

Árpád Cseh

# *Intensifying accumulation of wealth and a deepening gap, or the “teething troubles” of capitalism*

---

**SUMMARY:** *Capital in the Twenty-First Century* is an analysis that draws on the synergies arising from the integration of the collected historical data series and the applied economics methods and attempts to best understand the correlations among capital accumulation, economic growth, and increasing income and wealth inequalities, and the underlying drivers determining these. After a review and analysis of the relevant historical data series, Thomas Piketty concludes that what ultimately plays a key role in the growth of wealth inequalities is that in the long run the rate of return on capital is higher than economic growth, hence wealth accumulated in the past grows at a higher pace than the growth of the economy (or the proportional growth of labour incomes). The author suggests the possibility of progressive wealth taxes to be implemented at global level in order to resolve the problems described in the book. Piketty, however, admits that for the time being this is no more than a utopian idea which has little to do with reality. This article sets out to provide a critical overview of Thomas Piketty's book, as well as some articles and analyses of interest that have been published in this respect, focusing on the study of the problematics of rising wealth inequalities.

**KEYWORDS:** income inequalities, wealth inequalities, capital/income ratio, capital accumulation, global progressive property tax

**JEL CODE:** D31, D33, E25, N30, P16

---

Published in 2013, French economist *Thomas Piketty's* work burst into the centre of today's strongest economics discussions like a boulder lobbed into the water, creating everlasting waves. Due to the extreme topicality and relevance of the problems discussed in it, the book has stayed in the limelight since its publication, so much so that economist and Nobel Memorial Prize laureate in Economic Sciences, *Paul Krugman* (2014a) rightly called it “the most important economics book [...] maybe of the decade”.

Thomas Piketty's work focuses on an in-

depth analysis of the increasing measure of income and wealth inequalities. Although it is based on an extraordinary amount of data, the book points far beyond a simple documentation of the observed phenomena. It provides an analysis that draws on the synergies arising from the integration of a historical perspective and the applied economics methods in order to best understand the correlations among capital accumulation, economic growth, and increasing income and wealth inequalities, and the underlying drivers determining these.

Examining the factors and processes that determine the basic dynamics of capital accumulation and distribution, the book explores

---

*E-mail address:* cseh.arp@gmail.com

some essential questions that are unimaginable to answer unless supporting data of adequate quality and quantity are available. Therefore the author approaches one of today's most debated issues based on 15 years of comprehensive research activity comprising 20 countries and carried out with the cooperation of *Anthony Atkinson, Emmanuel Saez, Gilles Postel-Vinay, Jean-Laurent Rosenthal, Facundo Alvaredo, Gabriel Zucman* and many other scholars. Analysing one of history's most intriguing social problems – using data collected through empirical research and going back as far as the eighteenth century, and offering an interpretation for the observed processes – the book makes an attempt to help understand this problem, as well as to formulate some alternative solutions to resolve it.

Although the author has pointed out in many of his lectures that the main objective of the book was to disclose the collected data resulting from the aforementioned collective research and make them public property, he was also doing his best to find a meaning for the research results in an easily accessible form. While the author himself admits that he is unable to offer a perfect explanation for all questions and problems arising from the topic, it has to be acknowledged by all means – even despite some remaining data gaps – that this work is an extraordinary step forward in the exploration of the historical dynamics of wealth and income inequalities and the drivers underlying the observed phenomena.

