

CHAPTER 17

REDUCING INCOME INEQUALITY IN TÜRKİYE: WHAT HAS CHANGED AND WHAT CAN BE DONE?

Betül MUTLUGÜN¹

¹Res. Asst. Dr., Istanbul University, Faculty of Economics, Department of Economics, İstanbul, Türkiye
E-mail: betul.mutlugun@istanbul.edu.tr ORCID: 0000-0003-3052-5628

DOI: 10.26650/B/SS10.2024.013.017

Abstract

Growing inequalities across the globe since the 1980s have preoccupied the policy agenda of intergovernmental development organizations. The Millennium Development Goals launched in 2000 focused on eradicating poverty by 2015 as their primary goal. Still, all measures of income distribution present the same picture: the falling share of wages in gross domestic product cointegrates with the rise in overall income inequality and the top 1 percent income share. As this challenge has become a universal issue, working towards a more equal distribution of incomes is now part of the United Nations' Sustainable Development Goals. This chapter combines the personal and functional distribution of income approaches to understand Türkiye's income inequality. To reach this aim, the study focuses on the share of wages and personal income inequality to show how a rising return to capital relative to wage incomes can surge top income shares. Using a range of data sources from 1970 to 2022, the study conducts a retrospective analysis to evaluate Türkiye's performance concerning indicators linked to the Sustainable Development Goals. On this basis, the chapter identifies the potential of Sustainable Development Goal Target 10 for reversing income inequalities in Türkiye. It formulates several policy reforms and institutional arrangements to reduce inequalities and flags policy areas that might conflict with tackling widening economic inequality targets.

Keywords: Income inequality, wage share, redistribution, Türkiye, sustainable development goals

1. Introduction

Inequality has a multifaceted nature and is a blend of social, political, and economic factors. Different dimensions of inequality are associated with many spheres of human life, such as health status and well-being, educational attainment, capability, employment, crime and violence, and access to food and clean water. As inequality can take many forms, a high level of inequality is an indicator of many basic problems within societies (Wilkinson & Pickett, 2010). Also, the costs of inequality can be mitigated by improvements in the above-mentioned factors. This dynamic process makes inequality endogenous, i.e., it is determined from within the economic, social, and political systems. Hence, reducing inequality matters, given its complex nature and its correlation with numerous key indicators.

Studies on inequality have begun to increase gradually since the 2000s. From a policy perspective, the distributional objectives have been officially adopted in the past 20 years at a global level, starting with the Millennium Development Goals (MDGs). MDGs specifically focus on the eradication of poverty by halving the proportion of people whose income was less than \$1 a day between 1990 and 2015. The national policy targets, on the other hand, varied across countries. Yet, no ambitious agenda was set to fight inequality among developed and developing economies in the same period. Recognizing that there is still room for undoing global inequalities, Sustainable Development Goals (SDGs) Target 10 as part of a global agenda to transform society by the United Nations (UN), which was established in 2015, commits countries to ‘reduce inequalities within and among countries’.

Before starting the analysis, it is crucial to define and frame the concept of inequality. As one of the critical fields in economics, economic inequality refers to an unequal distribution of resources, income, or opportunity among individuals, households, or social groups. Roemer’s (1998, 2002) pervasive formalization of the concept of inequality of opportunity disentangles inequalities by “circumstances” in which individuals cannot be deemed responsible, and efforts, in which individuals should be deemed responsible. *Equality of opportunity* can be attained when circumstances do not exert any influence on the eventual outcome. This requires all individuals to encounter the same opportunity set. For this reason, it is an ex-ante concept. The ex-post approach, on the other hand, aims for *equality of outcomes* among individuals who have applied an equivalent level of effort, irrespective of their circumstances (Roemer, 1998). As evident from the target title, SDG 10 focuses on both types of inequalities. These inequalities refer to both inequality of opportunity (such as inequalities based on age, sex, disability, race, ethnicity, origin, and religion) and inequality of outcomes (such as monetary inequalities). Based on this distinction, this chapter limits its attention to equality of outcomes

and focuses on monetary inequalities, rather than equality of opportunity. Monetary inequality signifies currency-valued magnitudes associated with the economic activity of an individual or a household (Atkinson & Bourguignon, 2014, p. xxi). Income distribution will be the focus within the context of these economic activities.

