



DETERMINING & CONTAINING INEQUALITY: A CONTEMPORARY INTERPRETATION

INTRODUCTION	2
an alternative point of view	
1 - WHAT DO WE INTEND BY 'INEQUALITY'	2
1.1 Money does not (always) come first	2
1.2 Core interpretation: Piketty's assumptions	3
1.3 Cleaning up the formula: Stiglitz's assumptions	3
2 - LOOKING FOR A NEW FRAMEWORK	4
2.1 Exploitation model	4
2.1.2 Price of land	5
2.1.3 Centrifugal and Centripetal forces	6
2.2 How did we get there?	6
CONCLUSIONS	6
what can actually be done	
Bibliography	8
Sitography	8

INTRODUCTION

an alternative point of view

The purpose of this essay is to expose the highlighted traits of a paper named *The origins of inequality and policies to contain it*. It was written by an American economist called Joseph Eugene Stiglitz, and it was published in 2015.

His work starts with a strong *claim*: trying to demonstrate that our inequality was not mainly brought by *economic forces*, especially for capitalism's effects. Therefore, the thesis states that *political forces* are the most concerned ones (Stiglitz, 2015).

Hereafter, it will be discussed the author's idea of inequality and his model to explicate it. Since *politics* is the subject, we'll cover which *policies* should be formulated to address this issue at last.

1 - WHAT DO WE INTEND BY 'INEQUALITY'

'Inequality' can have plenty of meanings and interpretations. Hence, it's mandatory to give this term the proper significance related to our purposes, making some adjustments where it seems they are needed.

1.1 Money does not (always) come first

First of all, to deepen some philosophical and generic aspects could help to give an 'out-of-the-box' point of view on this topic. In fact, Stiglitz's document is so concerned with capital, wealth and income¹ that could let the reader think that this is the only existing type of inequality in our society.

'Equality' is something that can take place in a lot of contexts. We can quote a brief thought process done by Giovanni Sartori, which exposes it could exist at least six general types of equalities: *legal-political* equality, *social* equality, *opportunity* equality (divided in equal *accesses* and equal *starting points*) and *economic* equality (divided in *relative* and *absolute*. Sartori, 2012, 10).

This is not for sure the proper place to go further in that, but it was an important reasoning to do in order to settle a foreword reminder: 'money' does not always 'come first'.

¹ The 'mono-type' inequality vision is not the only 'mono-centric' view we can find in his work. It can easily be noted that Stiglitz's point of view is almost only focused on America's situation, even if he quotes a lot of other 'advanced countries' (Stiglitz, 2015).

1.2 Core interpretation: Piketty's assumptions

Stiglitz took the starting explanation of 'inequality' from the studies of Piketty, which seem to state the most shared concept of the matter. In his narrative, inequality is described as the unequal distribution of capital among people, which translates into an unequal share of wealth (Stiglitz, 2015). That condition can be caused by a large number of complex factors and agents, but he sums it up with a cleaner assumption: when the rate of return on capital² becomes greater than the growth rate³ of the nation we analyse, inequality grows. Just to give a deeper clarification: inequality happens when wealth grows faster than the economy itself, leading to an unbalanced wealth/income ratio among the population (Stiglitz, 2015). Hereafter, at least two important reasonings can be displayed from that exposure: capital is associated with wealth (and/or vice-versa) and our society relies on capital much more than before⁴. This makes it crucial for explaining inequality in that interpretation.

This explains our actual situation from Piketty's point of view, but it's not something the author totally agrees with. We are going to comprehend his reasons why.

1.3 Cleaning up the formula: Stiglitz's assumptions

Stiglitz brings four arguments to explain why Piketty's theory seems to be inaccurate:

1. One of the most shared beliefs among economists is the *law of diminishing returns*. So, if the rate of return should fall and all of that capital deepening Piketty stated is true, this means at least one side of his assumptions is at fault (capital deepening is something imprecise or the return on capital should become lower than the growth rate, in the long-term at least.).
2. It is clear Piketty underpins capital deepening. We normally expect that to increase labour productivity, and wages consequently. The problem is that it didn't happen: *wages have stagnated*.
3. *Wealth accumulation* is a puzzle. Data⁵ suggest it is not only composed of saved and re-invested income.
4. Since Piketty also takes a long-term perspective, the last ambiguity is about the *long-term determinants* of the wealth/income ratio. Usually, taking into account a large time-frame,

² When we talk about capital: "Capital means different things depending on the context, but here "capital" can simply stand for "wealth" in all its various forms: stocks, real estate, gold, etc." (Llewellyn, 2014). The rate of return on capital is therefore the change (%) in value of wealth over a certain time period. It's related to how much people *save* (Llewellyn, 2014; Stiglitz, 2015).

³ The growth rate of a country is the change (%) in its gross domestic product (GDP) occurred during a certain time period (usually measured on a 1 year-period). We can compute that by dividing the change in the GDP over its initial level multiplied by the time (years) passed (The Core Team, 2022, 1).

⁴ That 'effect' is summed as '*capital deepening*' (Stiglitz, 2015).