There are two main data sources serving as the basis for the analysis, which collectively make it possible to study – in a historical context – the dynamics of the division and distribution of wealth. While one of the data sources focuses on income inequalities and the distribution of income, the other focuses on the distribution of wealth and its relationship to income. Thomas Piketty identifies the World Top Incomes Database as the major

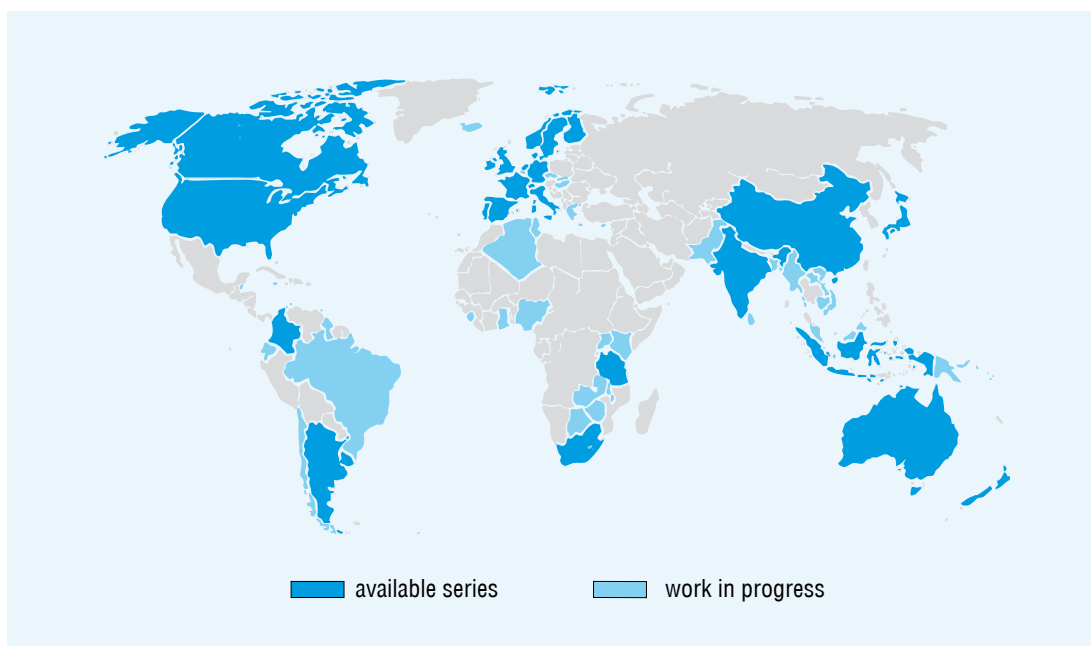
data source of the book; a database that is the most comprehensive and most extensive compilation of historical data connected to the evolution of income inequalities (see *Chart 1*).

Regarding its structure, the work itself is divided into a general introduction and description of the topic, a review of the basic concepts and correlations, the presentation and analysis of historical data, conclusions, and a brief summary. In the introduction the author – after raising the hypotheses and the key questions to be answered in the book, and describing in detail the sources and methodology applied – provides a rather critical historical overview of the theses of the most important thinkers of political economy who have dealt with the topic, including *Thomas Malthus, Robert Young, David Ricardo, Karl Marx* and *Simon Kuznets*. In addition, the major results and conclusions of the analysis are also summarised and embedded in a historical context.

Part one, which is divided into two chapters, introduces the basic definitions and correlations, theoretical and practical approaches and concepts connected to the idea of income and capital – to be used in subsequent chapters – and presents the data serving as the basis for the analysis. While the first of these chapters deals with the topics of national income, capital, and the capital/income ratio, and changes in the global distribution of income and output, the next one includes a more detailed analysis of the changes in population and output starting from the time of the industrial revolution. Although the author himself admits that there are no real novelties in part one, he nevertheless provides a systematic overview to serve as the basis for the analyses included in parts two and three and the conclusions drawn in part four that is indispensable for the in-depth treatment of the topic.

