

# INFLUENCE OF THE FINANCIAL CRISIS ON THE FINANCIAL INVESTORS ASSETS LEVEL IN POLAND

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## Abstract

*The main purpose of the submitted article is the estimation of crisis influence on financial investors potential in Poland. There are four group of collective investors on financial market in Poland like Banks, Insurance companies, Investment funds and Open Pension Funds. Their importance on financial market, and especially on capital market in Poland is still rising. The dynamism of their assets value in 2004 – 2008 has been analyzed. Financial investors assets and Gross National Product in Poland ratio has been calculated. An influence of the crisis on the investment portfolios structure is also reviewed.*

**Keywords:** *Collective investors, open pension funds, investment fund, financial instruments.*

**JEL codes:** *G20, G23*

## 1. Introduction

The aim of this paper is to analyze the consequences of financial crisis on financial market in Poland. The core of the market are collective investors, like banks, insurance companies, investment funds and open pension funds. They create very strong demand on securities, which are issued on this market. Because of the crisis level of their assets has been reduced. The directions of their investment policy has also been changed.

## 2. Business cycle theory

A business cycle is a term which refers to the fluctuations in values measuring the amount of business activity occurring in a given country or region. They characterize the rate of changes in business around a long-term growth trend<sup>1</sup>.

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<sup>1</sup> Burda M., Wypłosz C., Makroekonomia-podręcznik europejski, PWN, Warszawa 2000, p. 46.

The following economic indicators are most frequently used to evaluate the currently dominating trend:

- Gross Domestic Product,
- Level of employment,
- Price level,
- Exports value,
- Imports value,
- Investment expenditure,
- Personal income and expenditure,
- Income and profits of companies,
- Stock index value.

The following are the phases of a business cycle<sup>2</sup>:

- expansion phase – production, employment, investment, demand and prices increase while unemployment decreases,
  - peak phase – the end of growth, the aforementioned values stabilize at a high level,
  - contraction phase – unemployment grows while production, employment, investment, demand and prices fall,
  - trough phase – the end of contraction, the aforementioned factors remain at low level.
- Depending on their length, business cycles may be divided into<sup>3</sup>:

- Short (Kitchin cycles) – lasting 2 – 4 years, caused by inventory and wholesale price changes as well as settlement of bank operations,
- Medium (Juglar and Kuznets cycles) – lasting from 8 to 23 years, related to accumulation of production factors over a long period (investment, construction migration),
- Long (Kondratiev wave) – lasting from 40 to 60 years, connected with discoveries and innovations and the process of their spreading over the world (electricity, steam engine, railway, computer, the Internet).

The financial crisis of 2007-2009 started with the collapse of the market of high-risk mortgage loans in the United States.

The crisis was triggered by banks giving subprime mortgage loans with high repayment risk to people with little financial capacity. Those loans became securities for

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<sup>2</sup> Ibidem, p. 79.

<sup>3</sup> Barczak R., Nowe oblicza cyklu koniunkturalnego, PWE, Warszawa 2006, p. 117.

bonds sold on a large scale by private financial institutions (including the biggest American and European banks) as investment or speculation. There was little awareness of how risky the bonds were, as it was the time when real estate market was growing, while at the same time the major rating agencies awarded high safety rates to those bonds. Individual insolvency of debtors resulted in the lack of cash on the credit market and instability of those institutions.

### **3. Institutional investors in the financial system**

The financial system is a mechanism regulating financial relations between entities belonging to private, state and financial spheres, consisting of financial institutions, financial instruments, financial markets and rules defining the way they function<sup>4</sup>.

From the point of view of this analysis the segment of financial institutions is fundamental, in particular institutional investors who fulfill the valuable function of financial intermediaries. Using the financial instruments available to them they transform savings to investment.

Institutional investors are public trust institutions. They possess the competence and the necessary knowledge in the field of investing funds on the financial markets. Households and companies entrust these specialized institutions with their surplus of funds (savings) to be invested in certain securities. Thanks to the professional management of funds investment risk is effectively lessened through diversification of the contents of investment portfolios, as well as through the choice of instruments with different level of risk and potential return<sup>5</sup>.

