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Content

Dynamics of Economic growth and Household Income Distribution

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Abstract

This research focused on the relationship between Gross Domestic Product (GDP) and household incomes in the Czech Republic in the period 2010 to 2022 was based on the need to understand how macroeconomic factors influence the standard of living during different phases of the economic cycle. The aim of this thesis was to evaluate the impact of GDP and other macroeconomic indicators such as inflation, unemployment, household expenditures, household net disposable income (HNDI) and average monthly pay on household income. Time series methods and regression analysis were used to identify the key factors influencing household income. The results revealed a strong dependence between GDP growth and household income, with household net disposable income emerging as the most significant factor. The study also highlighted the differing impacts of these factors during periods of economic growth and recession. The research was limited by the use of annual data and a focus on selected factors, providing opportunities for future analysis, encompassing more detailed data and a broader range of variables.

Keywords: GDP, household incomes, household expenditures, regression analysis, economic growth, unemployment

Introduction

In recent years, the relationship between economic growth as measured by GDP and household income has often been discussed. This relationship is key for understanding the impact of economic growth on living standards. Lupu et al (2023) point out that economic developments in 11 Eastern European countries demonstrate GDP growth as a key determinant of increasing wages, underlining the importance of this relationship to

understand broader economic effects on household incomes. The choice of this topic is well timed because in the context of ongoing economic changes such as globalisation, automation and rising social inequality, these factors should be examined for effects both on the overall economy and individual households. Trzcinska (2022) argues that theoretical models such as the Zenga model are accurate tools for quantifying income inequality and provide a deeper understanding of differences in household income across different economies

The current social demand for analysis of this topic is based on the need to understand whether GDP growth actually leads to income growth for the majority of households, or whether only a narrow group of the population can benefit from it. Bilkova (2023) concludes that the trend of wages, GDP, inflation and unemployment in the Czech Republic since the beginning of the economic transformation shows a link between GDP growth and wage stagnation followed by wage recovery, with a delayed response of the labour market to economic crises. This issue not only affects economic but also social stability as rising inequality can result in adverse social consequences such as social tensions or political instability. Krajnakova et al., (2020) report that research on the employability of university graduates in the Czech Republic and the Slovak Republic shows a strong correlation between GDP growth and employment of persons with university degrees, suggesting a significant impact of economic growth on the labour market and household income.

The relationship between economic growth as measured by gross domestic product (GDP) and household income is one of the key issues in macroeconomics and social policy. Examining this relationship helps to understand the extent to which economic growth affects living standards and the distribution of income among different segments of the population. Hronova et al. (2022) point out that domestic consumption responds to economic recessions with a certain lag, thereby mitigating the effects of a crisis. In contrast, slower consumption growth during the recovery slows down the economic boom, confirming the key role of household consumption in economic development. Studies examining the effect of GDP on household income focus on both direct wage growth and indirect effects such as changes in unemployment, inflation or fiscal policy. Vochozka et al. (2023) point out that external economic shocks such as the Russian invasion of Ukraine, reveal the vulnerability of the financial system to external influences, and these shocks cause significant inflationary pressures that directly affect real household incomes.

Some studies argue that GDP growth has a greater income impact on higher income groups, resulting in an increase of income inequality. Tureckova et al. (2022) note that GDP growth often has a greater impact on the incomes of higher income groups, leading to an increase in income inequality. These inequalities can pose an obstacle to balanced economic development and cause tensions between social groups. On the other hand, other research suggests that GDP growth can also have a positive effect on middle-class incomes even if the growth of these incomes is not uniform. Bechny (2020) states in their study that Bayesian analysis shows that labour market shocks significantly affect GDP

growth and real wage growth in the Czech Republic. Meanwhile domestic demand shocks have twice the effect on unemployment as foreign shocks, highlighting the role of the domestic economy in job creation and income growth.

These conclusions are the key to discussions about how economic growth should be distributed to make it more socially fair and economically efficient. Tsapko-Piddubna (2021) points out that the implementation of inclusive economic policies such as employment, infrastructure and business development policies are the key to achieving equitable economic growth and improved living standards in CEE, which in turn promotes social inclusion and competitiveness of these economics.

The methods and approaches used to examine the relationship between GDP and household incomes vary. Some studies apply macroeconomic models while others rely on regression analysis and time series to track effects such as inflation, unemployment or tax burden. Krizek et al (2022) says that government spending on education, especially secondary education, has a positive impact on future GDP growth, suggesting the importance of human capital investment for economic development. Time series show a strong correlation between GDP growth and wages in developed countries. Subova et al. (2024) claim that empirical analysis shows short run Granger causality between GDP and household saving rates, with household savings having a significant impact on economic activity in the Czech Republic and Hungary, especially during periods of crisis

Regression analysis often confirms that factors such as inflation and unemployment can slow wage growth during periods of economic growth. Chytilova & Frejlich (2020) report that regression analysis shows an adverse impact of GDP growth on unemployment rates while minimum wages and other macroeconomic factors such as inflation affect the labour market and household incomes.

Some research also points out that GDP growth does not always lead to a proportional increase of income for all households, especially in periods of recession. Kislingerova (2023) concludes that the slowdown in the growth of the Czech economy that was already observed before the pandemic, was associated with low labour productivity and significant capital outflows, which limited the potential for household income growth even as GDP continued to grow. The wage growth dynamics is dependent on the labour market, which may respond to economic changes with a certain delay. Paksi et al (2023) conclude that macroeconomic factors such as GDP growth, the number of job offers and housing completions are the key factors influencing migration behaviour, which indirectly affects the income distribution and economic conditions of households.