Part two examines the long-term evolution and dynamics of the capital/income ratio, as well as the distribution of national income

### THE WORLD TOP INCOMES DATABASE IN RELATION TO THE DATA AVAILABLE FOR THE DIFFERENT COUNTRIES



Source: <http://topincomes.parisschoolofeconomics.eu/#Home>: (12/04/2015)

between capital and labour, first at the level of the countries involved in the scope of the analysis, then – as far as the available data permit – comprehensively, at a global level. In the scope of this, the transformation of capital is analysed first with a study of the British and French cases starting from the eighteenth century. This is followed by providing the German and American examples. Finally Thomas Piketty – considering the limitations of the multitude of historical data resulting from the collective research – extends the focus of the study to the whole world and tries to draw from empirical experiences the conclusions that might enable us to foresee changes in the capital/income ratio and the relative shares of capital and labour in the coming decades.

In the course of his analysis, Thomas Piketty starts from two correlations, namely that the share of capital in the national income

( $\alpha$ ) equals the product of the rate of return on capital ( $r$ ) and the capital/income ratio ( $\beta$ ), ( $\alpha=r\times\beta$ ), and that in the long term the capital/income ratio ( $\beta$ ) equals the quotient of the savings rate ( $s$ ) and economic growth ( $g$ ), i.e. ( $\beta = s / g$ ). In this connection he examines the issue of changes in the capital/income ratio ( $\beta$ ), which raises the problem of changes in the share of capital in the national income ( $\alpha$ ). In the author's view if economic growth ( $g$ ) falls, with the rate of return on capital ( $r$ ) and savings rate ( $s$ ) remaining the same, or changing only slightly, then the share of capital in the national income ( $\alpha$ ) may increase. Thus it is possible that the share of capital in the national income ( $\alpha$ ) will grow in parallel with the growth of the capital/income ratio ( $\beta$ ).

Therefore if the savings rate ( $s$ ) is 10 percent and the economic growth is ( $g$ ) 3 percent, then the capital/income ratio ( $\beta$ ) shall be approxi-

mately 333 percent; however, if the savings rate ( $s$ ) is 10 percent, but economic growth ( $g$ ) is only 1.5 percent, then the capital/income ratio ( $\beta$ ) shall be approximately 667 percent. If such a change is coupled with the rate of return on capital ( $r$ ) being unchanged or decreasing only slightly, then the share of capital in the national income ( $\alpha$ ) will increase, on account of the  $\alpha=r\times\beta$  formula. Technically, however, this depends on the elasticity of the production function, that is the elasticity of substitution ( $\sigma$ ) of capital ( $K$ ) and labour ( $L$ ).

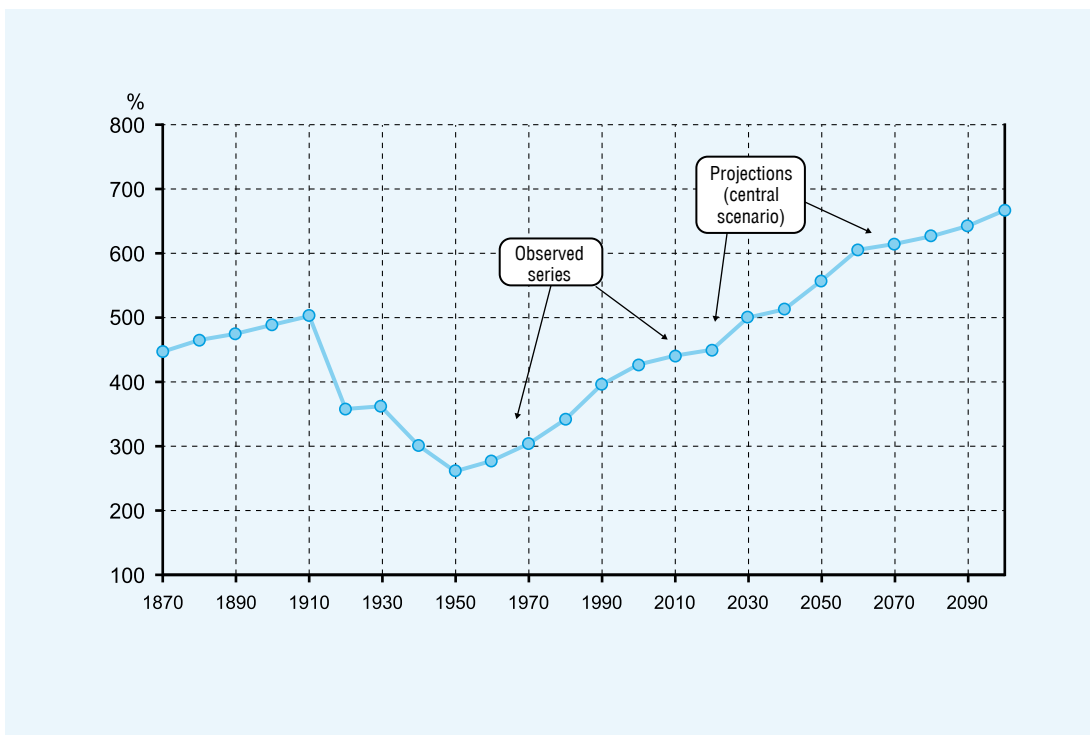
Assuming a Cobb-Douglas type of production function – where the elasticity of substitution ( $\sigma$ ) is 1 unit – any increase in the capital/income ratio ( $\beta$ ) will leave the share of capital in the national income ( $\alpha$ ) unchanged, since in this approach the rate of return on capital ( $r$ ) will decrease proportionally to the