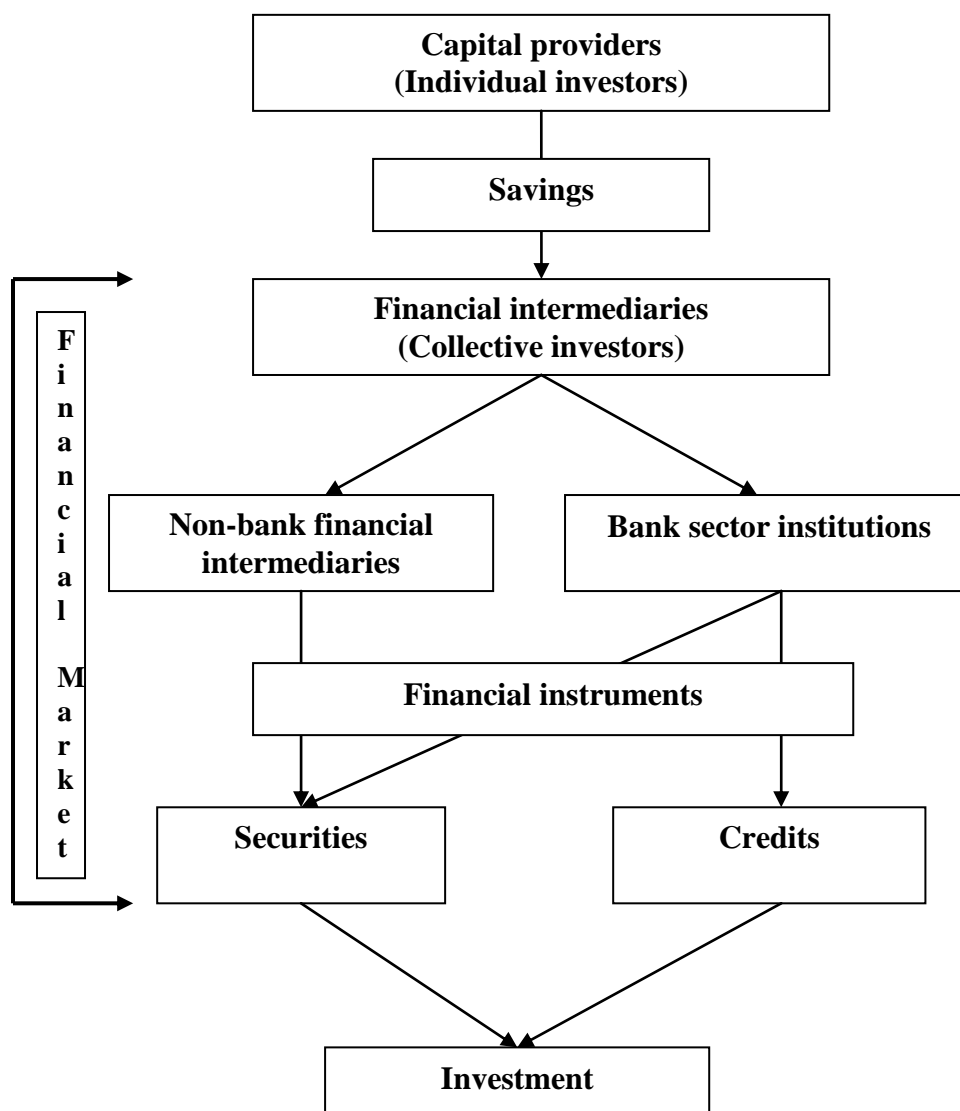
The process of transformation of savings into investments, by using collective investors has been shown on figure 1.

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<sup>4</sup> Wypych M., *Finanse i instrumenty finansowe*, Absolwent, Łódź, 2000, p. 104.

<sup>5</sup> Owsiak S., *Podstawy nauki finansów*, PWE, Warszawa 2002, p. 227.

**Figure 1 Mechanism of transformation of savings into investment**



*Source: own analysis*

The arguments which prove superiority of collective investment over individual one are the following<sup>6</sup>:

- professionalism – financial intermediaries employ highly qualified personnel and have better understanding of the financial market and the instruments it offers, which enables taking optimal investment decisions,
- investing flexibility – financial intermediaries have more opportunities to diversify the investment portfolio depending on the changing situation on the financial market,

<sup>6</sup> Proniewski M., Niedźwiedzki A., M., Rynek pieniężny i kapitałowy. Podstawy teorii i praktyki, Wyższa Szkoła Finansów i Zarządzania w Białymstoku, Białystok, 2001, p. 82.

- concentration of savings – financial intermediaries having considerable financial resources at their disposal may take advantage of the scale and as they have more bargaining power they may purchase financial instruments on better conditions than individual investors,
- diversification of investment – having bigger financial resources they stand a better chance of adjusting the structure of their investment portfolio with reference to the relation of risk-return. Thanks to the diversification of investment portfolio, financial intermediaries may decrease the level of risk of its content.

