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Did Economic Inequality Cause the Economic Crisis

Summary: The sudden and large increase of interest in questions of distribution of wealth and economic inequality, arising in recent years, resulted primarily from the enormous increase in inequality that occurred during the last three decades. The global economic crisis that emerged in 2008 gave a new impetus to this research because numerous scientific studies appeared in which inequalities were given as one of the key causes of the crisis from which the world is slowly recovering. This is especially true in Europe, whose recovery is barely discernible. This paper analyzes the trends of economic inequality and points to the impact of inequality on economic growth. The central question in this paper, however, is whether the economic inequalities caused the economic crisis. Although opinions differ as to inequality's impact on the occurrence of the crisis, the fact is that enormous economic inequalities, and especially their permanent growth, could have many negative effects, such as increasing poverty, increasing social stratification and causing global economic crises. As many authors have pointed out, escalating inequality is not an inevitable price of progress. On the contrary, it is a political decision that often has expensive ramifications.

Key words: Economic inequality, Income, Economic growth, Crisis, Gini coefficient.

JEL: D31, D63, F63, G01.

When dealing with income distribution, or more precisely, with economic inequality as its key component, there are constant and deep disparities in the economic science, not only regarding the influence of the income distribution on economic efficiency, but also regarding the mere need to consider the issue of distribution and economic inequality.

Ideas about "appropriate" income distribution represent value judgments, and there is no scientific way of resolving disputes concerning ethical issues. Economists should limit their analyses to those aspects of social issues that concern efficiency because using such normative analysis can have a negative impact on a study's objectivity. However, welfare economics theory suggests that efficiency itself is not an adequate normative standard and that other criteria, besides efficiency, have to be considered when comparing alternative solutions concerning resource allocation.

There have been such extremely divergent views regarding income distribution in the last century that the conventional view about the relationship between income distribution and macroeconomic activity was subjected to great transformation. While classical economists favoured the hypothesis that inequalities are useful for

economic development, the neoclassical paradigm, which was later dominant in the field of macroeconomics, abandoned the Classics' thesis and promoted the view that learning about income distribution is not important for understanding macroeconomic activity and the process of economic growth. This view metamorphosed in the past two decades.

The theory and empirical research that followed this metamorphosis showed that income distribution does in fact have a significant impact on economic growth. Moreover, unlike the classics that emphasized the beneficial effects of inequality on the process of economic growth, the modern theory pointed to the potential negative effects of inequality on economic development, noting that high inequality adversely affects economic growth.

The sudden and large increase in interest in questions of distribution, i.e. economic inequality, arising in recent years, stemmed primarily from the enormous increase in inequality that occurred during the last three decades. The global economic crisis that occurred in 2008 gave a new impetus to these studies because numerous scientific studies have appeared and highlighted inequality as one of the key causes of the crisis from which the world is slowly recovering; Europe is still shackled by it.

The objective of this paper is to analyze the impact of economic inequalities on economic development and, in particular, to offer an answer to the question of whether extremely high inequality of income and wealth caused the economic crisis. Before this, however, we will look at the shifts in inequality over the past three decades, an epoch in which, similar to the early twentieth century, there was an expansion of inequality.

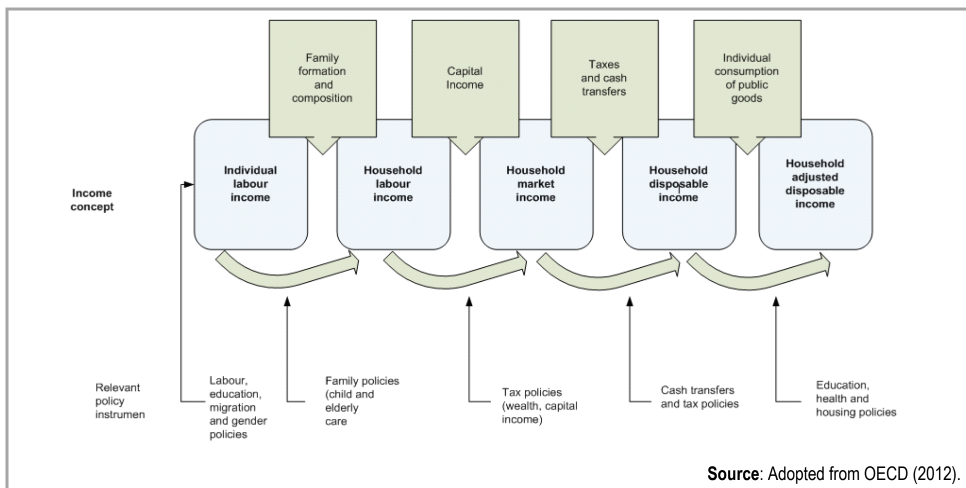
1. Inequality in the Period after 1980

Before pointing to the scope and pace of growth of economic inequality, we will briefly consider the problem of defining the concept of income, as a comparable category to which the problem of inequality relates. Economic inequality has many dimensions, state Anthony B. Atkinson and Salvatore Morelli (Anthony B. Atkinson and Salvatore Morelli 2011). Differences between individuals exist in their wages, which is the main concern of labour economics. These differences do not necessarily mean the inequality of income between households, where we should add earnings of other household members as well as the income from investments and various transfers, but also on the taxes of disposable income. The growth of inequality in earnings may be offset by lower income inequality from capital or by progressive taxation.

