The essential achievement of *Capital in Twenty-First Century* is that it represents a revival of political economy, in the classical sense, on a global scale.

In Piketty's book, economics is initially regarded as a social science and, in the end, as a moral, philosophical and political science. Here, we are placed in the tradition of Aristotle, Thomas Aquinas, Adam Smith and Karl Marx. In this manner, Piketty utilizes an economic perspective and reconstructs the unity in the practical sciences, at the same time as he recognizes that each of the different human sciences has its special perspective.

Piketty's book could be regarded as a revival of Adam Smith's main work, *The Wealth of Nations* (1776) in which the modern political economy was grounded. Later on, economics became an independent and specialized social science that lost its relation to the other social sciences. This has especially been the case in the period after the Second World War, when economics increasingly became an exercise in mathematical calculation, a mathematical modeling technique that totally lost its connection to the other social sciences. During the same period, the global economy has been developed on an unprecedented scale. Consequently, it has become difficult to discuss global society within the perspective that signified the classical political economy.

On one hand, we had the dominating economy, where it was possible to make some mathematical calculation about specific economic topics without any relation to a broader social scientific, political, and moral understanding of the significance of the economy for society and its environments.

On the other hand, we had the social sciences, sociology, political sciences, law, humanities, historical sciences and, finally, the moral sciences in their broadest sense. These sciences could criticize the economically driven uniform creations of global society, but they were not able to substitute the economic perspective and therefore, in the end, their impact was relatively limited.

Consequently, economics had become the triumphant sovereign perspective for understanding the transformation of modern global society. Given this background, it cannot be underestimated that Piketty reintroduces the classical political economic perspective in economics and on today's global society. This is the essential significance of Piketty's book. It has created anew a platform for a discussion of essential topics of classical political economy.

In this context, it should be emphasized that the global perspective is the central perspective in Piketty's book. He recognizes that the economy has transformed the world into a global world. It is from this perspective that he tries to understand the transformation of the nation states in the world. By so doing, Piketty gives an articulate understanding of how the economy may be able to transform global society in the twenty-first century. In this context, the long historical perspective from the past to the future becomes essential. Piketty's description could be called a historical analysis of the transformation of modern society from the origins of capitalism in the 18^{th} century until the global perspective of the 21^{st} century.

In the following, we would like to present some of the essential topics of *Capital in Twenty-First Century*, and in conclusion pose some questions for a further discussion of Piketty's book.

I.The Fundamental Arguments in Piketty's *Capital in Twenty-First Century*

Part 1: Income Capital and Inequality

In the introduction and part One of *Capital in Twenty-First Century*, Piketty poses some of the fundamental questions of political economy: What is capital? How is the wealth in the world distributed? Has wealth increased so that there is more equality or is the situation of wealth the same in the world? Piketty looks at the relation between income and capital, and argues that capital still has paramount significance for income today and that this implies reproduction of inequality. Therefore, according to Piketty, it is still capital and not work that is the basis for income in society.

Piketty gives the following important definition of capital: ”The first fundamental law of capitalism is ? = r x ?, where r is the return on capital. This links the capital stock to the flow of income from capital. The capital/income ratio ? is related in a simple way to the share of income from national income, denoted ?. The formula is ? = r x ?. For example if ? = 600% and r = 5%, then ? = r x ? = 30 %. “The return on capital is the central law of capitalism. Return on capital is a broader notion than the rate of profit and the rate of interest while incorporating them both” (Piketty 2014: 52)

For example, the housing market in Paris shows how an old relation between ownership, rent, and capital is still reproduced. It was also like this in the 20th-century and 19th-century novels that just took the capital income on real estate or other capitals for granted. We can see this in the novels of Balzac or Jane Austen. The author makes many references to the description of money and wealth of characters in novels. He argues that this helps us to understand the perception of wealth and inequality, but it also shows the changes from the 19th to the 20th century, because Jane Austin and Balzac can easily use money to describe the wealth of their characters in the sense that Austin’s characters earn approximately 1,000 pounds when they are rich, and 30 pounds on average a year just to live. Balzac talks about 10,000-20,000 francs on average to live well (Piketty 2014: 105 f.). This reference to literature to understand economics is an important contribution to the creation of a methodology of economics beyond the exclusive formal references to mathematics.