Income inequality is also an important factor which affects the relationship between GDP and household incomes. Stoilova (2023) points out that the analysis of tax revenues and their impact on economic growth in Central and Eastern European countries confirms the positive effect of tax revenues on GDP growth. At the same time, however, inefficient use of public spending can hinder inclusive growth and contribute to income inequality. Economics with higher levels of income inequality often show a weaker link between GDP growth and household income growth. Aydin et al. (2022) report that foreign direct

investment combined with rising human capital largely affects economic growth in CEE countries. Skilled labour and technological development are the key factors of long-term economic expansion.

This effect can be amplified in periods of global economic changes such as economic crises or changes in technology sectors. Flek et al. (2022) point out that the differences in cyclical unemployment between the Czech Republic and Poland during economic cycles show the influence of global economic changes. Whileas a higher labour market fragmentation in the Czech Republic suggests more complex mechanisms affecting household income growth during economic expansions and crises.

The literature also analyses differences between sectors that respond differently to GDP growth. Stepanek (2022) says that demographic changes in the Czech Republic, including population ageing and migration, will have a significant impact on different sectors of the economy. Some sectors may experience an increase in labour costs and a decrease in competitiveness, which may affect long-term economic growth. Various sectors, especially those with higher levels of innovation and capital intensity, benefit from GDP growth more than traditional sectors such as agriculture. Pokorny (2023) concludes that population ageing in the Czech Republic has an adverse impact on economic growth from a regional perspective. Some regions such as the Moravian-Silesian Region show specific trends that may be influenced by factors other than demographic changes.

The results of these studies show that not only GDP growth itself, but also the structure of the economy, income inequality and the way different sectors and regions respond to macroeconomic changes are crucial for household income growth. Other factors such as foreign direct investment, demographic changes and government policies are also repeatedly mentioned in the literature and can affect the link between GDP growth and the distribution of income across households. Lomachynska et al. (2020) find that FDI inflows have a positive impact on export growth in Visegrad Group countries. However, further growth of their competitiveness will depend on increasing the share of highly technical sectors in national economics.

Based on results of these studies and a review of the available literature, data collection and processing methods were selected to analyse the relationship between GDP and household income, allowing for detailed monitoring of these variables in different phases of the business cycle. The data were obtained from secondary sources, namely the publicly available databases of the Czech Statistical Office (CSO), covering the time series in the period 2010-2022. A time series method will be used to provide an overview of long-term trends and changes in GDP growth and household income, and regression analysis will be used to identify the impact of specific factors such as unemployment, inflation and income inequality on this relationship. These methods were chosen because of their ability to capture both short-run and long-run dynamics, which is in line with the objectives of this thesis aimed at quantifying the economic growth impact on household incomes in the Czech Republic.

The aim of this thesis is to investigate and quantify a potential dependence between GDP growth and household income in different phases of the business cycle and analyse the factors that may influence this dependence / relationship.

The following research questions are set to achieve this goal:

The key for efficient economic policy is to understand the dynamics between GDP growth and household income in different phases of the business cycle. Changes in this relationship during periods of growth and recession can provide key information on the sensitivity of households to macroeconomic changes.

RQ1: How does the strength of the relationship between GDP growth and household income change in different phases of the business cycle (growth, recession) in the Czech Republic in the period 2010-2022?

To analyse the impact of specific macroeconomic factors such as unemployment, inflation and income inequality is the key to understanding differences in the redistribution of economic growth. This analysis will make it possible to identify why some households benefit more than others from GDP growth and what are the contributors.

RQ2: What impact do specific factors such as unemployment and inflation have on household income growth in the context of GDP growth in the Czech Republic in 2010-2022?

Methods and Data

This chapter provides a framework for analysis of the relationship between gross domestic product (GDP) and household income in the Czech Republic in the period 2010-2022.The first part presents the data and their sources, including the basic characteristics that ensure their relevance to the research questions. The second part shows data processing, describing the approaches and analytical techniques that will enable to answer the research questions. The structure of the chapter allows to fully understand how the information leading to the objectives of the thesis was obtained and analysed.

Data Collection Methods

Data for the analysis will be extracted from publicly available databases, specifically from the Czech Statistical Office (CSO). This source provides reliable and up-to-date data concerning GDP, average household income and household expenditure. The data collection method is based on the use of secondary data from published statistics and time series available in the CSO's online databases. These data will be included for the period from 2010 to 2022 and analysed at annual intervals. This approach allows for a detailed analysis of trends and developments in different phases of the business cycle such as growth and recession.

To answer RQ1, GDP and household income data will be used to analyse changes in the strength of their interdependence over different phases of the business cycle. For RQ2, GDP, household income and household expenditure data will be included to examine how GDP growth affects household income through household consumption behaviour.

For the purposes of analysis, a number of statistical characteristics will be used to better describe the structure of the data. For each variable, the basic statistics such as mean, median, mode, standard deviation and variance will be calculated which allows to better understand the distribution of data across years and within different macroeconomic indicators.

In respect of data collection methods, no experiment or observation will be required as these are secondary data already collected by official institutions. These data will then be adapted for use in statistical models for time series analysis and regression analysis.

Data Processing Methods

To answer the research questions, the following data processing methods will be used to enable detailed monitoring of the relationship between GDP, household income and selected macroeconomic factors in different phases of the business cycle.