Notwithstanding this simplified scheme of the formation of household income as a relevant factor for consideration of income inequality, attitudes about the concept of income as a measure of inequality are rather divided. Without going into the many, often very divergent views on this issue, we will focus on one of the most comprehensive models of income, which was defined by Stiglitz and his associates (Organization for Economic Co-operation and Development - OECD 2012). They defined disposable household income, which, among other things, includes publicly provided in-kind transfers, such as public spending on education and health care.

Composition of disposable household income is influenced by several factors, which are shown in Figure 1. These factors in the cited article (OECD 2012) are defined as follows[1]:

- "*Individual labour income.* The dispersion of individual labour income amongst the working-age population reflects both the wage dispersion for full-time employees and the labour income dispersion of other groups who make up the working-age population (part-time workers and the self-employed, as well as the unemployed and people not looking actively for a job);
- *Household labour income.* Working-age families differ in size and composition, affecting the total labour income of households;
- *Household market income.* It includes both household labour and capital income;
- *Household disposable income.* Household disposable income covers all households and income sources, after taxes and cash transfers;
- *Household adjusted disposable income.* It adjusts household disposable income for in-kind transfers (e.g. public spending on health, education and social housing)".



Source: Adopted from OECD (2012).

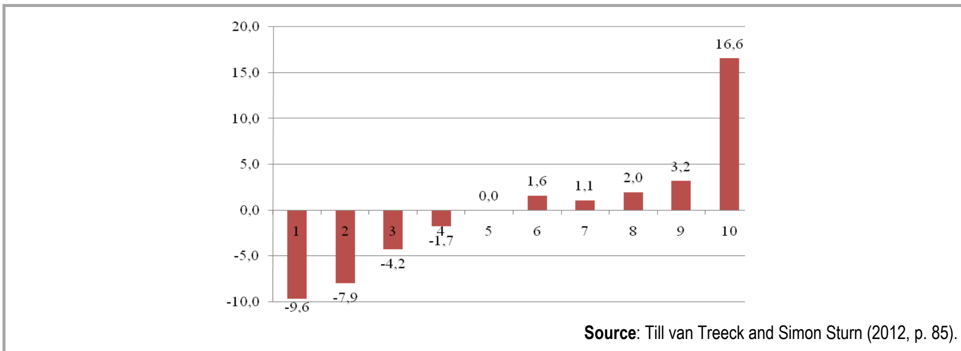
Figure 1 From Individual Labour Income to Adjusted Disposable Income of Households

In the last three decades there has been a large increase in inequality, both in developed countries and in developing countries. In Appendix of this paper we see how the Gini coefficient, the measure of inequality that is most commonly used in the literature, moved in 77 countries, during the period 1980-2005. While most of developed countries show a significant increase in inequality, this increase is very uneven in scale and over time, which resulted in large differences in the level of in-

[1] OECD provides more detail on the five main income concepts shown in Figure 1, and also discusses changes over time.

equality between countries. Anglo-Saxon countries, especially the United States, had high inequality earlier in the period. With the new increase emerging in recent decades, they have retained the position with the highest inequality among developed countries.

Nordic European countries have also had a significant increase in inequality in the last three decades, but this was preceded by a very low level, which is why they remain more egalitarian compared to other countries. Finally, the countries of continental Europe (Austria, Belgium, France and Germany) had a steady increase in inequality until the early 2000s, after which there was a large and rapid expansion of inequality, especially in Germany, which is particularly well illustrated by Figure 2.

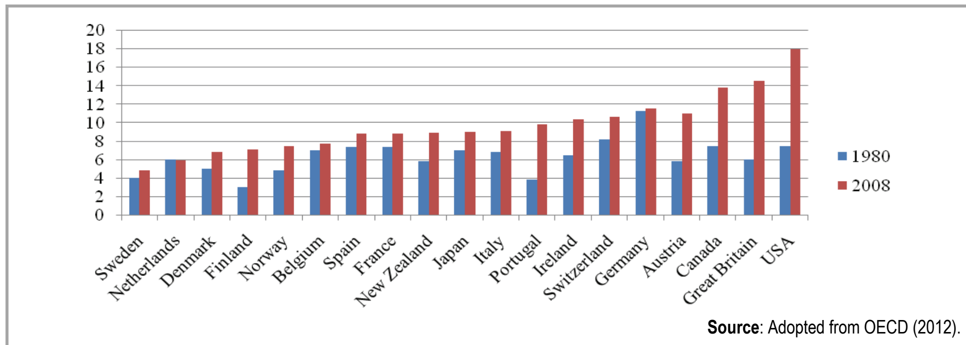


Source: Till van Treeck and Simon Sturn (2012, p. 85).

Figure 2 Growth of Real Annual Equivalent Disposable Income, in Decibels, Germany, 1999-2009

The greatest inequality in the world is still in the countries of South America: Chile, Brazil, Colombia, Ecuador, Paraguay and Argentina. All these countries have Gini coefficient values over 0.50. For comparison, the Gini coefficient in the U.S. is 0.37 and 0.35 in the UK. On the other hand, the lowest level of inequality is in Denmark, Switzerland, Slovenia, Sweden, Norway, Austria, Finland, France and Luxembourg. In these countries, the values of the Gini coefficient range from 0.20 to 0.30.