In the book, the growing inequality in the world is analyzed in terms of world regions. If we compare the numbers of population with input-output of capital/production in different parts of the world, we cannot really document a convergence of equality between the parts of the world even if the number of people and total output in Europe and America has decreased. Due to the increase of population in Asia and Africa, inequality between the regions still becomes bigger (Piketty 2014: 60-61).

Piketty says: “To sum up, global inequality ranges from regions in which the per capita income is on the order of 150-250 Euros per month (Sub-Saharan Africa, India) to regions where it is as high as 2,500 Euros to 3,000 Euros per month (Western Europe, North America, Japan) that is ten to twenty times higher. The global average, which is roughly equal to the Chinese average, is around 600-800 Euro per month.” (Piketty 2014: 64)

But these figures have to be corrected with regard to differences in purchasing power and exchange rates in different regions. So there may be important regional differences to take into account. We still see a situation where the rich countries have a higher income of their domestic product because they invest more abroad, and own more than their domestic product abroad. This is particularly true of Africa where foreign investors akin to the old colonial days still own more than 20% of the country’s capital producing units. So the rich countries earn money on capital ownership in the poor countries.

One possible conclusion from this is the following: That the rich countries still own a large part of the poor countries could be regarded both as good and bad. It can facilitate access to the international economy and growth, but it can also be a danger to development and self-determination, in consideration of marginal utility theory, meaning that the poor countries do not equally get access to their goods like the rich countries, who get increased wealth but do not need it as much as the poor countries.

The book discusses the law of cumulative growth. There is a close link between demographic growth and economic growth. Capital ownership structure has a close influence on this relation: “The central thesis of this book is that an apparent small gap between return on capital and rate of growth can in the long run have powerful and destabilizing effects on the structure and dynamics of social inequality. In a sense everything follows from the laws of cumulative growth and cumulative returns” (Piketty 2014: 77).

According to the law of cumulative growth in demography, we were 600,000,000 in year 1700, now we are 7 billons, and if this continues with cumulative growth dependent on life expectancy and birth rate in year 2300, we may be 70 billion. The accumulation of people in the developing world, and the stagnation of people in the developed world will lead to greater inequality due to the inequality of capital income in the developed and the developing world. The people in the regions with little demographic growth will become richer because of their increased capital income. On the other hand there is no doubt that growth has been extremely important for the developing countries. We have now moved from a life expectancy of 40 in the 18th Century to 80 in the 21st century, and today it has become normal to have access to health care and cultural goods. But can we sustain this kind of growth?

When we look at growth in the 20th century we see that rapid growth only happened in Europe in the glorious period between 1945 and 1970. This was due to the fact that Europe was far behind the US and could reach the US quickly during that period. After that period, growth has been slower, close to an average of 1.5 % annually. In fact, liberalization policies in the 1980s did not change this, and there is no evidence that state intervention really caused harm to growth. However, it is difficult to foresee growth and we cannot predict how growth will increase in the future and growth may also decrease in the 21st century.

Piketty talks about the “double bell curve of global growth”: “To recapitulate, global growth over the past three centuries can be pictured as a bell curve with a very high peak. In regard to both population growth and per capita output, the pace gradually accelerated over the course of the eighteenth and nineteenth centuries, and especially the twentieth, and is now most likely returning to much lower levels for the reminder of the twenty-first century” (Piketty: 2014: 99).