Time Series Analysis

This method will be applied to GDP and household income data to analyse the long-run relationship between these variables and to identify changes in its intensity during different phases of the business cycle. The time series analysis will be based on year-on-year changes in GDP and household incomes and will use the ARIMA (AutoRegressive Integrated Moving Average) model. This model is defined by the equation (Box et al., 2015):

$$y_t = \phi_1 y_{t-1} + \phi_2 y_{t-2} + \cdots + \phi_p y_{t-p} + \theta_1 \varepsilon_{t-1} + \theta_2 \varepsilon_{t-2} + \cdots + \theta_q \varepsilon_{t-q} + \varepsilon_t, \qquad (1)$$

where:

- y_t *is the variable value (e.g. GDP or household income) at time t,*
- $\phi_1, \phi_2, \cdots, \phi_p$ *are autoregressive component coefficients ,*
- $\theta_1, \theta_2, \cdots, \theta_q$ *are moving average coefficients,*
- ε_t *is the random component (residuum).*

The data units will be expressed in Czech crowns (CZK) and the time unit will be set annually. This approach will make it possible to assess how the relationship between GDP and household income changes in periods of growth and recession.

Regression analysis

Regression analysis will be used to quantify the effect of individual factors on changes in household income as a GDP growth function. This method will allow to analyse in detail the structure and statistical significance of these relationships, using the following linear regression model (Draper & Smith, 1981):

$$y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \varepsilon \qquad (2)$$

where:

- y *is the dependent variable*,
- x_1, x_2, x_3 *are independent variables,*
- β_0 *is the intercept,* $\beta_1, \beta_2, \beta_3$ *are regression coefficients,*

- *ε is the random component (residuum).*

The results of regression analysis will make it possible to quantify the impact of selected macroeconomic factors on household income changes. The analysis will thus provide a comprehensive view of their relationship to GDP growth and their effects over the period under review.

Expected Results

The analysis is expected to show different intensity of the relationship between GDP and household income depending on the phases of the business cycle. During periods of economic growth, a strong positive relationship between GDP and household income is expected. This assumption is based on the Keynesian model, according to which economic growth leads to an increase in income and, consequently, in household consumption. In contrast, this relationship is expected to weaken in a recession period, which may be due to a decline in economic activity, increased unemployment and lower consumption demand. The impact of other factors such as inflation and unemployment will be analysed in detail using regression analysis. Inflation is expected to have an adverse effect on real household incomes while the unemployment rate is expected to have an impact on income growth, especially in a period of economic recession.

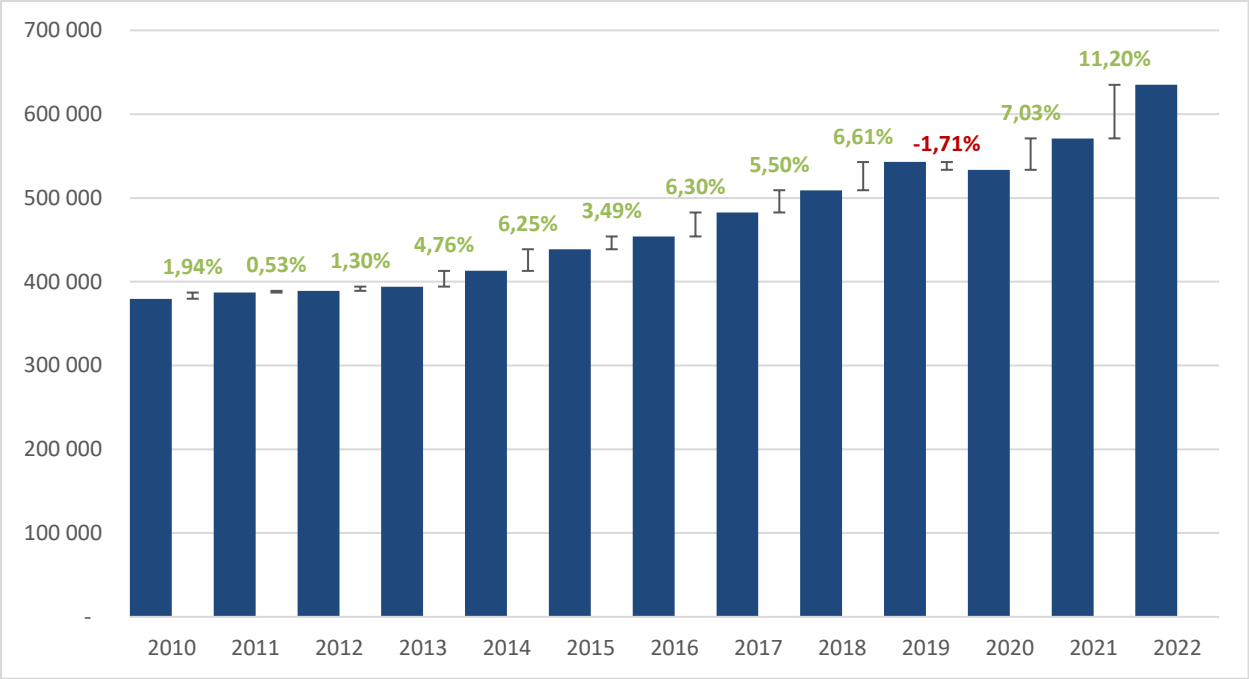
Results

This chapter presents the results of the data analysis conducted to answer the research questions. The analysis is focused on the relationship between GDP growth and household income in different phases of the business cycle in the Czech Republic in the period 2010-2022. The methods used include time series analysis and correlation analysis and their results are presented below.