In addition to the changes in the Gini coefficient, a very convincing sign of the growth of inequality is the increase in the share of the richest 1% in total income. In Figure 3 we see that the share of the richest 1% in the distribution of total income in the U.S. increased from about 8% in the 1980s to as much as approximately 18% in 2008. This means that the increase in income in such a long period in the U.S. brought material benefit mostly to the wealthiest. Such a drastic stratification occurred, although to a lesser extent, in the UK and Canada. Only the Netherlands recorded a decrease in the share of the richest 1% in the total income, while in the other developed countries the share of the richest 1% in the total income increased, but at a significantly smaller proportion than in the U.S. and Canada.



Source: Adopted from OECD (2012).

Figure 3 Share of the Richest 1% in the Total Taxable Income, 1980 and 2008

What caused such a large increase in inequality in the last three decades? The impact of globalization on inequality growth is undeniable. Kevin H. O'Rourke raises the question of whether globalization leads to the world becoming a more equal place, or if it leads to the rich getting richer and the poor getting poorer (Kevin H. O'Rourke 2001). He argues that there is various evidence of a link between inequality within countries and globalization in the late twentieth century.

Globalization encompasses several dimensions. First, it has strongly encouraged international trade exchange; in the last three decades international trade has grown much faster than production. Globalization has also significantly increased foreign direct investment, particularly from north to south. On the other hand, globalization has caused major structural changes in the global economy, with the following key features:

- Increase in the number of developing countries that have adopted the model of open economy and joined the world market;
- A significant increase in-developing countries' share of world production and exports;
- In the international division of labour, developed countries have opted for the export of goods in which highly skilled labour is invested, while developing countries mainly focused on products in which unskilled labour is invested;
- Equity, whether physical or financial, has become extremely mobile between countries;
- The expansion of multinational companies has contributed to making the technologies of developed countries available to developing countries;
- In contrast to capital and technology, labour mobility still remains limited due to the high costs of migration, but also because of anti-migration policies and acculturation problems.

Globalization has encouraged the development and transfer of new technologies that have had a significant impact on the change in the structure of demand for labour. Highly trained and highly qualified workers have become necessary for the

application of new technologies and the demand for them has increased, which has of course influenced the rapid growth of their earnings. This is not the case with the average skilled and especially unskilled workers, for whom the demand has declined. The well-known phenomenon of dualism in the labour market has occurred. On one side, there is the highly trained workforce that has job security and high wages. On the other side is the workforce with low skills, performing routine tasks. The gap between these two categories of labour is getting deeper and is dictated by the growing demand for highly skilled workers and by rapid technological development and globalization, through which new technologies spread quickly.

New empirical analysis shows that technological changes contribute to the growth of income inequality among full-time workers, although the size of these effects is difficult to quantify (OECD 2012). Technological changes affect inequality by reducing the demand for medium skilled workers engaged in routine tasks that may be performed by computers, while increasing the demand for highly skilled workers who are directed to the abstract and non-routine tasks that cannot be assigned to machines.

The impact of globalization on the labour market, in terms of creating a dualism in this market, certainly resulted in greater inequality in the distribution of labour income. However, despite this clear relation, the connection between globalization and income distribution within a given country is ambiguous. Globalization affects the prices of factors of production differently in different countries, depending on whether it is a substitution or complement between domestic resources and resources that are becoming competitive factors due to free international trade. In each case, the free movement of capital, labour and goods is disrupting the relationships within the economies, creating both positive and negative effects on the factor prices and the wages of the labour force. Multidimensionality of these changes reflects on the trends of economic inequality and, therefore, their understanding in a theoretical sense is ambiguous and empirically difficult to measure.

In addition to globalization, the increasing inequality is influenced by many other factors, such as demographic changes (i.e. population aging) and the system of social redistribution, which is directly related to the predominant form of welfare state, education system and the like.

Population aging adversely affects inequality and poverty because with the aging of the population the relationship between the active workforce and inactive population dramatically worsens. As pensions depend on the contributions made by employees, the ratio of the number of employees and retirees is crucial in making the system work. In the not so distant past, the ratio in Serbia was 3:1, meaning that three employees paid contributions for one pension, on average. Today, due to the population aging, this ratio is drastically misbalanced and is 1:1.1, which means that the number of employees and retirees is virtually equal. For this reason, about 50% of the pensions are now being financed from the budget. In addition, pensions are increasingly lagging behind earnings and the older population is disposed to an increasing risk of falling into permanent poverty.

Jürgen Faik researched the impact of population aging on economic inequality in Germany (Jürgen Faik 2012). He investigated the impact of population aging on the key macroeconomic indicators and inequality. The key evaluation is that the aging population has a strong influence on the growth of the unemployment rate. Higher unemployment, of course, means greater inequality and greater poverty.

The scale of inequality, and hence poverty, is significantly affected by the level of social redistribution of income, i.e. application of the welfare state model. This issue is addressed by Josifidis and others (Kosta Josifidis et al. 2011). They conclude that political orientation affects poverty through the institutions of the welfare state and labour market institutions. This is also an important aspect of considering the causes of inequality and poverty.

