# Inequality:
# evidence in the 21st century

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# Chapter 1

## 1.1 Introduction

In the 21st century, economies worldwide are navigating unprecedented levels of uncertainty, grappling with the lingering effects of the COVID-19 pandemic, frequent external economic shocks, and steadily rising living costs. Social inequality—long a subject of debate—has become even more apparent, exposing some of the fundamental weaknesses embedded in modern capitalist systems. This paper seeks to explore a pressing question: "Can we justify the persistence of social inequalities that are embedded within capitalist structures? Are these inequalities necessary to drive economic growth, or could they be meaningfully addressed through policy changes?"

Understanding this issue is critical as we work to balance the goals of economic growth and social fairness in an increasingly complex and interconnected world. More than a purely economic question, this issue of inequality also impacts social stability, government policy, and even the cohesion of communities. Wealth and income inequality affect nearly every aspect of economic life, influencing consumer behavior, investment patterns, and, crucially, the overall sense of social unity. As wealth and income gaps grow, equity has become a central concern for policymakers who are challenged to find ways to align economic prosperity with fairness. Whether or not a stable balance can be achieved will be key to determining if modern capitalism can continue to function sustainably or if increasing inequalities will weaken its foundations. This challenge has prompted economists and policymakers alike to reconsider approaches to taxation, labor laws, social welfare programs, and even the fundamental structures of the global economy.

A particularly influential perspective in the discussion on inequality comes from the work of economist Thomas Piketty, whose book *Capital in the Twenty-First Century* has had a profound impact on how we view wealth distribution and inequality. Nobel laureate economist Paul Krugman remarked on the significance of Piketty's analysis, saying that it has transformed our understanding of the forces that shape wealth and inequality. Piketty's "Fundamental Laws of Capitalism" focus on the relationship between the rate of return on capital ($r$) and the growth rate of the economy ($g$) as a critical factor in inequality. According to Piketty, when $r$ (the return on capital) exceeds $g$ (the growth rate), wealth tends to concentrate, leading to a rise in social inequality. This concept has sparked widespread interest and numerous studies, including one by Piketty and Gabriel Zucman (2015), which examines how changes in the $r$-$g$ gap have contributed to wealth concentration and inequality over time.

This dynamic between capital returns and economic growth is further examined in the work of Atkinson, Piketty, and Saez (2011) in *Top Incomes in the Long Run of History*, where they explore income distributions in several countries across more than a century. Their analysis shows that income inequality is not simply a byproduct of economic growth but is also significantly influenced by government decisions around taxation and wealth redistribution. These insights suggest that policy changes may offer ways to mitigate inequality without necessarily hindering economic growth, providing a range of potential solutions for policymakers.

Additionally, the book *Global Inequality* by Branko Milanovic (2016) looks at inequality from a global perspective, examining how globalization and technology have affected income distribution worldwide. Milanovic warns that, without targeted policies, both globalization and technological advancements are likely to worsen inequality, as they tend to disproportionately benefit wealthier countries and individuals. This work has brought attention to the potential need for global as well as national policy solutions, emphasizing that inequalities are not only internal to specific countries but also woven into the fabric of the global economy.

Taken together, these studies highlight the complex and multi-dimensional nature of inequality, suggesting that, while certain aspects of capitalism may inherently contribute to inequality, targeted policies could help reduce these gaps. However, implementing such policies presents challenges, as governments must balance the need for economic competitiveness with the push for social equity. Ultimately, this paper will explore whether modern capitalist systems can adapt to incorporate fairer distribution practices or whether they will continue to rely on existing structures that favor capital concentration, potentially at the cost of social stability and economic inclusiveness.

## 1.2 The Concept of Inequality

The term "inequality" has been extensively analyzed and debated within the academic literature. In economics, it is commonly understood as the uneven distribution of wealth, income, or other critical assets across a population. Beyond its empirical and statistical dimensions, inequality has also been a subject of philosophical inquiry, with various thinkers attempting to justify or critique its existence and implications.

Central to the discourse on inequality is the idea of distributive justice—a principle concerned with the equitable allocation of economic resources and rights. Philippe Van Parijs defines distributive justice as the state in which economic goods are allocated as they ought to be, emphasizing that it does not necessitate absolute equality in income or wealth distribution.

Instead, two forms of economic inequality can be justified: those arising from individual responsibility and those that ultimately benefit the disadvantaged (Van Parijs, 2007).[1]

This line of reasoning is echoed in John Rawls' seminal work, *Justice as Fairness* (1985), where inequality is justified under the "veil of ignorance" framework. According to Rawls, individuals, abstracted from their social and economic circumstances, would design principles of justice that prioritize fundamental liberties and equal opportunities. Socioeconomic inequalities, in this framework, are permissible only if they improve the welfare of the least advantaged members of society. This distinction underscores that unjust distributions are not inherently inequitable and vice versa.