increase in the capital/income ratio ( $\beta$ ). This standard approach, however, presumes a stable economic system where the distribution of capital and labour is determined merely by technology. Where the elasticity of substitution ( $\sigma$ ) is larger than 1 unit, the rate of return on capital ( $r$ ) will decrease in a smaller measure than the increase in the capital/income ratio ( $\beta$ ), therefore ultimately the share of capital in the national income ( $\alpha$ ) will increase. This is also supported by the research results presented in the book, as well as the trends observed since the 1970s and 1980s, which are shown in *Charts 2* and *3*. In can be seen in the aforementioned charts that between 1970 and 2010 the share of capital in the national income ( $\alpha$ ) also grew in parallel with the growth of the capital/income ratio ( $\beta$ ).

In addition to all these, the projection of

Chart 2

**THE WORLD CAPITAL/INCOME RATIO, 1870–2100**



Source: <http://piketty.pse.ens.fr/files/capital21c/en/pdf/F5.8.pdf>; (12/04/2015)

the capital/income ratio to the coming decades leads Thomas Piketty to draw the conclusion on the development of the relative shares of capital and labour that on the basis of the production function it is possible that the relative significance of capital to labour may strengthen, which eventually will change the distribution of national income between capital and labour in favour of capital and the owners of capital.

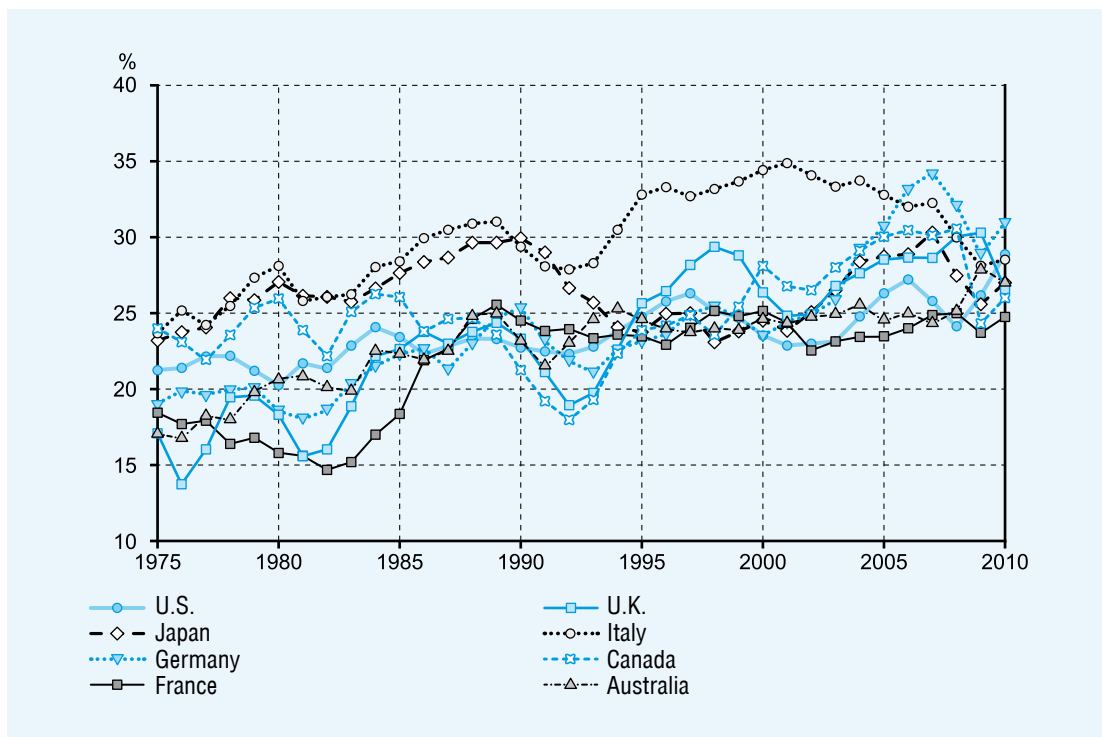
Part three focuses on the income and wealth inequalities interpreted at the individual level and examines their structure as opposed examining the long-term evolution and dynamics of the capital/income ratio, and the distribution of national income between capital and labour. In the first step, the book acquaints the reader with the order of magnitude of the inequalities arising from the dis-

tribution of labour income on the one hand and capital income on the other hand, then it focuses on the historical dynamics of inequalities, starting with a comparison of the United States and France. After this the author extends the scope of the analysis – examining inequalities connected to labour and to capital separately – to cover all countries in respect of which the required historical data are available. In the next step he examines the issue of inheritance and studies the changing importance of inherited wealth, taking into account long-term processes. Finally part three closes with a study of the global division or distribution of wealth in respect of the first decades of the twenty-first century.