2. Income Inequality in Serbia

2.1 The Applied Method

In order to quantify the level of economic inequality, and inequality in disposable income in Serbia, we chose to calculate the Gini coefficient, which is one of the most reliable measures of economic inequality. Gini coefficient is calculated according to the formula:

$$G = \frac{1}{n}\left(n+1-2\left(\frac{\sum_{i=1}^{n}(n+1-i)y_i}{\sum_{i=1}^{n}y_i}\right)\right), \qquad (1)$$

which can be simplified to:

$$G = \frac{2\sum_{i=1}^{n} i y_i}{n\sum_{i=1}^{n} y_i} - \frac{n+1}{n}, \qquad (2)$$

where: n - number of units (the total number of consumer units); i - index, ordinal number of household (consumer units) and y - value of the total disposable income for household i and a consumer unit, respectively.

We have taken the funds available for consumption as an empirical basis. Data of household income consumption we took from the Household Budget Survey, carried out by the Statistical Office of the Republic of Serbia. Weighting of household members has also been applied in Serbia, as recommended by Eurostat, in order to calculate the number of “consumer units” in the family, and to the available funds per consumer unit for each family. The head of the household receives a weight of 1, each adult member of the household aged 14 years and over receives a weight of 0.7 and children under 14 years receives a weight of 0.5. Homogenization and the comparability of data per household are achieved by this method.

2.2 The Results of Income Inequality Calculations in Serbia

Aggregating the available data, we came to the following results shown in Table 1.

Table 1 Household Disposable Income in the Republic of Serbia by Quintiles and the Gini Coefficient

Year	I quintile	II quintile	III quintile	IV quintile	V quintile	Gini coefficient
2006	0.06514	0.1221	0.1676	0.2290	0.4166	0.341
2007	0.0691	0.1266	0.1736	0.2346	0.3961	0.320
2008	0.0783	0.1316	0.1750	0.2322	0.3829	0.298
2009	0.0802	0.1315	0.1767	0.2335	0.3780	0.293
2010	0.0778	0.1320	0.1773	0.2322	0.3808	0.296
2011	0.0807	0.1307	0.1744	0.2308	0.3833	0.296
2012	0.0767	0.1312	0.1763	0.2339	0.3819	0.299

Source: The author's estimates; based on data from the Household Budget Survey[2].

In the period from 2006 to 2012, the value of the Gini coefficient range from about 0.341 (which was in 2006) to 0.293 (which was in 2009). In the last three years it was approximately 0.30. Reduced inequalities in Serbia after the 2008 can be considered as a consequence of the global economic crisis, which had a large negative effect on the Serbia economy.

Due to inadequate transparency of cash flows, high level of gray economy and widespread corruption, it is likely that existing Household Budget Surveys may not be an entirely reliable basis for the assessment of real disposable income, and hence economic inequality. Therefore, we believe that our calculation should be corrected for the influence of these factors (gray economy, corruption). Keeping in mind the calculation given above, the fact that gray economy in Serbia is estimated at about 30%, and the Corruption Perceptions Index is 3.7, which means that corruption is endemic, we believe that the real value of the Gini coefficient in Serbia is about 0.345.

Considering the level of development, this level of inequality is high and the value of the Gini coefficient in Serbia should be in the range from 0.20 to 0.30.

3. Inequality and Economic Growth

An abundance of literature on this topic emerged after Kuznets published an influential paper on inequality in the *American Economic Review* in 1955. This paper highly encouraged further research into the cause-and-effect relationship between economic growth, inequality and welfare. It was for the most part focused on the following three questions: (a) what is the impact of growth and development on inequality; (b) what is the impact of inequality on growth and welfare; (c) what is the impact of income redistribution policy on growth and welfare?

Kuznets based his hypothesis about the impact of economic development on inequality on the assumption that the economy consists of two sectors, a traditional one which is less productive and a modern one which is highly productive. According to him, economic development is, in fact, the transition of the traditional and out-

[2] Statistical Office of the Republic of Serbia, Statistical Bulletin (several issues).

dated sector into the new, modern and highly productive sector. Given that the traditional sector is less productive than the modern one, the income per worker is lower in the old than in the new sector. In the first stage of development, the inequality grows since a gap is created between high wages in the modern sector and low wages in the traditional one. Transition of the old sector into the modern one, which is the next phase of development, brings a reduction in inequality, as an increasing number of workers receive higher wages because of the transition to the modern, highly productive sector.

Until the eighties of the twentieth century, Kuznets' thesis was confirmed in the literature. In the early eighties, the belief in an inverted-U function of the level of development and economic inequality, as Kuznets illustrated his hypothesis, was questioned for several reasons. One of the key reasons was the fact that empirical trends, starting from the 1970s, do not match with Kuznets' thesis. In the developing countries of East Asia in the 1970s and 1980s, there was a reduction in inequality, although it was the first phase of development, whereas in the 1990s there was a significant increase in inequality, which is also contrary to the expectations of Kuznets' hypothesis.

