

FINANCIAL SECURITY OF MIDDLE CLASS FAMILIES IN POLAND OVER 2006-2009

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“ECONOMIC SECURITY” in the Polish literature

- In the Polish literature the concept of “economic security” is mostly considered in regard to a state not an individual
- The phenomenon of individual economic security has not been the aim of complex research in Poland yet

The purposes of the paper

- to create a measurement, a Middle- Class Financial-Security Index,
- to investigate the level of financial security experienced by middle-class families in Poland in 2009-2008 and 2007-2006.

- The index shows:
 - a percentage of middle class families that can be considered really secure,
 - what factors strengthen or destabilize financial security,
 - how the level of financial security was changing in 2009-2008 in comparison with 2007-2006.

The index is created for Poland as a whole and for different groups of middle-class households.

Economic security

Definition

- ***Economic security*** can be defined as the ability to achieve income necessary for covering household needs at its suitable level and to create financial reserves to be at disposal in case of unfavorable accidents (sickness, job loss, family breakdown).

Two points of view

- From the **microeconomic** point of view it is essential to distinguish whether the household is economically secure or not.
- From the **macroeconomic** position it is important:
 - to assess the aggregate level of security broken by different groups of households
 - to investigate changes in security levels over time.

Source of data

- ***Household Budget Survey*** (HBS) for the period of 2006-2009.
- Each household is included in the HBS over two years.
- The research is carried out basing on two panel data for 2006-2007 and 2008-2009.
- The 2008-2009 HBS is the last available panel.
- The second one, 2006-2007, has been chosen to compare the findings over time.
- Over 2006-2007 the Polish economy experienced very dynamic growth, while over 2008-2009 growth was visibly slower.

The methodology of the middle-class financial-security index

- defining a middle class sample;
- identifying factors influencing middle class financial security;
- setting for each area included in the index:
 - 1) a threshold that would be optimal to support overall financial security,
 - 2) a threshold that would threaten it,
 - 3) determining percentage of middle class families that met or meet these thresholds;
- defining criteria for considering the family:
 - 1) securely in middle class, or
 - 2) at high risk of slipping out of the middle class, or
 - 3) in-between these two groups.

- The general idea of the methodology is inspired by the Middle Class Security Index suggested by researchers of Demos: A Network for Ideas & Action and the Institute on Assets and Social Policy at Brandeis University,

however,

the index created for Poland is adjusted to the economic situation experienced by Polish families and data available.

Defining a middle class sample (1)

- Families should be considered the middle class on a base of income, a way of life and even social mobility.
- The concept of the middle class is not well developed in Poland.
- The middle class is not a symbol of the “Polish way of life”.
- **The paper avoids the discussion on social and cultural aspects of being middle class and focuses only on economic factors.**

Defining a middle class sample (2)

Criteria:

- **Main income source** - families which main income source of maintenance is: **income from hired work or income from self-employment** (employees and owners of small and medium-sized firms, lawyers, artists, journalists; excluding farmers' incomes);

*All incomes are considered **equivalent incomes**; the modified OECD scale is used: 1 for the first adult person in household, 0.5 for each next member of household – 14 years and over, 0.3 – for every child under 14 years.*

- **Income range** – families with an equivalent household income **between 150 and 600 percent of social minimum** (incomes adjusted to a household size using the OECD scale);
- **Age range** – age of household head: **25-64** (working age for a man with the university's diploma)

The income range – explanation (1)

- **Why social minimum not poverty line????**
- The Polish Government Statistical Bureau defines existence minimum, as an absolute poverty line. It is income that allows to meet only needs which must be met to avoid biological weakness.
- **Social minimum** is not a poverty line. It constitutes **income that allows to keep living standards at the minimum but fair level, including not only biological but also social needs**.
- It seems that social minimum is much more suitable to determine a middle-class income range than a poverty line.
- Social minimum has been calculated by the Institute of Labour and Social Studies for many years.

The income range – explanation (2)

- **Setting the range between 150 and 600 percent**
- **(S80/S20)** income quintile share ratio for population less than 65 years fell between **7 and 5** in 2005-2009.
- It is rationally to assume that **within middle class the ratio of highest and lowest income is equal to 4.**

The income range – explanation (3)

- **A choice of 150% of social minimum as a lower threshold.**
- In Poland there is a common opinion that the intelligentsia should be included into the middle class, whatever a concept of the middle class would mean.
- In the paper it is assumed that a family that consists of
 - parents, who are both appointed teachers
 - two children, one below 14 and second upper 14, belongs to the middle class.
- **A double wage of an appointed teacher gives such a family income only a little bit higher than 150% of social minimum.**

The income range

- 2009:
 - **1844 PLN ≈ 461 EUR** (an equivalent income per person per month) = the 150% of social minimum for a 4-person family;
 - **7378 PLN ≈ 1845 EUR** (an equivalent income per person per month) = the 600% of social minimum

*(both incomes adjusted to a family size using the OECD scale –
 $2.3 = 1+0.5+0.5+0.3$)*

- 2007
 - 1687 PLN ≈ 422 EUR
 - 6749 PLN ≈ 1687 EUR.