Conversely, Robert Nozick's perspective, as articulated in his entitlement theory, posits a more libertarian approach. For Nozick, distributive justice hinges on the legitimacy of property rights and their allocation through acquisition, voluntary transfer, or rectification. Any resulting distribution, regardless of its inequality, is deemed just if it arises without state intervention. This non-interventionist stance raises critical questions about the state's role in addressing and correcting inequitable distributions, particularly within democratic societies where legal-allocative parity is often considered a moral imperative.

Ronald Dworkin adds another layer to this debate with his concept of the "envy-free" allocation. Using a hypothetical auction scenario, Dworkin imagines a distribution system where individuals, isolated from societal hierarchies, allocate resources such that no one envies another's share. While this framework aims to counteract asymmetries, it has faced criticism for generating new forms of inequality and for its potential disconnect from Pareto efficiency,

[1] Van Parijs, P. (2007). International Distributive Justice. In: R.E. Goodin, P. Pettit, & T. Pogge, eds. 2007. A Companion to Contemporary Political Philosophy. Vol. 2. Oxford: Blackwell, pp. 638-652.

a principle that underpins much of welfare economics. Specifically, Dworkin's vision suggests that equality can only be achieved at a singular point where individual indifference curves intersect, a notion that may contradict the Second Welfare Theorem, which allows multiple Pareto-efficient outcomes depending on the initial allocation of resources.

The criticisms of Dworkin's auction model further illustrate the indeterminacy of inequality metrics and the inherent challenges in reconciling theoretical ideals with practical applications. As Heath (2004) notes, markets can compel individuals to internalize the costs of their decisions, fostering responsibility.[2] However, as Heath (2011) [3] later argues, market economies often produce distributions that are fundamentally unacceptable, even if efficient. This tension between efficiency and equity highlights the limitations of market mechanisms in addressing distributive justice, a recurring theme in both Rawlsian and Dworkinian frameworks.

Ultimately, while each philosophical approach offers valuable insights, they collectively underscore the complexity of defining and addressing inequality. Whether through Rawls' principles of justice, Nozick's property rights, or Dworkin's envy-free allocations, the debate

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[2] Heath, Joseph. 2004. "Dworkin's Auction." Politics, Philosophy & Economics 3 (3): 313–35.
[3] Heath, Joseph. 2011. Three Normative Models of the Welfare State. *Public Reason* 3 (2): 13-44.

reflects broader tensions between fairness, efficiency, and the role of state intervention in the modern capitalist system.

## 1.3 The Piketty Model

Thomas Piketty, a prominent French economist, has gained renown for his extensive research on economic inequality. He currently serves as an associate professor at the International Inequalities Institute at the London School of Economics and is the founder of the World Inequality Database. In *Survey Article: Philosophy and Public Policy After Piketty* (O'Neil, 2017), [4] Martin O'Neil summarizes the key aspects of Piketty's groundbreaking economic model, as presented in his seminal work *Capital in the Twenty-First Century*. [4]

This innovative work addresses one of the most contentious and debated issues of the 21st century. By presenting an empirically grounded model, Piketty aims to illuminate the underlying causes of inequality and explore potential solutions to enable democracies to regain control over the excesses of contemporary capitalism. His analysis contributes to a multifaceted and complex intellectual and political debate that resists simplistic categorization. As Piketty himself notes, "Intellectual and political debate about the distribution of wealth has long been based on an abundance of prejudice and a paucity of fact" (Piketty, 2014).

At the heart of Piketty's model are two "*fundamental laws of capitalism*" revealing the mechanics of distributive asymmetries within economic systems. While some view inequality as an inevitable and ever-growing phenomenon requiring redress, others argue against intervention, claiming such measures disrupt the existing equilibrium. Piketty does not aim to resolve the issue of inequality outright but seeks to redefine the terms of the debate through a

[4] O'Neill, M. (2017). Survey Article: Philosophy and Public Policy after Piketty. Journal of Political Philosophy, 25(3), pp.343–375.

historical-empirical analysis of data spanning the last four decades. This data forms the foundation of his model, offering new insights into the dynamics of inequality.

### 1.3.1 The First Fundamental Law of Capitalism

Piketty's model is anchored in an accounting identity known as the First Fundamental Law of Capitalism. This law examines the share of national income allocated to capital, expressed as the product of the return on capital ($r$) and the capital-to-income ratio ($\beta$):

$$\alpha = r \times \beta$$

Here, $\alpha$ represents the proportion of national income accruing to capital rather than labor. This share grows disproportionately when $\beta$, the ratio of a nation's capital stock to its income, increases significantly. The First Law thus provides an initial framework for understanding distributive asymmetry, highlighting how a surge in $\alpha$ can intensify inequality. The origins of $\beta$'s growth, however, are better explained by the Second Fundamental Law of Capitalism.

### 1.3.2 The Second Fundamental Law of Capitalism

"The slowing down of growth in recent decades has been responsible for the increase in inequality witnessed in modern capitalist economies" (Jackson and Victor, 2014). [5]

[5] Jackson, T. and Victor, P.A. (2014). *Does slow growth increase inequality? Some reflections on Piketty's 'fundamental' laws of capitalism*. https://openresearch.surrey.ac.uk/esploro/fulltext/book/Does-slow-growth-increase-inequality-

Some/99512684802346?repId=12138911610002346&mId=13140473360002346&institution=44SUR_IN ST.