Over the last thirty years, economic inequality has increased significantly in most developed countries. The growth of inequality has been particularly high in the U.S. and the UK. With these major changes in inequality, it has become clear that the new trend is contrary to Kuznets' hypothesis. Globalization and technological progress have brought big changes that Kuznets could not have foreseen in his hypothesis, which is why it could not be sustained in the long run.

Regardless of the authenticity of Kuznets' thesis on the impact of development on the movement of inequality, views on the inverse relationship of these categories, i.e. the impact of inequality on growth, are divergent. Positive impact of inequality on development is based on the claim that inequality produces capital accumulation, since the rich save more than the poor. This positive influence of inequality on development has been proven both empirically and theoretically. Most of the works in the nineties point out the negative impact of inequality on growth. However, as 2000 approached, certain new estimates showed that inequality still had a positive impact on economic development (Joël Hellier and Stéphane Lambrecht 2012). Although these papers were criticized for not applying an adequate method, they still found that the interdependence between inequality and growth varies across countries and over time.

High levels of inequality can cause great revolt among the poor and incite them to abandon production and apply specific strategies to achieve their goals, whether through belligerent unions or through strikes as a form of revolt or revolutionary and criminal activities. These activities reduce manufacturing resources, creating uncertainty among investors for existing and potential new investments. They also increase social violence and reduce the security of property rights. All these effects put the economic development at risk.

Inequality may adversely affect the human capital by slowing down its accumulation and affecting career choices, among other things. If a person is facing the decision of whether to pursue education to be an entrepreneur or a worker, the costs

of education could be a decisive factor. In circumstances of great inequalities, only a small number of individuals will be able to acquire the knowledge necessary for entrepreneurial work. Inequality can therefore limit the number of entrepreneurs, which will negatively affect the investment in entrepreneurial activities, which certainly reflects negatively on economic development.

If economic development is based on physical capital, then inequality contributes to development since the assumption is that the rich save more than the poor and higher savings means greater accumulation. When human capital is an essential factor in development, then inequalities become detrimental to development due to the fact that the poor cannot afford expensive higher education, which we mentioned earlier. Greater inequality can be particularly devastating for exceptionally talented persons, whose enormous potentials could remain unused due to the lack of proper education.

Inequality adversely affects social capital. Economists took the concept of social capital from sociologists. Fukuyama defines social capital as “the existence of a certain set of informal values or norms shared among members of a group that permit cooperation among them” (Francis Fukuyama 1955). These informal values and norms create trust, reciprocity and solidarity within a group and eventually positive external conditions for its members. Higher social capital comes with higher equality. Since the social capital undoubtedly contributes to economic development, this yields a new relationship between equality and development.

4. Does Economics Inequality Cause Economic Crises

In widespread literature on the causes of the global crisis of 2008, one of the key points is that we are dealing with a systemic and structural crisis of capitalism, not a cyclical crisis. Timur H. Gür, Naci Canpolat, and Hüseyin Özel believe that this crisis should be seen as an example showing that the economic and social matrix of institutions is wrong and that it requires new solutions (Timur H. Gür, Naci Canpolat, and Hüseyin Özel 2011). However, since our focus of observation is the effect of economic inequality on the emergence of economic crises, we will analyze this issue in more detail in further text.

It is not entirely clear whether there is a functional relationship between inequality and crises, according to Michael D. Bordo and Christopher M. Meissner (Michael D. Bordo and Christopher M. Meissner 2012). They came to this conclusion after analyzing data for 14 countries, looking at the period of over 120 years. They even reject the thesis that one can establish any parallels between the current crisis and that of 1929, although both were preceded by an extreme increase in economic inequality, which many authors naturally used as a pretext to develop a theory of economic inequality as one of the causes of major banking and financial crises.

The causes of the great crash of the U.S. economy in 1929 were analyzed by Galbraith. He pointed to a number of weaknesses of the U.S. economy that led to the major crisis. The first of these weaknesses is a bad income distribution, identified by the fact that the top 5% receive one third of the total income and the share of interest, dividends and rents is doubled. He argued that the ultimately unequal income distribution means that maintaining a high level of demand in the economy depends on

high levels of investment - or the high level of luxury consumption, or both of these factors (John K. Galbraith 1954). Some authors like Fitoussi and Saraceno, then Ryan, Stiglitz and others, adapted Galbraith's arguments to modern circumstances. They believe that the majority of consumers responded to the increase in inequality and reductions of income by reducing their savings and increasing indebtedness (Atkinson and Morelli 2011). This was aided by monetary policy that quickly responded by providing very low interest rates, which enabled private debts to rise above sustainable levels. In Figures 4 and 5 we see the movements of debts and savings in the U.S. for the period 1960-2010.