The analysis of economic inequality can be categorized into two distinct aspects: the *functional* distribution of incomes and the *size* distribution of incomes. The former takes a macro approach by focusing on the distribution of income between the main factors of production. The latter, on the other hand, is concerned with the distribution of income among individuals or households and focuses on the micro perspective. Income distribution analyses ultimately focus on the individual distribution of economic welfare. Nonetheless, similar underlying factors might influence both functional and personal income distributions. This chapter posits that functional income distribution is the crux of economic inequality, as the distribution of income among wages and profits impacts personal income distribution.

A first glimpse of the evidence suggests that there has been an upsurge in income inequality within countries since the 1980s (see, e.g., Atkinson, 2015; Piketty & Saez, 2014). This increase was accompanied by a significant decline in the share of wages in GDP worldwide. According to the World Inequality Report (2022), the richest 10% of the global population takes 52% of global income, while the poorest half of the population earns only 8.5% of the total global income. According to the same report, in Türkiye, these ratios are 54.5% and 12%, respectively. There is also a marked deterioration of the share of wages in GDP following the 1980s in Türkiye, along with other developing and developed countries (see Figures 2 and 3). These initial observations lead us to focus on how rising income inequality in recent decades may be related to an increase in the share of income held by the top earners in addition to a falling wage share.

There is a common set of driving forces for the divergence of the top incomes and a falling share of wages. The decline in the wage share can be linked to technological advancements, trade globalization, financialization, and declining labor bargaining power (ILO, 2012). These factors lead to uneven growth that affects different segments of the population disproportionately. While reducing welfare benefits hurts low-income groups more, technological change impacts unskilled workers (Giovanni et al., 2014). International trade generates domestic winners and losers. Financialization, on the other hand, might have played a more substantial role than ever before by strengthening the relative position of the rich, as the rich own most financial assets. The resulting income gap between these groups has widened recently, giving rise to increased personal income inequality. Thus, understanding the distribution of functional income is also important to assess personal income inequality.

Although Türkiye is among the fastest-growing OECD economies, challenges remain in terms of reducing inequalities. Data on monetary inequalities has not shown any improvement for more than a decade. There is an 8-fold difference between the share of income held by the bottom and the top 20 percent: in 2020, the share of the bottom 20 percent of the total disposable income was 6.1%, while the income share of the top 20 percent was 47% (Turkish Statistical Institute, 2022). This observation becomes obvious when checking Türkiye's distance from achieving SDG targets based on data availability (OECD, 2022). The most unsatisfactory progress has been recorded for the targets of reduced inequalities (SDG 10), poverty reduction (SDG 1), and human capital (SDG 4). The endogeneity of these goals points out an uneven distribution of growth benefits among society and the failure of pro-poor growth through low educational outcomes, lower average earnings of employees than the national median, continuing high multi-dimensional poverty, high income inequality, and limited redistribution policies. The inadequate performance of Türkiye in reducing income inequalities since the end of the 2000s requires a leap to meet Target 10 by 2030.

Against this backdrop, this chapter aims to explore the economic dimension of inequality by focusing on both personal and functional income distribution. To reach this aim, we report the progress of Türkiye in implementing SDG 10, the potential of it to reverse income inequalities and discuss the road ahead in 2030 for building a more inclusive society. When linking the falling labor share to a growing gap between top and bottom incomes, we will direct our attention toward SDG targets 10.1 and 10.4. Because the data on these targets serve as proxies for monetary inequalities in assessing the performance of Türkiye.

The present chapter proceeds in four steps. Section 2 examines the factors behind why within-country inequality has become a global sustainable development concern, and its subsequent designation as a distinct SDG target. Türkiye's development policy on SDG 10 is also evaluated in this section. Section 3 surveys expanding literature on the determinants of the declining share of labor, and its link with personal income distribution. The main empirical facts about income distribution in Türkiye are summarized in Section 4. In the last section, we look at future policy prospects in Türkiye. The last section concludes.