This observation underpins Piketty's Second Fundamental Law of Capitalism, which links $\beta$ to the savings-to-growth ratio:

$$\beta = \frac{s}{g}$$

In the long term, —the capital-to-income ratio—depends directly on a nation's savings rate ($s$) and inversely on its economic growth rate ($g$). This asymptotic law describes the trajectory of $\beta$ in near-stagnant economies, where ggg approaches zero. In such contexts, nations with high savings rates and low economic growth accumulate vast capital stocks over time, leading to significant societal shifts as $\beta$ rises.

As capital increasingly accumulates, its disproportionate importance exacerbates wealth concentration.

"Unless the distribution of capital is itself entirely equal... this relationship therefore suggests the spectre of a rapidly escalating level of income inequality. Rising wealth inequality would also flow from this" (Jackson and Victor, 2014).

The unequal distribution of capital, unless mitigated by redistributive policies, results in deepening income disparities that may destabilize the social and economic fabric of capitalist societies.

By articulating these two fundamental laws, Piketty reframes our understanding of inequality as an intrinsic feature of capitalist dynamics. His model emphasizes the systemic roots of inequality and challenges policymakers to address its causes through empirical analysis and targeted intervention. Whether his insights can guide practical solutions remains a pivotal question in contemporary economic thought.

### 1.3.3 Piketty's Equation

At the core of Thomas Piketty's framework lies the equation derived by substituting the Second Fundamental Law of Capitalism into the First, representing the crux of his economic model:

$$\alpha = r \, x \, \frac{s}{g}$$

In this formulation, α\alphaα denotes the share of national income allocated to capital, and it tends toward an equilibrium determined by the product of the return on capital (rrr) and the savings rate (sss), divided by the economic growth rate (ggg). In economies where wealth is widely dispersed and income is derived from both labor and capital, an increase in α\alphaα suggests a growing detachment from labor as the primary source of income, favoring capital accumulation. This trend becomes particularly pronounced in systems where capital stocks depreciate minimally, further solidifying the dominance of capital over labor.

Piketty emphasizes that while capital can benefit society broadly if effectively managed, it also grants its owners—given the existing wealth distribution—a disproportionate control over economic resources. As Piketty notes:

"In one respect, this is good news: capital is potentially useful to everyone... In another respect, however... the owners of capital... potentially control a larger share of total economic resources" (Piketty, 2016). [6]

A key destabilizing force in capitalist systems, according to Piketty, is the inequality relationship *r>g* where the return on capital outpaces economic growth. This dynamic, while

[6] Piketty, T., 2016. Capital in the Twenty-First Century. Harvard University Press, pp. 94-94.

not the sole cause of inequality, exacerbates wealth concentration, particularly over long periods. Historical evidence lends credence to Piketty's equation, showing its validity across centuries, with notable exceptions such as the mid-20th century, when $g>r$.

This rare inversion—driven by high economic growth following World War II—precipitated a significant reduction in inequality. Piketty underscores the importance of external shocks in shaping this relationship, observing that "its truth depends... on the shocks to which capital is subject... [and] public policies and institutions put in place to regulate the relationship between capital and labor" (Piketty, 2014).

When $r-g$ widens, inequality intensifies, often at an alarming pace. For example, an increase in the gap from 2% to 3% can shift wealth concentration dramatically, with the top 1% of the population controlling 50-60% of wealth—up from 20-30%. [5]Such a transition signals a shift from moderate, sustainable inequality to a system dominated by extreme disparities.

Piketty highlights that inequality in wealth is not a transient phenomenon but a structural feature of capitalist societies, observable wherever sufficient data exists. He identifies multiple forces that may further widen the $r-g$ gap, including declining global population growth and increased competition for capital. These trends underscore the role of wealth inequality as a defining, yet potentially dysfunctional, characteristic of modern capitalism.

The mid-20th century represents an anomaly in this trajectory, driven by exogenous shocks such as the destruction of European capital stocks during World War II. Negative shocks, such as the Black Death in the 14th century, also illustrate how external disruptions can yield positive redistributive effects, such as strengthening workers' bargaining power and raising wages. However, the longevity of such shifts remains uncertain. The contemporary implications are twofold. A pessimistic perspective views the egalitarian period of the mid-20th century as a fleeting deviation from capitalism's inherent trajectory toward inequality. Conversely, a more optimistic view argues for leveraging public policies—such as nationalizations, progressive taxation, and monetary measures to moderate inflation—that can counteract these trends. Piketty himself argues that $r$,$g$ and $s$ are influenced by a combination of contingent factors, making inequality neither inevitable nor immutable. Piketty's normative stance on inequality aligns with Rawlsian principles, advocating for redistributive measures that benefit the least advantaged. This approach mirrors the Rawlsian "difference principle," which justifies distributive imbalances when they improve the welfare of marginalized groups. Piketty also emphasizes the democratic and meritocratic dimensions of inequality, stressing that disparities must be justified by their broader societal benefits. As Martin O'Neil observes, Piketty's work presents a significant challenge to political philosophers: "Piketty's *Capital* throws down the gauntlet for political philosophers who are interested in the relationship between the theory and practice for social justice" (O'Neil, 2017).[7]This challenge underscores the critical intersection of empirical analysis and normative theory, inviting policymakers to engage with the structural drivers of inequality and the potential for transformative public interventions. By situating inequality within a historical and empirical framework, Piketty provides both a diagnosis of and a call to action against the destabilizing effects of unchecked wealth concentration.

