ECONOMIC RESULTS OF THE NON-FINANCIAL CORPORATIONS' SECTOR IN THE CZECH REPUBLIC

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Abstract - In connection with turbulent economic developments, an issue is often discussed of what effects crises and recoveries have on economic results of the non-financial corporations. In the years since 1989, the Czech Republic has gone through two major economic crises – the first occurred in the years 1997 and 1998, the second in 2009. The non-financial corporations' economic result was a large deficit in the former instance and a large surplus in the latter one. We can ask in what way non-financial corporations have been transformed between 1998 and 2008, and what the main cause was of the overall positive outcome of the 2009 crisis. Our analysis of the results achieved by the non-financial corporations' sector in the Czech Republic is based on the 1995-2018 data taken from the national accounts of the Czech Republic as published by the Czech Statistical Office, making use of specific relative indices.

Keywords - Non-financial Corporations, Economic Cri$sis, Sector Analysis

I. INTRODUCTION

The economic crises that occurred in the Czech Republic in the late 1990s and the late 2010s had different causes and different effects. Nevertheless, both led to a decrease in the GDP: by 0.6% in 1997, by 0.3% in 1998, and by 4.8% in 2009. The crisis in the years 1997 and 1998 was exclusively internal; it was caused by the economic transformation marked with a not very carefully thought-out privatisation, inconsistent approach to restructuring of industry, unclear concept of banking sector's development with subsequent bankruptcies of many banks, and too restrictive monetary policy. All these factors, together with a high volume of investments by non-financial corporations, insufficient available financial resources, and a practically non-existent capital market, led to problems in financing, expensive loans, and a high level of non-financial corporations' indebtedness. The low effectiveness of Czech non-financial corporations manifested itself in negative results of their current transactions (negative net saving values) and, with respect to the high level of investments, in a negative result of all non-financial transactions (meaning a high need for net borrowing).
The 2009 crisis had external causes; it first occurred in the U.S.A. as a crisis in loans and finances, which expanded to a wider economic crisis; symptoms of an economic slowdown had been occurring since 2008. The warning signs that had been coming from the outside helped Czech non-financial corporations get ready for the possible threats. For non-financial corporations, the 2009 crisis was manifested by a decrease in the volume of the wages paid, i.e., of compensation to employees, due to the reduction of human resources, a lower volume of both financial and non-financial investments, a larger volume of paid loans as compared to received ones and the issued shares. Ultimately, the non-financial corporations had positive net lending (i.e., a surplus of resources) in this year of crisis (for the first time since 1995).
After a short recovery in 2010 and 2011, the Czech economy fell back into recession in 2012 and 2013 (with a decrease in GDP by 0.8% in 2012 and by 0.5% in 2013). That recession was mainly caused by too restrictive a fiscal policy based on fear of a high deficit and growing debt of the general government sector. Government's unwillingness to support economic growth and the fear felt by households of the future negative developments thus attenuated the growth potential prevailing in 2010 and 2011. Similar to the one in 2009, the second recession was manifested in the economic results of the non-financial corporations by reduced expenses and investments; consequently, a very low value of net borrowing occurred at that time.
Our analysis of the non-financial corporations' sector's behaviour in the Czech Republic after 1995 makes use of indices of national accounts as well as indices whose nature is closer to corporate practice.

II. ECONOMIC RESULTS OF THE NON-FINANCIAL CORPORATIONS' SECTOR IN THE CZECH REPUBLIC

The time evolution of the non-financial corporation sector's economic results in the Czech Republic has, to a great degree, reflected the economic cycles taking place in the Czech Republic, in particular, the crisis in the late 1990s, whose causes were exclusively internal (the irregular process of the economic transformation) and the 2009 crisis with the subsequent recession in 2012 and 2013); the latter was connected with the financial and economic crisis. The most distinctive manifestation of these economic cycles was seen in the values of the net saving and that of the index reflecting the economic results of the non-financial corporations (net lending/borrowing). This evolution is illustrated in Fig. 1.