⁵ America presents a quite low savings rate, which can not explain the rise in wealth alone (Stiglitz, 2015).

capital/output goes up while savings rate increases and the long-term growth rate⁶ decreases.

In our situation, the savings rate decreased and the long-term growth rate fluctuated, so it does not explain why the ratio mentioned at first is still going up (Stiglitz, 2015).

5. The last criticism is the most substantial one, and it is consequential to the other four. It focuses on a trait of the actual 'formula' of the inequality's condition settled by Piketty: the *determination of the return on capital*. in his formula ' $r > g$ '⁷, he expects people to save all of their wealth, leading r to be nearby equal to 1⁸. Stiglitz claims instead it was demonstrated that this is far from reality. In real terms, r is actually around 1/3 in the best expectations. Hence, he adds a variable to the formula, representing the actual *savings rate*: ' s ', which is then about 0.3. The new formula becomes: $s \cdot r > g$ ⁹ and it's now more plausible at least (Stiglitz, 2015).

At this point, this is the problem: r would probably be greater than g , but taking the 'real' return on capital ($s \cdot r$) given by Stiglitz, it should invert that relationship. However, this is actually not happening (Stiglitz, 2015).

2 - LOOKING FOR A NEW FRAMEWORK

Even with the corrections we made, it's still not clear why we are not able to make a picture that fits with the actual situation. This means, at least by deduction, we need different models. It will be exposed the one offered by the author, explaining why it could be a valid insight in reasoning our wealth inequality, and how wealth is probably not so related with capital (Stiglitz, 2015).

2.1 Exploitation model

If capital and savings have not influenced the trend of wealth's share that much, they probably should not be the focal point of our analysis. Basing his claims on that (and other evidences that will follow), Stiglitz offers his personal interpretation to the causes of our increasing inequality, calling it the '*Exploitation model*'. The model basically asserts that the main cause of inequality is brought by rents which came from *exploitation* activities. This can create inequalities at both the bottom (like rents coming from predatory lending or abusive credit card practices) and the top

⁶ "The long-run growth rate in turn is the sum of the long-run rate of increase of the workforce plus the rate of labor augmenting technological progress" (Stiglitz, 2015, p.431).

⁷ Where ' r ' is the rate of return on capital and ' g ' is the growth rate of the economy of a nation.

⁸ Talking about rates, this means people save 100% of their capital.

⁹ The author also adds a deepening taken from a Cambridge study about the difference in return on capital that takes place between rich people, who commonly save more, and 'common' workers. it' simply indicated with a subscript ' c ': $s_c \cdot r > g$. It also states that in the long run equilibrium it becomes: $s_c \cdot r = g$.

population (like insider trading or forex scandals). Although it's quite simple to underline, since those rents do not come from 'tracked' situations, we already have a good starting point for explaining why we are not able to establish where the growth in wealth of the top population comes from (Stiglitz, 2015). However, we need to tell more than that.

The paper offers some evidences in support of this theory, which can be summed up in three points:

- High *social contributions* do not coincide with high levels of wealth (we can informally say that among our society 'who is doing *something* is not the wealthier'. Meritocracy usually fails talking about wealth distribution).
- *Taxes to the rich* people did not fix this situation (although we still need them. We also experienced some periods where taxes for 'the rich' were lower than they should have been, and it contributed reaching our situation).
- Our markets are characterised by the presence of *large monopolies*. They can invalidate the condition brought from competition, which is to hold back individuals from accumulating too much rent, leading then to exploitation (Stiglitz, 2015).

2.1.2 Price of land

Land (and its rents) is also disclosed as a driver of our inequality's increase (Stiglitz, 2015), therefore it is appropriate to spend some words about that.

Even if it's quoted as an example of how it could not be a good wealth-indicator for an entire nation, it becomes suitable if related to people and their capital¹⁰. We've seen in recent years a huge increase in land rents, and that is due to a rise in land's demand (and so, in its price). That is explained mooted these aspects:

- In the past, land's demand was almost only linked to agriculture, while 'recently' *urbanisation* also drove it, giving an 'extra' increase. The simplest example related to that is the need for more houses, which is something that clearly needs land (also mentioned in Gertten, 2019).
- Land became a store of value, as gold or other goods, hence *long-term investments in land* increased.
- *Credit availability*: some assets can be borrowed giving another asset as collateral. Simplifying a bit how it works, it becomes convenient to do that when the interest you pay on your borrowed asset is lower than the rent you are gaining from its usage. In this kind of situation, it is convenient to purchase the first asset we mentioned, using it as collateral for

¹⁰ That reasoning was taken from the thoughts about the existing difference between the concepts of wealth and capital (Stiglitz, 2015).

lending/borrowing activities, until interests become too high to operate (Boiardi, 2021)¹¹. In this cycle, land acts as collateral (Stiglitz, 2015).

2.1.3 Centrifugal and Centripetal forces

The author proposes at last a way for recalling what we have seen until now: *Centrifugal forces* are the ones that let inequality grow, while *Centripetal forces* are the ones that dampen it (Stiglitz, 2015).