[7] O'Neill, M. (2017). Survey Article: Philosophy and Public Policy after Piketty. Journal of Political Philosophy, 25(3), pp.343–375.

# Chapter 2

## 2.1 Explaining national inequality

Among the first models shedding light on various aspects of inequality is the marginalist model, revisited by J. Stiglitz in *Inequality and Economic Growth*, where inequality is associated with a decline in economic performance. The empirical evidence used by Stiglitz highlights a rise in inequality in recent years, starting with an analysis of trends classified by income and wealth.

"Wealth inequality too is on the upswing. For the four decades before the Great Recession, the rich were getting wealthier at a more rapid pace than everyone else" (*J. Stiglitz, 2016*). [8]

Data concerning the United States indicate a significant rise in social disparity from 1978 to 2013, with the top 1% seeing their share peak at around 40%, while 75% of the total wealth was held by the top 10%. The 2010 financial crisis exacerbated these conditions; nonetheless, the wealthiest 1% of asset owners possessed approximately 165 times the wealth of an average American in the remaining 90% of the population.

As the stock market benefited from a reevaluation of stock prices, the wealthiest individuals regained more than they had lost, unlike the rest of the population. This widened the social gap, debunking the American Dream, now reduced to a myth, as family income and social class exert a strong influence on the life trajectory of the average American. The situation has become a concern for many economists studying the phenomenon, particularly due to fears of worsening social asymmetries intrinsically linked to economic structures.

[8] Stiglitz, J.E. (2016). Inequality and Economic Growth. The Political Quarterly, 86(1), pp.134–155.

"When there are large inequalities of income, those at the top can buy for their offspring privileges not available to others" (*J. Stiglitz, 2016*).

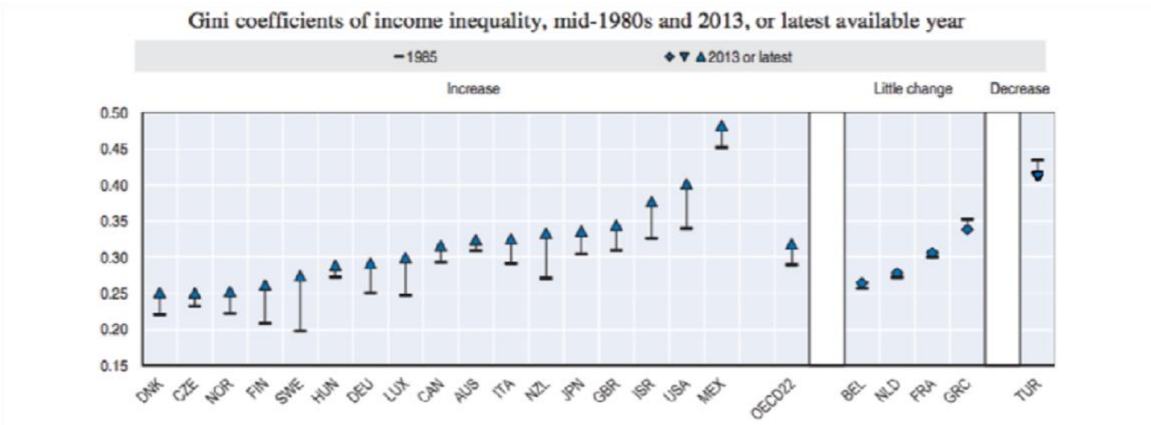



Figure 1: Gini coefficient measuring income inequality in OECD countries. Source: OECD, *In It Together: Why Less Inequality Benefits All*, OECD, Paris, 2015, p. 24.

The United States ranks as one of the most unequal nations globally (+29%), although a rising trend has also been observed in other countries, such as Germany (+17%), Canada (+9%), the UK (+14%), Italy (+12%), and Japan (+11%).

"Recent research by Piketty and his co-authors has found that the importance of inherited wealth has increased in recent decades" (*J. Stiglitz, 2016*).

The study of inequality has encompassed a variety of economic models. In *Capital in the Twenty-First Century*, Piketty addresses its causes by analyzing the socioeconomic thought of his predecessors. For example, according to Malthus, distributive imbalances arise from overpopulation, which grows at a rate *g*. The Malthusian model, though incomplete, was one of the most comprehensive for its time, focusing primarily on the French economy.

A dystopian-apocalyptic view of wealth distribution and the consequent alteration of social structures is further explored by Ricardo and Marx, two of the most influential economists of the 19th century.