Relationship between GDP Growth and Household Income during Business Cycle

In order to answer this research question, the annual changes in GDP and household income were analysed based on data available from the Czech Statistical Office. Time series, statistical calculations and trend visualizations were used for the analysis (see Graph 1).

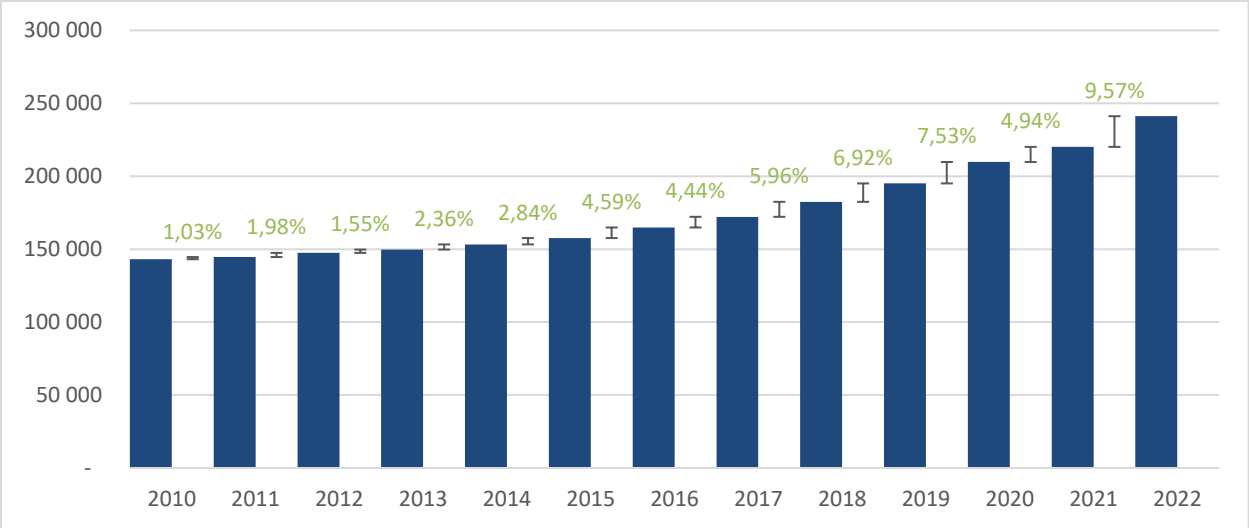
Graph 1: Year-on-year GDP changes



Source: Authors.

The GDP and household income trends in the period 2010-2022 were assessed using time series and graphical representation of year-on-year changes. Graph 1 shows the GDP trend in each year along with the year-on-year percentage variation. The results show long-term GDP growth with some periods of slowdown or recession. The most significant growth was recorded in 2022 when GDP grew by 11.20%. This rapid increase was in response to the economic recovery after the downturn in 2020 (-1.71%). A steady GDP growth was observed between 2013-2018, with slight fluctuations from year to year.

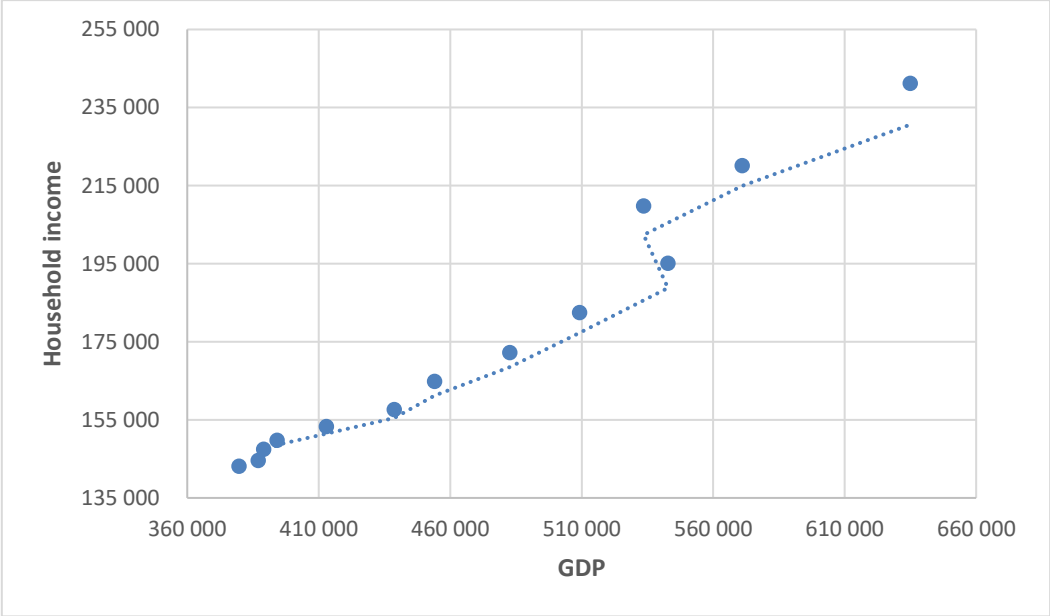
Graph 2: Year-on-year changes in household income



Source: Authors

Graph 2 shows the trend of household incomes, which indicates an overall increasing trend in the period under review. While GDP growth has been accompanied by larger fluctuations in some years, household income has been more stable. The highest annual increase in household income was achieved in 2022 (9.57%), which is related to the post-pandemic economic recovery and the strengthening of the labour market. In contrast, growth slowed to 4.94% in 2021, corresponding to the overall GDP slowdown in the same year. Thus, household income growth dynamics follow GDP trends, but with less volatility, indicating the resilience of household income to short-term economic fluctuations.