While the first three parts of the book place the emphasis on the exploration and presentation of the facts and on understanding the

Chart 3

**THE CAPITAL SHARE IN RICH COUNTRIES, 1975–2010**



Source: <http://piketty.pse.ens.fr/files/capital21c/en/pdf/F6.5.pdf>; (12/04/2015)

causes and drivers of the observed processes and phenomena, part four endeavours to draw some lessons and conclusions from these regarding the regulation of capital. The author first discusses social and political economy issues, and the role of the state. After this he proposes to rethink progressive income tax based on historical experiences and the recent trends, then examines the issue of the progressive taxation of capital and compares this – admittedly idealised – tool to other forms of regulation. Finally Thomas Piketty addresses the problem of public debt, in terms of an optimal capital accumulation.

The author – despite the fact that in his opinion income as a topic is also extremely important – dedicates the largest part of the book to analyses concerning wealth because he thinks that wealth accumulation and wealth concentration are more complex problems. Although he mentions that wealth is in part a function of the accumulation of savings originating from income, he also points out that when analysing wealth-related issues one should also take into account – among others – factors like inheritance or the exploitation of natural resources. This leads him to examine the correctness of the widely held view that growth – as understood in the modern sense – naturally favours labour over inheritance and expertise over birth.

In his view the division or distribution of wealth has been deeply saturated with politics throughout history and could not be analysed or explained by reducing it to purely economic mechanisms. He also calls attention to the fact that the in-depth examination of the observed phenomenon – dynamics of the distribution of wealth – has resulted in the discovery of powerful mechanisms that alternately have convergent and divergent effects. He further emphasises that there is no natural or spontaneous process to arrest destabilisation or the predominance of the factors that strengthen inequality.