Furthermore, other aspects of collective investment need to be emphasized. When investing their savings through financial institutions individual investors are freed from the necessity of constant monitoring of the financial market situation as well as gathering information about it in order to take the right investment decisions. Having bigger capital gives collective investors wider and more direct access to many financial instruments, which are not available for individual investors.

Major collective investors include:

- commercial banks (especially investment banks),
- insurance societies,
- pension funds,
- investment funds.

**Commercial banks** – the most common type of these banks are the credit-deposit banks which gain their capital from clients in the form of deposits and investment. They are the only institutions able to accept money from their clients on term deposits and transform them into credit funds. They also operate on the financial market using that part of the money procured from clients in the form of deposit or bonds which were not assigned for credit. The funds are engaged mostly in low-risk financial instruments such as treasury bills and bonds<sup>7</sup>.

Banks whose main aim is to invest in securities are investment banks. These are institutions primarily dealing in the capital market and its instruments. We should differentiate between the operations of investment banks on the primary and secondary market. In the former they prepare and carry out the issue of securities as well as advise their issuers. In some cases banks take over the risk connected with success of the issue functioning as guarantors. On the secondary market investment banks activities may have two forms:

- investing in securities (as a dealer),

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<sup>7</sup> Konieczny J., Bankowość inwestycyjna na świecie i w Polsce, OLYMPUS, Warszawa 1996, p. 67.

- carrying out client's orders to purchase or sell securities, sometimes also safe-keeping them.

Besides, their other functions include financial advisory services as well as mergers and acquisitions services<sup>8</sup>.

**Insurance companies** – the aim of the insurance societies is to provide financial protection to insured people, which enables limiting negative effects of risk. These institutions gain capital in the form of insurance premium paid by clients. The insurance holders pay premium as a way of financial protection of themselves and other people insured in case action committed takes place<sup>9</sup>.

Insurance companies must be solvent. This involves their having own capital at the adequate level and conducting investment deals complying with the statutory requirements and limitations. The main aim of their investment activity is to achieve profitability with the maximum high level of safety and maintaining asset liquidity<sup>10</sup>. The safety requirement makes it necessary for insurance companies to reduce the risk by diversification of the investment portfolio and high content of safe investment. Through investment the accumulated insurance capital returns to the financial system of the country and performs productive, pro-supply role. The main categories of insurance companies investment are:

- mortgage,
- real estate,
- securities (mostly safe – treasury bills and bonds),
- bank deposits.

**Open pension funds** – open pension funds are economic entities collecting contributions in order to turn a profit to those who pay them. As the consumption of the invested savings happens only after reaching pensionable age, the time scale of the investment of pension funds is relatively long. The general aim of the business of pension funds on the financial market requires minimal investment risk, therefore they must comply with various safety norms according to which the funds invests in financial instruments. This applies especially to open pension funds and funds connected with pension plans of employees, and to a lesser extent funds based on individual pension accounts – those three forms of savings accumulation are part of a social protection system and their activity is related to the social

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<sup>8</sup> Jacob A., Klein J., Investment banking, POLTEXT, Warszawa 1998, p. 17 – 19.

<sup>9</sup> Nowak K., Polski rynek kapitałowy, Wyższa Szkoła Bankowości, Poznań 1998, p. 151 – 152.

<sup>10</sup> Sułkowska W., Ubezpieczenia, zagadnienia podstawowe, WSZiB, Kraków 2001, p. 119.

policy of the state (in the case of open pension funds accumulation of savings is enforced by the system)<sup>11</sup>.

**Investment funds** – investment funds most distinctly represent the idea of collective investing. In comparison to the other financial intermediaries investment on the financial market is their primary aim. Their clients are mainly individual persons, who for various reasons are not interested in investing their savings on their own. The services of these institutions are frequently used by other entities (banks, insurance companies, open pension funds), because the investment offer of investment funds is highly diversified while the management of the accumulated capital is professional. Moreover the fees charged by these funds are relatively low<sup>12</sup>.

As was mentioned before collective investors influence the national financial system and economic development. They form a crucial element of the demand side of the financial market. Accumulated capital is invested in financial instruments, contributing to the development of the monetary market, and particularly the capital market. Both of these markets are used by companies when financing current business activities or investment ventures. Demand for capital from companies depends on various factors such as macroeconomic, line of industry and internal issues. When making a decision to finance business through the financial market the company must take into account the fact that the capital obtained must be repaid and interest must be paid in return for using this capital. Such decision should, therefore, be preceded by a survey of the market and based on reliable economic calculus.

