Financialisation and Economic Crisis: The Case of Poland

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CHANGES IN THE RELATIONSHIP BETWEEN THE FINANCIAL AND REAL SECTORS AND PRESENT FINANCIAL AND ECONOMIC CRISIS. CASE OF POLAND

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Abstract: The paper examines the development of the Polish economy in the age of intense global financialisation, which led to the systemic destabilization of the world economy. However, it is pointed that in case of Poland it is hard to speak about financialisation in the sense of the word used with reference to the ‘old’ market economies, i.e. as a domination of the financial sector over the real one. The study covers the period from 1992, when a recovery of Poland’s economy from deep recession triggered by the ‘shock therapy’ had begun, to 2013. It is the period of building the true financial system in the country as a part of a comprehensive transformation of the economic system. At the same time it is the period in which several regional or national and two global financial crises (2000-2001 and 2007-2009) took place. The paper concentrates on the impact of the former on Poland’s financial and real sectors.

The first part presents the development of main macroeconomic aggregates, analyses contribution of the main demand aggregates to the economic growth as well as financial balances of the economy and particular functional sectors.

In the second part changes in income distribution and development in gross capital formation at the level of national economy and particular sectors are examined. Next, development of household income inequalities are analysed in details. Finally, development of private final consumption is presented.
The third part of the paper is devoted to the impact of the both global crises on Poland’s economic development and its international position as a net lender or borrower. Factors defining this position and sectors’ contribution to the total net lending/borrowing are examined. Next, selected aspects of the banking sector development are analysed from the point of view of the real sector. The last point presents recent development of the housing market.

**Key words:** economic growth, employment, unemployment investment, consumption, net export, financial crisis, financial assets, financial liabilities, financial balances, net lending/borrowing, savings, income distribution, income inequalities, economic policy.

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INTRODUCTION

Contemporary history of the Polish market economy has begun in 1990, when – after 45 years of centrally managed economy – radical reform of the economic system was implemented. Admittedly, some fragmentary market oriented reforms had been introduced already in the late 1980s under the rule of the communist-led government, but it became obvious that partial changes would not be able to pull the economy from deep, multidimensional disequilibrium and to prevent its collapse and long lasting depression. As the systemic transformation has already been described in depth in numerous academic publications, there is no need to present it again. It is enough to remember that the transformation was based on monetarist premises and had revolutionary character (hence named ‘shock therapy’). Three immediate tasks were aimed at:

1. reduction of inflation, in order to stabilize the monetary situation and create conditions to introduce the convertibility of the Polish currency;
2. setting market mechanisms in motion and thus to abandon principles and methods of central management, and
3. far going privatisation and commodification of the economy.

The first consequences of the shock therapy were much more painful than expected by the government advisors: further increase in inflation (up to 580% in 1990), decrease in GDP by ca. one-sixth in two years and fast growing unemployment (no existing at all till the end of 1989). The first two phenomena turned out to be relatively short-lasting as since 1992 recovery of the economy had begun bringing gradual decrease in inflation and accelerating growth of GDP. However, the upward trend in unemployment had continued and reversed only in the middle of 1994.

The genuine financial system has been developing in Poland only since the beginning of the 1990s. Before, with a lack of markets and an effective price mechanism, money existed just as a unit of account and only to a limited extent as a means of payment. The financial system consisted then only of the few State-owned or fully State-controlled
commercial banks and some two thousand small, local cooperative banks, acting under non-market rules, with all significant parameters determined by the government. Accounts of State-owned firms were kept by branches of the National Bank of Poland (the central bank) and decisions on giving firms major investment loans were actually taken by political authorities rather than by banks. There were no other types of financial intermediation (except only two, state-owned, insurance companies), nor other financial markets than the loan-deposit one. Thus, the Polish financial system had to be created almost from scratch (for details see Janc et. al, 2013).

Since the beginning of the transition, the institutional structure of the Polish financial sector features the dominant position of the banking sector. It is a natural consequence of accepted sequence of changes: when other types of financial intermediaries were created, banks had already been well rooted in the market. Banks are the largest financial intermediaries in Poland and play a predominant role in satisfying financial needs of the real sector of the economy. As the development of the Poland’s financial system after 1989 has been presented in details in Janc et al. (2013) only selected aspects are presented in this paper.

Comparing the present level of development of the Polish financial sector with that in ‘old’ market economies one can conclude that there is ‘little to say about financialisation of the Polish economy’ (see Janc et al., 2013). One should rather speak about inevitable development of the financial sector to meet needs of the emerging and developing market economy.
I. LONG-RUN DEVELOPMENT IN THE ERA OF FINANCIALISATION SINCE THE EARLY 1990S AND THE ECONOMIC AND FINANCIAL CRISES

1.1 Development of currency regime and international competitiveness of the economy

Since the very beginning of 1990 the fixed exchange rate of the Polish currency against USD had been introduced as an integral part of the stabilization program. To restrain inflation and reduce inflationary expectations, the rate was set at the level equal to a bit more than one-third of the then purchasing power parity of the currencies. In May 1991 this regime was replaced by the peg to the basket of five currencies (USD 45%, DM 35%, GBP 10%, and FRF and CHF 5% each). Five months later crawling peg regime was introduced with a band gradually widened from ±0.5% to ±2%. The regime remained in effect till in May 1995 when crawling band regime was introduced. The band had been gradually widened from initial ±7% to ±15% in March 1999. In the meantime the former currency basket was replaced by the one composed of euro (55%) and USD (45%). Finally, since April 2000 fully floating exchange rate regime has been put in effect that ended the nine-year period of gradual devaluation of national currency. In the following nine-year period the exchange rate of PLN to euro fluctuated between 3.5 and 4.5, and since the crisis of 2009 the range of fluctuation narrowed to 4–4.5 band (see Fig. 1).

![Figure 1 PLN to Euro/ECU nominal exchange rate](image)

**Source:** Eurostat Database, *Euro/ECU exchange rates*
1.2 Economic growth

Unavoidable side effect of the shock therapy was hyperinflation and deep recession. Implementation of the free price system for consumer goods in the middle of 1989 resulted in increase in average annual inflation from 60% in 1988 to 251%. When the general reform was effected in 1990, inflation soared to 586% and ten years had to pass before it became one-digit.\(^1\) Equally shocking was decrease in GDP. In 1990-1991 the country’s GDP shrunk by more than 1/6. However, already in 1992 the economy entered the upward path and is incessantly continuing on it till now. During last 22 years Poland’s GDP has been growing at an average annual rate of 4.2%, reaching in 2013 the volume nearly two and a half times bigger than in 1991 (Fig. 2).

![Figure 2 GDP growth: 1991=100](image)

Source: Own calculations based on Ameco Results, GDP at 2010 market prices

Actual growth path of GDP has been close to that of potential GDP, at least since 1995\(^2\) (Fig. 3). Deviations from potential GDP ranged from -4.6% to +3.3%, with the arithmetic average of +0.1% (Fig. 4). Each 5-7 years the sign of the gap changed:

1996-2000: positive gap,
2001-2005: negative gap,
2006-2012: positive gap,

\(^1\) CSO, 2014, Roczn.
\(^2\) No data on potential GDP has been found for earlier years.

In the whole period 1995–2013 the total of positive gaps exceeded the total of negative ones by 30.2 Mrd PLN (at 2010 prices) that made 0.14% of the total actual GDP for that period.

It should be noticed that the gaps during the two consecutive crises – in early and the late 2000s – were totally different. The former was associated with actual GDP below the potential one, while the latter was preceded by emergence of positive gap, which lasted till 2012.

Figure 3 Actual and potential GDP at 2010 market prices (Mrd PLN)

Source: AMECO Results
Total consumption, was developing in similar way as GDP, but at a lower (by 0.5 percentage points) average rate. However in some years, and particularly in the years of both crises, i.e. 2001-2002 and 2008-2009, consumption was growing faster than GDP. In the whole period 1992 -2013 the rate of growth of the former fluctuated between 0.73% (2012) and 7.22% (1996). In 2013 total consumption was 2.2 times bigger compared with 1991 (Fig. 5)
Contrary to the consumption the gross capital formation (GCF) and gross fixed capital formation (GFCF) were developing along a very wavy paths, cresting to consecutive record heights on the eve of outbreak of each crisis (see Fig. 6). It should be noted that frequency of waves was diminishing with time. Consecutive sloping up waves of GFCF lasted 8 years (1993-2000), 6 years (2003-2008) and 2 years (2010-2011), were alternated with downward slopes lasting in turn 2 years (2001-2002 and 2009-2010) and 1 year (2012). During the first cycle (1992-2002) annual rates of growth fluctuated between −9.7% and +19.7%, during the second one (2003-2010) the range of fluctuations was −1.9% +19.2% and during the third cycle (2011-2012) it was −1.5→+9.3%. During 22 years GFCF increased nearly 3.8 times, that is much more than GDP and total consumption.

1.3 Employment, wages and unemployment
1.3.1 Employment
In the last two decades total employment fluctuated between 13.6 and 15.9 million persons with an average of 14.9 million and standard deviation of 654 thousand persons this gives the relative deviation of (σ/μ) of 4.4% (see Fig. 7). Minimum employment was observed during the economic crisis of early 2000s while maximum during the 2009-2013 crisis. It is worth to pay attention to two facts:
1) Total employment as well as number of employees reached their peak values in 2009 when the crisis hit the Polish economy, and till 2013 were still higher than in 1996-1998, when the economy experienced the highest growth since the transition.

2) While the graph of employees runs parallel to that of total employment, the graph of self-employed has approximately linear slope. As a result the share of the latter decreased from 30.2% in 1992 to 22.8% in 2013 or, in absolute figure by a bit more than 1 million person.

1.3.2 Wages

In spite of fast growing labour productivity (only between 2000 and 2013 real labour productivity per person increased by half\(^3\)) and some increase in employment between the 1990s and 2010s, the share of compensation in GDP diminished considerably. Figure 8 shows adjusted wage share\(^4\) as percentage of GDP at factor cost and of GDP at current market prices. Between 1992 and 2013 the former fell by 18.6 percentage points while the latter by 16.9 points, to unprecedented low levels of 53.8% and 47.5% respectively.

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\(^3\) Calculated on the basis of the Eurostat Database: Labour productivity and unit labour costs [nama_10_lp_ulc].

\(^4\) Defined as compensation per employee as percentage of GDP at factor cost per person employed (Eurostat).
1.3.3 Unemployment

One can distinguish five stages of unemployment development in Poland (see Fig. 9 and 10).