Part 2: The Economic Dynamics of Inequality

In part two of *Capital in Twenty-First Century*, the dynamics of capital/income ratio over time are analyzed. Piketty argues that the present state of inequality in the 21st century in Europe is just a return to the situation of the 19th century, which was interrupted by the public policies following the Second World War. Starting with the references to Balzac and Jane Austen, where the unequal distribution of wealth in 19th-century society is clear, Piketty analyzes the distribution of wealth in western societies today. He shows that a small group of people owns virtually most of the wealth, while millions of people have a very limited relation to capital. Piketty shows that the richest 10 % owns 60 % of the wealth, while the remaining

90 % owns very little and of only 40 % of the wealth (Piketty 2014: 259). They own so little that capital for them is a very abstract concept. The growth of the middle class in the 20th century was the social invention that contributed to hide these differences in wealth from view and, possibly, from memory.

Part 3: What was the Justification of Inequality?

In the third part of *Capital in Twenty-First* Century, Piketty questions the justification of this inequality. We can call it a hyper-patrimonial society, that is, a society based on inherited wealth. This was the case in Europe. In the US there was hyper-meritocratic society, a society of super-managers, but this distinction does not hold. Piketty does not only make the mathematical measures of inequality by Gini and Pareto, but he also uses real examples from life to illustrate inequality. However, if we look at the numbers, the fall in inequality in the 20th century is due to the collapse of *rentiers* and high income from capital, at least this is the case in France (Piketty 2014: 274). But, we have gone from a society of *rentiers* to a society of managers (Piketty 2014: 278), where the managers today are the ones with the high income. After ’68, a minimum wage was introduced in France and this increased equality, but from the 1980s this trend did not continue so strongly and from the 1990s super-salaries was introduced to top managers. In the US, the numbers of *rentiers* in the beginning of the 20th century were lower than in Europe, but they existed. The US were even more egalitarian than France between the 1950s and 1980s. However, since then inequality has exploded and contributed to the instability of the US economy and led to the financial crisis. The highly paid superstar managers in the US have recently contributed to the increase of inequality.

How should we understand wage difference and inequality? Education plays a key role. In particular, minimal wages are important to avoid inequality in combination with investment in education. But the race between technology and wages cannot explain the increase of top-income in the US since the 1980s.

In the beginning of the 20th century, inequality in Europe was bigger than in the US, even in the Scandinavian countries, including Denmark. The top incomes in Germany increased during the Nazi-period 1933-1938, and later in the 1950s. We can also document rising inequality in salaries in the developing world, particularly in China, after the changes to a capitalist system in the 1980s.

Piketty has also studied inequality of capital ownership. In France a tax on estate and gifts was established in 1791, and this gives us a historical picture of wealth distribution since that time. In fact, we can document hyper concentration of wealth during the *Belle Epoque* in France, and we can also document hyper-concentration of wealth in Europe in the 19th century, particularly in societies prior to the First World War. The society of *rentiers* flourished during "la belle époque". It seems that the return on capital is greater than the growth rates in such "inheritance societies".

Inequality remains very big: "To recap: the inequality r > g (return on capital is bigger than growth) is a contingent historical proposition, which is true in some periods and political contexts and not true in others. From a strictly logical point of view it is perfectly possible to imagine a society in which the growth rate is greater than the return on capital – even in the absence of state intervention" (Piketty 2014: 358). This is a historical relation that changes in different historical periods. The fundamental inequality r > g can explain the failure of the French revolution (Piketty 2014: 365). The concentration of wealth today, though markedly lower than in 1900-1910, remains extremely high (Piketty 2014: 375), and taxation may not change this fact.

Piketty says: "To sum up: the fact that wealth is noticeably less concentrated in Europe today than it was then in the Belle Epoque is largely a consequence of accidental events (the shocks of 1914-1945) and specific institutions such as taxation of capital and its income. If those institutions were ultimately destroyed, there would be a risk of seeing inequalities of wealth close to those observed in the past or, under certain conditions, even higher. Nothing is certain: inequality can move in either direction. Hence I must now look at the dynamics of inheritance and at the global dynamics of wealth. One conclusion is already quite clear, however: it is an illusion to think that something about the nature of modern growth or the laws of the market economy ensures that inequality of wealth will decrease and harmonious stability will be achieved" (Piketty 2014: 376).