Factors included in the index

- **Financial assets**
- **Education**
- **Housing**
- **Budget**
- *Healthcare is omitted. In Poland all family members are covered by public obligatory health insurance.*
- *However, public obligatory health insurance does not mean that serious illness cannot destroy financial stability. The quality of Polish healthcare system is not sufficient, and patients are often forced to use private healthcare. The costs of medicines against some illnesses must be covered out of pocket in 100%.*
- *Financial assets or incomes left after covering living expenses should be sufficient to cover the cost of private healthcare.*

Assets – a problem

- How to estimate household's assets?
- There are not data on savings, securities as well as on home equity at a household's level.

Assets – *measuring*

- The basic question is **whether a household has been able to generate savings over two succeeding years** (a given household is included in the HBS only over two years).
- **The 2-year sum of an increase in savings plus capital income = proxy of assets accumulated over two years**
- *household's assets accumulated over two years = Δ savings in two succeeding years + sum of income from property and income from rental of a property and land in two succeeding years*

Income from hired work or Income from self-employment

- total expenditures on consumer goods and services
- principle and interest of loans (excluding housing loans)
- private insurances

= Δ savings in a year

Asset factor - *definition*

- The asset factor is included in the index as **the number of months**
when
a family could meet 75% of its essential living expenses,
using financial assets accumulated over two last years
- *Essential living expenses are expenditures on food, housing (without spending on furniture and equipment), clothing, transport (without purchases of cars and motors, bicycles), health care, personal care, education, transport insurance, private health insurance.*

Asset factor - *Thresholds*

- Setting the thresholds is based on the average number of months without employment income. This number of months depends on the situation on labor market and it was equal to 10 months in 2009 and 14 months in 2007.
- the **optimal** level for financial security - the level of assets accumulated over two last years that allows a family to cover 75% of its essential living expenses for **at least 150% of average number of months** without employment income or income from self-employment;
- **Risk** for financial security – the level of assets accumulated over two last years that allows a family to finance 75% of its essential expenses for **less than 50% of average number of months** without employment income or income from self-employment.

Education factor

- **Higher level of education is a factor that strengthens financial security**

Two arguments

- For Poland's population in age of 25-64 over 1999-2009 the higher employment rates and lower risk of poverty were associated with the higher level of education attained
- **Employment rates for:**
 - **tertiary education - between 86% and 82%,**
 - upper secondary and post-secondary non-tertiary education - between 67% and 61%,
 - lower secondary education - between 47% and 36%.
- **In-work at risk-of poverty rates for:**
 - **tertiary education - between 2% and 3%,**
 - upper secondary and post-secondary non-tertiary education between 14% and 12%,
 - lower secondary education between 34% and 27%.

Education factor - *Thresholds*

- The **optimal** level for financial security – **tertiary education**
- **Risk** to financial security - upper secondary and post-secondary non-tertiary education or less

Housing - *definition*

- The housing factor means a percentage of after-tax income spent on housing.
- *Housing expenses: mortgage principle and interest for owned home/or vacation home, rent, insurance, maintenance, utilities, heating and public services.*

Housing - *Thresholds*

- The **optimal** level for financial security – **less than 20%** of after-tax income spent monthly on housing;
- **Risk** for financial security – **more than 30%** of after-tax income spent monthly on housing

Budget factor - *definition*

- The budget factor is included into the index as **the amount left at the end of the month after paying taxes and covering living expenses.**
- This amount should afford a middle class family to cover the costs of expensive medicines, to improve housing, or in general, to improve the quality of life or to save or invest.

In details:

Living costs =

Income from hired work/income from self-employment + income from property and income from rental of a property and land

- *total consumer expenditures*
- *principle and interest of loans and house loans*
- *house, life health and other private insurances*

Budget factor - *Thresholds*

- The **optimal** level for financial security – Amount left at the end of the month after paying taxes and covering living costs is **more than 150% of the amount that allows to make ends meet** (the amount adjusted to a family size)
- **Risk** for financial security – Amount left at the end of the month after paying taxes and covering living costs is **less than 50% of the amount that allows to make ends meet** (the amount adjusted to a family size).
- *The amount that allows to make ends meet*
 - *736 PLN per month/ per person (≈ 184 EUR) in 2009,*
 - *703PLN (≈176 EUR) in 2007.*

Defining criteria for considering the family securely in middle class, or at high risk

- A family can enjoy **financial security** within middle class, if **at least three factors** for this family **meet the optimal threshold** for financial security.
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- A family is exposed to **high financial insecurity**, if **at least three factors** for this family **meet the threshold defined as risk** for financial security.
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- If a family falls **between these two groups** it means that the family is not at high risk of slipping out of the middle class but its financial security is fragile.

