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Inequality and Economic Growth*

Tamás Tóth – Dávid Benkő

Joseph E. Stiglitz:
The Price of Inequality. How Today's Divided Society Endangers Our Future
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Empirical studies have shown that despite the growing gross national product in advanced national economies, income inequality has increased in past decades (*Atkinson 2008; Cingano 2014*), as social groups have not benefited equally from economic growth, and the state redistribution of incomes could only mitigate this process. The 2008 global money and capital market crisis, which later turned into an economic crisis, temporarily reduced income inequality in society (*OECD 2016*), as the value of the assets held by the highest social class, who mainly own securities, suddenly dropped. However, from 2010, partly on account of the sustained negative economic and social impact of the global crisis, divergence returned. For example, income inequality in the US rose to levels unparalleled for 90 years.

The 2012 book by Stiglitz, "The Price of Inequality", focuses on the inequality developments in the US, but Stiglitz also applies his findings to developed countries. In his review in the *New York Times*, Thomas B. *Edsall*, (*2014*) an associate professor at Columbia University, states the following about this bestseller: "The single most comprehensive counterargument to both Democratic neoliberalism and Republican laissez-faire theories." Edsall argues that one of the key claims in the book is that politics shapes the market in ways that favour the richest at the expense of the less well-off majority. One feature of Stiglitz's book is that it uses practical examples to illustrate economic phenomena and its conclusions are based on empirical observations rather than mathematical correlations.

In the introduction to the book, Stiglitz asserts that income inequality in the US has soared in the past 3–4 decades. In the past 40 years, the income of the lower 90 percent increased by merely 15 percent in real terms, while the upper 1 percent's surged by 150 percent. For those in the nine lower income deciles, wage increases

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Tamás Tóth is a senior analyst at the Magyar Nemzeti Bank. E-mail: tothtamas1@mnb.hu
Dávid Benkő is an analyst at the Magyar Nemzeti Bank. E-mail: benkod@mnb.hu

did not follow the rise in productivity, therefore the economic effects of GDP growth did not filter down to middle- and lower-income groups. As a result, *the highest-earning 0.1 per cent's share from total income has increased from 1 to 5 per cent since 1980, whereas median income sank back to its 1990s level after the 2008 crisis*.

According to the author, inequalities, which increased due to regulatory shortcomings, played a role in both the emergence and the spread of the 2008 financial and economic crisis. The author highlights the significance of rent-seeking, meaning competition for rent (profits) generated artificially, i.e. independent from the forces of supply and demand, for example through state engagement. From the perspective of society, this leads to wasted resources. This is because rent-seeking strongly influences economic policy and inhibits efficient crisis management and stricter financial regulation, which is desirable for society as a whole but entails wealth and income losses for the economic elite. Stiglitz claims that the 2012 LIBOR scandal as well as the inappropriate procyclical management of the euro crisis based on austerity measures were European consequences of rent-seeking. He argues that the crisis management efforts entailed a considerable reduction in state spending, which led to higher unemployment, which in turn further increased inequalities and dampened aggregate demand, thereby deepening the recession.

The book underscores that high inequalities may dent economic efficiency and productivity. The Nobel Laureate economist analyses case studies in behavioural economics and concludes that a level playing field, subjective fairness (i.e. that employees consider the compensation for their work fair) and rising subjective well-being lead to higher productivity and growth. Stiglitz believes that the substantial productivity growth in the US during the Industrial Revolution manifested itself for the overwhelming majority of the population in the form of a proportional increase in income. On the one hand, this maintained the motivation for high-quality work, and on the other hand, when spent on consumption, it became the biggest engine of growth from the demand side. By contrast, in the context of the unequal income distribution typical today, subjective fairness is missing from the incentives of those earning the median income, which goes hand in hand with a fall in the efficiency of work and its negative impact on growth.

Stiglitz also identifies further channels through which huge social inequality can damage the economy and hamper economic growth. The elite's rent-seeking behaviour influences and distorts the regulatory environment and the legal framework, and guides fiscal policy towards less efficient methods. Stiglitz finds that the "American Dream" based on social mobility and equal opportunities in the first half of the 20th century offers real hope and opportunities for less and less people, since the benefits of growth are mostly reaped by higher-income groups.

Stiglitz's findings concerning income inequality tally with the literature that maintains that a reverse correlation can be identified between the extent of inequality and economic growth. Among others, *Herzer – Vollmer* (*2010*) point out this negative correlation and conclude that inequality affects growth negatively in the long run, irrespective of the level of development. The research by *Bagchi – Svejnar* (*2015*) suggests that the negative impact of income inequality on growth is more pronounced if the state redistribution of income is determined by political ties.

The literature under review lists the following as the *main channels of social inequality influencing real economic growth*: (1) social mobility; (2) social cohesion and public confidence; (3) political field; (4) technological progress; (5) productivity and efficiency.

(1) The *social mobility* channel: According to the human capital accumulation theory, income inequality enters the social dimension, which exerts an impact on growth through education (*Galor – Moav 2003*). In the context of rising inequality, the educational investments of low-income households drop significantly. The resulting decline in social mobility and the limitation of skills allocation have a negative impact on economic growth in the longer run through the diminishing supply of skilled labour necessary for technological progress. *Wilkinson – Pickett* (*2009*) also confirmed it empirically that high inequality entails low social mobility.

(2) *Social cohesion and public confidence* channel: Public confidence in decision-makers falls as inequality increases, and as a result, in extreme cases, the deeper social tensions, the deteriorating domestic security, rising crime and political destabilisation may restrain growth (*Kumor et al. 2007*). According to the endogenous fiscal policy theory, on account of higher inequality many voters reject more state involvement, as they interpret the phenomenon of inequality as a negative consequence of redistribution. *Wilkinson – Pickett* (*2009*) empirically confirm the theory that in societies with lower income inequalities, public confidence in the political and institutional system is typically stronger.