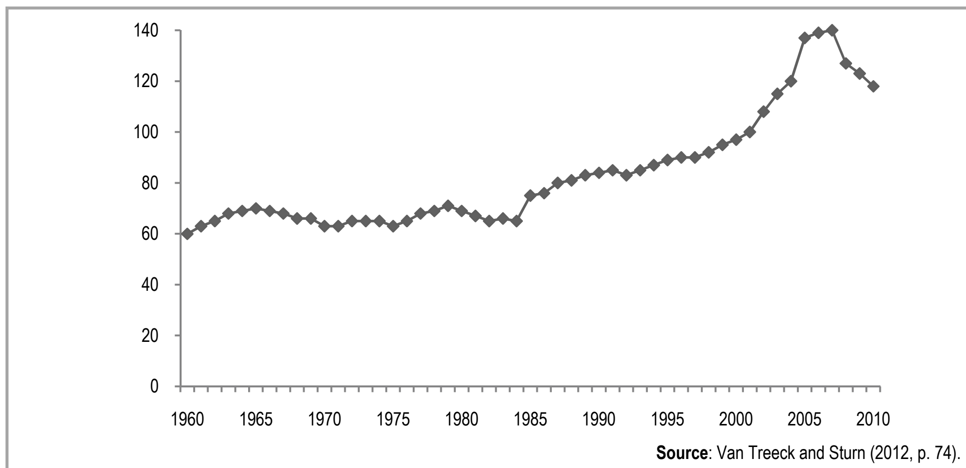


Figure 4 Personal Debt as a Percent of Disposable Income, U.S., 1960-2010

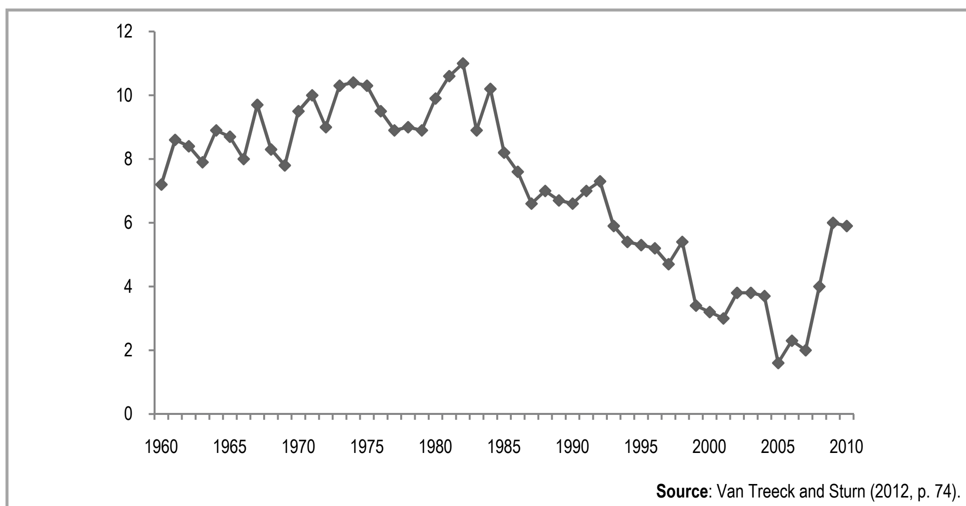


Figure 5 Personal Savings as a Percent of Disposable Income, U.S., 1960-2010

Spending was therefore temporarily kept at the same level even though income was significantly reduced, which resulted not only in the retention of high aggregate demand and employment, but also in the creation of balloon loans. Wealth was overrated and exorbitant real estate prices gave the wrong impression that the level of debt was sustainable. The crisis emerged when the balloons exploded and net values returned to normal levels. Although the crisis emerged in the financial sector, its roots, according to these authors, are much deeper and lie in structural changes and income distribution that occurred in the past 25 years.

Regardless of the fact that many authors are interested in the connection between these phenomena, so far few studies describe in detail the extent to which inequality caused the crisis. One of the attempts in this direction is the work of Engelbert Stockhammer, who notes that there are obvious parallels between the current crisis and the one in 1929, because both were preceded by a large increase in inequality (Engelbert Stockhammer 2012). He examines several ways in which an increase in inequality, interacting with financial factors, contributes to the imbalance that causes the crisis. He came to a very significant calculation, which is very important for understanding the impact of inequality on the occurrence of crises. According to his findings, a decline in the share of earnings by 10% would lead to a decrease in consumption by 4% of GDP.

A large increase in inequality in the last three decades has caused a huge redistribution of income on several levels. The crucial redistribution occurred in the functional income distribution, the distribution between labour and capital. The share of labour in income distribution was significantly reduced in favour of capital income. The share in the income of the poorest from the bottom of the ladder stagnated or somewhat and significantly decreased, while the share of the rich at the top of the ladder rapidly increased.

The question is what the macroeconomic effects of these tectonic changes in income distribution are and what the consequences of the changes are on both aggregate demand and the demand for retail goods and services. It is reasonable to expect that the reductions in the share of wages in income have a negative impact on the demand for consumer goods. Recipients of earnings, particularly the poor, have a higher propensity for consumption than the recipients of the income coming from return on capital. On the other hand, the decline in the share of wages and an increase in the share of profits should have a positive effect on the investment growth, and thus on the level of demand that requires new investments. As we have both negative and positive effects of reduction in the share of wages on aggregate demand, the net effect in theory still remains unclear and depends on the relative size of individual effects.

The effect of changes in personal income distribution on demand of consumer goods is much easier to understand, because the standard theory of consumption predicts that the poor have a higher marginal propensity to consume than the rich. To illustrate this rule, Stockhammer cites the findings of Stein, who showed that in 2007 in Germany the top quartile of income earners had an average saving rate of 15.8%, while the bottom quartile had a savings rate of only 4.1%; the second quartile had an 8.0% savings rate and the third had 9.0%. In the period from 1995 to 2007, the dif-

ference in the savings rate between the top and bottom quartiles increased from 5.5% to 11.7% (Stockhammer 2012). This increase in the difference in saving is a result of the increase in income inequality.

