# Life Cycle of Virtual Organizations in the Czech Republic

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**Abstract.** This paper is focused on aspect connected with virtual organizations in the Czech Republic. The virtual organizations are enterprises registered at virtual addresses. The virtual address is used especially for registration but most business activities are performed elsewhere. The studied aspects are a correct definition of this kind of the organization, empirical evidence from the Czech Republic as a number of enterprises in different regions, default rate and especially a length of economic activities. The virtual organizations are supposed to be less transparent. The research verifies an assumption that virtual organizations are mostly start-ups whose business activity finishes very early and therefore their corporate life cycle is short. The verification is performed on the data sample containing 125 insolvent enterprises registered at the virtual addresses.

**Keywords:** Virtual organization  $\cdot$  Enterprise age  $\cdot$  Insolvency register  $\cdot$  Czech republic

## 1 Introduction

This paper is focused on aspects connected with a corporate life cycle and age of businesses which are registered at virtual addresses. Sometimes this kind of business is called virtual organization. First it is necessary to define a concept of the virtual organization from different perspectives. The first perspective contains literature overview which is not consistent and uniform [2] as it is introduced further. The conclusion of literature overview provides a definition of the virtual organization which is used in the second perspective. The second perspective is empirical and it is based on the corporate data of the Czech Republic extracted from business as well as insolvency register. Virtual organizations are said to be less transparent in the Czech Republic and there are even worries that this kind of organizations helps functioning the gray economy [9].

This pilot research verifies an idea of transparency connected with a corporate viability. The basic idea of establishing companies is based on the long-term existence otherwise the company is not able to produce economic value added [14] or [6]. The results show if the companies registered at virtual addresses have the shorter corporate life cycle or the virtual address is only one stage of their life cycle.

#### 2 Literature Overview

The concept virtual address sounds very modern. Partly it is connected with the development of information and communication technologies over last decades [8]. The literature is not uniform with the definition of virtual address. It is possible to find papers about virtual addresses or headquarters, virtual organizations, virtual offices or virtual enterprises. These words have been used by managers, entrepreneurs and researchers since 1990s [3]. It is not a surprise that first virtual offices or enterprises existed in the United States of America at the beginning of 1990s although till today there are arguments if this possibility was first offered by Ralph Gregory or Richard Nissen [5].

Anglo-American literature uses the concept virtual address rarely because the virtual address itself is only a mean to achieve the objective. The basic objective is not to have a classical traditional office whose functioning is connected with costs of rent, furniture, utilities and other related cost items. Therefore it is more discussed the concept of virtual office. According to Devenport and Pearlson [4] virtual office can exist in five different forms as occasional telecommuting, hoteling, tethered in office, home-based mobility and fully mobile. The development of information and communication technologies has open a possibility of not having a traditional formal enterprise headquarter. On the other hand each enterprise needs to have a headquarter at least for purposes of business register, contact with government authorities and business correspondence. The owners of real estates can offer their address to dozens, hundreds and even more enterprises. Usually it is a case of real estates which have a good location downtown. This kind of address is called virtual address or virtual headquarter, e.g. [9] or [1]. According to Becht, Mayer and Wagner [1] the address used by virtual enterprises is the address where more than 100 enterprises are seated for the purpose of state or regional business register. This definition will be used further because for our purposes we need quantitative definition. We are not able to study case by case qualitatively. The enterprises registered at virtual addresses will be extracted form business and insolvency register automatically.

# 3 Empirical Evidence

The part empirical evidence is based on the definition that virtual corporate address is the address with more than 100 registered enterprises. Table 1 provides results of extraction from the Czech business register. In total there have been detected 58435 enterprises with virtual headquarters. Although Prague is the capital and economic center of the country its hegemony with more than 84% of virtual enterprises is evident and it overweights the importance of the economic center.

Analogical extraction can be done also from the insolvency register which contains data about individual insolvency cases (Insolvent companies have debts at least to two creditors and the company is unable to repay them.). Plaček and Louda [9] extracted insolvent enterprises with virtual headquarter in Prague. Their results prove that the insolvency rate for virtual addresses is more than 4 times higher than for classical

Region	Number of enterprise
Prague Region	49363
South Moravian Region	4436
Pilsen Region	2005
Moravian-Silesian Region	1535
Central Bohemia Region	515
Hradec Králové Region	193
Ústí Region	148
Pardubice Region	131
Olomouc Region	109

Table 1. Number of virtual enterprises in regions of the Czech Republic. Source: authors

corporate addresses. This result confirms lower enterprise transparency because enterprise viability is questionable due to the higher insolvency rate. These statements lay the foundation for our research concretely specified further.