Graph 3: Time series with moving averages (ARIMA model) for the relationship between GDP and household incomes



Source: Authors.

In order to examine the long-term relationship between GDP and household income in more detail, a time series graph with moving averages was created based on the ARIMA

model. Graph 3 provides a smoothed overview of the trends of both variables and eliminates short-term fluctuations, which allows to better identify the main trends in the period under study.

The results illustrated in the Graph show that a moderate GDP growth was experienced between 2010 and 2013, accompanied by a gradual increase in household incomes. Both time series show synchronous growth, with moving averages confirming a stable positive trend. In the following years, namely between 2014 and 2018, there was a stronger increase in GDP, to which household income also responded with positive growth. Moving averages over this period suggest a strengthened relationship between the two variables, which can be attributed to the economic recovery and stabilization of the labour market.

The economic downturn in 2020 is also visible from the Graph, with GDP showing a slight decline due to the economic recession. Household incomes respond to this decline with a lag, which is reflected in the slowdown of their growth in the Graph. The impact of the economic recession is therefore mainly visible in the short term, while the long-term trend remains positive. In the last phase of the period under review, i.e. 2021 and 2022, the economy was recovering, which is reflected in a sharp GDP increase. This trend is accompanied by a significant increase in household incomes, with moving averages confirming a return to a positive relationship between GDP and income.

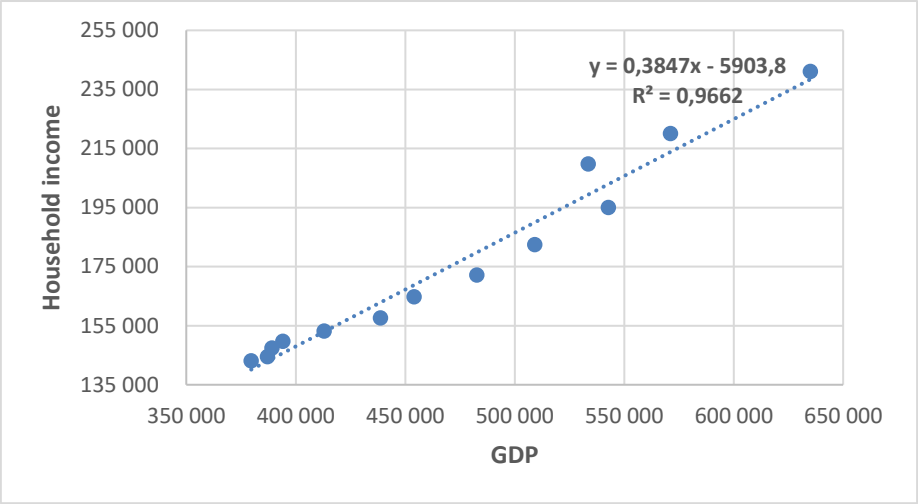
Graph 3 of the time series with moving averages shows that household incomes are responding to GDP changes in a stable and positive manner, but with a slight time lag. The use of the ARIMA model and moving averages has made it possible to better capture the long-term dynamics of the relationship between the two variables and to eliminate short-term fluctuations that could distort the overall trend. This approach confirms that GDP growth is an important factor affecting household incomes, especially in periods of economic growth while this relationship can be temporarily weakened by recessions.

Impact of Selected Factors on Household Income Growth in Context of GDP Growth

This chapter presents the results of regression analysis which studies the impact of selected macroeconomic factors on household income growth in the Czech Republic in the period 2010-2022. The factors analysed include gross domestic product (GDP), household expenditure, inflation, unemployment, the average monthly individual pay and household net disposable income (NDI). The results are presented in Graphs and regression coefficients that illustrate the strength and significance of the relationships.

The results of regression analysis showed that GDP has a strong positive relationship with household income growth. The graphical representation clearly shows a linear relationship between the two variables. Rising GDP increases the economic activity and production, which leads to increasing employment, wages and total household income. This result confirms that GDP is the key indicator of economic growth, which in turn is reflected in the financial situation of households (see Graph 4).

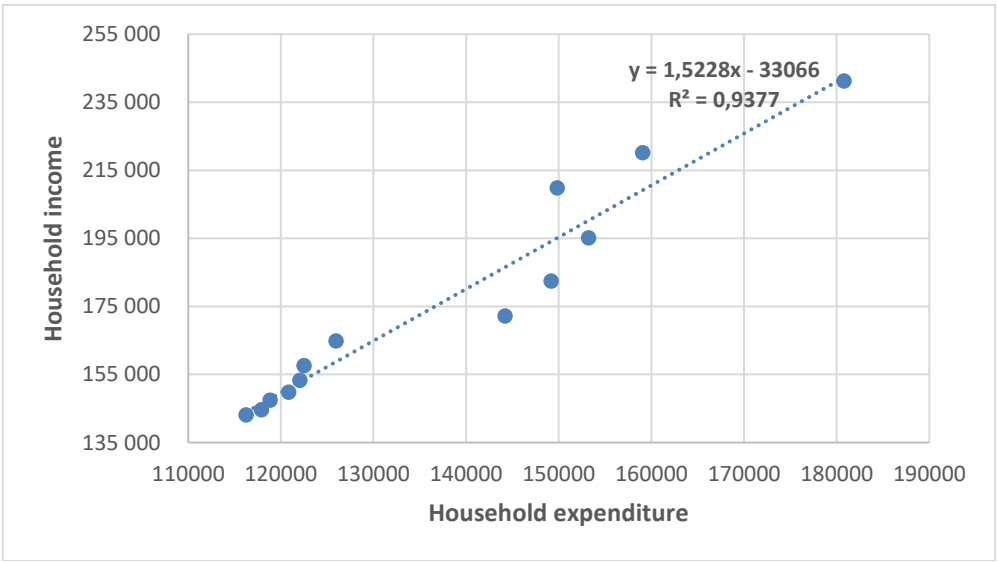
Graph 4: Relationship between GDP and household income