2. A Transformative Agenda for Reduced Inequalities? The Implementation of SDG 10 in Türkiye

Research on the disparities between developed and developing countries has revealed that from 1820 to 1950, a noticeable divergence in per capita income occurred between these two groups. However, since the 1950s, and notably in the 1990s, there has been evidence of con-

vergence at the global level in terms of purchasing power parity (PPP) (Bourguignon, 2015; Milanovic & Milanovic, 2010; Stiglitz, 2012). Much of this catch-up occurred between the 1950s and 1970s. The developing world has cut its distance from the most developed countries by a quarter from a centennial perspective (Paprotny, 2021). The process of global convergence was mostly due to Asian countries, especially China and India, and subsequently to Latin American countries. Conversely, the contributions of Africa and Oceania to the overall global convergence have been comparatively limited. However, a pivotal inquiry arises as to the potential sustainability of this convergence in the wake of new issues such as the environment and exhaustible resources. Therefore, global economic development requires a set of shared regulations arising from the significant challenges to promote inclusive growth. Notably, the 2030 Agenda for Sustainable Development was established as the first comprehensive framework for all nations worldwide. Its principal objective is to combat poverty while also fostering the attainment of 17 sustainable objectives across all facets of human life by 2030.

The United Nations SDG 10 mandates the “*reduce inequality within and among countries*”, underscoring the global imperative to address this concern (United Nations, 2018). This goal calls on countries to commit to progress on 10 sub-targets, where each of them identifies various dimensions of inequality. First, SDG 10 focuses on both inter-country and intra-country inequalities¹. Second, it concentrates on both *horizontal inequalities* (corresponding to the distribution of income among different categories of people such as gender, ethnicity, location, religion, etc.) and *vertical inequalities* (corresponding to the distribution of income among individuals and households within a nation).

In the context of reduced inequality *within* countries (i.e., intra-country inequalities), three national challenges are mentioned:

- i. Targets 10.1 and 10.4 focus on progressively reducing *income* inequalities *within* a country and stress the distribution of income and earnings and its links with macroeconomics.
- ii. From the perspective of the Leave No One Behind (LNOB) principle, targets 10.2 and 10.3 focuses on reducing inequalities of *outcome* by ensuring access to equal opportunities and promoting social, economic, and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, religion, or other status relevant within society.
- iii. Connected with the previous group, target 10.7 aims to solve the new form of inequality based on the migration and mobility of people.

1 Inter-country inequality refers to variations in inequalities among different countries, whereas intra-country inequality pertains to inequalities within a specific country.

SDG 10 also promotes reduced inequality *among* countries (i.e., inter-country inequalities) based on the convergence-divergence debate. In this context, it aims to enhance the representation of developing countries in decision-making in global international economic and financial institutions in targets 10.5, 10.6, and 10. a, 10. b, and 10. c.

SDG 10 recognizes the rising inequality within and among nations as an impediment to achieving inclusive development. However, the implementation of SDG 10 presents three potential challenges: (1) the ambiguous conceptualization of the targets due to a lack of specific guidance as to how to reduce inequalities, and the inadequate criteria to measure progress, (2) the absence of requisite data to estimate necessary measures for attaining the targets. Specifically, data for targets 10.1, 10.2, 10.4, and 10. a, 10. b and 10. c can be easily accessed, while data related to targets on reducing inequalities of outcome is more challenging, and (3) the omission of wealth inequality from the targets, which is intricately linked with income and earning inequalities. Consequently, the complexity of the targets renders the official progress reporting by the United Nations on SDG 10 a formidable undertaking.

The activities to support the adoption of Agenda 2030 by Türkiye started quite early. Türkiye was among the first 22 Voluntary National Review Reporter countries in 2016. The implementation of the agenda has been initiated through the integration of SDGs with National Development Plans (NDPs) and sectoral strategies. Sustainable Development Coordination Commission (SDCC) is coordinated by the Ministry of Development of Türkiye, and SDGs have become a shared responsibility of all ministries. So, SDGs entered into various strategy and policy documents at both central and local levels, according to the VNR report (United Nations, 2019). The Ministry of Development is actively collaborating with a wide range of stakeholders, which includes academia, practitioners, and local administrations, to facilitate the exchange of knowledge and best practices under the name of the Stocktaking Analysis Project. It was identified that projects related to SDG 10 are more beneficial for localizing SDGs. Union of Municipalities of Türkiye (UMT) is responsible for coordinating and informing the institutions under its responsibility to provide their input and submit their practices to the system to achieve SDG 10 by operationalizing the National Database for Best Practices and Projects. Also, institutional responsibility for SDG 10 belongs to the Human Rights and Equality Institution of Türkiye.