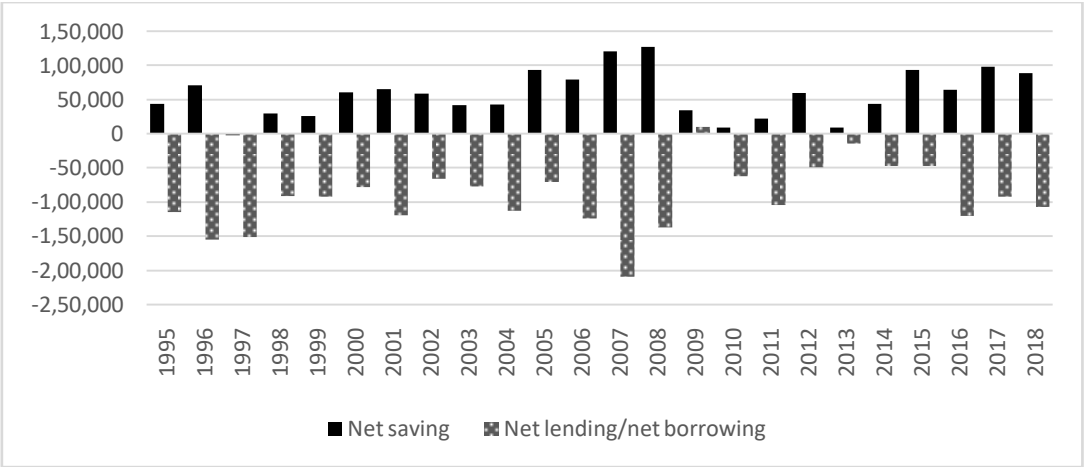


Fig. 1.Net saving and net lending/borrowing of the non-financial corporations in the Czech Republic (mil. CZK)
Source: www.czso.cz

The data shown in Fig. 1. clearly indicates that, in the years preceding the crisis, the non-financial corporations in the Czech Republic achieved the highest value of net borrowing (–155.4 bil. CZK in 1996, and –209.7 bil. CZK in 2007), mainly caused by the high year-to-year growth in investments[1] occurring in those years. However, the responses to the signs of the coming crisis were different in each of these two instances. Late in the first decade of this century, the non-financial corporations responded rather quickly and flexibly. Even though their gross value added went down by 6.8% in 2009 as compared with 2008 (in current prices), and their gross savings by 11.6%, the non-financial corporations got to a positive value of net lending,[2] mainly because of a decrease in the investments into the fixed capital by 15.8% as compared with 2008. A similar situation arose in 2013, when the year-to-year growth rate in the Czech economy got to a negative value (–0.5%) again; the value of the gross savings of the non-financial corporations went down by 4,.8%, but thanks to the stagnating investments the non-financial corporations achieved the smallest deficit in the period from 1995 to 2018. It is clear that the Czech non-financial corporations respond quite flexibly to negative stimuli coming from the outside; namely, by being careful in their expenses.

On the contrary, the result of current transactions in the late 1990s (negative net savings in 1997) was, despite the lower investments (down by 3.3 percentage points in the year-to-year comparison), the main cause for the high value of net borrowing (–151.0 bil. CZK). A fundamental difference between the behaviours of the non-financial corporations in the two crises we study was thus manifested in the results of current transactions and the levels of investments after the crisis signs occurred. Let us now have a more detailed look at the features that were, from the viewpoint of current transactions, dominant in the two key periods of the Czech economic developments we study here.[3]

III. VALUE ADDED AND ITS COMPONENTS

In crisis years, compensation to employees usually grows faster than value added. Our two periods differ from each other in that respect as well. While both gross and net value added values grew in 1997 for non-financial corporations in current prices (with a year-to-year growth of compensation to employees, which was even larger than that of the value added, namely, by 5.7 percentage points), in 2009 both gross and net value added values went down for the non-financial corporations as compared with the preceding year (in current prices, by 9.9% for the net value added and by 6.8% for the gross value added) and the compensation to employees went down as well (by 5.2% in current prices). In 2010, both gross and net value added stagnated, while compensation to employees grew slightly. The development was analogous in the subsequent recession years (2012 and 2013): the net value added stagnated, and the compensation to employees went up moderately (by 2.1% in 2012 and by 0.6% in 2013).

An important index characterising the level of economic activities carried out by non-financial corporations is profit share, i.e., the proportion of gross operating surplus in gross value added. The highest values of the profit share (above 52%) were achieved by Czech non-financial corporations in

[1] The year-to-year decrease in the fixed capital formation was by about one-fifth in both of these instances.

[2] It is worth mentioning that the Czech non-financial corporations have achieved net lending only in 2009, i.e., the year of crisis; never before and never after in the entire period from 1995 to 2018.