RESULTS

- The sample of the middle class – a problem with the income range
- The Middle-Class Financial-Security Index in 2009-2008 and 2007-2006
- Insight into economic security of the middle class in 2009
- Economic security of households with income below the middle-class income range (below 1844 PLN)

The sample of the middle class – a problem with the income range

- The **basic sample** of households with a head in 25-64 age and with a main income source, as income from hired work or income from self-employment, **WITHOUT THE INCOME CRITERION**
 - 8253 households in 2009 (households included in the HBS over two years, 2009-2008).
 - **median equivalent income = 1500 PLN**
 - average equivalent income = 1966 PLN
- **1844 PLN =150% of social minimum, as the bottom of the income range for identifying the middle class ??????????**

For comparison in 2009, the equivalent social minimum per person amounted 1229 PLN (\approx 307 EUR), or 2827 PLN (707 EUR) per a 4-person family.

The 2009-2008 **basic sample** of households (workers, the self-employed, age range for household's head, 25-64) has been broken by the income criterion :

- **41,2% of the basic sample = middle class, (3411 households), meeting the income criterion (the equivalent income per person in the range of 1844 PLN – 7378 PLN)**
- 58% of the basic sample = households with income below 1844 PLN
- 0.8% of the basic sample = households with equivalent income per person above the top of the income range, 7378 PLN.

Even taking into account that really reach people do not participate in the HBS, **the income range used in the definition of the middle class in this paper has generated the sample of relatively well-off households rather than the typical middle class with income below and above the median.**

Extending the middle class

- The middle class extended in 2009 comparing with 2007

(41% and 35%, respectively)

in spite of

worsening economic activity

1.7% = real GDP growth rate in 2009

6,8% = real GDP growth rate in 2007

The main findings from the Middle Class Security Index (1)

- Between 2007 and 2009
the fraction of economically **insecure** households **declined** from 22% to 18%
while
the percentage of households that enjoyed **economic security** **increased** from 6% to 9%.
- In both years the **majority of middle-class families (73%) was between these two groups.**
- Such households were not at immediate and high risk for falling out of the middle class but they still experienced lack of the solid foundations for safeguarding their financial security.

The main findings from the Middle Class Security Index (2)

- The level of **financial assets** is a **crucial factor** for security of middle-class households.
- Over 2009-2008
 - **42 percent** of middle-class families was **not able to accumulate enough assets** to meet $\frac{3}{4}$ of basic expenses **for even 5 months**but on other hand
 - **34 percent** of families **could accumulate assets** covering $\frac{3}{4}$ of essential expenses **for more than 15 months.**
- Comparing the median number of months, in 2009 middle-class households had assets to cover $\frac{3}{4}$ of their essential expenses for 8 months while in 2007 for only 5 months.
- **The ability to accumulate financial assets has increased.**

The main findings from the Middle Class Security Index (3)

- **Housing** expenses were **not** a factor that threatened security of middle-class families both in 2009 and 2007.
- Only minority of middle class families has spent on housing monthly more that 30 percent of its after-tax income,

however,

- the percentage of such households has grown considerably for two years

(from 7% in 2007 to 12% in 2009).

The main findings from the Middle Class Security Index (4)

- In both of the years considered, 2009 and 2007, more or less **50 percent** of middle-class families experienced the **budget problem**.
- Considerable part of middle-class had a **deficit**,
 - higher expenses than after-tax income,
 - 25% in 2009
 - 31% in 2007.
- Such families should change their consumer behavior.
- The budget deficit has been covered by consumer loans.
- Fortunately for these households their loan burden has not been troublesome yet.
- *Principle and interest of loans as percent of after-tax income, in average = 8.5%*
 - (families experienced the low level of economic security = not economically secure in 3 or more factors)

The main findings from the Middle Class Security Index (5)

- **Young families** (a head in 30-aged, in average) have made:
 - the **smallest fraction of insecure** middle-class households and they have **managed with threats** in all areas **better than older** families.
 - the **largest fraction among highly secure** middle-class households.
- They have enjoyed the highest equivalent income, in average.
- Both findings for secure and insecure households show that the **financial position of young families in the middle class has been relatively good.**

The main findings from the Middle Class Security Index (6)

- **Non-manual workers** households have made a dominate fraction of **highly secure** middle-class families
- The largest fraction of economically secure families has lived in the **central region** of Poland, especially in Warsaw.
- Families with high economical security have preferred to live in **larger towns** as well as in **the country**.

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- There are **differences** in the fraction of **insecure households** across Poland's **regions**.
 - What is interesting that higher the average equivalent income in a region, higher percentage of insecure middle-class households.

The main findings from the Middle Class Security Index (7)

- It seems that the first wave of the current financial crisis (2008-2009) has not influenced strongly economic security of middle-class families in Poland.
- The impact of the second wave ??????????????

Low level of economic security = not economically secure in 3 or more factors

High level of economic security = economically secure in 3 or more factors

Middle level of economic security = not economically secure in 2 factors and economically secure in 2

Economic security of households with income below the middle-class income range (below 1844 PLN) in 2009

Percentage of households that experienced economic security at:

- low level - 38%
- middle level - 61.7%
- high level - 0.3%

Economic security of middle class households in 2009

Percentage of **middle-class households** that experienced economic security at:

- low level - 18%
- middle level - 73%
- high level - 9%