessens and Klapper 2005; Djankov et al. 2008; Camacho-Miñano et al. 2013; Ponticelli, Alencar 2016; Staszkievicz, Morawska 2017), mechanisms encouraging early bankruptcy (Cepec, Kovac 2016; García-Posada, Mora-Sanguinetti 2014) or mechanisms coordinating cooperation between creditors in the process of bankruptcy of a group of affiliated entities and minimizing the risks arising from conflicts of interest (Wessels 2017; Kokorin 2020). The researchers identified good practices in bankruptcy proceedings (Kaiser 1996; Ravid, Sundgren 1998; Davydenko, Franks 2008; Blazy et al. 2011; Blazy et al. 2013; Adriansee et al. 2014a,b; Danovi et al. 2017), how bankruptcy procedures lead to maximized debt repayment (Sundgren 1998; Thorburn 2000; Armour et al. 2008; Couwenberg, de Jong 2008; Blazy et al. 2018a,b; Blazy, Stef 2019), the main objectives of bankruptcy systems, determined their measures – maximizing the value of a debtor's assets to be distributed among creditors, depending on their position in the order of absolute priority (APO) of repayment (Hart 2006), as well as proposing legal indicators to measure the attractiveness of insolvency systems (Blazy et al. 2013, 2018).

The analysis of the literature on bankruptcy proceedings has shown that previous publications have been focused on the analysis of insolvency systems in economically developed countries, especially in the USA in relation to chapter 11 and 13 and the effects of § 363 (Altman 1993; Bris et al. 2006; Altman et al. 2011; Jiang et al. 2012), as well as Western European countries such as Great Britain, France, Finland, and Spain (Armour et al. 2008; Grunert and Weber 2009, Blazy et al. 2013, Sundgren 1998, Camacho-Miñano et al. 2013). There are relatively few publications devoted to the post-communist countries of Central and Eastern Europe (Smrčka et al. 2014; Banasik et al. 2019a,b; Staszkievicz, Morawska 2019; Blazy et al. 2020; Kruczalak-Jankowska et al. 2020).

Taking into consideration the research to date, a research gap has been identified, both in terms of the research method in relation to the analysis of the effectiveness of post-communist enterprise insolvency proceedings, as well as in terms of empirical data. The aim of this research is to provide empirical evidence of the impact of the bankruptcy (pro-creditor/pro-debtor) law model on the effectiveness of the calculated recovery rate for creditors. The research fills a cognitive gap in the new institutional economics.

In order to carry out the abovementioned study, it is crucial to understand the changes in bankruptcy law that took place in Poland over the period under consideration.

Changes in the bankruptcy law in Poland after 31 December 2015

As of 1 January 2016, significant changes to Polish bankruptcy law were introduced. The previous uniform regulation of the Bankruptcy and Reorganisation Law was divided into two separate legal acts. Since then, the provisions of the Act of 28 February 2003 – Bankruptcy Law concern the so-called liquidation bankruptcy, and the new Act of 15 May 2015 – Restructuring Law covers proceedings which allow the debtor to enter into an arrangement with creditors. These are: (1) proceedings for the approval of an arrangement, which – to put it in general terms – consist of presenting a previously concluded arrangement to the court for approval, (2) accelerated arrangement proceedings dedicated to debtors who do not have disputed creditors, (3) arrangement and (4) remedial proceedings, which enable the conclusion of an arrangement and also sometimes (in the scope of remedial proceedings) corrective actions in terms of creditor disputes.

There have also been far-reaching changes to the bankruptcy proceedings themselves, which until 1 January 2016 could be conducted in the scope of the ‘arrangement’ or ‘liquidation’ procedure.

Firstly, the distinction between liquidation and arrangement bankruptcy has been abandoned, confining proceedings simply to ‘bankruptcy’, which means judicial winding-up proceedings carried out by an insolvency practitioner under the supervision of a judge-commissioner.