The total number of insolvent enterprises registered at virtual addresses can be found in Plaček and Louda [9]. These authors [9] made research only for Prague Region but their results are representative due to the Prague hegemony. Registers in the Czech Republic enable only partial automatic data extraction. Especially when the aggregated data from individual uploaded files are needed. The data are available but the analytic has to open one by one. The automation and using nowadays IT possibilities is limited because the files do not have uniform format and layout. These aspects are discussed e.g. in [10] or [11]. These difficulties have a consequence that this research is based on the other data sample already used for general insolvency research in the Czech Republic. Other additional information and results about general insolvency research could be found in [7] or [12].

The first step of this research is a comparison of two data files. The first file contains a list of enterprises registered at the virtual address extracted from business register. The used definition is if more than 100 enterprises are registered at the same address they are called virtual. The second file is the aforementioned data sample used for general insolvency research. The comparison of these files is based on the match of enterprise name and identification number. MS Excel was used for this matching. As a result 125 enterprises have been detected in both samples. These units will be analyzed further. The general insolvency research provides information about the data of an insolvency proposal, end of insolvency proceeding in the case of bankruptcy declaration or reasons why the bankruptcy was not declared. The previous research was not focused on the age of enterprise or length of economic activity before the insolvency proposal. The day of enterprise set up is not available in insolvency register but this piece of information can be found in business register. The business register provides the day of set up one by one. Some analyzed enterprises do not exist anymore (finish activity, erased from register) and therefore the data have to be extracted not only from valid register but also from its previous versions.

Region	Virtual enterprises	Virtual enterprises		Γotal sample	
	Number of cases	Relative	Number of cases	Relative	
		frequency		frequency	
With declaration	54	43%	1536	56%	
Without declaration	71	57%	1215	44%	
Total	125	100%	2751	100%	

Table 2. Number of cases with and without bankruptcy declaration. Source: authors.

Table 2 shows the results of the insolvency proposals which can finish with as well as without bankruptcy declaration. In the case of virtual enterprises there are more proposals finishing without the bankruptcy declaration then in the general total sample.

There can occur different reasons why the bankruptcy has not been declared. These reasons are concretely specified in Table 3 as well as the number of related cases on the analyzed sample. It is necessary to take into account that lack of debtor's assets means the bankruptcy as well. The enterprise does not have even enough assets for paying costs of the insolvency proceeding and therefore it has no sense to start the insolvency proceeding. In this case an insolvency administrator would have to be paid from the court budget (simply said budget created from taxes). Mistakes in the proposal and unmet requirements of insolvency are the most detected reason for not declaring bankruptcy. Unmet requirements are often connected with a situation that the creditor wants to start the insolvency proceeding not because of bad debts but because of a competition fight. These efforts are not ethic and they should harm the "insolvent" enterprise. This kind of proposal is called a "bullying" proposal in the Czech Republic. The government fight against this kind of proposal by a payment of a deposit for costs of the insolvency proceeding. The existence of deposit makes much more difficult to start the insolvency proceeding.

Reason	Number of cases	Relative frequency
Flaws in the proposal or unmet requirement of insolvency	35	49.3%
Lack of debtor's assets	14	19.7%
Unpaid deposit for costs of insolvency proceedings	9	12.7%
Proposal taken back	12	16.9%
Bankruptcy cancelled	1	1.4%
Total	71	100%

**Table 3.** Reasons for not declaring bankruptcy. Source: authors.

Insolvency proceeding is usually a long process of collective enforcing receivables which are not fully satisfied. The length of the process is also displayed by Table 4 which shows how many cases with bankruptcy declaration have been already finished.

The main incentive of this research is the analysis if enterprise age before the beginning of the insolvency proceeding. Shorter enterprise age or shorter time period of entrepreneur activity is expected because of lower transparency of the virtual enterprises.

Insolvency proceeding	Number of cases	Relative frequency
Unfinished	14	26%
Finished	40	74%
Total	54	100%

Table 4. State of insolvency proceeding (cases with bankruptcy declaration). Source: authors.