In his analysis in part three of the book, focusing on inequality understood at the individual level, Thomas Piketty points out that the in a somewhat absurd, but nevertheless logical way, the two defining events of the twentieth century, namely the two world wars, as well as the subsequent public policies played a key role in the reduction of inequalities. He also calls attention to the fact that a radical increase in inequalities can be seen again, starting from the 1970s and 1980s, although there are significant differences among the individual countries, suggesting that institutional and political differences play an important role in the processes in question.

In Thomas Piketty's view what ultimately plays a key role in the growth of wealth inequalities is that in the long run the rate of return on capital ( $r$ ) is higher than economic growth ( $g$ ), hence wealth accumulated in the past grows at a higher pace than the growth of the economy (or the proportional growth of labour incomes). Therefore the key issue is not only how much income an individual has, but also how much wealth he holds. According to Thomas Piketty's empirical observation in the period under review societies were built on wealth from the economic aspect, therefore inequality is manifested primarily in the inequality between those possessing capital and those possessing nothing else than their own labour.

On the basis of the experiences of the first three parts, the empirical observations, as well as the presentation and the analysis of the data collected as a result of the collective research, in part four of his book Thomas Piketty attempts to draw some conclusions for the future regarding the political consequences of the issues investigated. In this regard, however, it should be noted first of all that the author's intention – as he himself has emphasised in several lectures of his – is primarily not to give an exact description of future developments.

He merely provides an opportunity for everyone to write their own “part four” about their ideas on income and wealth inequalities, using the data, knowledge and analyses published by him.

As far as Thomas Piketty’s part four is concerned, it deals with such profound issues as how to transcend the present form of capitalism. On the basis of a review of historical processes, phenomena and historical data the author concludes that whenever the structure of inequalities is transformed and the past is wiped out, there is generally some kind of shock to play a key role. He points out that in the twentieth century the two world wars functioned as such shocks; however, their effect on the structure or extent of inequalities today (in the second decade of the twenty-first century) may only slightly be felt; actually, the wealth inequalities, which the two world wars helped to eliminate have by now reached or even exceeded their historical peaks.

He also warns that although the new global economic system is associated with such extreme prospects as the total elimination of poverty, in terms of inequalities this endeavour is coupled with factors such as the immeasurable wealth of individuals, which occasionally transcends countries. He raises the question whether it is possible to reform capitalism in a way that a more peaceful or more sustainable system is created, or whether some kind of shock, a crisis more serious than all previous crises or even a new world war – now actually of global proportions – is needed again. Regarding the regulation of patrimonial capitalism he also asks whether it is possible to have a system of political institutions that might be able to assume the regulatory function fairly and efficiently.

In addition, in order to avoid an equalisation process, which is compared in the book to an endless spiral, as well as to regain control over the accumulation of wealth, Thomas

Piketty proposes an ideal solution that in his opinion would enable us to manage the problem in a more peaceful manner, as opposed to the ones seen by him so far, and hence resolve the intensification of wealth inequalities. In his view this solution – which might be rightfully termed radical – could be embodied in an instrument aimed at the global progressive taxation of capital, which is only one component of an ideal social and financial system. Piketty, however, admits that for the time being this is no more than a utopian idea which has little to do with reality.

In this context it might be worth discussing the issue of global regulation and global governance, as well as the role that national states, the different regional integrations and major supranational organisations are supposed to play in any potential implementation of Thomas Piketty’s proposed solution. The introduction of a global property tax proposed by the author most of all raises the necessity of new forms of international cooperation that should rise above national interests, surpassing all previously achieved levels, and that would fundamentally rearrange the framework and relations of multilateral cooperation, and make room for the introduction at global level of instruments that are indispensable for the resolution of the significant problems currently faced by mankind.

Despite the multitude of uncertainty factors and the author’s scepticism concerning his own proposed solution it should be emphasised that, as *Paul Krugman* (2014b) also points out, Piketty’s contribution to the analysis of the topic is outstanding, and has fundamentally changed professional discourse about the problem.