The first stage began in 1990 as a result of transition from centrally managed to market economy. Fast increase of unemployment from zero at the beginning of 1990 to 2.5 million (and the rate of unemployment to 14.4%) in 1994 had two reasons: 1) excessive, economically unjustified employment at the starting point; 2) decrease in demand for domestically manufactured products because of their mediocre use value and poor quality.

The second stage covered the period from 1995 to 1998 when economic growth accelerated to ca. 6% annually owing to giving up by the new Centre-Left government the neoliberal dogma about allegedly principal contradiction between struggle for reducing inflation and stimulating economic growth. This led to 700 thousand reduction in unemployment and decrease in its rate to 10.2%.

However, in 1999 the trend reversed as a result of completely incoherent economic policy, not in keeping with socio-economic reality, carried out by the next government composed of neoliberals and rightist populists. This led to growth recession and the four-
year period of fast increase in unemployment. The GDP growth rate fell to 1.2% that resulted in doubling of unemployment. Number of unemployed soared to 3.4 million, while the unemployment rate to 20%. Economic slowdown hit particularly hard the youngest generation of labour force. Number of unemployed less than 25 years old increase from 440 thousand in 1998 to 969 thousand in 2002 and the rate of unemployment from 22.5% to 42.5%.

During subsequent six years unemployment was consistently falling down, reaching in 2008 the lowest level since 1991 i.e. less than 1.2 million (7.1% of the total labour force). The unemployment among people under 25 years decreased to 305 thousand and their
rate of unemployment fell to 7.1, the lowest since the middle of 1990s. To some extent this fall was also conditioned politically.

Since the end of 2001 political power in Poland was in hands of the Centre-Left (till 2005), the rightist-populist coalition (2005-2007) and Centre-Right, in turn. The Centre-Left government implemented again growth-promoting policy creating favourable conditions for economic recovery. Their rightist-populist successors did not manage to spoil it because they lost power after two years, and the Centre Right, which took power in 2007, though declaring during the election campaign attachment to neoliberal economy, actually were carrying out pragmatic economic policy enabling the economy to make use of opportunities and avoid major threats occurring in the external economic environment.

With the coming of the crisis in 2009 the unemployment trend reversed again. In total, it increased by half (by just under 0.6 million persons) during five years, i.e. much less than during the four-year period of 1999-2002 when the unemployment doubled. The rate of unemployment increased to 10.3% in 2013. In spite of the increase, the number of unemployed and the rate of unemployment in 2013 were similar to that in 1998, the last year of economic boom in the second half of the 1990s. Unemployment among the young people in 2011-2013 was by a bit more than 100 thousand bigger than in 2008 and their unemployment rate increased from 17.2% in 2008 to 27.3% in 2013. Considerable decrease in unemployment (by 0.2 million persons) in 2014 (not shown on the chart) is possibly a harbinger of reversion of the trend.

1.4 Contributions to the GDP growth
Since 1992, when Poland has entered a ceaseless path of economic growth that was mainly domestic demand-led. In only four years contribution of domestic demand to GDP growth was negative (2001, 2009) or null (2012 and 2013). Coefficient of correlation between GDP and domestic demand for the period 1992-2013 is 0.94 The net export contributed positively to economic growth in 11 years out of 22 years of the period under consideration, but only in three cases the contribution was more than 1.5 % (see Fig. 11).
Coefficient of correlation between GDP and net export for the period 1992-2013 is -0.80, that shows the latter plays a role of a shock absorber.

It is worth to stress fundamentally different relation between changes in REER (deflated by unit labour cost) and changes in export and GDP rates of growth in particular sub-periods (see Fig. 12). Since the beginning of 2000s to 2008 increases/decreases in international cost competitiveness (decreases/increases in the REER) of the Polish economy were accompanied by increases/decreases in exports of goods and services as well as in GDP, which was what should be expected according to the simple theoretical rule. Correlation between annual percentage changes in the REER and changes in rates of growth of exports and GDP was strong negative: -0.76 and -0.79 respectively⁵ (see Fig. 12 and 13) However, in earlier and later sub-periods the opposite was true: the correlation was positive and for exports very high in both sub-periods (+0.87 for 1997-2000 and +0.92 for 2009-2013), while for GDP equally high (+0.86) for 2009-2013 and moderate (+0.32) for 1995-1999. So, one can conclude that before the 2001 crisis and since the onset of 2009 crisis, changes in the international competitiveness was not a decisive factor of development of the Polish economy. However, it should be noticed that if the REER had not decreased considerably in 2009 (by 22% compared to 2008), Polish exports could fall much more than by 2.7% and the GDP rate of growth could be much lower than actually observed 1.6%.

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More detailed picture of domestic demand aggregates’ contribution to the economic growth presents Figure 14. The contribution of private consumption was positive in each year and the generally the biggest one. In three years only (1995, 2007 and 2011) it was slightly below the contribution of gross fixed capital formation (GFCF). The latter had the biggest impact on fluctuations of the rate of economic growth. Correlation between the two was very strong (0.90) and considerably higher that between contribution of private consumption and GDP growth (0.73). In years when the GDP growth fell below 2 per cent, contribution of the GFCF was negative. The public consumption had in all but one year positive but minor contribution to the economic growth: in four years only it was above 1%. The contribution of public consumption was weakly positively correlated with that of private consumption (0.12) as well as with the rate of GDP growth (0.23).

1.5 Financial transactions and balances – total economy

1.5.1 Financial transactions

Between the middle of 1990s and early 2010s huge fluctuations were observed on both sides of financial account of the Polish economy: net acquisition of financial assets and net incurrence of financial liabilities. As a general rule their ratios to GDP were increasing in years of accelerating economic growth (1995-1998, 2003-2007 and 2010-2011), and
decreasing when the growth was slackening (see Fig. 15). Differences between the lowest and highest values of both were similar: 41 (assets) and 42.3 percentage points (liabilities).

![Figure 15 Financial transactions as % of GDP: total economy](source)

Source: Eurostat Database: Financial transactions

Particular functional sectors contributed in very different degree to the development of the economy financial transactions (Fig. 16 and 17). Corporations were definitely dominating players in financial market in the whole 1995-2012 period and had the decisive impact on changes in the total value of transactions. However their share in acquisition of assets as well as in incurrence of liabilities diminished sharply in 2002 and 2009, the years of both crises. This concerns both financial and non-financial corporations, but while since the recovery from the 2001-2002 crisis financial corporations were unquestionable leader on both sides of the financial market, before the outbreak of the crisis non-financial corporations – not financial ones – were unquestionable leader in incurrence of financial liabilities and their acquisition of financial assets was similar to that of financial corporations. It is worth to notice that there were two cases only when net financial assets or liabilities of corporations diminished in absolute terms: this happened with the financial corporations’ liabilities in 2002 and the non-financial corporations’ assets in 2012.

Another fact worth to emphasize is that in some years net acquisition of financial asset by households was close to that of non-financial corporations (1995, 2002, 2004 and 2007) or
even noticeably exceeded the latter (2005, 2009 and 2012). In case of incurrence of liabilities such a situation happened only twice (2009 and 2012).

Net acquisition of assets by non-resident subjects only once exceeded 10% of GDP. This happened just before the outbreak of the 2009 crisis. In the remaining years the ratio fluctuated between 2.5% and 9.9% of GDP. A comparison of average ratios for 1995-2005 (5.5%) and 2006-2012 (8.4%) shows noticeable increase in the role of the Rest of the World in acquiring domestic financial assets since the middle of 2000s.

![Figure 16 Net acquisition of financial assets by sector as % of GDP (non-consolidated)](image)

![Figure 17 Net incurrence of financial liabilities by sector as % of GDP (non-consolidated)](image)
1.5.2 Financial assets, liabilities and net financial worth of the economy

Throughout the period 1995-2012 value of Poland’s financial liabilities exceeded value of its assets and the difference between them was growing over time (Fig. 18). Between 1996 and 2010 their ratios to GDP increased by 154.5 and 115.6 percentage points respectively, that gives an annual average of 11 and 8.3 points. In 2008 – the first full year of the world financial crisis – growth of both rates (though no volumes of liabilities and assets) temporarily slowed down to nearly zero. Next, after acceleration in two following years, both reached their maxima (344% and 278 % respectively) and then diminished in two consecutive years to 338% and 271 % of GDP in 2012, which means an increase by 142 and 103 percentage points compared to 1995. This led to a decrease of Poland’s net financial worth from -28.7% of GDP in 1995 to -67.2% in 2012. Though throughout the whole period non-financial corporations’ sector was the largest contributor to total net financial liabilities, the decrease in the economy net financial worth resulted mainly from decrease in net worth of the general government from +15% of GDP in 1995 to -33.6% of GDP in 2012 (see Fig. 19). This, in turn was a consequence not so much of an increase in government’s liabilities, as of a fall in unquoted shares owned by the government from 54.5% of GDP to 5.0% as a result of privatisation of state owned or co-owned firms. In effect total government financial assets decreased from 66.6% of GDP to only 28.7%.

![Figure 18: Financial assets and liabilities as % of GDP](source: own work based on Eurostat database, Financial balance sheets [nasa_f_bs] (nasa_f_bs))
This general picture is an outcome of very different development of financial assets and liabilities in particular institutional sectors, which will be discussed in details in the following points.

![Figure 19 Net financial wealth by institutional sectors (% of GDP)](chart.png)

Source: Own work based on Eurostat database, Financial balance sheets [nasa_f_bs]

1.6 Financial balances - functional sectors
1.6.1 Non-financial corporations

As a rule financial wealth of the sector of non-financial corporation is negative. Poland is not an exception. Net financial wealth of the sector between the middle of the 1990s and the early 2010s increased only slightly, from -85.6% of GDP to -78.4%, but in the meantime had been fluctuating within the -66.4 (2001) to -92.6 (2007) bracket (see Fig. 19). Liabilities contributed to these fluctuations much more than assets, as a path of development of the latter was relatively smooth and sloping gently up from 14% of GDP in 1995 to 36.2% in 2012. By contrast with this, development of financial liabilities was marked by variability of direction and pace of change. In 1995-2002 financial liabilities fluctuated between 87% of
GDP and 100%, then however it gradually increased to 123.9% in 2007, but till 2012 fell to 114.6% (Fig. 20).