[3] However, a fast response by non-financial corporations to the 2008 crisis and the subsequent improvement in their economic results was not specific for the Czech Republic. A similar trend, namely, a high value of net borrowing in 2008 followed by net lending (even though the non-financial corporations always showed net borrowing in the preceding years) can be documented in other countries (such as Slovakia, Austria or Eurozone as a whole).

2001, and then in 2006 and 2007; that is, in time periods in which the proportion of compensation to employees in the gross value added (GVA) went down due to a significant growth of the total value of the gross value added. In the years of the crisis, the profit share was decreasing; its lowest value (47.4%) occurred in 1997; later the profit share was going down year to year as late as in the period from 2008 to 2013 due to the decreasing net operating surplus (which returned to its pre-crisis value of 2008 in 2014). The recovery that occurred in the Czech economy in 2014 was reflected in the growing value of the profit share (above 51%) in 2014 and 2015; however, this value was going down after those years until 2018, in which even a value smaller than in 1997, which was a year of crisis, occurred (46.7%). The profitability of Czech non-financial corporations was falling in 2016 through 2018 due to a very quick growth of wages, leading to a disproportion between the growth rates of GVA and compensation to employees.[4] The recession/crisis years thus are reflected in decreasing profitability of Czech non-financial corporations; nevertheless, the pressure on the growth of wages in the recent years (due to the low level of wages in the Czech Republic) has had similar effects in this respect. All the same, we can say that Czech non-financial corporations' profit share level is high in comparison with other developed countries (cf. Fig. 2.).

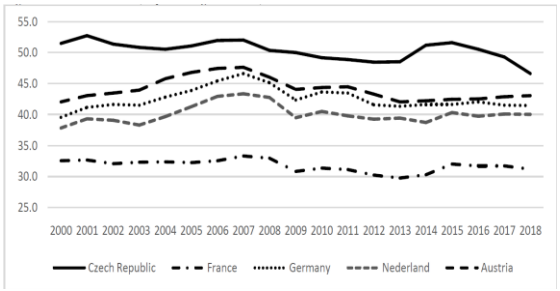


Fig. 2.Profit share values (as percentages of GVA) in selected countries
Source: EUROSTAT, the authors' own calculations

IV. DISTRIBUTION OF INCOME

One feature characteristic for Czech non-financial corporations is the ever-growing negative balance of the property income; in the 1997–1998 crisis, the balance of interests dominated (due to quickly growing interest rates on loans and the growing indebtedness of non-financial corporations); after that, the vast volume of new (especially foreign) investments brought about a growing balance of distributed income of corporations. In 1997, the negative balance of interests amounted to two and one-half times that of distributed income; in 2018, the former was just one-hundredth of the latter.

[4] The difference between the values of GVA and compensation to employees in 2018 was 5% to the detriment of GVA.

After 2000, Czech non-financial corporations sought out financial resources by issuing shares and attempted to reduce their indebtedness in the form of loans. A look at financial transactions (cf. Fig. 4.) will help us understand not only the disproportion between components of the property income but also the substantial changes in the net lending/borrowing values in both crises we study here. From 1995 to 1997, the non-financial corporations' indebtedness in the form of loans was growing, with an apex in 1997, which was – among others – manifested by a high level of net borrowing in the said period (–155.4 bil. CZK in 1996, and –151.0 bil. CZK in 1997). In the subsequent years, the loan-indebtedness was going down, and the non-financial corporations were focused on searching for financial resources in the form of issued shares. Significant growth of indebtedness in the form of both loans and shares occurred in the economic growth years from 2006 to 2008.

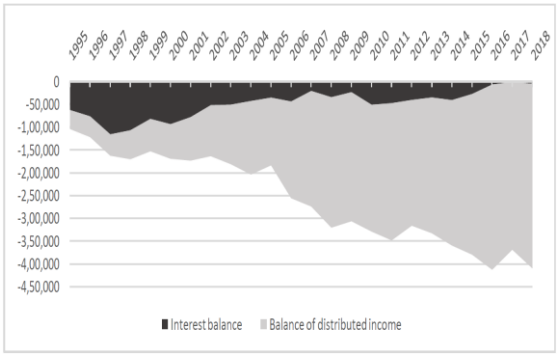


Fig. 3.Balance of property income for the non-financial corporations in the Czech Republic (mil. CZK)
Source: www.czso.cz

On the contrary, a sharp decrease came in indebtedness in the form of both loans and shares. These factors, together with other above-mentioned aspects of the non-financial flows, contributed to the record values of net borrowing in 2007 (–209.7 bil. CZK); on the other hand, to net lending in 2009 (9.7 bil. CZK). The recovery that came in 2014 was manifested in a growing demand for other financial resources, especially issuing shares.