In Ricardo's view, when population and output grow steadily, land prices and rents adjust due to supply and demand dynamics. An increase in these prices leads landlords to demand higher rents, resulting in a greater share of national income accruing to them. This process creates social imbalance, with landlords retaining a dominant share of total wealth. The principles of scarcity and price systems, which can sustain prolonged price increases, shape this scenario. In modern contexts, land prices can be replaced with oil prices. Trends from 1970 to 2010 reflect social, economic, and political imbalances that, if projected into the following forty years, highlight the adjustments inequality undergoes according to supply and demand dynamics, often dictated by fuel prices.

Unlike Ricardo's model, which assumes steady growth and social disparity rooted in supply-demand alignment per the neoclassical school, Marx's model critiques the contradictions of capitalism. According to Marx, economic growth did not translate into improved conditions for the working class, which endured harsh and stressful working hours in exchange for low wages. Marx expanded on Ricardo's model with the principle of *infinite accumulation*: the tendency of capital to accumulate and concentrate in the hands of a few without limits, explaining how the share of national income could grow disproportionately. Although this theory has not fully manifested, it remains relevant and serves as a foundation for studying capitalism in the 21st century.

"If the rates of population and productivity growth are relatively low, then accumulated wealth naturally takes on considerable importance, especially if it grows to extreme proportions and becomes socially destabilizing" (*Piketty, 2014*).

Most of these views converge in Piketty's model, which highlights the divergent forces shaping an economy when *r>g*.

## 2.2 Inequality in Italy

At the end of 2022, the wealthiest 1% of Italy's population possessed assets amounting to 84 times the total wealth of the poorest 20% (Oxfam, 2024). In recent years, social inequality in Italy has intensified significantly, making it the most unequal country in terms of income among OECD nations.

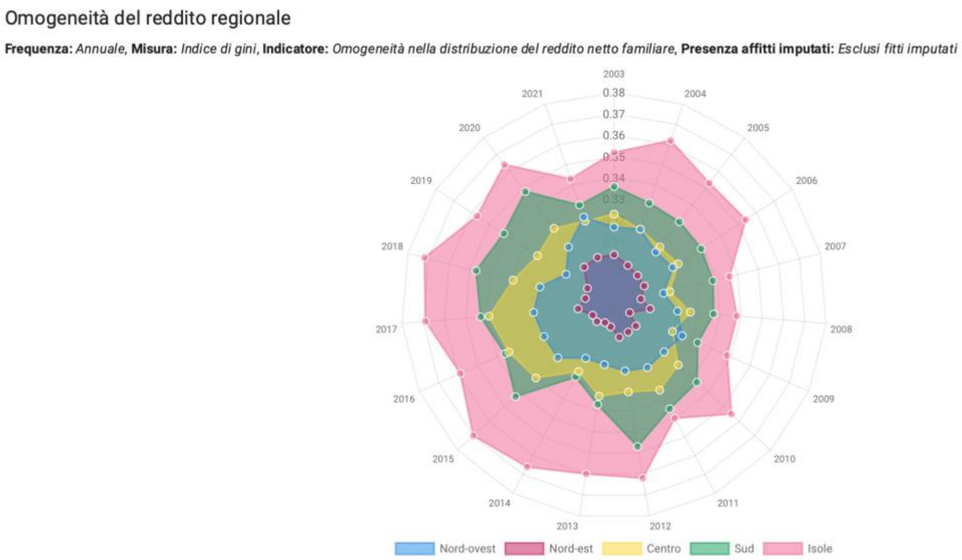



***Figure 2*** *The following graph shows the percentage of homogeneity in the distribution of net family income, considering the Gini index for five macro-areas.*

This issue reflects the worsening of an already existing problem, as highlighted in a 2013 report by the Bank of Italy, which built upon earlier research by Piketty [69](Acciari P. and Mocetti S., 2013). The report found that the Gini index was 3% higher in the Center-North compared to the national average, with even greater inequality in the South due to uneven income distribution. The following table presents these findings, comparing the Gini index at both

[9] Acciari, P. and Sauro Mocetti (2013). *Una Mappa Della Disuguaglianza Del Reddito in Italia*. Banca d’Italia.

international and regional levels for 2008. The Gini index is a fundamental measure of inequality, expressed on a scale from 0, representing perfect equality, to 1, where a single individual owns all wealth.