In the investigated period one can observe significant changes in the structure of both, financial assets and financial liabilities of non-financial corporations. In the whole period the two dominating categories of assets were currency and deposits, and other accounts receivable. Till 2006 they altogether constituted 81-89% of the total assets but then gradually fell to 68% in 2012, which made up 24.6% of GDP (see Fig. 21). One should notice that while until 2004 other accounts receivable was for most of the time the biggest category of asset, in the following eight years it was invariably currency and deposits, which in 2012 made 36.3% of the total assets or 13.1 of GDP. Declining share of the other accounts receivable was, in turn, a result of a huge decrease in the share of non-trade receivables since 2003. On the other hand an increase took place in proportion of shares and other equity (from 5.1% in 1995 to 12.6% in 2012) and loans (from 2.3% to 10.5% respectively), in particular long terms, while proportion of securities other than shares diminished (from 8.5% to 5.9%).

![Figure 20 Financial assets and liabilities of non-financial corporations (% of GDP)](image-url)
As to development of the structure of liabilities three stages should be distinguished. Between 1995 and 2001 value of shares and other equity of non-financial corporations – the biggest category of liabilities – was not changing considerably, contrary to values of other major categories, first of all other accounts payable and loans, which increased 5.3 and 3.3 times. This led to dramatic fall in the proportion of shares and other equity to total liabilities (from 71% to 38%) as well as to GDP (from 70.5% to 33.4%). Then, during following six years this category of liabilities was fast increasing reaching in 2007 62% of total liabilities and 77% of GDP. In the last stage the proportion of shares and other equity fell to 52-53% of total liabilities and 60-61% of GDP in 2012-2013. It is also worth to notice significant increase in the share of loans in 2011-2012 compared to 1995 (see Table 1 and Fig. 22). However it should be stressed that loans exceeded 30% of total liabilities also in 2002 and 2008.
Table 1 Structure of liabilities of non-financial corporations (%)

<table>
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<tr>
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<tbody>
<tr>
<td>Shares and other equity</td>
<td>70,7</td>
<td>38,2</td>
<td>62,2</td>
<td>52,9</td>
</tr>
<tr>
<td>Loans</td>
<td>18,0</td>
<td>29,5</td>
<td>23,8</td>
<td>31,2</td>
</tr>
<tr>
<td>Other accounts payable</td>
<td>11,0</td>
<td>28,8</td>
<td>11,4</td>
<td>11,8</td>
</tr>
<tr>
<td>Other liabilities</td>
<td>0,2</td>
<td>3,4</td>
<td>2,5</td>
<td>4,0</td>
</tr>
<tr>
<td>Total</td>
<td>100,0</td>
<td>100,0</td>
<td>100,0</td>
<td>100,0</td>
</tr>
</tbody>
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Source: Own calculations based on Eurostat database, Financial balance sheets [nasa_f_bs]

The financial wealth of corporations is the ultimate property of their owners shareholders. It is useful to examine the wealth before accounting for shares and other equity on the liabilities side (see Fig. 23). As liabilities in shares and other equity are the biggest and most volatile component of non-financial corporations’ liabilities (its ratio to GDP was fluctuating between 33.4% to 77.2%) their deduction changes the net financial wealth of non-financial corporations fundamentally. During first seven years of the examined period it consistently diminishes from -15.2% of GDP to -34,2%. Then, until 2006 the ratio increases to -12.8% and next fluctuates between -19.8% and -13.4%. Finally, in
last two years it stabilizes on the level of -18%. It is worth to notice that while behind the changes in the net financial wealth between 1995 and 2005 were changes in loans (and precisely long-term ones) as well as other accounts payable, the later fluctuations were caused by changes in loans only.

![Figure 23 Net financial wealth of financial and non-financial corporations (excluding liabilities in shares & other equity) as % of GDP](image)

Source: Own calculations based on Eurostat database, Financial balance sheets [nasa_f_bs]

### 1.6.2 Financial corporations

In 1995 total financial assets of financial corporations exceeded their total financial liabilities. The former made 52% of GDP while the latter 42.7%. During the following seventeen years the ratios increased to 120% and 125.6% respectively (see Fig. 24). On the assets’ side this growth was made of an increase in loans – from 17.6% to 56.7% – and in securities other than shares – from 24.1% to 41.5% (see Fig 25). Increase in liabilities’ was first of all a result of an increase in currency and deposits (from 35.5% to 62.6%), insurance technical reserves (from 1.2% to 24.9%) and shares and other equity from 2.9% to 23.9% of GDP. It should be emphasized that the increase in loans was much smaller than increase in other liabilities mentioned above. Their value relative only once, in 2010, exceeded 10% of GDP (see Fig. 26).
Figure 24  Financial assets and liabilities of financial corporations
% of GDP

Source: Own work based on Eurostat database, *Financial balance sheets*

Figure 25  Main categories of financial corporations' financial assets (% of GDP)

Source: own work based on Eurostat database. *Financial balance sheets*
Till 2002 total financial assets had been growing faster than liabilities that resulted in increase in financial wealth of the sector from 9.3% to 16.2% of GDP. However, with economic recovery after the crisis of 2001-2002 growth of assets slowed down while liabilities accelerated. This concerned first of all shares, which proportion to GDP increased from 2.9% of GDP in 1995 to 13.3% in 2003 and then to 30.8% in 2007. In effect financial wealth of the sector had become negative falling in 2007 the lowest value of -12.8% of GDP. The 2008 world financial crisis brought about sharp increase in the main sector’s financial assets (loans and securities other than shares) on the one hand and decrease in most categories of liabilities (particularly in shares), on the other. As a consequence the sector’s financial wealth approached zero. Between 2009 and 2012 it fluctuated between -5.9% and +1.5% of GDP.

As in case of non-financial corporations, deduction of liabilities in shares and other equity results in substantial change in development of net wealth of financial corporations. Its ratio to GDP developed along an upward trend to 2000 only till 2002, increasing from 12.2% in 1995 to 28.7%. In the two following years the ratio fell to 16.4%, after which for
most years it fluctuated between 17.1% and 18.9%, going beyond the upper limit of this band in 2011 only (see Fig. 23 above).

1.6.3 Households’ financial assets and liabilities

Household sector’s net financial assets, which between 1995 and 2007 doubled its value relative to GDP, responded to the world financial crisis with a sharp fall from 64% to 42% in 2008, and in next four years oscillated between 45% and 51% (see: Fig. 19 above). Ratio of households’ financial assets more than doubled between the middle of 1990s and the beginning of 2010s, while relative financial liabilities, which in 1995 made just 2.4% of GDP, had increased fifteen-fold till early 2010s (see: Fig. 27).

It is also worth to notice some other features of development of households’ financial assets and financial liabilities:

1. deviations of actual values from the trend were much greater in case of assets;
2. changes in assets had greater impact on net assets than changes in liabilities;
3. the most fluctuating component of assets were shares and other equity;
4. decrease in ratio of financial asset to GDP, as well as of net financial, assets took place only in years preceding three major economic slowdowns, i.e. in 2000, 2008 and 2011.

Between 1995 and 2012 huge changes in structure of household’s assets as well as liabilities were observed (see: Figures 28 and 29). While at the beginning of the period currency and deposits made nearly 70% of total assets, on the eve of the world financial crisis the share of this component fell to half of it, and after an increase to 46% remained on similar level till 2012. On the other side net equity of households in life insurance reserves and pension funds reserves, which in 1995 made only 1.5% of total assets increased to almost 26% in 2012. The main reason behind this increase was the 1999 reform of national pension system: for younger generations of employees the unfunded defined benefit pension plan had been replaced by defined contribution one. In consequence, till 2001 total reserves raised by pension funds were very small. Situation had changed radically since 2002 and the share of households net equity in the funds in their total assets jumped from 0.1% to 7.6%. In 2012 it already exceeded 20%.

The most volatile component of major households’ assets was an aggregate shares and other equity, which proportion to the total assets fluctuated in the 15 – 41% band, reaching the highest values at the end of two economic booms in Poland, i.e. in 1998 and 2007. A reaction to symptoms of approaching crises was a large scale swap of shares and other equity for deposits. It is worth to notice that since the end of 1990s a proportion of the shares alone to total households’ assets showed downward trend, falling from ca. 32% in 1998-1999 to 10.6% in 2008 and then to 9.1% in 2012. It should be mentioned that in Poland (like in other transition countries) changes in volume of shares acquired by households in particular years depended not only on changing households’ risk aversion but also – to large extent – on the supply of stock of currently privatised state owned corporations.
In the whole period of 1995-2012 an increase of long-term loans was preferred instrument by households to obtain finance, first of all to buy a flat or house. In 1995-1998, the period of economic boom their share in total liabilities increased by 9.6 percentage points reaching 65.6%. At the same time proportion of short term loans decreased from 39% to 20%. The latter, after alternate ups and downs between 1999 and 2003, began gradually diminishing down to 8.9% in 2012. Contrary to this, the share of long-term loans – after falling to less than 50% in 2001 – had entered an upward path and remained on it to the end of examined period. The 2009 crisis did not reversed the trend, though slowed the growth down. In 2012 the long-term loans made 89% of the total liabilities.
Figure 29 shows development of net financial assets ratio and gross debt-to-disposable income ratio of the household sector. During the whole period the former was higher than the latter, that means households’ financial wealth was covering their gross debt in excess. Both ratios demonstrated upward trend. The gross debt-to-income ratio was growing incessantly since 1996 till 2011. During 17 years it increased 18 times (from 3.1% in 1995 to 57.8% in 2011). The highest increase took place in the three-year period preceding the 2009 crisis: the ratio increased then 2.2 times compared to 2005. In the case of net financial assets ratio years of growth alternated with years of fall. In consequence, household debt-to-assets ratio was changing significantly. In 1995 their gross debt made only a fourteenth of net financial assets. Seven years later the ratio was nearly one third and after temporary fall below one fourth in 2003-2004, soared to seven tenths in the last five years of the investigated period. Enormous increase came in 2008, when the ratio doubled compared to 2007: in consequence of sharp, one-time fall in financial assets (by 80 Mrd euro or 38% in nominal terms) accompanied by continuing increase in gross debt.

It should be emphasized, however, that the fastest growing part of households’ financial assets was net equity of households in life insurance reserves and pension funds reserves. From the point of view of households this kind of financial equity is – by its very

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6 In spite of the huge increase, the ratio is still far below that in “old” market economies.
nature – actually currently non-disposable one. If this category of assets are deducted from the total net assets, it turns out that since 2004 households’ gross debt exceeds their disposable assets. In 2012 the debt was by two fifth bigger than the disposable assets.
II. LONG-RUN EFFECTS OF FINANCIALISATION ON THE ECONOMY THROUGH DIFFERENT CHANNELS

2.1 Income distribution

2.1.1 Total economy

Since the beginning of the 1990s the distribution of GDP underwent considerable changes. Only in 1992 – the first year of post transition recovery – shares of gross operating surplus (GOS) and of employees’ compensation (CE) were nearly identical (see Fig. 31). Thereafter the former was developing along an upward trend, while the share of employee compensation was showing declining tendency. Admittedly they came near to each other during the 1996-1998 boom but then they almost systematically drifted apart. In consequence, between 1992 and 2014 the share of GOS increased from 44.7% to 51.7% while the share of CE decreased from 44.7% to 36.9%, which is one of the lowest in the EU. That means that the former has become by 14.8 percentage points (or by two fifth) higher than the latter.