Secondly, entities which petition for the bankruptcy of a debtor, i.e. the debtor himself or his personal creditor, have been granted the right to submit an application for approval of the conditions of sale of the debtor’s enterprise or an organised part thereof or assets constituting a significant part of the enterprise (Article 56a–56h of the Bankruptcy Law). It is the institution of the so-called pre-pack, i.e. a prepared liquidation, which enables the transfer of ownership of the debtor’s enterprise or its main assets

to the entity indicated in the application shortly after the declaration of bankruptcy. Pre-pack enables the acceleration of bankruptcy proceedings and optimisation of costs.

Thirdly, the new provisions of Articles 266a to 266f of the Bankruptcy Law allow for the conclusion of an arrangement in bankruptcy. This is a solution for bankrupts whose financial situation in the course of the proceedings has improved to such an extent that it allows for the restructuring of both the company and existing liabilities by entering into an arrangement with creditors. Importantly, an arrangement in bankruptcy does not entail a change in the procedure.

A number of changes introduced on 1 January 2016 aim to shorten the time taken for liquidation of the assets of the bankrupt and thus the bankruptcy proceedings themselves, which should, in principle, translate into lower costs of these proceedings. Among other things, the insolvency practitioner was allowed to sell the bankrupt's movables and property rights without the consent of the board of creditors or the judge-commissioner, if the value of both (estimated separately) does not exceed PLN 50,000 (Article 206(3) and (4) of the Bankruptcy Law). Furthermore, when selling the bankrupt's real estate, the necessity of carrying out a court tendering, which was often laborious and time-consuming, was abandoned as the basic principle of liquidation. At present, it is possible to obtain the consent of the board of creditors or the judge-commissioner to sell all assets of the bankrupt without a prior attempt to sell them via tender or an auction conducted by a judge-commissioner (which is provided for in Articles 306–334 of the Bankruptcy Law).

While discussing the changes made to bankruptcy law in Poland, the modification and simplification of the creditor satisfaction category should be mentioned as well. The number of categories has changed in relation to the previous state of the law, with four of the previous five remaining. A separate – high – category of satisfaction of public-law claims (from taxes and other public levies, as well as social security contributions) was abolished. After the changes made in Articles 342 and 343 of the Bankruptcy Law, public-law claims are satisfied in the same category as other claims (this is a second high category), excluding only claims from the employment relationship, which were nevertheless granted a privileged position.

There have also been far-reaching changes in the determination of the remuneration of insolvency practitioners. Currently, the level of remuneration depends largely on objective factors. The remuneration is composed of a part which depends on the amount paid to creditors in the implementation of the distribution plans; a part depending on the number of employees employed on the date of the declaration of bankruptcy; a part depending on the number of creditors participating in the proceedings; a part depending on the duration of the bankruptcy proceedings from the date of the declaration of bankruptcy to the date of implementation of the final distribution plan (short and efficient proceedings are rewarded, which is an incentive for insolvency

practitioners); and a part determined by the court depending on the difficulty of the proceedings and their efficiency. It is worth recalling that previously, i.e. in proceedings initiated before 1 January 2016, remuneration was determined with reference to the amount of bankruptcy estate funds or with reference to the duration of the proceedings. There were no strict criteria in this model.

Moreover, some instruments were introduced on the part of the court with the aim of shortening proceedings and facilitating the handling of bankruptcy cases. Article 259(1) of the Bankruptcy Law provides that the examination of objections to the list of claims shall, in principle, take place in a closed session (without the need for a hearing, i.e. without the participation of the parties). According to the previous legal procedure, an obligatory hearing was required before an objection could be examined, which involved the need to plan, convene and notify participants of the hearing. The new regulation allows for notifications, summonses and deliveries to participants in an informal manner, appropriate to the circumstances, if the manner of summoning, notification or delivery enables the addressee to become familiar with the content of the information received (Article 220a of the Bankruptcy Law). Finally, the possibility of direct communication between the insolvency practitioner and the judge-commissioner by telephone, e-mail, etc. has been sanctioned (Article 152(2) of the Bankruptcy Law).