2.2 How did we get there?

We have seen some of the factors and narratives that led us to this situation, but what has happened to bring these factors to that evidence nowadays?

Stiglitz offers a wide variety of specific and more generic agents, which all point to one same present scenario. In fact, what brought us here can be described with a single word: *globalisation*. That common notion surely presents a lot of positivities, but it doesn't if we talk about our case study. To globalise can mean something quite opposite to what we could think about, since it's simply more difficult to control a large system than a small one, leading the society (especially the financial system for this instance) to a '*declining unionisation*' (Stiglitz, 2015).

To conclude and recall the opinion of the author, what we have exhibited is the result of an actual *deregulation of financial institutions* we are experiencing, which has let them to be able to approach those types of rent seeking previously described (Stiglitz, 2015). If this is the scene we are living in, it's now clear what it was stated in the introduction: we require policies.

CONCLUSIONS

what can actually be done

The picture is now clear: *public policies* are in the spotlight. However, any assumption falls meaningless without a proposal. There are then a few points offered in the document within we can begin to rethink our approaches.

The first one regards something that probably has the highest significance: *education*. This could be of course a prism of topics¹². The one we are interested in is *education's access*, which is too dependent on capital. The proposal here is to simply make it accessible for more citizens (Stiglitz, 2015).

¹¹ Although the source cited talks about a different context (decentralised finance), the process alone can be related to our matter (Boiardi, 2021, 09:00-19:00, 25:40-30:00).

¹² Even regarding the knowledge of inequality itself, as shown in Gimpelson, Treisman (2018).

The second point is, on the other hand, the hugest: the matter of *taxation*. In Stiglitz's opinion, we should: put more taxes on the 'top' population, especially taxing *inherited capital* more than life-cycle savings. He also divides the return on capital into four different kinds of returns, where the ones that need a heavier taxation are the *return on risk*¹³ and *rents* we've partially analysed. Finally, since it was said it's among the main causes of inequality, he proposes more taxes on the *return to land* and again higher *interest rates* for 'the rich' (Stiglitz, 2015).

Since we have just talked about taxes, which can be seen as government's rent, we have also to address its expense aiming to dwindle inequality. This brings us to the last point he focuses on: *government investments*. As we underlined in the first chapter, labour productivity didn't increase as we expected, leading to wages' stagnation. Government has then to invest in what can lift up labour productivity with the purpose of raising wages and reducing inequality as well (Stiglitz, 2015).

"It is politics in the 21st century, not capitalism, which is at fault." (Stiglitz, 2015, p.445).

¹³ The return on risk, also known as 'return on risk-adjusted capital', is a measure of the returns made by an investment which is based on capital at risk (Capital set aside to cover risks). It can be obtained by dividing the net income over risk-weighted assets (allocated risk capital, economic capital, or value at risk. Hargrave, 2021; Kagan, 2021).

Bibliography

- Sartori G.(2012). *Democrazia cosa è*. BUR SAGGI (italian edition). RIZZOLI LIBRI. Kindle edition: Milano.
- Stiglitz J. E. (2015). *The Origins Of Inequality And Policies To Contain It*. In National Tax Journal, Vol.68 (2), p.425–448. University of Chicago, National Tax Association: Chicago.
- The Core Team (2022). *THE ECONOMY. Economics for a changing world*. University College London, Core Economics Education: London.
- Gertten F. (Director). (2019). *Push* [Film]. WG Film: Malmö.
- Gimpelson V., Treisman D. (2018). *Misperceiving inequality*. In Economics & Politics, Vol.30 (1), p.27-54. John Wiley & Sons: Hoboken.

Sitography

- Llewellyn M. (2014). *Thomas Piketty's "Capital in the Twenty-first Century" explained*. "TED". October 6, 2014 (<https://ideas.ted.com/thomas-piketys-capital-in-the-twenty-first-century-explained/>, consulted on 05/05/2023).
- Boiardi L. (2021). *LENDING e BORROWING su AAVE, TECTONIC, ABRACADABRA (tutorial PRATICO) | CORSO di DEFI Ep. 5. "The Crypto Gateway"*. December 30, 2021 (https://www.youtube.com/watch?v=itUbLT8Dp2w&list=PLhhAltp0qPbbQsJbdARhixeRQMvpKYZW&index=5&ab_channel=TheCryptoGateway-InvestireinCriptoalute, consulted on 05/09/2023).
- Hargrave M. (2021). *Return on Risk-Adjusted Capital (RORAC) Formula & Example*. "investopedia". January 21, 2021 (<https://www.investopedia.com/terms/r/rorac.asp#:~:text=Return%20on%20Risk%2DAdjusted%20Capital%20is%20calculated%20by%20dividing%20a.by%20the%20risk%2Dweight%20assets>, consulted on 05/12/2023).
- Kagan J. (2021). *Capital at Risk (CaR)*. "investopedia". July 31, 2021 (<https://www.investopedia.com/terms/c/capital-risk-car.asp>, consulted on 05/12/2023).