#### **4. Level of financial investors assets in Poland in 2004 – 2008**

The object of this analysis is the evaluation of influence of the situation on the financial market on the potential of institutional investors in Poland. This includes two areas:

- evaluation of assets possessed by collective investors as well as their structure,
- Change of the level of assets engaged by investment funds and open pension funds in high-risk financial instruments.

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<sup>11</sup> Proniewski M., Niedźwiecki A.M., op. cit., p. 88.

<sup>12</sup> Dziawgo D., Dziawgo L., Fundusze powiernicze, Towarzystwo Naukowe Organizacji i Kierowania „Dom Organizatora”, Toruń 1994, p. 11.

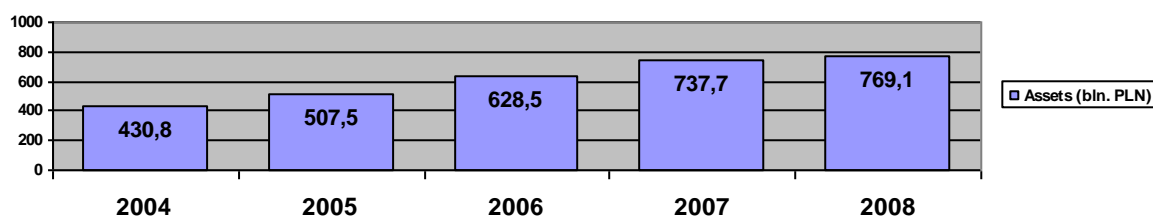
**Table 1 Value of WIG and WIG – 20 indexes in 2004 – 2008**

Index	2004	2005	2006	2007	2008	2008/2004
<b>WIG</b>	26 636,19	35 881,36	50 411,82	55 648,54	27 228,64	2,22 %
<b>WIG – 20</b>	1 960,57	2 683,20	3 285,49	3 456,05	1 789,73	- 8,71 %

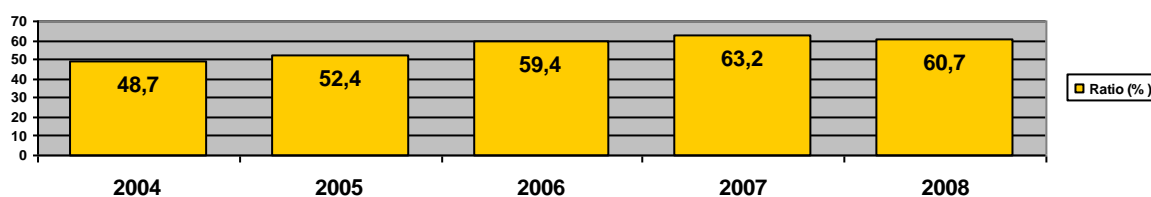
*Source: own analysis based on [www.gpw.pl](http://www.gpw.pl)*

WIG means Warsaw Stock Exchange Index and WIG – 20 contains 20 biggest companies on capital market in Warsaw. During the analyzed period growth of both indexes was observed annually with the end of the growth period in 2007. In 2008 significant decrease of their value was registered, which was the effect of a considerable fall of the prices of shares on the Warsaw Stock Exchange (decrease 51,1 % and 48,2 % respectively). During the four analyzed years the index referring to all shares on the trading floor increased by slightly over 2%, while the index based on the 20 largest companies decreased in value by almost 9 %.

The diagrams below and the table represent financial potential of collective investors in 2004 – 2008. The level of assets held by the segment of financial investors and its relation to Polish GDP is illustrated. In addition, the table presents the structure of this segment of the financial system.

**Figure 2 Financial investors assets in Poland in 2004 – 2008**

*Source: own analysis based on [www.knf.gov.pl](http://www.knf.gov.pl)*

**Figure 3 Ratio of financial investors assets to GDP in Poland in 2004 – 2008**

*Source: own analysis based on [www.knf.gov.pl](http://www.knf.gov.pl) and [www.stat.gov.pl](http://www.stat.gov.pl)*



It is important to note that despite the crisis of 2008 financial investors assets in Poland were still growing, however the rate of growth slowed down (17,8% in 2005, 23,8% in 2006, 17,4 % in 2007, 4,3 % in 2008). The crisis resulted in the return of investors trust in bank deposits. Drastic falls of share prices on the stock exchange discouraged most of them from risk taking, the effect of which was the flow of capital to banks. The effect of the bad situation on the stock exchange market was the decrease in the share of financial investors assets in the GDP. This is a negative phenomenon because their role in the financial system and national economy weakens.