Thus, the increase in inequality certainly affects the multiple changes in aggregate demand, especially its structure. Changes in demand are undoubtedly a trigger for a number of macroeconomic imbalances, hence the appearance of any type of crisis. On the other hand, the high level of inequality can result in an increased tendency for speculation. It is estimated that with the increase in income of a small group of very wealthy individuals, their relative capabilities in relation to the accumulated wealth for consumption decrease and that the speculative use of wealth increases. As the income of the super-rich grows rapidly, increasing wealth is being invested in risky ventures. However, there are few empirical studies to confirm this hypothesis. There are a number of reasons for this. Conceptually, it is difficult to operationalize the phenomenon of speculation. In addition, there is an empirical problem because the available data on the distribution of wealth are extremely scarce.

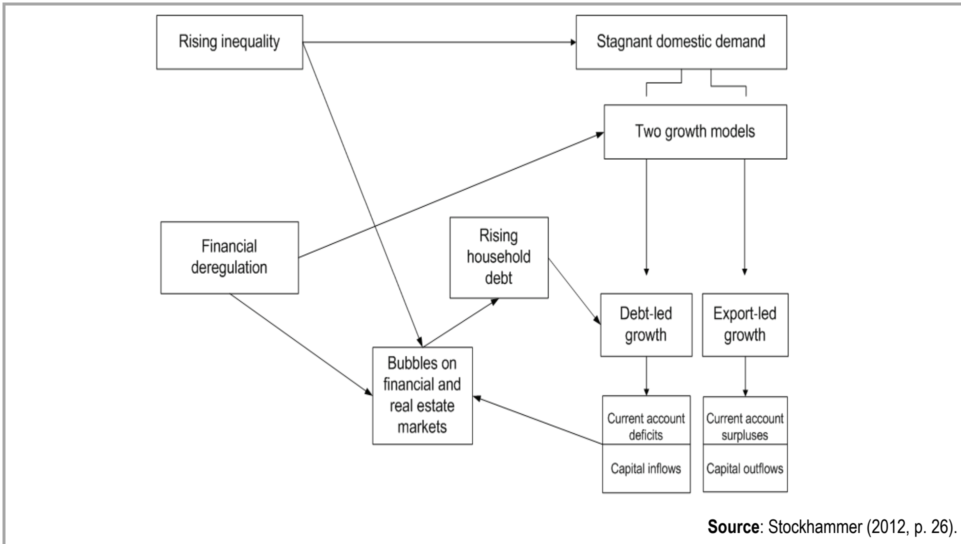
Atkinson and Morelli view the relationship between inequality and crises more as a coincidence rather than a causal relationship (Atkinson and Morelli 2011). In the conclusion of their work, they emphasize: “this article would attract more readers if we concluded that the growth of inequality caused the economic crisis. In fact, we found that crises differ largely in whether or not they were preceded by an increase in inequality and in any case where the inequality is increased the causality is not easy to determine”. They, however, do not dismiss the possibility of the existence of this causality, but they could not prove it.

At the end of the debate about whether the growth of inequality contributed to the imbalances that caused the current crisis, or whether the increase in inequality caused the crisis, it may be best to see the scheme given by Engebert Stockhammer, who views inequality not as an alternative to financial factors but as a complementary explanation that highlights the interaction between financial and social factors (Stockhammer 2012).

Stockhammer, as shown in Figure 6, believes that the increase in inequality leads to stagnation or decline in demand. Developed countries react to this imbalance in two ways. English-speaking countries and Mediterranean countries resort to the growth model based on borrowing, whereas-the growth model based on increasing exports is applied by countries such as Germany, Japan and China. These two models became apparent with the financial liberalization of international capital flows, which led to unprecedented international imbalances. The growth model based on the increase in debt became unsustainable. The increase in inequality, concludes Stockhammer, played the role of drivers of imbalances that caused the crisis. The increase in inequality, in conjunction with financial deregulation should be considered as a cause of the crisis.

These arguments should have direct implications for economic policy. There is a wide consensus that financial reforms are necessary to prevent similar crises in the future, but so far, little has been done to change the regulation of financial markets. Numerous analyses of the impact of inequality on economic crisis show that

income distribution should be the central issue of domestic and international economic stability policies.



Source: Stockhammer (2012, p. 26).

Figure 6 Growth of Inequality and Financial Deregulation as Causes of the Crisis

5. Instead of a Conclusion

In the wake of the current crisis, an attitude arose that centered on the notion that increases in inequality have an important effect on the cause of global economic crises, past and present. Although opinions about the causal relationship between economic inequality and crises remain divided, the fact is that this problem has become a central issue in research of macroeconomic imbalances on both national and international levels. The growth of inequality creates economic, social and political challenges. It is obvious that the phenomenon of income distribution, long ignored as irrelevant to economic efficiency, has become an unavoidable concern of economic theory, especially for economic policy makers. In the last few decades, before the current crisis, the entire increase in income went to only a narrow layer of the rich, while the poor and to some extent, the middle class, were completely excluded from these distributions because at the same time their income stagnated or even significantly decreased in real terms. Extremely unequal distribution of income resulted in great social polarization and caused economic and political instability.