The new regulation of the Bankruptcy Law implements the principle of priority of restructuring over bankruptcy (liquidation) of the debtor, which is the most pro-debtor aspect of the new law. In the case of a concurrence of a bankruptcy petition and a restructuring petition, the regulations require that a restructuring petition be considered first (Article 9b (1) of the Bankruptcy Law). However, this is not an absolute rule. It is limited when a delay in the examination of a bankruptcy petition may be contrary to the interests of creditors. Where the interests of all creditors are at stake, the bankruptcy court issues a decision to take over the bankruptcy petition and the restructuring petition for joint consideration and resolution in a single order (Article 9b (3) of the Bankruptcy Law). If taking over the bankruptcy petition and the restructuring petition for joint consideration would lead to a significant delay in issuing the decision on the declaration of bankruptcy, to the detriment of creditors, and the grounds for restructuring presented by the debtor in the restructuring petition are known to the bankruptcy court, the bankruptcy court does not issue a decision on taking over the petitions for joint consideration and examines the petition for declaration of bankruptcy (Article 9b (4) of the Bankruptcy Law).

In contrast to pro-debtor solutions, which certainly include regulations blocking bankruptcy in the event of an attempt to restructure the debtor's enterprise, the new law has also introduced institutions serving creditors since 1 January 2016. It was determined, among other things, when the debtor would effectively be able to use an argument of disputed character of a creditor's claim in a situation where a creditor has

filed for bankruptcy. Pursuant to Article 12a of the Bankruptcy Law, the court shall dismiss a bankruptcy petition filed by a creditor if the debtor shows that the liability is, in its entirety, of a disputable nature and that the dispute arose between the parties prior to the filing of the bankruptcy petition. Moreover, it is provided that the performance of the debtor's obligations towards the creditor after filing the petition for the declaration of bankruptcy does not affect the further course of the proceedings (Article 29a (2) of the Bankruptcy Law). Finally, any regulations referred to above, which optimise the costs of proceedings, i.e. introduction of a pre-pack, definition of strict criteria according to which the insolvency practitioner's remuneration is granted, enabling the free sale of movables and receivables when their value assessed separately does not exceed PLN 50,000, resignation from the obligatory court tendering in case of liquidation of real estate, should be considered pro-creditor solutions.

Research methodology

Research on the efficiency of bankruptcy proceedings was based on the analysis of files from bankruptcy proceedings conducted at the District Court in Warsaw. The analysis covered the period i) from 01.01.2004 to 31.12.2015 $n = 150$ files of the pro-creditor model of bankruptcy proceedings and ii) from 01.01.2016 till 31.12.2019 $n = 66$ files of the pro-debtor model of bankruptcy proceedings.

Due to the fact that less than 1% of records were incomplete, the computer imputation procedure was performed using IBM SPSS Statistics Program Version 26.

In order to test and compare the efficiency of bankruptcy proceedings, the following four measures were determined: i) rate of debt recovery (value of satisfaction of creditors / total receivables), ii) indicator 1 (funds obtained by the receiver / recognized claims), iii) indicator 2 (remuneration of the receiver / costs of bankruptcy proceedings), iv) efficiency ratio (recovered debts / costs of bankruptcy proceedings).

The hypothesis was as follows: *Changing the model of bankruptcy proceedings from a pro-creditor model to a pro-debtor model increased the efficiency of the bankruptcy law as measured by the following measures: i) rate of debt recovery (value of satisfaction of creditors / sum of receivables); ii) indicator 1 (funds obtained by the receiver / receivables recognized); iii) indicator 2 (trustee's remuneration / costs of bankruptcy proceedings) and iv) efficiency ratio (recovered debts / costs of bankruptcy proceedings).*