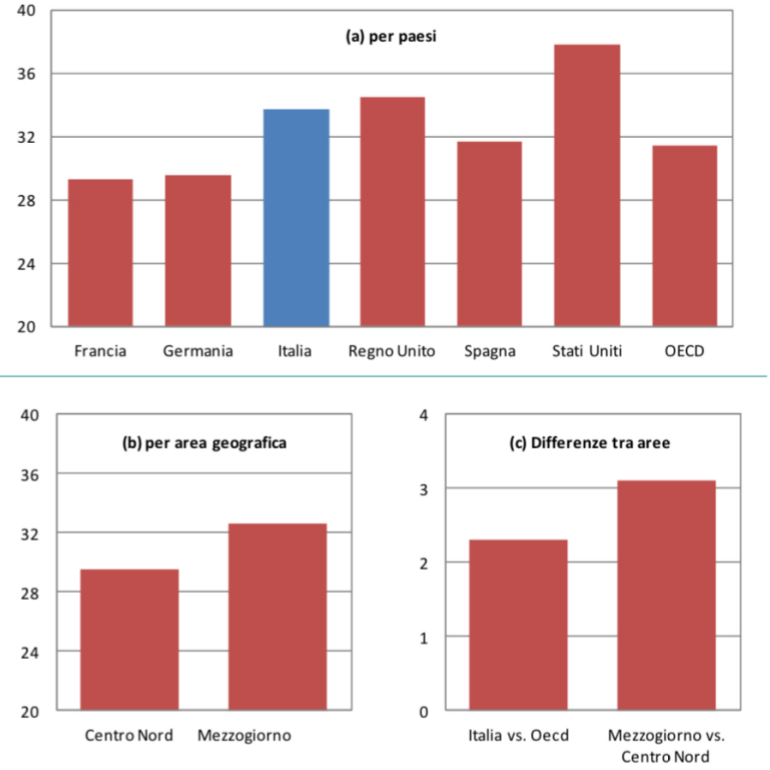



***Figure 3*** *The Gini index is expressed in percentage values. The data for international comparison are from OECD (2011); the data for Central-North and the South are from Banca d'Italia (2012). The reference year is 2008. The data for Italy are always from IBF. Panel (c) shows the differences in percentage points between the Gini indices.*

Our objective is to explore how different variables are impacted by the disparity between returns on capital and the real growth rate of the Italian economy. By analyzing these dynamics, we aim to understand how this gap influences economic conditions across different regions, identifying patterns and regional disparities that may contribute to broader socio-economic inequalities.

## 2.2.2 The variables

To assess the correlation between inequality and the imbalance between returns on capital and economic growth in Italy, it is essential to define these variables statistically. We denote the rate of return on capital, or real interest, as *r*, and the economic growth rate as *g*.

Economic growth is measured by changes in GDP. For this analysis, we specifically examine the variation in regional Gross Domestic Product over a ten-year period, spanning from 2002 to 2022.

$$g = \frac{Yt - Yt - 1}{Yt - 1}$$

Estimating *r* (return on investment) is a more complex process and requires adjusting the parameters proposed by *C. Goés* as necessary. This variable, net of real GDP growth, is calculated using a combination of the rate of return on Italian Treasury bonds, the Regional Tax on Productive Activities (IRAP), and changes in the GDP deflator for each Italian region. The methodology is outlined below.

$$ri; t = [(1 - \tau i; t) i \; i; t - di; t)]$$

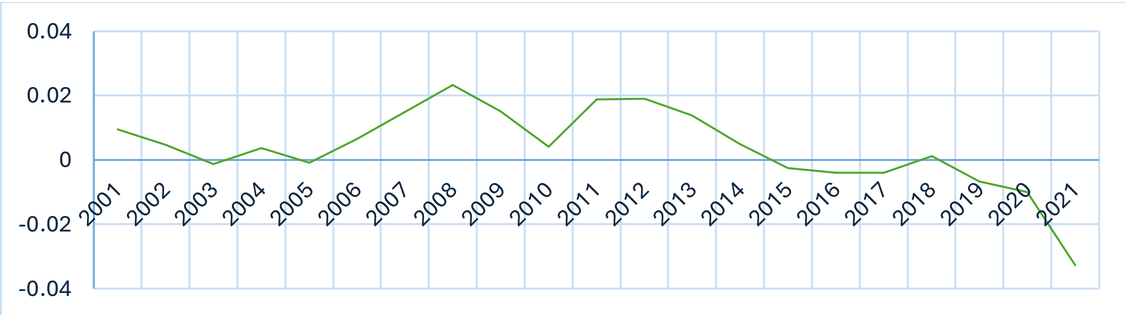
Where *ii,t* represents the return on capital, *τi,t* denotes the value of IRAP, calculated based on the ordinary rate, which varies according to specific legislative parameters, and *di,t* corresponds to the change in the GDP deflator at the regional level. The data series are sourced from the Ministry of Economy and Finance (MEF) databases, except for the GDP time series, which is obtained from the ISTAT database.

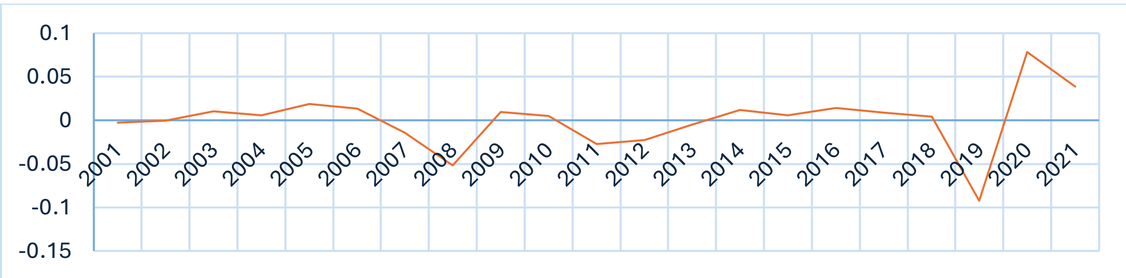
Nominal interest is average of the annual yield of all government securities (BTP, BOT, CTZ, etc.).[10]