**Table 2 Financial investors market distribution in 2004 – 2008 (share in %).**

<b>Institution</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
Banks	70,3	64,8	59,8	56,8	64,7
OFE Open Pension Fund	14,5	17,0	18,5	19,0	18,0
TFI Investment Fund Company	8,8	12,1	15,7	18,3	9,6
TU Insurance Society	6,4	6,1	6,0	5,9	7,7

*Source: own analysis based on [www.knf.gov.pl](http://www.knf.gov.pl)*

As a result of the financial crisis in 2008 investors trust in banks increased. Their share in the segment went up by 8 percentage points. However, in comparison to 2004 the share of banks in the segment of collective investors was still lower by almost 6 percentage points. The negative trends influenced primarily investment funds, which was a consequence of low profit of the funds managed by them (decrease of assets by 45% and loss of almost 8% of the market share). Open Pension Fund and insurance societies operate by slightly different rules with the flow of incoming capital guaranteed statutorily, which is the reason why they experienced little effect of the crisis (insurance society assets increased in 2008 by 36.2% whereas Open Pension Fund assets fell by only 1.2% in spite of the fact that a large part of them was engaged in the stock market). In the case of Open Pension Fund it was due to constant flow of cash to portfolios from the contributions paid by the future pensioners.

The last part of the present survey analyzes the level of engaging in the high-risk instruments by Open Pension Fund and investment funds. In the case of Open Pension Fund the components of their portfolios include:

- Shares,
- Treasury debtor documents and bank deposits,
- Others.

In the case of investment funds they were divided as follows:

- Aggressive (Stock Exchange shares, balanced, stable growth),
- Foreign
- Safe (treasury bonds, money market)
- Others

**Table 3 Structure of investment portfolios of Open Pension Fund in 2004 – 2008**

Instrument	Share (%)					2008/2004 (p.p.)
	2004	2005	2006	2007	2008	
Shares	33,6	31,8	34,2	34,9	21,6	- 12,0
Safe	58,5	62,2	61,1	60,0	73,6	15,1
Others	7,9	6,0	4,7	5,1	4,8	- 3,1

*Source: own analysis based on [www.knf.gov.pl](http://www.knf.gov.pl)*

The table above confirms negative influence of the financial crisis on the level of engaging of pension funds in shares. The maximum limit of capital invested in this kind of securities allowed is 40%. Even when there was a bull market trend on the Stock Exchange the funds never invested the whole limit allowed, whereas in 2008 stock was less than 20% of the investment portfolios. It was beneficial for the state treasury because there was an increase in the amount of capital engaged in treasury bonds, which means it was easier for the Ministry of Finance to sell them and as a result cheaper financing of the budget deficit. During the analyzed period a decrease was observed in the ratio of shares in the Open Pension Fund portfolios by 12 percentage points.

**Table 4. Structure of the investment funds TFI market in 2004 – 2008**

Instrument	Share (%)					2008/2004 (p.p.)
	2004	2005	2006	2007	2008	
Shares	49,2	53,6	64,7	68,4	50,7	1,5
Foreign	11,4	8,5	9,9	15,4	18,4	7,0
Safe	35,6	30,6	20,1	12,2	24,9	- 10,7
Others	3,8	7,3	5,3	4,0	6,0	2,2

*Source: own analysis based on [www.izfa.pl](http://www.izfa.pl)*

Investment funds placing their assets mostly in shares still constituted more than half of the market by the end of 2008, but during that year the ratio decreased by more than 17 percentage points (during the analyzed period until 2007 the ratio of shares in the investment market systematically grew). Investment funds clients withdrew their savings from the whole of investment market, in particular from those highly engaged in high-risk instruments

(notwithstanding the level of loss they incurred as a consequence). As a result safe funds and foreign funds increased their share of the market. This was particularly important in the case of the former as it shows the change in preferences of their clients as far as investment risk is concerned (the market share during the last year increased by 12 percentage points, reaching 25% level, which was still lower by 10 points in comparison with 2004).

#### **4. Conclusion**

Effects of the financial crisis may be clearly observed in the financial system in Poland. It is particularly evident in the segment of institutional investors, a crucial element of the system. The rate of growth of their assets became significantly slower in 2008. Moreover, their relation to GDP of Poland is less advantageous. The beneficiaries of such situation were the banks, whose assets increased, confirming that Polish investors treat them as the most stable element of the system. Institutions which were severely affected by the crisis were investment funds, whose clients incurred very high losses. Regaining trust in those funds of most investors will require much time and good investment results.

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