The descriptive statistics were explored. Statistical results (see Table 1) showed that the pro-debtor model of bankruptcy proceedings has an only slightly shorter duration (an average of 42 days) and a slightly higher indicator 2 than the pro-creditor model of bankruptcy proceedings. However, the pro-creditor model of bankruptcy proceedings has a much higher efficiency ratio and higher indicator 1 than the pro-debtor

model of bankruptcy proceedings. Surprisingly, the rate of debt recovery was similar for the pro-debtor and pro-creditor models. The distribution of the abovementioned measures was asymmetrical. The acquired data was statistically evaluated and dependences among the selected data sets were analyzed (see Table 2). Surprisingly, there was no correlation in the pro-creditor model of bankruptcy proceedings between the duration of bankruptcy proceedings and the efficiency ratio, rate of debt recovery, indicator 1 or indicator 2. There was, however, statistically significant at the 0.01 level (2-tailed) but average negative correlation in the pro-debtor model of bankruptcy proceedings between the duration of bankruptcy proceedings and indicator 2, i.e. the longer the duration of bankruptcy proceedings, the higher the indicator 2.

The Kolmogorov-Smirnov and Shapiro-Wilk tests' assumption of normal distribution was rejected. The statistical analyses were conducted using IBM SPSS Statistics Program Version 26. The Kruskal-Wallis H non-parametric test was employed.

The selected test of difference significance allowed authors to verify the null hypothesis:

H0: PROC = PROD (there is equality of distribution functions of measures such as the rate of debt recovery, indicator 1, indicator 2, efficiency ratio and duration of bankruptcy proceedings in the sampled research population)

against the alternative hypothesis:

H1: PROC \neq PROD (there is no equality of distribution functions of measures such as rate of debt recovery, indicator 1, indicator 2, efficiency ratio and duration of bankruptcy proceedings in the sampled research population)

Where:

PROC – the dependent variable determined by a given factor of the abovementioned measures and the duration of bankruptcy proceedings in the sampled research population of the pro-creditor model of bankruptcy proceedings;

PROD – the dependent variable determined by a given factor of the abovementioned measures and the duration of bankruptcy proceedings in the sampled research population of the pro-debtor model of bankruptcy proceedings.

If the significance level was greater than or equal to $\alpha = 0.05$, there was no reason to reject H0. However, when the value of α was less than 0.05, the null hypothesis was rejected. If the statistical value of χ^2 exceeds the value read from the chi-square distribution tables for $\alpha = 0.05$ and $v = k - 1$, it can be concluded that the test results confirm the significance of differences between the pro-creditor (until 31.12.2015) and pro-debtor (as of 01.01.2016) models of bankruptcy proceedings in Poland, as determined by measures such as the effects of various levels of debt recovery, indicator 1, indicator 2, the efficiency ratio and the duration of bankruptcy proceedings.

Results

From both the theoretical and practical points of view, it is very important to answer the question of whether changes in the model of bankruptcy proceedings from a pro-creditor model to a pro-debtor one in Poland based on the change in the bankruptcy law brought about a higher rate of debt recovery (value of satisfaction of creditors / sum of receivables); a higher indicator 1 (funds obtained by the receiver / receivables recognized); a lower indicator 2 (trustee's remuneration / costs of bankruptcy proceedings), a higher efficiency ratio (recovered debts / costs of bankruptcy proceedings), and a shorter duration of bankruptcy proceedings.

Hereby, our hypothesis was partially validated for the efficiency ratio and indicator 2. The results are presented in Table 3. The null hypothesis must be rejected for i) the efficiency ratio and ii) indicator 2 because there is no equality of distribution functions in the sampled research population. The pro-creditor model of bankruptcy proceedings has a much higher efficiency ratio than the pro-debtor model. The pro-debtor model of bankruptcy proceedings has a higher indicator 2 than the pro-creditor model i.e. trustee remuneration has a much higher share in the costs of bankruptcy proceedings in the pro-debtor model than in the pro-creditor model. The test results confirm the significance of differences between the pro-creditor and pro-debtor model of bankruptcy proceedings in the case of indicator 2 and the efficiency ratio. There is significant statistical difference in the tier of indicator 2 and effectiveness ratio. There is no reason to reject the null hypothesis for indicator 1, rate of debt recovery and duration of bankruptcy proceedings because there is equality of distribution functions in the sampled research population. The pro-creditor and pro-debtor model of bankruptcy proceedings have equal distribution of duration of bankruptcy proceedings, rate of debt recovery and indicator 1.