The time period is computed as a time difference between the day of insolvency proposal and the day of enterprise set up and it is measured in years. The possible time period are displayed in Table 5 and they are accompanied by number of cases in the sample of the proposals with the bankruptcy declaration and by the number of cases in the same sample increased by cases of lack of debtor's assets. It is discussed before that lack of assets does not lead to bankruptcy declaration in the legal way but in the economic sense lack of assets means evident bankruptcy of the enterprise. The results show that majority of enterprises registered at virtual addresses exists more than 5 years before the day of the insolvency proposal. Five years could be already considered as a long existence at the market.

Time period Bankruptcy declaration Bankruptcy declaration + lack of assets Number of cases Number of cases Bellow 1 year 0 1 5 5 1-2 years 2-3 years 3 4 3–4 years 11 12 4-5 years 2 5 Above 5 years 41 33

**Table 5.** Age of enterprises in insolvency proceeding. Source: authors.

These findings have serious consequences. The initial idea that virtual addresses are mostly used by start-ups is not confirmed and it is fully rejected. Majority of enterprises have existed over 5 years before the insolvency proposal, some even over 10 or 15 years. The data do not confirm the assumption that because of lower transparency and higher default rate the enterprises registered at the virtual addresses finish at the insolvency proceeding young. Some enterprises are very young but the others are already mature companies.

There can be found several explanations for this state of the world. Already mature companies lose their entrepreneur advantage at the market, competition fight is more difficult than several years ago or their product is not competitive anymore because of too long product life cycle. The explanations could be also found at the side of entrepreneurs themselves. The owners/entrepreneurs are elderly and their effort has decreased because of the physical age and permanent existence at the market. The aforementioned reasons explain the occurrence of the bankruptcy but they are not the direct explanation for having the headquarter at the virtual address. The basic reason for the virtual address is the cost optimization comparing with the classical business address. Already existing enterprises have shifted their address from the classical business address or from the

home address. Small start-ups have very often their address similar as a place of residence of their founders. The concept of virtual address enables a better headquarter in the comparison with the home base which is not representative at all for clients and other related business partners. Other reasons are connected with institutional environment. Very often it is discussed that the insolvency proposals are submitted too late [13] in the moment when the enterprise is not active anymore and their assets are extremely low (case of lack of debtor's assets which is also known as assets emptiness). In the Czech Republic there are many enterprises which are only set up but they are not engaged in the economic activity. These enterprises are just prepared and their wait for their aim as SPVs or new owners. These owners prefer buying already created enterprise instead of creating own one.

Czech insolvency proceedings are criticized that they last too long. In the research sample only finished insolvency proceedings can be analyzed further because unfinished proceedings cannot be analyzed yet because the process will go on. The second column of Table 6 displays number of cases according to the age of enterprise. It is same approach as in Table 5 but Table 6 takes into account only the finished insolvency proceedings. The third column shows number of cases according to the length of insolvency proceeding. Majority of cases are solved shorter than 3 years. The average length of insolvency proceeding published by [15] is over 3 years. In the analyzed sample the length of insolvency proceedings is shorter. Although the size of sample is not representative there can be detected factors why the insolvency proceedings of the virtual enterprises are shorter. The virtual enterprises would not have much property and difficult business relationships which have to be solved by an insolvency administrator.

Time period	Age of enterprise	Length of proceeding	
	Number of cases	Number of cases	
Bellow 1 year	0	4	
1–2 years	4	6	
2–3 years	2	13	
3–4 years	9	8	
4–5 years	1	6	
Above 5 years	24	3	

**Table 6.** Age of enterprises and length of finished insolvency proceeding. Source: authors.

## 4 Conclusion

The paper's aim was the analysis of the enterprises registered at the virtual address (also called virtual enterprises) in the Czech Republic. There are worries that this kind of enterprises is connected with lower transparency, higher risk of default and serious consequences for related partners. The research verified the assumption that the life cycle of the virtual enterprises is short and they finish their business activities very quickly in the insolvency proceeding. The sample contained 125 enterprises. The size is not representative and it can be taken as pilot. The results show that many enterprises have been set up already many years ago and therefore the virtual enterprises are not a case only

of start-ups but they are used also in other stages of the corporate life cycle. Possible explanations are mentioned. On the other hand the length of these insolvency proceedings is shorter than average in the Czech Republic.

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