![Figure 31 Distribution of gross domestic product %](image-url)

Source: Own calculations on the basis of AMECO Results, (UVGD, UWDC, UOGD and UTVN)
The share of taxes on import and production less subsidies, which increased by 2.9 percentage points (from 10.7% to 13.7%) between 1992 and 1998 was then gradually diminishing to 11.2–11.3% in 2013–2014.

2.1.2 Corporations

Distribution of gross value added (GVA) in corporations was developing a bit differently from distribution of GDP in national economy as a whole. In the first half of 1990s share of compensation of employees had increased considerably and till 2001 only once was below 60%. Then, during next three years fell below 50% and till 2014 decreased to 47% (see Fig. 32).

Share of GOS, in turn, after a fall to 31% in the early nineties, oscillated between 33-39% in 1994-2001 and then during got close to 50%. Finally, in 2013 and 2014 exceeded that level.

Figure 32 Distribution of gross value added in %: Corporations

It is worth to notice a sharp fall in the third component of the corporations’ GVA in the early 1990’s called “Other taxes less other subsidies on production”\(^7\). As subsidies had not

\(^7\) Other taxes on production consist of all taxes that enterprises incur as a result of engaging in production, independently of the quantity or value of the goods and services produced or sold. Other subsidies on production
changed considerably it had to be a result of slump in taxes. Since 1994 the difference between other taxes and other subsidies did not exceeded 2.9% of corporations’ GVA.

2.1.3 Households

Since 1995 households’ real disposable income had been incessantly growing (see Figure 33). The 2009 crisis slowed down the growth but, contrary to the crisis of 2001-2002, did not halt it. Worthy noticing is fast and nearly linear growth of the income between 2005 and 2009. On these four years fell nearly 2/5 of the total 66.4% increase in disposable income between 1995 and 2013.

Along with growing households’ income, their gross and net savings rates were fast diminishing, by 0.7 percentage points per annum on average (see Fig. 34). In 1995, with the gross rate of 16.9% and the net rate of 14.6%, Poland ranked fifth on the list of twenty EU countries for which data are available. Thirteen years later the rate was only 2.4% – less than one-seventh of initial level and one-fifth of the EU28 average – and the net rate became negative (-0.3%). Admittedly, in 2009, due to the crisis, the rates soared to 9% and 6.9% respectively, but after next two years the gross saving rate fell to still lower level of 2.1%, while the net saving one fell again below zero (-0.2%).

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*Figure 33 Households’ real gross disposable income 1995=100*

Source: Own calculations based on AMECO Results, Real gross disposable income, deflator private consumption: households and NPISH, 2005=100 (OVGH).

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*consist of subsidies except subsidies on products which resident producer units may receive as a consequence of engaging in production. (AMECO – List of Variables).*
2.2 Income inequalities

The below assessment of impact of the crisis on income inequalities covers the period from 2005 to 2013. The measures used are based on disposable equivalised income or consumption expenditure. Two main institutional sources of data are the Eurostat and the national CSO but some other has been used as well. Eurostat data comes for the EU SILC while CSO form HBS.\(^8\) Data presented by other institution are based on one of the two sources. As shown below, data published by particular institutions differ considerably and this concerns not only their values for individual years but also their trends. In consequence, some of them lead to conclusions that contradict each other.

Most of these differences can be explained by different methodologies applied to collecting raw data in HBS and EU SILC\(^8\), as well as by some differences in methodologies applied by particular institutions and researchers to data processing. Analysis of all these differences and assessment of their impact on final results goes beyond the scope of this paper.

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\(^8\) EU-SILC = European Union Statistics on Income and Living Conditions; HBS = Household Budget Survey.
\(^9\) See: OECD, 2012
2.2.1 Gini coefficient

The Figure 35 shows Gini coefficient series got from various sources. As neither Eurostat nor the national CSO data have been found for years earlier than 2003, data from few other sources are presented to bridge the gap. One glance is enough to notice big differences not only in values of the coefficient for particular years but also in scale of their changes from year to year. All four sources of data for the end of the 1980s and the beginning of the 1990s document that – in spite of fast growing unemployment – in the first two–three years since the onset of economic transition, inequalities measured by the Gini coefficient had diminished owing to big increase in social transfer payments (including pensions), which averaged 17.7% during 1990-1997, the highest level in any transition country. (Keane and Prasad, 2002, pp. 2-4). In particular, Keane and Prasad (1999, pp. 14-15 and 31), using the CSO’s annual Households Budget Surveys micro data, have shown that this is true irrespective of the equivalence scale used for calculating the coefficient. The above mentioned authors notice (p. 24-25) that an increase in 1993 Gini coefficient could be result of changes in CSO’s HBS methodology in that year, and the actual increase in inequality began only in 1994. In any case, all available sources confirm considerable increase in inequalities between 1992 and 2004 and decrease thereafter. However, there are huge divergences as to the scale and duration of that decrease. While CSO data show only slight decrease in 2006 (by 0.5 percentage points) and then fairly constant value of the Gini coefficient, the OECD data suggest an extremely sharp decrease in Gini coefficient in 2005 (by 5.4 percentage points or by 14% in one year!). As no real reason can be found for such a shocking reduction in income inequality, the OECD 2005 coefficient must be completely wrong. Suggested by the Eurostat sharp decline in inequality between 2005 and 2013 by 4.9 percentage points (of which by 3.4 points during first two years) is also

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10 The below presented data on Gini coefficient and quantiles come from the following sources: CIA; CSO (2014), Household Budget ...; OECD (2012); OECD (2013); OECD Stat; Eurostat SILC; UNICEF (2001); UNICEF (2007); LIS; World Bank; Brzezinski & Kostro (2010) Kene & Prasad (1998); Kene & Prasad (1999); Kene & Prasad (2002).

11 One should stress that highest social transfers was accompanied by the highest economic growth among the transition countries: during seven years 1992-1998 the Polish GDP increased by 43%.
highly doubtful\textsuperscript{12}. The remaining series (B&K\textsuperscript{13}, LIS, CIA, WDI and even so the OECD, when passing over the 2005) do not confirm that decline in inequalities between the pre-crisis years and the following four was so sharp. As mentioned above the CSO, as well as LIS data explicitly suggest that between 2006 and 2013 the Gini coefficient remained fairly constant.\textsuperscript{14}

![Figure 35 Gini coefficient](image-url)

So, one may conclude that the crisis with certainty has not increased income inequality in Poland, at least as measured by the Gini coefficient. And if there has been a decrease, then only a moderate one.

\textsuperscript{12} The reason may be an issue with the EU-SILC data in the first year of implementation, resulting in some overestimation of the level of inequality in 2005. See: OECD (2012), Income Distribution Data Review – Poland, http://www.oecd.org/els/soc/OECDIncomeDistributionDataReview-Poland.pdf

\textsuperscript{13} B&K = Brzeziński and Kostro (2010)

\textsuperscript{14} The CSO HBS data seem to be more reliable than the Eurostat SILC ones as in HBS, data are collected all through the year for different groups of households every month for a total of ca. 37 thousand households surveyed, while ca. 16 thousand households are surveyed in EU SILC, with incomes assessed over a 2-month period (May-June) but for the total period of the preceding year. OECD (2012).
2.2.2 Quantile ratios

Equally ambiguous picture emerges from comparison of other measures of income distribution: Palma ratio and other quantile share ratios (see Table 2).

Table 2 Quantile ratios

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Source: Compiled from CSO, 2014, p. 287, Eurostat [ilc_di01] (own calculations) and OECD Stat Extracts

15 The Palma ratio (named after the Chilean economist Jose Gabriel Palma), is defined as the ratio of the richest 10% of the population's share of national income divided by the poorest 40%’s share. Quantile share ratio is the quotient of income shares of any two quantiles or sets of quantiles.
According to the CSO’s HBS data on income distribution, some decrease (by 0.08) in the Palma ratio between 2005 and 2009 was temporary and in 2013 it came near to its initial level, which means that the proportion of income of 10% of the richest to that of 40% of the poorest had was nearly the same in 2005 and 2013 (see Fig. 36). On the other hand the OECD and particularly Eurostat SILC based data shows considerable fall of the ratio: by 0.14 in six years (OECD) and by 0.31 in eight years (Eurostat).

![Figure 36 Palma ratio](image)

Sources: OECD.StatExtracts and own calculationa based on CSO (2014) Table 6, p. 287; Eurostat SILC Distribution of income by quantiles [ilc_di01] and

Similar difference can be observed in development of main quintile and decile share ratios – S80/S20, S90/S10, S90/S50 and S50/S10. Both, CSO HBS and SILC, data give nearly the same value of particular ratios for 2005: 6.6, 12.2–12.7, 3.5 and 3.5–3.7 respectively. However, it is the only similarity between the series. According to the CSO’s HBS data, proportion of income of the richest 20% to the income of poorest 20% (S80/S20), after a fall in 2006 and 2007 (by 0.54), then remained roughly stable till 2010, after which in 2013 the ratio slightly exceeded the 2005 level. In turn, the Eurostat SILC data suggest considerable decrease (by 1.5 in the pre-crisis years and relative stabilisation thereafter. Similar development of the ratio show the OECD data, with the difference that here the initial, 2005 value of the ratio is by one sixth lower (see Table 1 and Figure 37). Still bigger differences are in case of decile income share ratios S90/S10, S90/S50 and S50/S10. The CSO’s HBS data reveal “downs and ups” of the ratios of average incomes of the richest
10% to the middle 10% and to the poorest 10% of people between 2005 and 2010 and then their considerable increase during the following three years (see Figures 38-40). Changes in the S90/S10 – the ratio of the tenth to first decile income shares – were driven by the opposite changes in both its components: inequality in the top of the distribution (S90/50) and inequality at the bottom end (S50/S10).¹⁶ And until 2012 both oscillated around nearly the same average value (3.4 and 3.5 respectively) and within relatively narrow ranges, and only in 2013 the S50/S10 ratio soared above its previous band. Contrary to this, the Eurostat data show a huge decrease in S80/S20 and S90/S10 ratios till 2010, followed by only small changes thereafter. The OECD data show similar trend, but again with much lower initial value of the ratios (see Figures 37-38).