*Paul Krugman* (2014b) acknowledges that when discussing the evolution or dynamics of inequalities Thomas Piketty is hardly the first economist to point out the sharp rise we are experiencing or even to emphasize the con-

trast between the most significant part of the world's population and top society that can be seen in terms of income and wealth differences. He also agrees that as a result of the collective research our previous knowledge has been extended with a significant amount of historical data series; however, all these are no real novelty in themselves. He emphasises on the other hand that the novelty of Thomas Piketty's work lies in the fact that he "demolishes that most cherished of conservative myths, the insistence that we're living in a meritocracy". That we are living in a society in which the wealth earned by the individuals is deserved. He also calls attention to Piketty's meaningful assertion that "we're well on our way back toward" a society "dominated by an oligarchy of inherited wealth", which was characteristic of the period before World War I.

The really striking thing in the opinion of Paul Krugman (2014b) is that the majority of critics have been unable to formulate any substantive, meaningful counter-arguments against Thomas Piketty's thesis. It seems to him that negative responses in general have been all about name-calling and claims about the author being an advocate of Marxist ideologies.

In *Stephanie Flanders'* view (2014) Thomas Piketty summarises the "central contradiction of capitalism [...] with a Marxian turn of phrase", asserting that the entrepreneur inevitably tends to become a rentier, dominating more and more over those who own nothing but their own labour. As Stephanie Flanders also points out, Thomas Piketty sees the root of the problem in the fact that capital reproduces itself faster than output increases, in other words, that the "past devours the future". In her opinion this is the very conclusion of which everyone wants to know whether it is true or not. She thinks that the evidence for the problems of rising wealth inequalities is not nearly as clear as in the case

of the rising inequality of incomes. She also expresses her doubts about the strength of the factors that in the opinion of Thomas Piketty are pushing the economy towards the intensification of inequalities and divergence. She also raises the possibility that slower economic growth might have just as adverse effects for the owners of capital as for everyone else, and as a result their situation may as well turn for the worse. It is also imaginable for her that as a result of such costly effects "their share of the total pie might even decrease". In her opinion, at first glance Thomas Piketty seems to offer an elegant explanation both for the slow rate of growth and for rising inequalities; however, she emphasises – what the author himself also admits – that the world is lot more complicated than the "central contradiction to capitalism" might suggest.

Among the criticism that has appeared on *Capital* one should also mention the thoughts of *Bill Gates* (2014), who – though admitting that he is not an expert on the topic at hand – raises interesting questions about what Thomas Piketty has to say that are certainly worthy of consideration. He agrees that high levels of inequality are indeed a problem that should be dealt with, because capitalism does not have any self-correcting mechanism to push the economy towards greater equality, therefore excess wealth concentration can have a snowball effect. Nevertheless he also admits that governments can play a constructive role in offsetting the snowballing tendencies under analysis if and when they choose to do so. He also agrees with Thomas Piketty's position that some level of inequality is inherent to capitalism. In this regard, he asks what level of inequality is acceptable and when inequality starts doing more harm than good. That said, he expresses his opinion that Piketty's thesis ( $r > g$ ) fails to adequately differentiate among the different forms and types of capital, each having different social utility. He also mentions



that in his view Thomas Piketty's notion that inheritance plays a key role in the wealth accumulation process is not true for the United States. In Bill Gates' (2014) words, "that old money is long gone – through instability, inflation, taxes, philanthropy, and spending". In his opinion it is enough to take a look at the Forbes 400 list of the wealthiest Americans, where he cannot see anyone whose ancestors have accumulated family wealth by collecting rents from land. This, however, is an oversimplified view, as Thomas Piketty does not primarily talk about people on the Forbes 400 list. With this statement Bill Gates narrows down the focus of analysis significantly to a special economic environment which is basically driven by technology. Although he agrees that there are indeed forces that might support the accumulation of wealth, he also thinks there are forces that counteract this trend. In his opinion *Capital* does not analyse these forces sufficiently. He is also disappointed that Thomas Piketty focuses heavily on data concerning the topics of wealth and income, while neglecting consumption altogether. In his opinion a more profound examination of the topic of consumption could add a lot to our understanding of human welfare. Finally he turns his attention to Piketty's ideal solution, the proposal for a progressive tax on capital. In this regard he presents his view that we would be better off with a progressive tax on consumption. It should be noted in this respect that while Thomas Piketty's proposal clearly offers a solution for the problem of capital accumulation, Bill Gates only aims at handling over-consumption.