### 2.2.2 Descriptive statistics of *r* and *g*

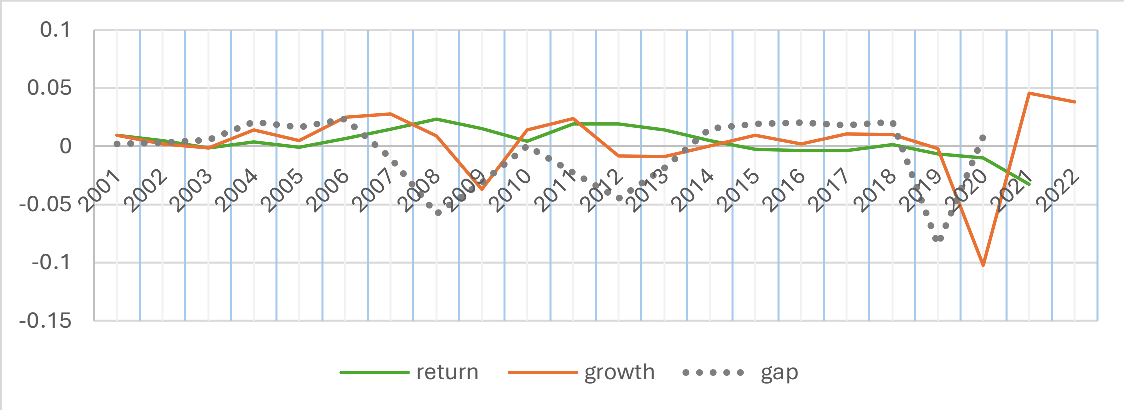
Working with multiple datasets requires strong organizational skills. After gathering the data relevant to the research question, they were merged into a single database using STATA commands. The first step involved computing *r* and *g* as the primary variables, applying the formulas outlined in section 2.2.1. This process enabled the generation of the graphs below, which illustrate the average values of *r* and *g* over the 20-year period from 2001 to 2021.

The values of *r* reflect the inflation-adjusted real interest rate at time *t+1*, effectively serving as a projection at time *t* for the following year.




Góes, C. (2016). Testing Piketty's Hypothesis on the Drivers of Income Inequality. International Monetary Fund.
[10]https://www.dt.mef.gov.it/it/debito_pubblico/dati_statistici/principali_tassi_di_interesse/archivio_tassi_interesse/https://www1.finanze.gov.it/finanze2/dipartimentopolitichefiscali/fiscalitalocale/aliquoteirap/sceltaregione.htm




| Region | mean(r_g_gap) | mean(return) | mean(growth) |
|---|---|---|---|
| Abruzzo | -0.0,061203 | 0,0042649 | -0,0017066 |
| Basilicata | -0,0026935 | 0,0038256 | 0,002269 |
| Calabria | -0,0098447 | 0,0022474 | -0,0057469 |
| Campania | -0,0080884 | 0,0033561 | -0,0026423 |
| Emilia-Romagna | 0,000401 | 0,0049378 | 0,0064434 |
| Friuli-Venezia Giulia | -0,0040852 | 0,0037619 | 0,0015068 |
| Lazio | -0,0045702 | 0,0050685 | 0,0019979 |
| Liguria | -0,0077538 | 0,0011947 | -0,0040156 |
| Lombardia | 0,0013049 | 0,0053576 | 0,0073263 |
| Marche | -0,0049492 | 0,0048453 | 0,0012981 |
| Molise | -0,0113779 | 0,0033503 | -0,0061368 |
| Piemonte | -0,0057476 | 0,0051833 | 0,000558 |
| Puglia | -0,0066133 | 0,0038547 | -0,0003712 |
| Sardegna | -0,0054307 | 0,0032368 | -0,0010308 |

| | | | |
|---|---|---|---|
| Sicilia | -0,0089219 | 0,0030386 | -0,0044312 |
| Toscana | -0,003507 | 0,0042826 | 0,0032964 |
| Trentino Alto Adige / Südtirol | 0,0045533 | 0,0032362 | 0,0102427 |
| Umbria | -0,0084455 | 0,0033213 | -0,0047752 |
| Valle d'Aosta / Vallée d'Aosté | -0,0057791 | 0,0011798 | -0,001861 |
| Veneto | -0,0019131 | 0,0049144 | 0,0049682 |

At the regional level, Trentino-Alto Adige/Südtirol exhibits strong economic growth, with an average gap of 0.0045533, indicating low inequality, and a *g* value of 0.0102427. In contrast, Molise records the lowest values for these two variables, with a mean *g* of -0.0061368 and a *g*-*r* gap of -0.0113779. The highest real interest rate (*r*) is observed in Lombardy, at 0.0053576, while Liguria registers the lowest value, averaging 0.0011947.