In the case of the S90/S50 ratio the CSO data show very small changes between 2005 and 2013 while according to the Eurostat the ratio fell from 3.5 to 2.9, i.e. by one sixth (no OECD data has been found to calculate the ratio).

¹⁶ S90/S10 ratio is equal to the product of the S90/S50 ratio and the S50/S10 ratio.
A matter of particular interest is a proportion between incomes of hundredth and first percentiles. The SILC data, the only available for 2005-2013, do not allow for even rough estimation of the proportion because numbers are given to one decimal place and in case of the first percentile they are rounded to 0% (2005) or 0.1% (remaining years). Therefore, one can say no more than that the actual share of the first percentile does not exceed 0.05% for 2005 and is somewhere between 0.05% and 0.15% for the following years. In turn, the share of the hundredth percentile fell from 5.7% in 2005 to 4.5% in 2013, but in the meantime fluctuated between 4.7 and 5.5%.

Some idea about the above mentioned proportion gives a comparison of top cut-off points\(^{17}\) of the ninety-ninth and the first income percentiles (Fig. 41). The ratio fell sharply during the pre-crisis boom: from 66.8 to 27.9 in 2006\(^{18}\) and to 22.4 the year after. The 2009 crisis brought the next decrease, this time to 17.5. Till 2013 the ratio did not exceeded 22. It should be noticed that these figures are ratios between the lowest income registered in the hundredth percentile and the highest income registered in the first percentile. And that means that ratios of average incomes of the two percentiles (or, in other words, of their income shares) are several times bigger than ratios of the top cut-off points.

It is worth to take a closer look at the top five income percentiles. Figure 42 shows a downward trend of income shares of all of them, but that of the hundredth percentile is most sloping. The Figure also reveals a big difference between the development of income share of the hundredth percentile and the remaining four. While the actual values of the latter were very close to the trend lines, the actual values of the former greatly deviated up and down.

\(^{17}\) Top cut-off point is the upper income threshold for a given quantile (here percentile).

\(^{18}\) Behind such a dramatic fall of the ratio is more than two-fold increase in top cut-off points of the first percentile reported by SILC. However, it should be pointed out that reliability of the latter raises similar doubts as the above mentioned dramatic fall of Gini coefficient in the same year.
Summing up, different sources of statistical data suggest mutually exclusive answers on the question about changes in income inequality in Poland between 2005 and 2013:

1. According to the Eurostat SILC data the four pre-crisis years saw huge diminution in inequalities, as income share of the richest 30% (and particularly of the richest 10%) decreased, while all other – except the seventh decile – increased their shares, and in particular the poorest 20%. Income inequalities were decreasing in both: the upper
the lower income halves of the society. The 2009 crisis and the following years only slowed these trends or stabilized relative incomes. It should be emphasized that according to the SILC data downward trend in the share of the top ten percent continued till 2013.

2. Quite different conclusion should be drawn for CSO HBS data: decrease in inequalities since the 2005 right up until the hit of crisis was small. Admittedly, they also show a decrease in the income shares of the richest 30 percent and increase in shares all other deciles (except the seventh) between 2005 and 2008. However, these changes were 3-4 times smaller than those resulting from the SILC data. The 2009 crisis did not bring significant changes: the biggest one was a decrease in share of the richest decile by 0.2. Till 2013 income shares of all but three deciles were more or less the same as in the crisis year. The exceptions were the tenth one and the first two. The former increased its share by 0.6 while the share of the latter was reduced by 0.4, of which 0.3 fell to the lowest decile. It means that since the crisis the share of the 10% of poorest people decreased by ca. one seventh.

2.3 Investment in capital stock

The development of gross capital formation (GCF) and gross fixed capital formation (GFCF) has been discussed in point 1.1. Let’s remember only that in 2013 the former was almost 3.5 times and the latter nearly 3.8 bigger than in 1991\(^{19}\) and that both were developing in a cyclical way. In this point here investment expenditure in 1995-2012 by particular sectors is presented, beginning with investment rates. Figure 43 shows contribution of functional sectors to the total investment rate. The latter fluctuated between 17.7% and 24.5%\(^t\) of GDP reaching its minimum in 1995 and maximum in 1999. Another (local) minimum (18.2%) appeared in 2005 and maximum (22.3%) in 2008. The average (arithmetical) rate in 2006-2012 was by 0.5 percentage point lower than in 1999-2005 (20.3% and 20.8% respectively).

\(^{19}\) For 2014 the figures are 3.1 and 4.1 respectively.
Corporation’s investment ratio developed in similar way. The band of fluctuations was 9.5-16.6% of GDP. While the maximum value was observed also in 1999, the minimum was registered in 2010, tough it was only a bit lower than in 1995 (0.8 p.p.) and 2004 (0.2 p.p.). The difference between averages for the two sub-periods was still more distinct: 10.8% and 12.6%.

Household investment radio was developing along an upward trend till 2008, increasing from 4.1% of GDP in 1995 to 5.4% but thereafter fell to 4.5% in 2011.

General government contribution to the total investment was in all years except the last four, the smallest one. Its investment ratio, after increase in 1996-1997 from 3.3% do 3.9% GDP, followed by temporary decrease to only 2.4% in 2000, stabilized in the following five years on the level of 3.3-3.4% of GDP. Thereafter, the 2006 initiated the six-year growth of government investment ratio to 5.7% in 2011. However, in 2012 the ratio fell to 4.6% of GDP, i.e. the level of 2008.

Both crises, 2001-2002 and 2009, caused considerable decrease in corporations’ contribution to total investment of the economy, however impact of the former was longer lasting and much stronger than the latter. The crisis of the early 2000s caused a fall of ca. 6.6 percentage points in the corporations’ investment-to-GDP ratio during three years, while the 2009 crisis resulted in only two-year decrease of 2.8 points in total. In contrast
to the corporate sector, households’, as well as and public investment, were incomparably less sensitive to downturns in the economy. One should note that corporations’ share in total investments showed downward trend in the decade 2001-2010, while government share was increasing (see Fig. 44).

Figure 44 Share of functional sectors in total investment

![Graph showing the share of functional sectors in total investment from 1995 to 2012.](image)

Source: Eurostat database, Annual sector accounts. Key indicators

Figure 45 shows ratios of non-financial corporations’ gross profit and gross fixed capital formation to their gross value added. The latter, after considerable increase between 1995 and 2000 (from 25% to 38.2%) fell to 23.4% during next four years. Admittedly, since 2005 the trend had reversed raising the investment rate to 28% in 2007 and 2008, but then it fell again, this time to 21-22% (an all-time low) in 2010-2012. By contrast, gross profit share, after a moderate increase from 31.4% to 36.7% in 1997-2000, soared to ca. 47% in 2004-2007 and then to 49% in 2011-2012. In consequence, in 2004-2005 gross investment of non-financial corporations, which in 1998-2000 was exceeding their gross profit, in 2004-2005 made only 47.2-48.5% of it, and – after temporary increase to 62% just before the 2009 crisis - fell to 43-44% of gross profit thereafter. One may draw two conclusions:

i. Since the crisis 2001-2002 development of non-financial corporations’ investment had become independent of their profits;

ii. Both crises considerably reduced non-financial corporations’ propensity to invest physical capital.
Contrary to corporations household's investment in physical capital were much less susceptible to economic and financial crises (see Fig. 46). Their gross investment rate remained on gentle upward path right up until 2008, increasing from 5.63% to 8.49% and only then fell below 8%. Households’ gross saving rate, in turn, was diminishing. Significant deviations from the downward trend came up in years of economic crises. In 2008 and 2011-2012 gross saving rate declined below household investment rate, that means a part of investment in capital stock was financed through raising loans from financial institutions or reducing households’ financial assets, shares in particular.
Until 2005 government’s investment was below 4% of GDP and 9% of total expenditure [see Fig. 47]. Thereafter the investment had entered the upward path and remained on it till 2011 in despite the crisis. As a result both ratios increased to 5.7% 13.2% respectively, or by two thirds compared to 2005. The increase in government investment compensated to some extent business and households’ investment in 2009 and 2010. Substantial decrease (to 9.2% and 3.8%) that came after was a result of the European Council recommendation of 7 July 2009 to the Polish authorities “to end to the situation of an excessive government deficit” [Council of the European Union, 2009].

![Figure 47 Government investment as % of total government expenditure and GDP](image)

**Figure 47 Government investment as % of total government expenditure and GDP**

- **Government investment to GDP ratio**
- **Gross fixed capital formation as % of total expenditure**

Source: Own work based on Eurostat database, Key indicators [nasa_ki] and Government revenue, expenditure and main aggregates [gov_a_main]

### 2.4 Consumption

Private final consumption, like the total one, had been increasing every year since 1991, at an average annual rate of 3.94%, a bit higher than in the case of total consumption. In 2013 it was 2.43 times higher than in 1991 (at 2010 prices). However, the annual rate of growth were changing considerably. Figure 48 shows annual average rates for five sub-periods. Looking separately at the growth rates in periods of economic slump (1991-93, 1999-02

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20 The general government deficit in 2009 reached 7.3% of GDP and then increased to 7.6% in 2010. However in 2014 it fell to 3.2%. On 12 May 2015 the European Commission (2015) recommended the Council to abrogate the above mentioned decision.
and 2009-13) and those of economic boom (1994-98 and 2004-2008) it is easy to notice that in both cases the rates were declining from one period to the next.

Private consumption expenditure, as a proportion of domestic demand, did not change significantly in the early 2010s compared to the decade 1991-2000 (see Fig. 49). Though in comparison to the early 1990s the proportion of private consumption about 4 percentage points lower, it is more or less the same as it was in the second half of 1990s. The crisis of 2009 had no significant impact on it, contrary to the crisis of 2001-2003 when the proportion increased by more than 3 percentage points.
III. FINANCIALISATION AND THE ECONOMIC AND FINANCIAL CRISES
AS THE CRISIS OF FINANCE-DOMINATED CAPITALISM

3.1 Poland’s economic development in the decade of two global crises

Actually it is hard to maintain that in Poland is a finance-dominated capitalism. As has been mentioned at the beginning of the paper, the development of the country’s financial sector is still behind this of the “old” market economies. This, probably, is one of the most important reasons why Poland has been the only EU country in which the GDP remained on the upward path in 2009, while all other countries observed then a decrease in GDP compared to the previous year between 1.9% (Cyprus) and 17.7% (Latvia). What’s more, during last ten years Poland has not experience even a single quarter of decrease in GDP.