Source: Authors.

Household expenditure is another important factor affecting household income. The analysis showed a strong linear relationship, with higher household expenditures leading to higher incomes. This relationship is logical - rising consumption promotes economic growth, which is reflected in rising employment and wages. Higher spending may reflect households' growing confidence in the economy, which encourages their willingness to invest and spend (see Graph 5).

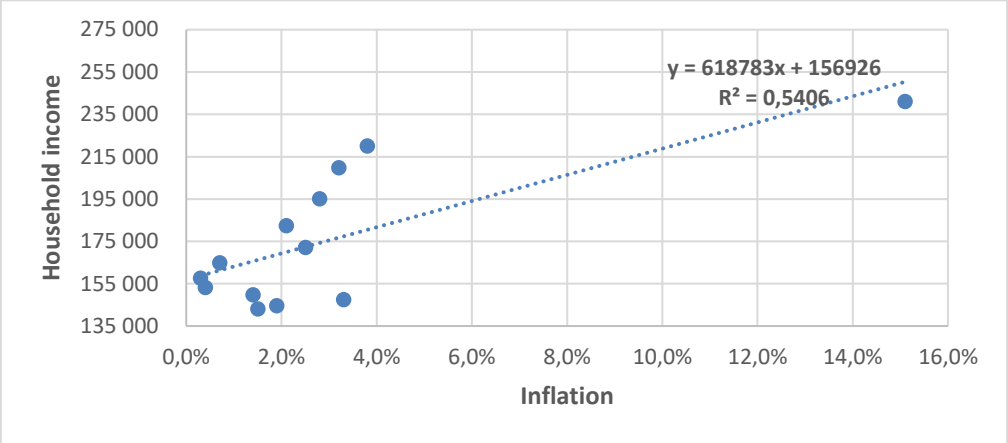
Graph 5: Relationship between expenditure and household income



Source: Authors.

The relationship between inflation and household income was slightly positive. Rising inflation can increase nominal household incomes, which is particularly visible in the short term. However, it is important to note that real incomes may be depressed by inflation. This result suggests that inflation affects incomes rather indirectly, through wage adjustments and the price level (see Graph 6).

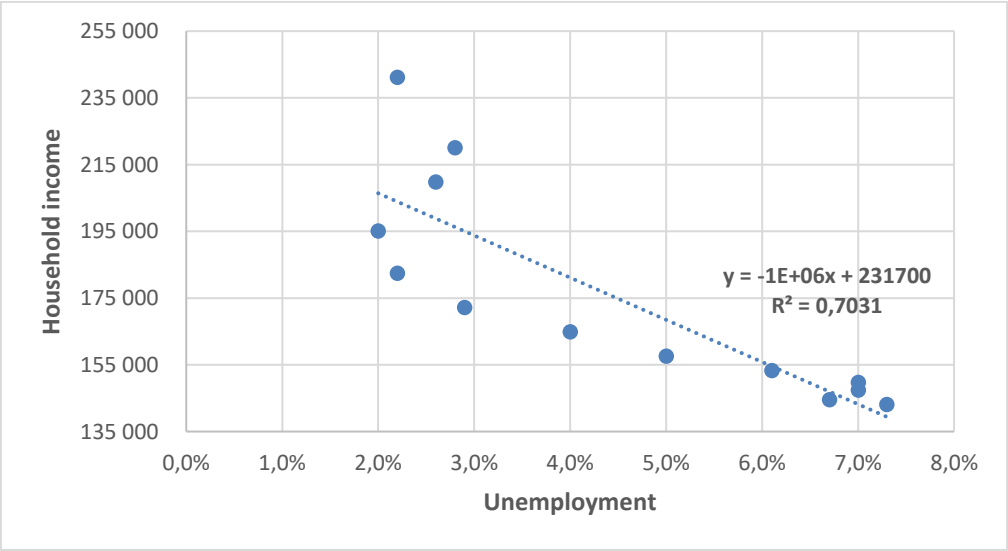
Graph 6: Relationship between inflation and household income



Source: Authors.

Unemployment shows a negative relationship with household incomes as shown in Graph 7. As the unemployment rate increases, household incomes decline as a result of limited job availability and lower incomes. This result is consistent with the economic theory where unemployment reduces aggregate demand and household income.