(3) *Political field* channel: According to the median voter theorem (*Ferreira 1999*), in the context of greater inequality the median income is below the average. In such a case, the median voter is interested in higher tax rates and redistribution. This can be distortive and act as a disincentive, and the process can stifle economic growth. The median voter theorem's claims run partly counter to the endogenous fiscal policy theory. In a nutshell, in the median voter model voters still trust the public institutional system (and its policies reducing inequality), whereas in the endogenous fiscal policy theory, a lack of public confidence can be identified.

(4) *Technological progress* channel: The minimum income theory maintains that the precondition for the widespread use of advanced technologies is the provision of an appropriate level of income (minimum income) (*OECD 2015*). In the model, the adequate purchasing power is provided by earned income, which is affected negatively by high inequality, due to the previously mentioned lack of subjective fairness. The marginal propensity of high earners to consume is considerably lower than in the case of low-income people, thus, if the surplus income materialises for the former group, it increases consumption only slightly.

(5) *Productivity and efficiency* channel: The efficiency wage theory model examines the relationship between wages and motivation (*Raff – Summers 1986*). Better paid workers work more efficiently, while the uncertainties surrounding livelihood due to low wages burden employees too much, both mentally and physically, therefore they threaten labour efficiency. According to the theory, those earning low wages permanently will sooner or later face social and health problems, which further hinders their social mobility, so they enter a negative spiral of the social mobility channel.

All the channels listed here appear in Stiglitz's work, however, he attaches special significance to the (1) social mobility and (5) productivity and efficiency channels. In the former dimension, growth is supported through facilitating social mobility, while in the latter, according to Stiglitz, increasing subjective well-being leads to higher productivity and growth through equal opportunities and subjective fairness. In a summary thesis, Stiglitz argues that the state redistribution model does not support the rise of earned income and social mobility in line with growing productivity, and this hampers economic growth in the US through the continuously widening income inequality.

Nevertheless, it has to be noted that in contrast to the above argument, several authors claim that inequality stimulates growth (*OECD 2015*). The typical channels of the positive relationship are as follows: (1) The possibility of rising inequality is a strong incentive for harder work, investments and taking risks in the hope of greater yields (*Mirrlees 1971; Lazear – Rosen 1981*). (2) If the productivity advantage of the high-skilled is substantial, the emerging significant differences in wages may encourage more people to take part in education (*OECD 2015*). (3) High inequality may increase the value of aggregate savings, and thus also capital accumulation supporting growth (*Kaldor 1955; Bourguignon 1981*).

Finally, according to several studies and theories, the impact between inequality and growth is not unidirectional, i.e. growth also affects inequality. The seminal work of the discussion on this aspect of the relationship between inequality and growth was written by *Simon Kuznets* (*1955*). According to the development theory by Kuznets, during the first phase of industrialisation, the benefit derived from growth is distributed unevenly within countries, since the technological advantage is concentrated in a small group. Over time, however, the impact of economic growth driven by improving productivity exerted on employment and wages filters down to lower-income groups as well, reducing inequalities. This theory was supplemented by *Piketty – Saez* (*2003*) with a third stage, in which globalisation and the financial integration of the top economies leads to another increase in inequality, coupled with a rise in GDP per capita. Analysing the correlation between inequality and GDP, *Pini's* (*2014*) analysis shows that in the 1980s higher GDP per capita was coupled with lower inequality, i.e. income disparities between social groups were smaller in richer countries. Yet by the 2000s, the strength of the correlation between the two variables had considerably diminished, as inequality started growing again in several developed countries.

During the discussion about the direction and sign of the two variables' impact on each other, the need for establishing an *optimal level of inequality* emerged naturally. The theoretical framework for this was provided by the so-called "inverted-U hypothesis", according to which overly low inequality can constrain economic growth just like overly high inequality, therefore the optimal level can be found at the top of the inverted U (*Persson – Tabellini 1994; Banerjee – Duflo 2003; Barro 2008; Freeman 2012; Hasanov – Izraeli 2012*). Nonetheless, Hasanov – Izraeli maintain that in the longer run, lower inequality is more favourable, since it can facilitate improvement in the qualitative parameters of social cohesion, mobility and human capital. The "inverted-U hypothesis" and the corresponding models examine the effect of income inequality on growth, while the proponents of the Kuznets curve employ a reverse causal relationship and identify the levels of inequality observed in the individual growth stages in a sort of evolutionary approach. Another material difference is that while the inverted-U hypothesis aims to arrive at the level of inequality maximising growth, the Kuznets curve does not adopt a clear stance regarding the optimal level.

All in all, economists have not arrived at a consensus in relevant literature during the examination of the relationship between inequality and growth. Certain theories argue for an inverse relationship between the two phenomena, others believe in growth coupled with a high level of inequality, while some assert that an optimal level of inequality, where maximal growth can be achieved, can be identified (*Berg – Ostry 2011*). *In his work, "The Price of Inequality", Stiglitz clearly argues for the negative relationship*, and he believes that the income inequality seen in the US in past decades has restrained the growth rate of the real economy. The author contends that income inequality impacts growth through hampering social mobility and labour productivity. Stiglitz writes that in the US the level of state redistribution is too low, its efficiency is inadequate, and this constrains economic growth through the continuous rise in income inequality. His proposals include raising the level of redistribution, curbing rent-seeking by the elite and strengthening subjective fairness (i.e. increasing compensation for work in real terms and lower difference in incomes).

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