Piketty studies capital accumulation in the long run. Referring to Balzac he asks whether study and hard work or marriage with a rich person or inheritance leads to wealth. He looks at the annual flow of inheritances in the long run, and he can document that "the inheritance flow accounts for 20-25% of annual income every year in the nineteenth century with a slight upward trend toward the end of the century" (Piketty 2014: 379). From 1910 until 1920 it diminished, and from 1920 until 1980 it was rather low (from 10% to 4% to 7%). From the 1980s it began to rise again, and in the year 2010 it seems to be 12% (Piketty 2014: 380). The baby boomers had very little inheritance, but the children born in the 1970s and 1980s have already inherited. For them the decision to buy a house may have been dependent on this (Piketty 2014: 381).

Decreasing mortality rates do not necessarily influence the transmission of gifts as inheritance. Inheritance is also realized through the transmission of gifts. Inheritance occurs later in aging societies but is still very important. In the aging society there is a growing importance of inheritance and gifts are given approximately ten years before the death of the donor. Gradual increase of gift giving between generations contributes to enforce this trend (Piketty 2014: 393). In an aging society people also inherit a larger amount. If we look at the distribution of inherited wealth since 1790, we can see that 25 % of income comes from heritage while 75 % from work. But this is very unequally distributed. This explains the young man Rastignac's dilemma, that is, rich people were a very little group so it is difficult to find a rich girl, so it may be better to work to get a decent salary (to be or not to be!).

Inheritance represents one quarter of total lifetime resources of cohorts born in 1970 or later. So we are moving towards the society of *petits rentiers* (Piketty 2014: 418). The fact of living of money from the past will increase. This is the case with the movie *Dirty Sexy Money.* In France today we see the reemergence of inherited wealth – and not only wealth achieved by hard work, education or merit. This is the case even though the words rents and *rentiers* took on very pejorative connotations in the 20th century. In the book the concepts are used in their descriptive sense. Capitalism remains a society of *rentiers* even though it has become more democratic. The return of inherited wealth seems to be a global phenomenon. This is the case not only in Europe and the United States, but globally as well. We can see this among others with the increase in global billionaires.

The wealthiest 0.1 % on the planet, some 4-5 million out of an adult population of 4-5 billion apparently possess fortunes in the order of 10 million Euros on average, nearly 200 times of the average global wealth. The wealthiest 45 million possess 3 million euros on average (Piketty 2014: 438). Liliane Bettencourt, the heiress of L'Oreal had a fortune that increased from 2 billion to 25 billion dollars from 1990 to 2010. This was a little less than Bill Gates and more than Steve Jobs (Piketty 2014: 440). However, the entrepreneurial argument cannot justify such differences in wealth. Is the inequality of the fortunes justified? Moreover, Piketty discusses the Sovereign Funds of the Oil states like Norway, Abu Dhabi, Saudi Arabia and other gulf states. What about all the people who worked very hard in the businesses? Maybe we need a progressive fiscal tax on capital!

Part 4: Regulation of Capital in Twenty-First Century

In part four of the book, Piketty deals with this question about regulation of capital in the Twenty-First Century. Can we imagine political institutions that contribute to the regulation of these issues?

Piketty thinks that a progressive tax on capital is the way to solve the challenges of the 21st century. Piketty argues for greater state intervention in the economy. He looks at different solutions to inequality problems in relation to university systems, pension systems, tax systems etc. Then he argues that we need to rethink the progressive income tax and introduce a global tax on capital in chapters 14 and 15 of the book. It is argued that estates must be more heavily taxed than income.

Piketty argues that it was war, not democracy that gave us progressive taxation. We need to rethink income tax in a more egalitarian way in the globalized economy. However, a global tax on capital is a utopian idea. It is difficult to impose a tax on global wealth. A simpler solution could be automatic transmission of banking information.