Poland was hit by the world financial and economic crisis only in 2009. In preceding years the economy had experienced fast and till 2007 accelerating growth. Its GDP had increased by nearly 39% compared to 2000, half of which fell on last three years before crisis. Final consumption was growing only somewhat slower than GDP but Poland was the only country in which 1999 growth in households consumption expenditures exceeded 2%. Formation of GFC, and consequently imports, which contracted at the beginning of the decade as a result of the early 2000s recession, had shown sharp acceleration in the following eight years increasing by 42% and 86% respectively compared to 2000. Incessantly growing exports doubled between 2000 and 2008 (see Table 3).

With coming of the 2009 crisis all of the above mentioned economic aggregates, except GDP and consumption, decreased, and the most formation of non-fixed capital, imports and exports, while relative decrease in imports was two times bigger than decrease in exports, because of appreciation of the Polish currency (see Figures.50 and 51). However, as final consumption expenditure remained on an upward path, GDP did as well, though its rate of growth fell from 6.2% on average in 2006-2008 to 1.6%, the lowest level since 2003. It should be noticed that according to the European Commission (2010, p. 3), this positive (compared to other EU countries) performance “reflects a constellation of
favourable factors including sound fundamentals at the outset of the crisis, a well-capitalised and not vulnerable financial sector, the closeness of the Polish economy and the early depreciation of the currency.

Table 3 Poland’s economic development 2001-2013: basic macroeconomic indicators

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<td></td>
<td>2000=100</td>
<td>Annual</td>
<td>2000=100</td>
<td>Annual</td>
<td>2009=100</td>
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<tr>
<td></td>
<td>average %</td>
<td>average %</td>
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<td>rate</td>
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<td>average %</td>
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<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>GDP</td>
<td>158.6</td>
<td>3.6</td>
<td>138.8</td>
<td>4.2</td>
<td>1.6</td>
<td>108.6</td>
</tr>
<tr>
<td>Domestic demand</td>
<td>147.1</td>
<td>3.0</td>
<td>137.6</td>
<td>4.1</td>
<td>-1.1</td>
<td>108.5</td>
</tr>
<tr>
<td>Final consumption expenditure</td>
<td>148.5</td>
<td>3.1</td>
<td>135.5</td>
<td>3.9</td>
<td>2.0</td>
<td>105.0</td>
</tr>
<tr>
<td>of which households</td>
<td>148.3</td>
<td>3.1</td>
<td>134.5</td>
<td>3.8</td>
<td>2.1</td>
<td>105.9</td>
</tr>
<tr>
<td>Gross capital formation</td>
<td>142.5</td>
<td>2.8</td>
<td>144.9</td>
<td>4.7</td>
<td>-11.1</td>
<td>121.6</td>
</tr>
<tr>
<td>of which gross fixed capital</td>
<td>148.6</td>
<td>3.1</td>
<td>141.8</td>
<td>4.5</td>
<td>-1.2</td>
<td>108.0</td>
</tr>
<tr>
<td>Exports of goods and services</td>
<td>248.6</td>
<td>7.3</td>
<td>203.4</td>
<td>9.3</td>
<td>-6.8</td>
<td>120.7</td>
</tr>
<tr>
<td>Imports of goods and services</td>
<td>197.2</td>
<td>5.4</td>
<td>186.5</td>
<td>8.1</td>
<td>-12.4</td>
<td>120.1</td>
</tr>
</tbody>
</table>

Source: Own calculations based on Eurostat Database, [nama_gdp_k], Last update 08.09.2014.

Regarding fiscal policy, the authorities allowed a full operation of automatic stabilizers, and rapidly designed an investment-focused recovery plan. The size of the overall fiscal stimulus in 2009 – measured as the change in the structural balance – is estimated at about 2 percent of GDP. At the same time, the authorities took measures to contain the increase in the government deficit”. Though such a policy resulted in doubling public deficit (from 3.7% in 2008 to 7.5-7.8% in 2009-2010)\(^{21}\), at the same time allowed – among other things – to higher co-financing of EU-funded investment projects.

\(^{21}\) The above figures come from ESA 2010 statistics. According the ESA 2005 they were 3.6%, 7.3% and 7.6% respectively.
In next two years remarkable acceleration of economic growth appeared bringing 8.6% increase in GDP. Gross capital formation, exports and imports increased by one fifth and consumption expenditure by 5%. The last one was again the highest increase among the EU member states (only Sweden had comparable order of magnitude: 4.7%). However,
in 2011 – in spite of accelerating growth of GDP – first signs of slackness appeared again: considerable slowdown in growth of consumption, exports and imports. The second phase of crisis came indeed in next two years. In 2013 rate of GDP growth fell to the level of 2009 because of further slowdown in growth of consumption and exports, and decrease in gross capital formation. Preliminary CSO’s estimate [CSO, 2015, Table 5] shows that the expected acceleration of economic growth has actually come in 2014 and 3.4% increase in GDP has been reached\(^{22}\), i.e. two times bigger than in 2013.

3.2 Net lending / borrowing of the economy and its factors

Within the space of the two decades the Polish economy was a net lender for few years only: at first after the recovery from transition crisis in early 1990’s and next in 2013 [see Fig. 52]. Since 1996 to 2012 net borrowing was fluctuating between 1.6% and 5.4% of GDP. Exceptionally high increase in net lending (up to 10.7% of GDP) in 1994 was in nearly four fifths a result of one-off increase in government’s net capital transactions with the ROW from zero to 7.75 Mrd euro (8.5% of GDP), mainly because of cancelation of a part of Polish foreign debts by Paris Club and London Club. In the following decade net capital transactions of the economy practically had no impact on total net lending but began to grow gradually only since Poland’s accession to the European Union reaching (2.4% of GDP) in 2013. Together with net current transfers from the rest of the world (RoW) it partially balanced negative values of net exports of goods and services and of net primary income from the RoW. The latter remained all the time negative, but between 1994 and 2003 has only moderate negative impact on net lending/borrowing, falling below -1% of GDP only once. However, since 2004 it had become the main – and in 2013 the only – negative component of the total net lending/borrowing. This was a consequence of fast increasing income of non-residents, mainly from FDI, and a slowdown in 2007-2008 and next a decrease in income of residents from investment abroad as well as from compensation of employees. Paradoxically, good performance of the Polish economy

\(^{22}\) GUS (2015a).
attracting foreign investors through long odds on decent profits at relatively low risk, contributed to the deterioration in the balance of income. The stock of FDI in Poland increased from 22% of GDP in the early 2000s to 47% in 2012, the level similar to the average of the Euro area.

In the examined period net borrowing increased above 5% of GDP three times: in 2000, 2004 and 2007-2008. Each time there were different reasons behind this.

At the end of 1990’s it was fast decrease in net export (from 2.3 Mrd in 1995 to 11.9 Mrd euro in 2000) because of the Asian and then Russian financial crisis. In consequence, since 1996 the economy as a whole became the net borrower. By the end of decade net borrowing reached nearly 10 Mrd euro, that made 5.4% of GDP, the highest ratio in the period under consideration. The downward trend in net export reversed in 2001 as a result of slackening domestic demand caused by the economic slowdown and an increase in real wages far behind that in labour productivity. In 2003 Poland found itself among the three of the later EU 27 countries with the most stable prices. As a consequence, considerable gain in international price and still more in cost competitiveness was made: in 2002-2004 the REER(CPI37) decreased by 16.3% and the REER(CPI18) by 18.8%, while the REER(ULTC37) and REER(ULTC18) decreased by as much as 25.7% and 27.9% respectively compared to
This project has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration under grant agreement no 266800.

2001.\textsuperscript{23} This, together with increasing net current transfers from the rest of the world (RoW), contributed to fall of the net borrowing to only 3.3 Mrd euro or 1.7\% in 2003, the lowest ratio between 1997 and 2011.

However, in 2004 the second peak of net borrowing (5.0\% of GDP) took place. It was an effect of a sharp decrease in net current transfers from 2\% of GDP in 2003 to zero and in net primary income from -1\% to -2.8\% of GDP in 2004. The main reason behind this decrease were growing foreign direct and portfolio investments, which effected in increasing payments to the RoW (Jurek. M., 2009, p. 251)

In 2005, net borrowing ratio fell again below 2\% as a result of increase in all of its components, but two years later again exceeded 5\%, reaching the third peak value. It was an effect of economic boom in 2006-2008 when GDP grew at 6\% per annum on average. Growth of both, gross capital formation and consumption accelerated substantially. This caused 44\% increase in volume of imports of goods and services in three years, which was followed by only 34\% increase in exports. In consequence, net exports decreased from -0.9\% of GDP in 2005 to -4.9\% in 2008 (or, in nominal terms, from 2.3 to 17.7 Mrd euro). In 2009 a relation between dynamics of imports and exports reversed and net borrowing ratio reached a level close to that of 2005. After some decline in the two following years, it was replaced by small net lending (0.8\%) in 2013. This result was much faster increase in exports than imports of goods and services since 2012 accompanied by some increase in net capital transactions. On the other side net primary income remained on its downward path.

To sum up: in the whole period net exports of goods and services had a decisive impact on development of the total net lending/borrowing. Correlation coefficient between the two was 0.82.

\textsuperscript{23} Eurostat Database, \textit{Industrial countries' effective exchange rates including new Member States - annual data [ert_eff_ic_a]}, Last update: 18-12-2014 (own calculations). See also: Dymarski, W., 2009,. pp. 206 and 208.
3.3 Net lending or borrowing by functional sectors

The economy’s net lending/borrowing is a product of net lending/borrowing of particular functional sectors. Their contribution to the economy total was different and changing over time, and different factors impacted their balances (see Fig. 53).

Households had been ceaselessly a net lender until 2006 but thereafter it happened only twice, in 2009 and 2010. The net lending/borrowing-to-GDP ratio had been showing clear downward trend, which led to its gradual decrease 6%–8% of GDP in most part of the 1990’s to 0.3% – 1.8% in the middle of 2000’s. Since 2007 the ratio fluctuated between -3.8% and +1.9%.

The downward trend of ratio was the outcome of two factors (see Fig. 54):

1) Between 1995 and 2013 households’ gross saving-to-GDP ratio developed along the downward trend line, falling from 12.2% to 3.9% (in 2008 and 2011 it fell even below 1.5%). Since 2002 also absolute value of saving had been on downward path, though fluctuating from year to year within very wide band, particularly between 2007 and 2011 when changes reached ±15 Mrd euro year on year.