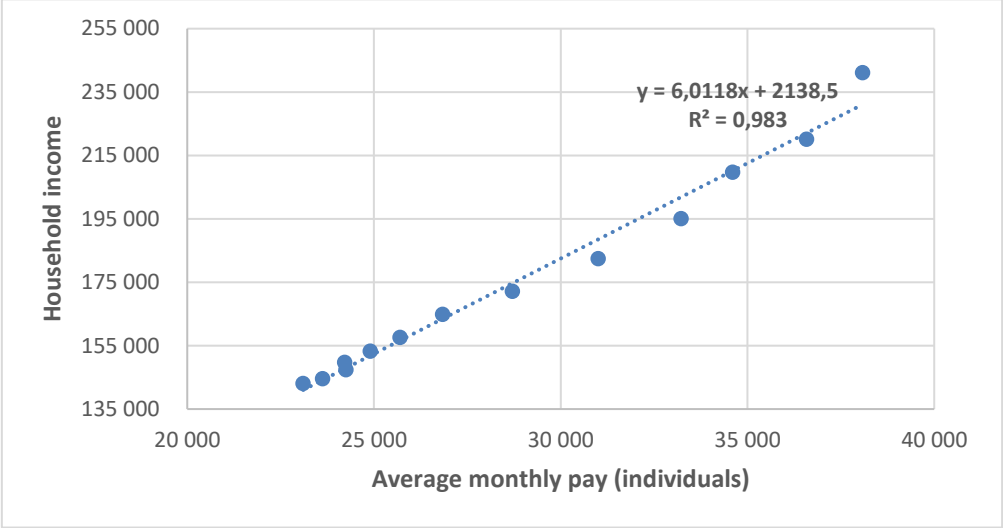
Graph 7: Relationship between unemployment and household income



Source: Authors.

The average monthly pay of individuals showed a very strong positive relationship with household incomes. Higher wages increase the total household income and support their financial stability. This result confirms that wage growth is the key factor improving the economic situation of households (see Graph 8).

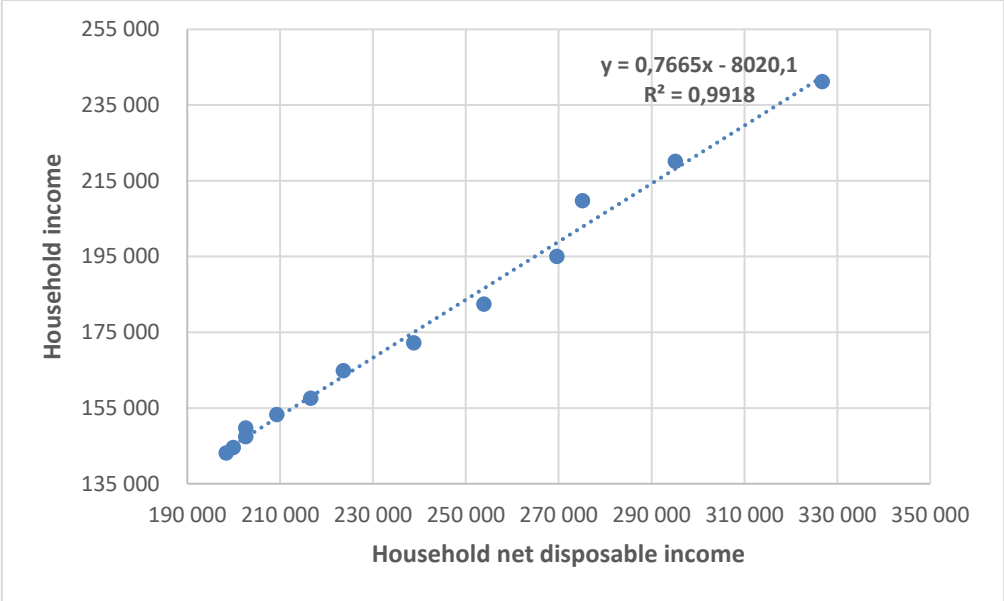
Graph 8: Relationship between the average monthly pay (individuals) and household income



Source: Authors.

The most significant relationship was found between household net disposable income and household income. Net disposable income represents the resources available to households after deducting taxes and social contributions. The analysis results confirm that rising household net disposable income directly increases household income, which is logical as this factor reflects the real disposable resources of households (see Graph 9).

Graph 9: Relationship between household net disposable income and household income



Source: Authors.

It was concluded from the regression analysis and graphical illustration that household income growth is affected by several key macroeconomic factors, with varying degrees of significance and influence. Household net disposable income (HNDI) proved to be the

most significant factor, showing a strong linear relationship with household income. This result is logical as NDHI represents the resources available to households after deducting tax and insurance liabilities. The high R^2 value and visual analysis of the graph confirm that this factor most precisely predicts income growth and provides a stable basis for assessing the financial situation of households.

A similar significant effect was observed for average monthly pay of individuals, which is another key indicator of income growth. This factor directly reflects the payroll policy trend and labour market situation. Higher average pay supports the households' financial stability and increases their purchasing power, which can further stimulate the economy through higher consumer demand.

GDP which is often considered the main indicator of economic growth also showed a significant positive relationship with household incomes. The analysis results confirm that GDP growth increases economic activity, consequently resulting in growth of employment, production and income. For this reason, GDP can be used as a general indicator of long-term household income growth.

Household expenditure has also proven to be an important factor affecting household income. The graphical illustration and analysis results showed a strong correlation between higher expenditure and rising incomes. This phenomenon can be interpreted as a result of higher consumer confidence and rising economic activity, supporting income growth through increased demand and production.

On the other hand, inflation has showed a slightly positive relationship with household income, but with a lower level of statistical significance. This may be due to the fact that inflation mainly affects nominal incomes, while real incomes may be devalued by the rise in prices. Nevertheless, the results suggest that moderate inflation may be associated with payroll adjustments and subsequent income growth.