Polarization as a measure of inequality in income distribution in modern theoretical literature is being directly linked with the intensity of social conflicts (Michal Brzezinski 2013). It is not necessary to prove that social conflicts and political instability adversely affect development, disrupting market activities and labour relations, as well as reducing the security of property rights. From another point of view, polarization is often identified with the disappearance of the middle class, a phenomenon observed in the U.S. and UK in the 1980s. Different economic theories show that a stable and large middle class is a source of new entrepreneurs, transmission of “mid-

dle class values", greater savings, promotion of human capital and creation of demand for high-quality consumer goods, all of which raise the overall level of investment and production. Therefore, high or rising levels of bi-polarization can have a negative effect on economic development.

Inequalities arising from an unequal starting position in society have a negative impact on overall economic performance. Inequalities also increase political challenges since they cultivate social resentment and generate political instability. They can also reheat populism, protectionism and anti-globalist sentiments. People will not support open trade and free markets for long if they feel they are the losers, while a small group of winners is getting richer.

As we have seen, high levels of and growing economic inequality have many negative effects, from increased poverty and social stratification to causing global economic crises. The question is what kind of strategies can be applied to keep inequality within socially tolerant and desirable limits so that their influence is stimulating to economic development and social stability. Regulatory reforms can be implemented in such a way to make markets more efficient and encourage employment, which will simultaneously reduce inequality. Labour market and social policies also need to adapt to the changing structure of the household. The current situation also calls for policies of inclusive development.

Any strategy that aims to reduce the growing gap between the rich and the poor should rest on the following three pillars: intensified investment in human capital, promotion of inclusive employment and well-designed redistribution policies. In any case, income distribution and economic inequality can no longer be excluded from the interests of economic theory and life.

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Appendix

Table 2 Gini Coefficient, 1980-2005

Country	1980	1990	2000	2005
Argentina	0.425	0.444	0.479	0.501
Australia	0.281	0.302	0.314	0.310
Austria		0.252	0.256	0.268
Bangladesh	0.351	0.336		
Belgium	0.282	0.222	0.275	
Bolivia		0.525	0.633	
Brazil	0.597	0.605	0.586	0.564
Bulgaria	0.234	0.237	0.422	
Canada	0.283	0.281	0.316	0.319
Chile		0.540	0.595	
China	0.295	0.357	0.403	0.454
Columbia	0.585	0.534	0.574	0.562
Costa Rica	0.510	0.441	0.458	0.472
Czech Rep.		0.206	0.262	0.267
Denmark		0.237	0.225	0.228
Dominican Rep.		0.502	0.520	0.506
Ecuador			0.560	0.535
El Salvador		0.526	0.538	0.484
Estonia			0.360	0.347
Finland	0.214	0.209	0.253	0.266
France	0.295	0.282	0.277	0.280
Georgia			0.503	0.466
Germany	0.244	0.258	0.266	0.280
Ghana		0.518		
Greece			0.332	0.325
Guatemala		0.594	0.598	0.504
Honduras			0.511	0.566
Hong Kong	0.394	0.422	0.514	
Hungary	0.215	0.283	0.292	0.291
India				
Indonesia	0.433	0.387	0.396	
Ireland	0.366	0.333	0.312	0.321

Israel	0.304	0.305	0.349	0.375
Italy	0.375	0.291	0.336	0.346
Jamaica		0.582	0.540	
Japan	0.334			
Korea			0.369	0.310
Kyrgyz Rep.			0.375	0.352
Latvia			0.350	0.359
Lesotho		0.630		
Lithuania		0.224	0.347	0.324
Luxembourg		0.239	0.262	0.270
Malaysia	0.506	0.491		
Mauritania		0.734		
Mexico	0.504	0.467	0.499	0.468
Moldavia		0.242	0.405	
Holland	0.252	0.263	0.230	0.264
New Zealand	0.347	0.401	0.402	
Nicaragua			0.541	0.523
Nigeria	0.512	0.572		
Norway	0.223	0.231	0.259	0.262
Pakistan	0.369			
Panama		0.565	0.578	0.548
Paraguay		0.398	0.555	0.539
Peru			0.496	0.477
Philippines	0.460	0.436	0.494	0.479
Poland		0.262	0.284	0.316
Portugal	0.341	0.329	0.347	
Romania		0.229	0.303	
Russia			0.453	
Slovakia		0.189	0.243	0.255
Slovenia			0.232	0.231
Spain	0.320	0.304	0.336	0.316
Sri Lanka	0.445			
Sweden	0.196	0.228	0.251	0.237
Switzerland	0.319	0.296	0.283	0.263
Taiwan	0.267	0.271	0.289	0.305
Thailand	0.440	0.498	0.448	0.427

Turkey		0.438		
Turkmenistan		0.262		
Uganda			0.546	
Ukraine	0.334	0.246		
Great Britain	0.265	0.338	0.350	0.351
USA	0.297	0.334	0.367	0.373
Uzbekistan		0.280		
Venezuela			0.458	0.476
Zambia		0.776	0.666	

Source: Brzezinski (2013, pp. 33-34).