Discussion

According to the literature on the subject, a well-functioning legal system and a rapid litigation system for economic development has a positive effect (Smrčka et al. 2017; Mruk et al., 2019; Cepec and Grajzl; 2020; Liu et al., 2020; Melcarne and Ramello, 2020). In this regard, bankruptcy law is critical for the attractiveness of the national business environment (Staszkiwicz and Morawska 2019), and shorter and cheaper insolvency proceedings contribute to establishing new enterprises (Kruczalak-Jankowska et al. 2020). Moreover, Directive (EU) 2019/1023 of the European Parliament and of the Council of 20 June 2019 on preventive restructuring frameworks, on the discharge of debt and disqualifications, and on measures to increase the efficiency

of procedures concerning restructuring, insolvency and discharge of debt, and amending Directive (EU) 2017/1132 (EU Directive) in preamble (point 6) highlights that the excessive length of procedures concerning restructuring, insolvency or discharge of debt “is an important factor triggering low recovery rates and deterring investors from carrying out business in jurisdictions where procedures risk taking too long and being unduly costly.” Similar conclusions apply to bankruptcy proceedings.

However, in Poland (see Figure 1) the change of bankruptcy model from pro-creditor to pro-debtor did not significantly shorten the duration of bankruptcy proceedings, which are now only slightly shorter than they were in the past. On, average, bankruptcy proceedings last 563 days in the pro-debtor model and 604 days in the pro-creditor model of bankruptcy proceedings, counted as the time from the commencement of proceedings until the declaration of bankruptcy (in days). Regarding the duration of bankruptcy proceedings, Marciano et al. (2019) concluded that efficient judiciaries might be slow, just as fast courts might be highly inefficient. Thus, improving judicial performance by restructuring the composition of national judiciaries may not be the most optimal decision, but rather the opposite.

Surprisingly (see Figure 2), the efficiency ratio (recovered debts / costs of bankruptcy proceedings) of the pro-creditor model of bankruptcy proceedings was 2.4966 on average, compared to 0.9317 in the pro-debtor model. This means that the pro-creditor model of bankruptcy proceedings in the past allowed for a higher level of recovered debts than does the pro-debtor model nowadays. Blazy et al. (2020) proved that “the total recovery rate is determined by the type of bankruptcy procedure and depends on the national environment in which the procedure takes place”. On the other hand, a study of Dutch bankruptcy procedures showed that certain features of companies (Couwenberg and de Jong, 2008) explain this phenomenon better than specific bankruptcy procedures. This leads us to the conclusion that an in-depth analysis of the characteristics of bankrupt companies is necessary – on the basis of the same dataset used in this study.

The costs of bankruptcy proceedings are similar between the pro-creditor and pro-debtor model of bankruptcy proceedings, which confirms indicator 2. Indicator 2 (remuneration of the trustees / costs of bankruptcy proceedings) is higher in the pro-debtor model of bankruptcy proceedings (0.5065) than the pro-creditor one (0.2887) (see Figure 3). However, the higher indicator 2 in the pro-debtor model of bankruptcy proceedings results from the change in bankruptcy law which allows for higher remuneration of trustees.

Conclusions

The current paper analyzed the change in the model of bankruptcy proceedings in Poland from pro-creditor to pro-debtor. It contributes to the identification of the major determinants connected with the effectiveness of bankruptcy law such as: i) rate of debt recovery (value of satisfaction of creditors / sum of receivables); ii) indicator 1 (funds obtained by the receiver / receivables recognized); iii) indicator 2 (trustee's remuneration / costs of bankruptcy proceedings) and iv) the efficiency ratio (recovered debts / costs of bankruptcy proceedings).