On the other hand, the unemployment rate has proven to be a negative factor affecting household incomes. The results of regression analysis and graphical processing show that household income decreases as unemployment increases, which reflects the theoretical assumptions. Higher unemployment rates limit the availability of jobs and reduce aggregate household incomes.

Discussion

In this chapter, the results from the previous chapters will be analysed and discussed with respect to the research questions. Furthermore, the results will be compared with the existing knowledge and insights that have been presented in the literature review as well as any limitations of the research that was conducted will be identified.

How does the strength of the relationship between GDP growth and household income change in different phases of the business cycle (growth, recession) in the Czech Republic in the period 2010-2022?

The analysis of the results confirmed that the relationship between GDP growth and household income varies significantly depending on the business cycle. In periods of GDP growth such as 2013-2018, household incomes were positively affected, which was especially evident in the steady growth of real incomes and the strengthening of household purchasing power. This phenomenon can be attributed to the economic expansion, resulting in employment growth and increasing household disposable incomes.

In contrast, during periods of recession such as 2020 when GDP fell by 1.71%, household incomes were relatively stable, indicating the effect of government interventions and social programmes for maintaining household living standards. This finding is in line with the argument of Hronov et al. (2022), who emphasize the stabilizing role of domestic consumption during crisis periods. The use of the ARIMA model allowed to identify long-term trends and eliminate short-term fluctuations, providing a more comprehensive view of this relationship dynamics.

Furthermore, the analysis showed that the strength of the relationship between GDP and household income changes during recessions. The GDP effect on incomes is weakening while other factors such as government support and transfers are becoming more important. These results are consistent with the assumptions of Bilkov (2023), who emphasizes a delayed response of the labour market to economic crises.

These findings suggest that GDP plays a key role during periods of growth while other instruments stabilizing household incomes are more important during recessions. This knowledge is crucial for making policies, which should not only reflect growth phases but also the needs of households during economic downturns.

What impact do specific factors such as unemployment and inflation have on household income growth in the context of GDP growth in the Czech Republic between 2010 and 2022?

Regression analysis revealed that the selected macroeconomic factors have different degrees of influence on household income. The most significant factor was household net disposable income (HNDI), which showed a strong positive dependence on household income. This relationship can be supported by the fact that HNDI means the real resources that households can use for consumption or investment. This finding is consistent with the results of Subov et al. (2024), who points out the key role of HNDI in predicting household economic behaviour.

The unemployment rate had an adverse effect on household incomes, which is consistent with economic theory. Higher unemployment rates reduce the availability of jobs and aggregate income, which was especially evident in a crisis period. This relationship is supported by the conclusions of Chytilova and Frejlich (2020), who highlight the importance of a stable labour market for ensuring household financial stability.

Inflation only had a slightly positive effect on household incomes, which may be due to payroll adjustments in response to the rise in prices. This result underlines that payroll

policy is important to protect real household incomes from the impacts of inflation. However, the long-term effects of inflation can be adverse if wage growth does not keep pace with price increases.

The analysis also showed that household expenditure and the average monthly pay have a strong impact on household income. Higher spending indicates rising household confidence in economics, which supports consumption and income growth. The average monthly pay has proven to be a key indicator of economic stability as it supports households' purchasing power and their ability to cope with economic fluctuations.

This analysis was limited by the use of annual data, which cannot capture short-term fluctuations. Furthermore, some important factors such as the impact of foreign investment or regional differences were not considered, which creates the opportunity for future research. Nevertheless, the results provide important insights into the impacts of macroeconomic factors on household incomes in the Czech Republic.

Conclusion

The aim of this thesis was to analyse the relationship between GDP growth and household income in the Czech Republic in the period 2010-2022 and review the impact of selected macroeconomic factors on this relationship. Time series methods and regression analysis were used to achieve this goal.

The results showed that GDP growth had a strong and positive effect on household incomes, with this relationship being most pronounced during periods of economic growth. The use of the ARIMA model allowed to capture long-term trends and eliminate short-term fluctuations, which provided a more comprehensive view of the relationships being analysed. Moreover, the regression analysis revealed that household net disposable income (HNDI) and average monthly pay were the key determinants of household income growth. These factors helped to better understand the dynamics between economic growth and households' financial situation.

Economic factors such as inflation and unemployment affected household incomes more indirectly and their impact was less pronounced. Inflation had a slightly positive impact, which could be linked to payroll adjustments. On the other hand, unemployment was adversely related to household income, which is consistent with theoretical assumptions of lower aggregate demand during an economic crisis.

The thesis also showed that household income dynamics were sensitive to the phases of the business cycle. During periods of recession, stabilizing factors such as government intervention played a key role while during periods of growth, economic expansion was reflected in increased consumption and income growth. This finding is crucial for making policies aimed at promoting household economic stability.

The limitation of this thesis was that the analysis covered annual data that do not capture short-term fluctuations. Also, a broader set of macroeconomic factors such as the impact

of foreign investment or regional differences was not included, which creates the opportunity for future research.

Based on the results of this thesis, it can be concluded that the objective of research was fulfilled. The thesis answers the research questions and provides an overview of the key factors affecting household incomes in the Czech Republic. The results underline the importance of GDP as a key indicator of economic growth and confirm GDP relevance for improving households' living standards. These findings can be used for practical making of economic policy aimed at ensuring the long-term financial stability of households.

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