Before evaluating the *Capital's* message, or Thomas Piketty's thesis and his proposal for the solution of the problem we should note first of all that the author deals with one of the most intriguing and also most widely debated social problems of our time that has some effect on all of our lives one way or another. Although many

have challenged the reality of what the book is about, i.e. the actual existence of the problem, in my opinion the historical data series – even without the addition of the consumption data proposed by Bill Gates – speak for themselves. The growth of income and more importantly that of wealth inequalities, as well as the divergent forces of the economy constitute one of the key social problems of our time, which should indeed be discussed.

In the words of Paul Krugman (2014c), "*Capital in the Twenty-First Century* makes it clear that public policy can make an enormous difference [...] even if the underlying economic conditions point toward extreme inequality". In his opinion, the drift toward a society built on oligarchy can be halted and even reversed, as soon as political decision-makers and the system of institutions determined by them commit themselves to the resolution of the problem. In his view Piketty ends his book with a "call to arms" for the implementation of – preferably global – property taxes. In this regard he thinks that although it is easy to be cynical about the proposed alternative solution, *Capital* is still a "masterly diagnosis of where we are and where we're heading". This makes the thoughts of Thomas Piketty worthy of consideration for everyone. In Krugman's opinion the greatest merit of the book is that it has transformed the dominant framework of economic discourse concerning the topic, hence we shall never talk about the issues related to the problematics of inequality the same way as we used to.

The ultimate question is whether, when it comes to solving the problem, there is any reasonable reality at all for the prevalence of any commitment of such dimensions as could actually enable us – despite resistance – to implement at global level measures suitable for the restriction or reversal of the growth of wealth inequalities, and potentially for the total elimination of the existing gap.

---

LITERATURE

FLANDERS, ST. (2014): Capital in the Twenty-first Century by Thomas Piketty – review. *The Guardian*, 17/07/2014 Online: <http://www.theguardian.com/books/2014/jul/17/capital-twenty-first-century-thomas-piketty-review> Downloaded 12/04/2015

GATES, B. (2014): Why Inequality Matters, *gatesnotes*. 13/10/2014 Online: <http://www.gatesnotes.com/Books/Why-Inequality-Matters-Capital-in-21st-Century-Review> Downloaded 12/04/2015

KRUGMAN, P. (2014a): Wealth over Work. *The New York Times*, 23/03/2014 Online: <http://www.nytimes.com/2014/03/24/opinion/krugman-wealth-over-work.html> Downloaded 12/04/2015

KRUGMAN, P. (2014b): The Piketty Panic. *The New York Times*, 24/04/2014 Online: [http://www.nytimes.com/2014/04/25/opinion/krugman-the-piketty-panic.html?\\_r=1](http://www.nytimes.com/2014/04/25/opinion/krugman-the-piketty-panic.html?_r=1) Downloaded 12/04/2015

KRUGMAN, P. (2014c): Why We're in a New Gilded Age. *The New York Review of Books*, 08/05/2014 Online: <http://www.nybooks.com/articles/archives/2014/may/08/thomas-piketty-new-gilded-age/> Downloaded 12/04/2015

PIKETTY, TH. (2014): Capital in the Twenty-First Century. *The Belknap Press of Harvard University Press*. Cambridge, Massachusetts London, England