The aim of the change in bankruptcy proceedings from a pro-creditor to a pro-debtor model was to develop, among other things, more effective institutions under insolvency law, both in terms of liquidation and the restructuring of enterprises. The results show that the new pro-debtor model of bankruptcy proceedings implemented in Poland from 1 January 2016 is less effective than the pro-creditor model of bankruptcy proceedings was. Furthermore, the presented research does not allow for the thesis that bankruptcy proceedings have become significantly shorter after 1 January 2016, although the changes in bankruptcy law seemed to be advantageous and provided the court with instruments by which to conduct proceedings efficiently. On the other hand, it is worth considering whether or not the change in the model of bankruptcy law has contributed to increasing the share of restructuring proceedings in the total number of insolvency proceedings. After all, restructuring takes priority over bankruptcy and liquidation in this model. An increasing interest in restructuring proceedings is currently noticeable. The research undertaken in this area should be continued and further discussed, because the presented model of insolvency is quite new. The issue of whether restructuring proceedings are more efficient and effective than bankruptcy, and more attractive for both debtors and creditors as a result, could be worth examining.

It is worth adding that in Poland, the institution of bankruptcy was subject to changes in the process of development of the capitalist system, and thus is derivative of the state's role in the economy. Polish entrepreneurs and citizens, due to Poland's communist past, still do not trust the legal system, formal institutions or other people (ESS 2020). For this reason, the pro-debtor model of bankruptcy proceedings may have a negative impact on future Polish entrepreneurship development. An effective law must work in a specific social and economic space. Thus, the optimal model of bankruptcy proceedings must be consistent with market requirements and the degree of institutional development of the state. It is important to ensure stable legal regulations, albeit adapted to the degree of socio-economic and institutional development. Legal activity should be aimed at improving the solutions in force and its consolidation

in the case law. Practice shows that frequent changes in the law and model of bankruptcy law do not contribute to its effectiveness and efficiency.

This study contributes to the literature by proving that, in transition countries such as Poland, a change in the model of bankruptcy proceedings from pro-creditor to pro-debtor does not necessarily lead to a higher rate of debt recovery or shorter duration of bankruptcy proceedings. In Poland, the pro-creditor model of bankruptcy proceedings had a higher efficiency ratio than the pro-debtor model of bankruptcy proceedings now has.

To the best of the authors' knowledge, no previous study has referred to the comparison of effectiveness between the pro-creditor and pro-debtor models of bankruptcy proceedings in a transition country such as Poland.

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Annex

Table 1 Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis		
						Statistic	Std. Error	Statistic	Std. Error	
Duration of bankruptcy proceedings (days)	Pro-creditor model until 31.12.2015	150	0.00	1591.00	604.1000	316.52519	0.984	0.198	0.854	0.394
	Pro-debtor model from 01.01.2016	66	286.00	1023.00	562.8939	187.53208	0.721	0.295	0.103	0.582
Indicator 1 (funds obtained by the receiver / recognized claims)	Pro-creditor model until 31.12.2015	150	0.00	1006.75	15.6204	92.92567	8.887	0.198	89.532	0.394
	Pro-debtor model from 01.01.2016	66	0.00	52.71	1.2382	6.49383	7.907	0.295	63.464	0.582
Indicator 2 (trustee's remuneration / costs of bankruptcy proceedings)	Pro-creditor model until 31.12.2015	150	0.00	1.76	0.2887	0.25966	2.827	0.198	12.633	0.394
	Pro-debtor model from 01.01.2016	66	0.00	4.45	0.5065	0.60328	4.914	0.295	29.614	0.582
Efficiency ratio (recovered debts / costs of bankruptcy proceedings)	Pro-creditor model until 31.12.2015	150	0.00	18.99	2.4966	3.00537	3.035	0.198	11.184	0.394
	Pro-debtor model from 01.01.2016	66	-0.46	11.03	0.9317	1.69353	3.883	0.295	19.616	0.582
Rate of debt recovery (value of satisfaction of creditors / total receivables)	Pro-creditor model until 31.12.2015	150	0.00	1.00	0.1382	0.20389	2.474	0.198	6.929	0.394
	Pro-debtor model from 01.01.2016	66	-0.57	1.00	0.1336	0.25135	1.878	0.295	5.750	0.582
Valid N (listwise)	Pro-creditor model until 31.12.2015	150								
	Pro-debtor model from 01.01.2016	66								

Source: Authors' own compilation.