2) Households’ gross capital formation was nearly ceaselessly growing along with GDP, irrespective of current value of gross saving. In most years between 1991 and 2012 its ratio to GDP remained within 1%-1.4% band. In absolute figures GCF increased from 1.1 Mrd euro annually in 1991-1992 to almost 18 Mrd euro per year in 2010-2013. As a result the fall/increase in households’ saving was compensated by increase/fall in their borrowing. In 2008-2013 gross capital formation exceeded gross savings by 36.4 Mrd euro. As shown in Figure 54, the run charts of gross saving and net lending/borrowing are parallel. Correlation coefficient between the two is 0.82 for absolute values and 0.95 for their ration to GDP.

One should also notice the very distinct impact of fluctuations of the GDP growth rate on behaviour of the household sector. Each of the three deep slowdowns of the Polish economy – i.e. 2001-2002, 2009 and 2012 – had been preceded by a two-year period of
significant decrease in household’s net lending/borrowing-to-GDP ratio, followed by its increase in the year of slowdown. Then, the ratio was falling again.

**Figure 53** Net lending(+) or borrowing (-) as % of GDP by institutional sectors

Source: AMECO Results: UBLA and own calculations based on UVGD, UBLC,

**Figure 54** Net lending (+) or borrowing (-) of households and NPISH and its factors (Mrd euro)

Source: AMECO Results, UBLH, USGH, UITH and UKOH

**Corporations**, in contrast to households, were net borrower in the first half of the investigated period. Their net borrowing was increasing from less than 1% of GDP in 1994 to nearly 8% in 1999. Then the trend had reversed, first of all because of fast increasing exports of goods and services. Since 2003 corporations had become net lender for the most time. Exceptions were 2006 and 2007 when again considerable increase in corporations’ gross capital formation as well as in compensation of employees made them
temporarily net borrower. Since 2008 an upward trend had been restored and in 2010-2013 corporations’ net lending reached the level of 4.3%-5.5% of GDP. Behind this change was a slowdown in the gross capital formation in 2008 and then decrease by one fifth in the following two years on the one hand, and large increases in gross savings in 2008-2009 on the other. Behind the latter were significant increase in net current transfers received by corporations compared to the previous years and decrease in current taxes on income and wealth in 2009-2010.

**General government.** With the exception of 1994, the general government was net lender, because its gross capital formation exceeded considerably its gross sawing, with growing discrepancy between the two over time. What’s more, in most of the period government saving were very slight or negative. Significant savings (7.7 and 4.9 Mrd euro) were made only in 2007 and 2008, i.e. in two years preceding the crisis, but in the following years fell again below zero, down to –9.7 Mrd euro in 2010. The difference between government’s gross fixed capital formation and saving reached 30 Mrd euro, the highest nominal value since the beginning of Poland’s transition to marked economy. In consequence net borrowing reached the record value of 27.8 Mrd euro (see Fig. 55).

![Figure 55 General government's net lending (+) or net borrowing (-) and its main factors (Mrd euro)](image-url)

*Source: Eurostat Database, [gov_a_main]*)
3.4 Selected aspects of the banking sector development in 2000s

3.4.1 Accessibility of depository institutions to customers

As the development of financial sector has been already described in detail in D2.02 only some points will be presented here.

Total number of commercial banks in Poland, which diminished by about one-fourth between 1996 and 2004, had not changed substantially since 2006 and remained between 69 and 70 (with exception of 2011 when the number fell to 67). On the other hand total number of credit unions and financial cooperatives had been still falling: in 2013 it was 626, i.e. by 8% less than in 2004. Contrary to this, number of branches of both types of the above mentioned depository institutions was fast growing. The number of bank branches increased from nearly 8.4 thousand in 2004 to 10.9 thousand in 2012, i.e. by 30%, and that of credit unions and financial cooperatives increased still more: from nearly 4.2 thousand to above 6.1 thousand or by 47%. Consequently, physical accessibility of the depository institutions to their customers considerably increased. (IMF, 2014). The same is true for ATMs, which number per 1000 km² and per 100,000 adult inhabitants had increased ca. 2.3 times since 2004. (see Fig. 56). This enabled an increase in percentage of population having a bank account from 55.5% in 2003 to 81% in 2013 (Związek ..., 2014, p.9).
3.4.2 Borrowers, loans and deposits to non-financial sector

The 2009 crisis, together with successive restrictions imposed by the Financial Supervision Authority on granting mortgage and consumer loans (in particular in foreign currency), violently reversed the by then upward steep trend in number of borrowers from financial intermediaries and initiated a four-year decrease (see Fig. 57). The number, which between 2004 and 2008 increased by almost 3.4 million (to 7.4 million, of which 7.28 million were household borrowers), in next four years fell by 2.56 million (by 2.67 million in case of households). In 2013 some increase in the number of borrowers was observed (by 0.47 million in total and 0.46 households).

In relative terms the above presented figures mean that the percentage of borrowers among adult population had increased from 12.6 in 2004 to 22.9 in 2008 and then fell to 14.8 in 2012. In case of household borrowers the numbers were 12.6, 22.6 and 14.1 percent respectively.

In spite of diminishing total number of borrowers, a value of outstanding loans from commercial banks, credit unions and financial cooperatives continued to grow, though at lower rate, in particular since 2012. Looking at Figure 58 one can notice that in 2004-2013 value of outstanding loans from depository institutions doubled in relation to GDP reaching 52%. Particularly fast growth was observed in 2005-2008 when the ratio increased from 28% to 48%. The only year when the percentage increase of outstanding loans was lower than that of GDP at current prices was 2012. It is worth to notice that Poland, with its
44.6% increase in bank loans for non-financial sector between the end of 2008 and September 2014 takes the second place in the EU. Only Sweden registered higher (50.6%) increase in that period (see Table 4).

![Figure 58: Outstanding deposits with and loans from commercial banks, credit unions and financial cooperatives (% of GDP)](image)

Source: IMF Data warehouse, Financial Access Survey (FAS) Poland

<table>
<thead>
<tr>
<th>Country</th>
<th>Rate of growth</th>
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<th>Rate of growth</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Sweden</td>
<td>50,60%</td>
<td>Cyprus</td>
<td>12,30%</td>
<td>Romania</td>
<td>-1,40%</td>
</tr>
<tr>
<td>Poland</td>
<td>44,60%</td>
<td>France</td>
<td>12,00%</td>
<td>Estonia</td>
<td>-9,40%</td>
</tr>
<tr>
<td>Slovakia</td>
<td>34,80%</td>
<td>Austria</td>
<td>8,10%</td>
<td>Portugal</td>
<td>-12,20%</td>
</tr>
<tr>
<td>UK</td>
<td>29,30%</td>
<td>Belgium</td>
<td>6,50%</td>
<td>Lithuania</td>
<td>-21,80%</td>
</tr>
<tr>
<td>Finland</td>
<td>22,80%</td>
<td>Italy</td>
<td>6,20%</td>
<td>Slovenia</td>
<td>-23,30%</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>19,60%</td>
<td>Greece</td>
<td>4,70%</td>
<td>Hungary</td>
<td>-26,40%</td>
</tr>
<tr>
<td>Czech Rep.</td>
<td>18,50%</td>
<td>Netherlands</td>
<td>2,20%</td>
<td>Spain</td>
<td>-28,50%</td>
</tr>
<tr>
<td>Malta</td>
<td>18,40%</td>
<td>Germany</td>
<td>1,70%</td>
<td>Ireland</td>
<td>-47,80%</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>13,20%</td>
<td>Denmark</td>
<td>-0,40%</td>
<td><strong>Euro area</strong></td>
<td><strong>-2,30%</strong></td>
</tr>
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</table>

Source: NBP [2015], (rates of growth calculated on the basis of ECB data)
One should stress that since the middle of 2005 total value of loans to households has been making more than the half of total banking sector portfolio loans. Till the end of 2013 the share increased to 69%. On the other side the share of firms in total outstanding loans fell from 55% in 2003 to 31% in 2013 (see Fig. 59). Still more startling is the fact, that housing loans to households, which share in total loans had increased between 2003 and 2013 from 15% to 43%, has become in present decade four times bigger than investment loans to firms.

![Figure 59 Structure of loans to the non-financial sector 2003 - 2013](image)

**3.5 Housing market**

The 2007-2008 housing market boom in Poland was a culmination of lasting already for several years increase in housing prices. Since 2006 increase in the prices accelerated. Within twelve months, between September 2006 and September 2007, average housing prices in big cities [capitals of provinces] increased by 56-64% that jacked them up to the
level 3-4 times higher compared to the early 2000s. Increase in prices continued in the following six months but was not significant. In the first three quarters of 2009 a distinct but moderate downward trend observed, followed by about two-year of relative stabilization of prices. Next fall in prices came only at the end of 2011 and the beginning of 2012, but lasted only about a year, after which prices stabilized at a level equal to 85-95% of the boom maximum but still by one third to two third higher than in September 2006 (see Fig. 60). That means that for the average 2013 monthly wage one could buy only 0.6-0.85 square meter of a flat.

It should be mentioned that during the housing boom banks, in the pursuit of profit, offered their household customers loans in foreign currencies, first of all in Swiss francs. As in 2007-2008 PLN/SF exchange rate was a bit above 2 and the interest rate of a loan denominated in SF was much lower than that in PLN, banks offered them on large scale (several hundred thousand) to households, even to those which did not qualified to get the equivalent loan in national currency.
Rapid depreciation of the Polish currency, first in the autumn of 2008 (to ca. 3 PLN/SF) and next in January 2015 (to ca. 4 PLN/SF), have had a very negative balance sheet effect on those households. As a consequence, significant part of them owe now to the bank the amount in PLN, which is often higher than the amount they actually borrowed several years ago. Even if they have been regularly paying instalments and interest.
CONCLUSIONS

Why has the Polish economy coped with an impact of the global crisis better than any other EU country, and especially better than other post-socialist countries? Exhaustive answer to this question needs further, in-depth studies on structural and institutional differences between particular economies, nature of their economic relations with the outside world, as well as differences in the reaction of their governments, their central banks and of economic actors to the global crisis. Such a research goes beyond the scope of this chapter. Nevertheless, some preliminary observations can already be made. First of all, one should say that a quest for any single reason of the success of Poland would be pointless, as a specific combination of factors has been underlying it. The most important of them seem to be the following:

- Unlike most CEE countries, Poland – despite growing political polarization – has had very stable two-party ruling coalition since the end of 2007 and the government led until September 2014 by the same Prime Minister.
- Poland has retained its own currency and unlike the Baltic Republics and Bulgaria have floating exchange rate regime. This has allowed the Polish government more freedom to pursue its own internal policy objectives and to a large extent insulated the economy from macroeconomic problems of its main trade partners. The floating rate helped also to protect the economy from getting into deep current account deficit in years preceding the crisis as well as from mass outflow of foreign capital, particularly from the financial sector. As Bakker and Gulde [2010, p. 43] emphasise “[…] fixed exchange rate countries face greater challenges when confronted with capital inflows than floaters. […] For countries with floating exchange rates, nominal exchange rate appreciation may help in moderating credit booms. Exchange rate appreciation tempers overheating, reduces inflationary pressures, and keeps real interest rates positive. The nominal appreciation also keeps pressures on nominal wage growth in check.” It should be added, however, that the exchange rate can be

\[\text{24 This part of the paper is based on Dymarski (2014).}\]
used to respond to the crisis only if foreign currency exposure is relatively narrow, as it has been in the case of Poland, by contrast with Hungary or Romania.\(^{25}\)

- Poland’s economy was much less dependent on external demand than those of other CEE countries (except Romania). Despite continuous increase in export-to-GDP ratio since Poland’s accession to the EU, the ratio reached only 40% on the outbreak of the crisis, compared to more than 80% in Slovakia and Hungary and nearly 70% in Slovenia, Czech Republic and Estonia. And that means, that the scale of transmission of the shock in demand from Poland’s trade partners was relatively small.