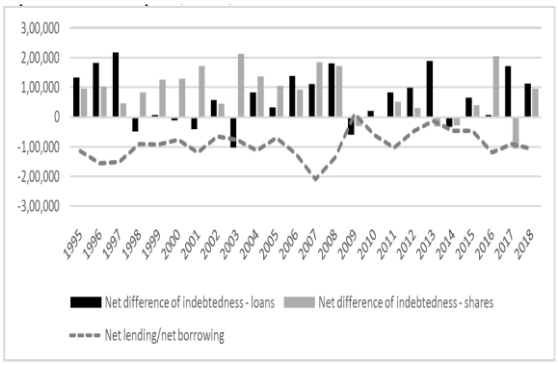


Fig. 4.Net difference of indebtedness in the form of shares and other equity and loans for the non-financial corporations in the Czech Republic (mil. CZK)
Source: www.czso.cz

This data not only helps us explain the disproportion between the property income balances but also indicates the causes for differences in net lending/borrowing in both crises we study here.

V. PROFITABILITY AND INDEBTEDNESS

It is suitable to complement our view of the economic situation of non-financial corporations with an analysis of indices whose definitions are close to those of the corporate practice. We have namely in mind the index of net entrepreneurial income.[5]This index is used in deriving relative indices for the non-financial corporations: net debt-to-income ratio after taxes, and net return on equity after taxes.[6] These two relative indices will help us illustrate different roles of Czech non-financial corporations in 1997 and in 2009.

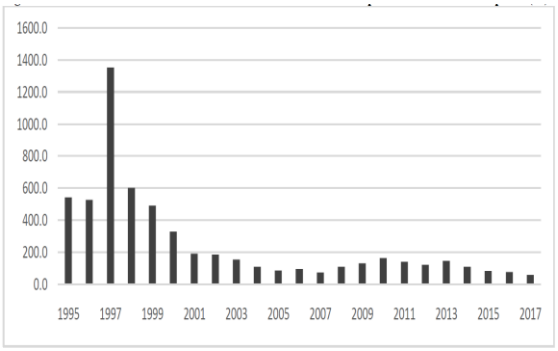


Fig. 5.Net debt-to-income ratio values after taxes for the non-financial corporations in the Czech Republic (%)
Source: www.czso.cz, EUROSTAT, the authors' own calculations

The net indebtedness of the non-financial corporations (after taxation) expresses the degree to which the non-financial corporations are or are not capable of covering their current liabilities from the results of their operational activities. The data shown in Fig. 5.unambiguously indicates the fundamental difference between the years 1997 and 2009 for the Czech non-financial corporations. In 1997, the net indebtedness level was higher than 1,355%being twoand one-half times that of 1996, a year-to-year increase from 2008 to 2009 was by one-half, but only achieved a value of 110.3%, i.e., the same value as in the economic-growth year 2004. In the recovery stage after 2014, the net indebtedness was continuously going down, achieving a value of 60.2% in 2017. The main reason for the high year-to-year growth in non-financial corporations' net indebtedness in 1997 was an increase in loan-indebtedness by 22.3%, i.e., by 233 bil. CZK. A lack of financial resources and the necessity to focus on bank loans with high interest rates (in consequence of an undeveloped capital market) were the reasons for financial problems the non-financial corporations had to cope with in 1997; and also for the differences between non-financial corporations' economic results in 1997 and 2009 crises.

Another index which confirms the above-mentioned observations and which is based on the indices close to the corporate practice is the own-resources profitability index, which confirms the above-mentioned observations and is based on indices close to corporate practice. Its concept is based on a ratio of the net income after taxes with respect to the net indebtedness in the form of shares and other equity.[7]

The data shown in Fig. 6. implies that, while the own-resources profitability in the 1990s was between 4.2% in 1997 and 9.5% in 2000, its values in the first decade of this century were substantially larger, namely, from 11.2% in 2002 to 19.7% in 2008 (the highest values between 22% and 23% occurred in 2015 through 2017). The year-to-year decrease in own-resource profitability in 1997 was exclusively caused by a significant drop in net income. On the contrary, non-financial corporations' profitability in 2009 was even higher by one percentage point than in 2005 (when the GDP went up by 6.5%).