A more pronounced social divide characterizes the southern regions, particularly Abruzzo, Basilicata, and Campania, whereas equality is observed in only three regions—Emilia-Romagna, Lombardy, and Trentino-Alto Adige/Südtirol. Overall, economic growth remains low, reflecting the lingering effects of post-2008 stagnation and the subsequent pandemic shock. The presence of high *r* values in certain northern regions, such as Lombardy and Piedmont, suggests that despite visible economic prosperity, wealth remains concentrated among a small segment of the population.

# Conclusions

This study has examined inequality in the 21st century through both theoretical and empirical lenses, with a particular focus on Italy. Drawing on foundational economic theories, empirical data, and the influential work of Thomas Piketty, it has analyzed the structural mechanisms that drive wealth concentration and social disparities. The findings highlight that inequality is not an accidental byproduct of economic development but an inherent feature of contemporary capitalist systems, shaped by the imbalance between the rate of return on capital ($r$) and the real economic growth rate ($g$). The analysis began by outlining the theoretical underpinnings of inequality, tracing perspectives from classical economic thought to modern frameworks. John Rawls' theory of justice and Robert Nozick's libertarian critique were explored, highlighting the fundamental philosophical debates over distributive justice and the legitimacy of wealth disparities. Rawls' argument that inequalities should only be tolerated if they benefit the least advantaged stands in contrast to Nozick's belief in the sanctity of property rights and voluntary transactions. Similarly, Ronald Dworkin's "envy-free" allocation model underscored the challenges of achieving an equitable distribution in practice. Building upon these philosophical debates, the study engaged with the empirical work of Thomas Piketty, whose research provides a robust framework for understanding modern inequality. Piketty's two fundamental laws of capitalism suggest that when $r > g$, wealth accumulates faster than the economy grows, leading to rising inequality. This mechanism, observed throughout history, challenges the traditional notion that market forces alone can correct extreme disparities. The study also examined complementary perspectives from scholars such as Stiglitz, Milanovic, and Saez, who emphasize the role of government policy, taxation, and globalization in shaping income and wealth distribution.

The empirical analysis of Italy provides a striking case study of how inequality manifests within a developed economy. As the study has demonstrated, Italy ranks among the most unequal countries in the OECD, with wealth increasingly concentrated among the top 1% of earners. The disparities have been further exacerbated by external economic shocks, including the 2008 financial crisis and the COVID-19 pandemic, both of which disproportionately affected lower-income groups and regions with weaker economic structures. A key finding of this research is the regional divergence in economic outcomes. The gap between $r$ and $g$ is not uniform across the country, with regions like Trentino-Alto Adige/Südtirol experiencing relatively balanced growth and low inequality, while Molise records the highest levels of economic stagnation and social disparity. The data indicate that northern regions, particularly Lombardy and Piedmont, maintain high $r$ values, reflecting strong capital returns but also reinforcing wealth concentration within a small segment of the population. Conversely, southern regions like Campania, Basilicata, and Abruzzo continue to experience economic stagnation and rising inequality. The persistence of these regional disparities suggests that structural factors—such as historical investment patterns, labor market rigidities, and variations in local taxation (e.g., IRAP)—play a crucial role in shaping economic outcomes. The empirical results align with Piketty's broader argument that inequality is a systemic issue rather than a temporary deviation, requiring deliberate policy interventions rather than reliance on market corrections.

One of the central questions posed in this paper is whether inequality is an unavoidable consequence of capitalism or whether it can be meaningfully addressed through policy. The findings suggest that while market forces naturally favor capital accumulation, targeted policy measures can mitigate their most extreme effects. Several policy avenues emerge from this analysis. Progressive taxation and wealth redistribution, historically effective in reducing inequality, could be reintroduced to counterbalance the excessive accumulation of wealth at the top. Investment in human capital and regional development would be crucial to addressing economic disparities, particularly in Italy's southern regions, where stagnation remains a persistent issue. Regulating capital and financial markets, particularly speculative investment practices, could also serve to rebalance wealth distribution, ensuring that capital is allocated toward productive economic activities rather than concentrated within financial elites. Additionally, reinforcing social safety nets and implementing labor market reforms could help ensure that economic growth benefits a broader portion of the population rather than exacerbating existing disparities.

Inequality remains one of the defining challenges of modern capitalism. As this study has demonstrated, the mechanisms that drive inequality are deeply embedded in economic structures, requiring concerted efforts to address their root causes. While some degree of inequality may be inevitable in market economies, its extreme manifestations threaten social cohesion, economic stability, and democratic governance. The case of Italy illustrates how inequality can be both a national and regional issue, shaped by historical economic trajectories, financial policies, and government intervention. The persistence of stark regional divides, coupled with the growing concentration of wealth among the top 1%, suggests that without deliberate policy action, inequality will continue to rise. Future research should further investigate the effectiveness of policy interventions, particularly in addressing regional disparities and improving wealth distribution. Additionally, comparative studies across different economic models could provide insights into which policies have proven most effective in mitigating inequality.

In sum, inequality is not merely a statistical measure but a reflection of broader societal dynamics. Whether capitalism can adapt to create a more inclusive economic model or whether it will continue along a trajectory of deepening wealth concentration remains an open question—one that will shape the future of economic policy and social justice in the decades to come.

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