- The ratio of Poland’s net external debt to GDP in the years preceding the outbreak of crisis had been under control. The average for 2005-2007 was even a bit lower than for previous three years, contrary to Bulgaria, Hungary, Romania and the Baltic Republics where the ratio in 2007 was two to three and a half times higher than in 2002.

- Poland’s domestic debt has been denominated in national currency and thus its vulnerability to the crisis was significantly lower than that of the Baltic Republics, Hungary and Bulgaria.

- The National Bank of Poland has been carrying out balanced monetary policy, “responding flexibly to shocks affecting the Polish economy, adjusting the level of interest rates to changing macroeconomic conditions” [NBP 2012b, p. 6].

- The Polish banking sector has been the least concentrated one among the CEE countries. In 2008 the three top players in Poland’s banking market owned only 28.4% of total bank assets, compared to 30.4-35.3% per cent in Bulgaria, Hungary, and Latvia, 40.6-48.2% in the Czech Republic, Lithuania, Romania and Slovenia, 55% in

\(^{25}\) An appreciation of the domestic currency has a positive effect on e.g. the net income and net wealth of the borrowers in foreign currency, increasing the demand for new foreign currency loans. This can boost aggregate domestic demand and may lead to an overheating of the economy. On the other hand a depreciation of the domestic currency increases the value of foreign currency debt in terms of the domestic currency, adversely affecting net income, net wealth and aggregate domestic demand [see: Martin 2010].
Slovakia and as much as 89.3% in Estonia. The Heldfndhal-Hirshman index shows similar proportions (see Fereira 2012, Appendix II, p.20-21).

- At the outbreak of crisis in Poland the state-owned banks had substantial share in total assets of the banking sector: around 18%, while in Estonia and Lithuania the sector was totally in private hands. In the other CEE countries the State’s share ranged from below 1% in Slovakia to about 5% in Romania [CEE Banking Sector..., 2012, pp. 33-47]. On the other hand, Poland had a moderate share of foreign-owned banks in total assets, estimated at around 67-76%. Only Slovenia and Latvia had this share smaller (24-38% and 67% respectively), while in the remaining countries foreign owned banks had from 84% to 99% of total assets. The share does matter because in the period preceding the financial crisis foreign banks “have been instrumental in pushing the amount of household lending (both in local and foreign currencies)”[Brown, Hass, p. 17], while during the crisis “lending conditions increasingly depend on the situation of the banking sector in countries from which the parent banks originate” [Firdmuc et. al, p. 22].

- Effective State supervision over banking sector contributed substantially to maintaining its stability. Percentage of the sector’s institutions with negative profitability ratio did not exceed 3% and their share in the aggregate assets of the banking sector, after increase in 2009-2011 to some 8-9%, fell to 5% in 2012. Average capital adequacy ratio had been remaining at the level of 11-14% with an upward trend since 2009 [NBP 2012a, NBP 2013].

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26 All figures are for 2008. Admittedly, at the end of that year the Latvia’s government owned as much as 19.5% of total bank assets [Transition Report 2009, p. 188], but it had already been a result of the crisis: in November 2008 the State owned Mortgage and Land Bank of Latvia took over 51% of shares of the collapsed Parex Bank (Latvia’s second biggest bank) [Letter ..., 2009]. Before it happened, the State owned only 4.2% of bank assets.

27 Precise estimates of foreign bank shares presented in different sources differ more or less, sometimes substantially. In the case of Poland and Slovenia the following figures for 2008 have been found: 67.0% and 38.2% [CEE Banking Sector..., 2012], 72.3% and 31.2% [CEE Banking Outlook ...], 72% and 26% [Classens, Horen] and 67% and 24% respectively [CEE Banking Sector..., 2013]. According to some sources Hungary and Latvia had the shares similar to Poland, but other sources presents much higher estimates.
• To curb the accelerating growth in mortgage and consumer loans, and foreign currency loans in particular, the Polish Financial Supervision Authority issued in 2006 the Recommendation S on good practices related to credit exposures, enforced next by Recommendation S II of 2008, which required banks to apply stricter credit underwriting standards and to disclose foreign currency risks when providing foreign currency loans. As a result, in 2008 new foreign currency loans in Poland made only 25 percent of total loans, while in Bulgaria, Hungary and Romania 53-55%, in Latvia 62% and in Lithuania as much as 88% [Klingen, p. 17, fig 1]. The share of outstanding loans in foreign currencies in total loans decreased from 63.3% in 2009 to 46.4% in 2014 (Makarenko 2015).

• Though Poland, like most other countries, passed through a housing bubble in the pre-crisis period, housing prices did not surged as high as in Bulgaria, Baltic Republics or Hungary [see: Global Property Guide, 2013] and the burst of the bubble in the middle of 2008 had not significant negative impact on the Polish financial sector or performance of individual banks.

• Polish fiscal policy was sensible in pre-crisis years and as well as after the crisis outbreak. The government kept itself at a distance from austerity policies, at least until 2010. Between 2008 and 2010 the policy was actually countercyclical: general government expenditure grew faster than GDP and the deficit more than doubled, reaching 7.8% in 2010, only to fall to 3.9% two years later.

• Poland registered the lowest inflation before the onset of the crisis. It was the only CEE country where price increase in 2008 compared to 2005 was below 10% (8.3%), being ahead of Slovakia, Czech Republic and Slovenia (10.4%, 11.7% and 12.3% respectively). By contrast, in the remaining six countries prices rocketed by 19 to 35% in the same time as a result of uncontrolled expansion of bank credit and/or large inflows of foreign capital boosting money supply. In particular, the four countries with

28 Further restrictions on providing foreign currency loans have been imposed by Recommendation T of 2010
pegged exchange rates, confronted by the so called trilemma (or impossible trinity)²⁹, were not able to sterilize the capital inflow.

- The reaction of Polish consumers to successive news about effects of global crisis on other economies was calm. Neither panic withdrawals of deposits nor any reduction in consumers’ demand for goods and services was observed. On the contrary, in spite of 22% decrease in new consumer loans between 2008 and 2011, final consumption expenditures of households was growing from year to year, albeit at a decreasing rate. Total growth in 2008 to 2013 was 11.4%. As for the bank deposits of households, these increased by 80% in nominal terms and by about 65% in real terms between 2007 and 2011 [NBP 2012a, NBP 2013].

- Poland was the only CEE country where an upward trend of gross capital investments in non-residential buildings and structures was not reversed in 2009. On the contrary, during three years their volume had increased by 22% compared to 2008. In all other countries this kind of investments contracted considerably [Eurostat Database 2013f].

- The EU funds were used in Poland more effectively and more efficiently than in some other benefiting countries.

Certainly, the above list could be rounded out with a number of other factors, but those already presented seem to be sufficient to conclude that their set has been unique. Nevertheless Poland, as all other EU countries, has not avoided substantial slowdown in 2012 and 2013. The GDP rate of growth fell from 4.5% in 2011 to just 1.6% in 2013. In consequence the Government decided to put forward a motion to the Parliament to increase the Central Government deficit in 2013 by an equivalent of 1% of GDP and to cut expenditures by about 0.5% of GDP (most of all for defence). As a result the ratio of total public deficit to GDP in 2013 – after its reduction from 7.8% in 2010 to 3.9% in 2012 – increased temporary to 4.3%. in 2013.³⁰

²⁹ In macroeconomic management, policy makers must face a trade-off of choosing only two of the three policy choices: exchange rate stability, financial market openness and independent monetary policy oriented toward domestic objectives [Obstfeld and Taylor 2009, p. 2].

³⁰ These are ESA 2005 figures. According to ESA 2010 they are 7.6%, 3.7% and 4% respectively.
According to recent announcement issued by the Poland’s Central Statistical Office the slowdown has already come to an end. In 2014 the GDP growth has accelerated to % 3.4% (CSO 2015).

And last but not least, the way Poland have handled the last crisis challenges the claim that increasing the public deficit above a certain, arbitrarily established limit is always harmful for the economic stability, regardless of specific actual circumstances. There are solid grounds to state that if in 2008-2010 there were no large increase in the deficit, Poland would not be able to avoid recession and destabilisation of the economy. and, in consequence, possibly even bigger public deficit and/or a fall in standard of living of the population.

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THE ABSTRACT OF THE PROJECT IS:

The research programme will integrate diverse levels, methods and disciplinary traditions with the aim of developing a comprehensive policy agenda for changing the role of the financial system to help achieve a future which is sustainable in environmental, social and economic terms. The programme involves an integrated and balanced consortium involving partners from 14 countries that has unsurpassed experience of deploying diverse perspectives both within economics and across disciplines inclusive of economics. The programme is distinctively pluralistic, and aims to forge alliances across the social sciences, so as to understand how finance can better serve economic, social and environmental needs. The central issues addressed are the ways in which the growth and performance of economies in the last 30 years have been dependent on the characteristics of the processes of financialisation; how has financialisation impacted on the achievement of specific economic, social, and environmental objectives?; the nature of the relationship between financialisation and the sustainability of the financial system, economic development and the environment?; the lessons to be drawn from the crisis about the nature and impacts of financialisation?; what are the requisites of a financial system able to support a process of sustainable development, broadly conceived?'}
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