Table 2 Spearman Correlations Coefficient

Pro-creditor model until 31.12.2015			Indicator 1	Indicator 2	Efficiency ratio	Rate of debt recovery
Spearman's rho	Duration of bankruptcy proceedings	Correlation Coefficient	0.010	-0.155	0.104	0.088
		Sig. (2-tailed)	0.901	0.058	0.207	0.285
		N	150	150	150	150
Pro-debtor model from 01.01.2016			Indicator 1	Indicator 2	Efficiency ratio	Rate of debt recovery
Spearman's rho	Duration of bankruptcy proceedings	Correlation Coefficient	0.021	-.393**	-0.012	-0.027
		Sig. (2-tailed)	0.867	0.001	0.922	0.828
		N	66	66	66	66

Correlation is significant at the 0.01 level (2-tailed)**

Source: Authors' own compilation.

Table 3 Test Statistics^{a,b}

Test Statistics ^{a,b}					
	Indicator 1	Indicator 2	Efficiency ratio	Rate of debt recovery	Duration of bankruptcy proceedings
Kruskal-Wallis H	0.501	19.683	34.125	0.575	0.14
df	1	1	1	1	1
Asymp. Sig.	0.479	0.000	0.000	0.448	0.905

a. Kruskal Wallis Test

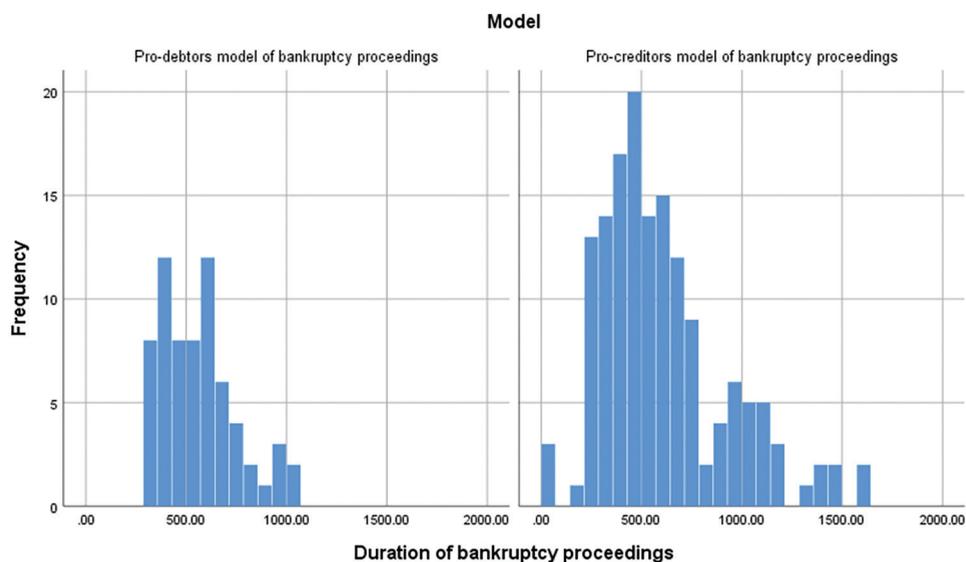
b. Grouping Variable: Model of bankruptcy proceedings

Ranks			
Model of bankruptcy proceedings		N	Mean ranks
Indicator 1	Pro-debtor model from 01.01.2016	66	113.03
	Pro-creditor model until 31.12.2015	150	106.51
	Total	216	
Indicator 2	Pro-debtor model from 01.01.2016	66	136.93
	Pro-creditor model until 31.12.2015	150	95.99
	Total	216	
Efficiency ratio	Pro-debtor model from 01.01.2016	66	71.07
	Pro-creditor model until 31.12.2015	150	124.97
	Total	216	

Ranks			
Model of bankruptcy proceedings		N	Mean ranks
Rate of debt recovery	Pro-debtor model from 01.01.2016	66	103.66
	Pro-creditor model until 31.12.2015	150	110.63
	Total	216	
Duration of bankruptcy proceedings	Pro-debtor model from 01.01.2016	66	107.73
	Pro-creditor model until 31.12.2015	150	108.84
	Total	216	