The year-to-year decrease in profitability occurring in 2009 (by 4.5 percentage points) was caused by a decrease in net income and an increase in net indebtedness in the form of shares. In other words, indices close to corporate practice help us understand the differences in economic results achieved by non-financial corporations.

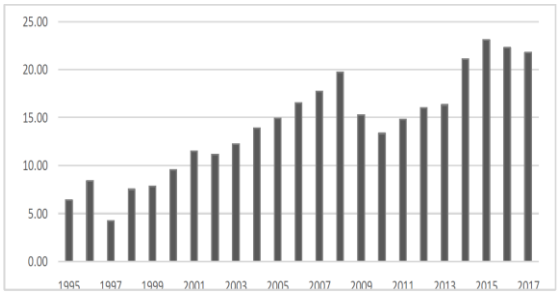


Fig. 6.Net return on equity after taxes of the non-financial corporations in the Czech Republic (in %)
Source: www.czso.cz, EUROSTAT, the authors' own calculations

[5] This index is defined as the net value added plus subsidies and received property income (minus rents and the property income attributed to insurance policy holders) a reduced by compensation to employees, taxes on production and imports, paid interests and paid rent. Net income of the non-financial corporations is sometimes expressed as the "after taxation" value – that is, after subtracting the current taxes on income.

[6] This index is defined as the ratio of net indebtedness at the end of the year in the form of securities other than shares and loans, with respect to net entrepreneurial income after taxes.

[7] The ne indebtedness in the form of shares is a difference, at the end of the year, between the receivables and payables in the form of shares.

We can thus see that the negative results of the Czech non-financial corporations shown on the national accounts in 1997 (negative savings, a high value of net borrowing) were caused by their high level of indebtedness and low efficiency. The substantial change in these parameters late in the first decade of this century brought about high levels of savings and net lending in 2009, even despite the overall economic decrease by 4.8%.

VI. CONCLUSIONS

By analysing relative indices based on the national account data, we can identify the reasons for the occurrence of differences between economic results of Czech non-financial corporations in the two crisis periods, distant by 12 years from each other. With the aid of those indices, we are able to explain the causes for loss from current transactions in 1997 and surplus in 2009, but differences in the economic circumstances in which the Czech non-financial corporations existed could not be analysed in more detail. The latter aspects are better described by values of relative indices; these relative indices are admittedly also based on the national accounts, but their constructions and informative values are closer to evaluating economic performance in corporate practice. It has turned out that significant differences in conditions are hidden in the rate of indebtedness and in profitability of corporations' own resources. The values of these indices were fundamentally different in the years we compare here, i.e., 1997 and 2009. In 2008, Czech non-financial corporations relatively flexibly responded to negative stimuli from the outside by drastically reducing all current expenses in 2009. We could not expect the same behaviour in 1997 when the crisis was caused by the economic transformation taking place in the Czech Republic; the predictions for 1997 were rather optimistic even at the end of 1997 (with the expected GDP growth by 2%).

ACKNOWLEDGMENTS

This article was written thanks to support from the Institutional Support to Long-Term Conceptual Development of Research Organisation, the Faculty of Informatics and Statistics of the University of Economics, Prague.

REFERENCES

[1] Gregory, P. R.; Ruffin, R. J.,"Principles of Economics", Reading Massachusetts, Addison–Wesley, 1997.
[2] Fayolle, J., "Pratiquecontemporaine de l´Analyseconjoncturelle,. Paris, Economica, 1987.
[3] Giovannini, E., "Understanding economic statistics: an OECD perspective", Paris, OECD, 2008.
[4] Hronová, S., Hindls, R., "Economic Crises in the Results of the Non-Financial Corporations Sector in the Czech Republic", Statistika, vol. 92, No. 3, pp. 4–19, 2012.
[5] Hronová, S., Hindls, R., Marek, L., "Reflection of the Economic Crisis in the Consumer and Entrepreneurs Subsectors",Statistika, vol. 96, No. 3, pp. 4–21, 2016.
[6] Lequiller, F., Blades, D., "Understanding National Accounts", Paris, OECD, 2006.

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