There is a contributive and intensive justification for capital tax. The three types of tax on income, on capital, and on inheritance complement each other.

Piketty proposes also a European wealth tax enforced by European institutions and the European central bank. A tax on capital is a better and less totalitarian solution than a centrally planned economy. Piketty says: “To sum up: the capital tax is a new idea, which needs to be adapted to the globalized patrimonial capitalism of the twenty-first century. The designers of the tax must consider what tax schedule is appropriate, how the value of taxable assets should be assessed, and how information about asset ownership should be supplied automatically by banks and shared internationally so that the tax authorities need not rely on taxpayers to declare their own asset holdings” (Piketty 2014: 534).

The tax on private capital is the most efficient solution to reduce public debts. This is a way to solve the problems of the current crisis in many states. It is presupposed that this would be the solution for the European Union.

II. Some Essential Questions for a Further Discussion of *Capital in Twenty-First Century*

Instead of moving towards a society of equal chances and resources, we face a society with increased inequality. In this sense, Piketty’s book represents an important challenge to mainstream ethics and political philosophy.

However, we can still point to a number of important questions that remain after this discussion of Piketty’s work. In particular, it would be possible to address the following questions to Piketty’s work:

1. Are Marx and Piketty right when they argue that capital will be the basis for income rather than work in the long run, or do they forget that value-creation through work will still makes work very important?

2. How should we evaluate the dangers to democracy of increased individual wealth? Should

we argue that this is not only a challenge to equality, but also to political freedom and social cohesion in democratic societies?

3. Does the law of accumulative growth work? The belief in the existence of such an economic law seems to be the fundamental presupposition of the work of Piketty.

4. How should we evaluate the use of literary examples in Piketty? They seem to be very important. But can we give them an essential significance for economic theory?

5. Is Piketty right in saying that, due to capital ownership, the developing world is still owned by the developed world?

6. Is it really true that we live in a hyper-patrimonial society where richness and wealth are based on inheritance and *rentiers* after all? It seems that this is the case, and that it is an illusion to believe that we live in a kind of democracy with equal conditions for everyone – given for example the fact that most students at Harvard have parents who belong to the richest 2% in the US.

7. What should we say about the idea that it was accidental that there was equality in the 20th century due to the world wars. How do we ensure equality in the future, without wars?

8. What about Piketty's analysis that we live in a society where people get 25% of their life income from inheritance, and that this will also be the case in an aging society because even though inheritance will only come later, it will still be a general part of society's function? Is that not contradictory to the idea that older people today want to spend their money rather than to give it to their children? Maybe Piketty underestimates the egoism of the '68 generation?

9. Is the idea of a global tax on capital income the way to proceed? If it is only possible at the EU-level, what does it mean for the national tax systems?

10. What will happen if we do not have such a tax in the future – will we, as Piketty suggests, experience further increase of inequality throughout the world?

These questions do not exclude the significance of Piketty's research. As mentioned in the introduction, the essential achievement of Piketty's book is that this book represents a revival of political economy, scaled for global society, in the classical sense. Economics is placed as a social science and a humanistic science, and in the end as a moral and political science. In this manner Piketty utilizes an economic perspective and reconstructs the unity in the practical sciences. At the same time as he recognizes that each of the different human sciences has its special perspective.

Piketty's reconstruction could be called a historical analysis of the transformation of modern society from the origin of capitalism in the 18th century till the global perspective in the twenty-first century. In conclusion, Piketty revives the political-economic project of Adam Smith and Piketty's work has already had an impact comparable to that of Adam Smith during the 1770s. Therefore, it would be fair to see Piketty as the Adam Smith of the Twenty-First Century.

Reference Piketty, Thomas (2014), *Capital in the Twenty-First Century*, The Belknap Press of Harvard University Press, Cambridge, Massachusetts and London.