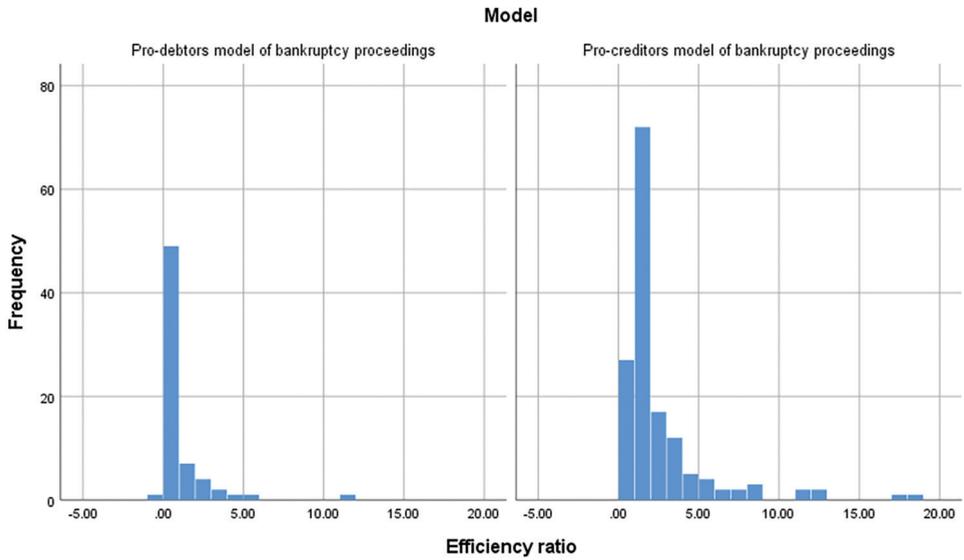
Source: Authors' own compilation.

Figure 1 Duration of bankruptcy proceedings vs model of bankruptcy proceedings



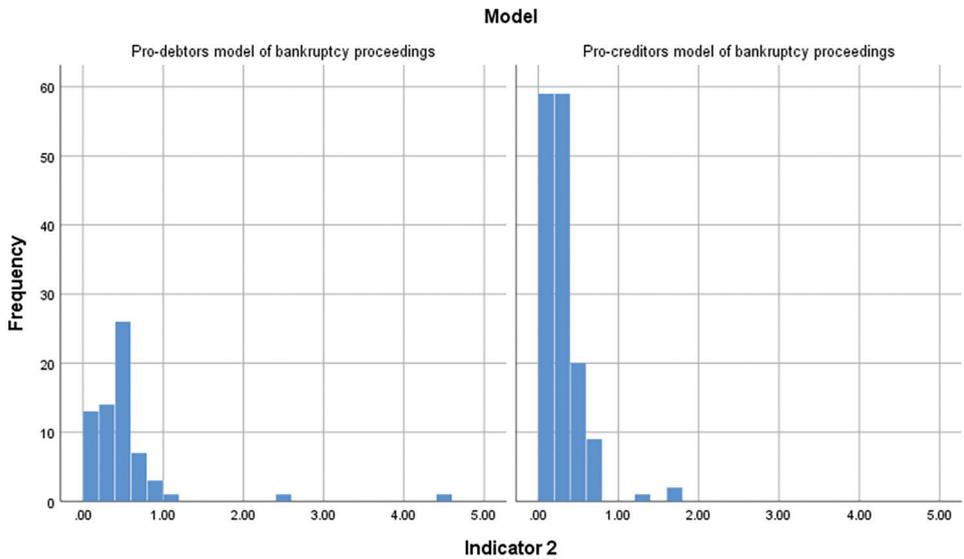
Source: Authors' own compilation.

Figure 2 Efficiency ratio of models of bankruptcy proceedings



Source: Authors' own compilation.

Figure 3 Indicator 2 of models of bankruptcy proceedings



Source: Authors' own compilation.

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