In 2022, UN Türkiye dedicated 7.4% of the total \$347 million available resources to contribute to SDG 10 (*Sustainable Development Goals | United Nations in Türkiye*, n.d.). The recent 10th Development Plan mentions that the program gives special attention to tackling horizontal inequalities. It aims to formulate appropriate redistributive policies such as reduc-

ing the heavy burden of taxes and increasing the opportunities of social transfers to achieve easier access to opportunities. However, the ratio of produced indicators by TurkStat is not sufficient to assess the SDG 10 targets. According to the distribution of indicators by SDGs, only 40% of SDG 10 indicators are available for Türkiye. Stocktaking Analysis Projects' compliance level map which ranks the state of consistency of the stakeholders' inputs with SDGs indicates that in terms of policy and strategy, legislation, and institutional framework, at least half of the targets have already been achieved, while in terms of project inventory and implementation, less than half of the targets have been attained.

The mutual interaction among the SDG targets highlights the necessity of a holistic approach when implementing policies to attain the goals. From the theoretical perspective, as Atkinson (2000, p.4) mentioned, "income distribution assists our understanding of various fields of economics", and "...the study of economic inequality should be at the heart of economic analysis" (Atkinson & Bourguignon, 2014, p. xviii). The map of interaction between SDGs prepared by the Türkiye VNR report in 2019 states that SDG 1 and SDG 10 are strongly impacted by SDG 4, 8, 9, and 13, and have an indirect impact on other targets. The endogeneity of these goals points out an uneven distribution of growth benefits among society and the failure of pro-poor growth through low educational outcomes, lower average earnings of employees than the national median, continuing high multi-dimensional poverty, high-income inequality, and limited redistribution policies. The key target for income inequality is SDG 10.1, 'progressively achieve and sustain income growth of the bottom 40 percent of the population at a rate higher than the national average'. However, this target fails to adequately tackle the problem of vertical inequality: the gap between the richest and the poorest is at the core of monetary inequalities. This gap can still widen even if the bottom 40 percent records higher income growth compared to the national average.

Another challenge is the insufficiency of disaggregated data, which hampers the monitoring process, crafting of policies for tackling inequalities, and evaluation of policy implementations. For Türkiye, what is needed to achieve SDG 10 is to improve the capability for data-driven analysis and ease the process of integrating verified data by UN agencies into the UN SDG database. Specifically, targets 10.2-10.4, which represent horizontal inequalities, suffer more from the lack of appropriate indicators and the absence of concrete benchmarks. For example, SDG 10.2 aims to "2030, empower and promote the social, economic, and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status". The indicator to measure progress towards this goal is given as "Proportion of people living below 50 percent of median income, by sex, age, and persons with disabilities".

In Türkiye, the assessment of SDG 10 is undertaken through three focus areas: (i) strengthening economic and social equality, (ii) addressing global mobility, and (iii) collaborating with international economic and financial institutions (United Nations, 2019, p. 95). Through cumulative efforts, some progress has been observed at the national level regarding the selected indicators under SDG 10 in Türkiye. According to the SILC 2022 report prepared by TurkStat, the Gini coefficient² decreased from 0.428 in 2006 to 0.415 in 2021. VNR Report for Türkiye (2019, p.95) states that the target is set to further reduce it to 0.36 by 2023. The share of the richest 20% in 2002 was approximately 9.6 times higher than the share of the poorest 20%. This ratio decreased to 7.9 in 2021. In the past 20 years, Türkiye has made significant progress in reducing poverty. The poverty gap, calculated based on 60% of the median income and measuring the distance to the poverty line, decreased from 33.6% in 2006 to 25.6% in 2022. The severe material deprivation rate decreased from 60.4% in 2006 to 28.4% during the same period (Turkish Statistical Institute, 2023). Also, the report claims that wage earners' income increased through significant social protection expenses from 2000 to 2018.

Table 1. Türkiye distances to SDG 10 and recent trends

SDG global target	Distance to target	Trend Assessment	OECD Average distance	OECD Trend Assessment
10.1 By 2030, progressively achieve and sustain income growth of the bottom 40% of the population at a rate higher than the national average	1.72	n.a.	1.23	No progress or moving away from the SDG target
10.2 By 2030, empower and promote the social, economic, and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion, or economic or other status	2.41	Progress has been made, but is insufficient to meet the target	1.54	No progress or moving away from the SDG target
10.3 Ensure equal opportunity and reduce inequalities of outcome, including by eliminating discriminatory laws, policies, and practices and promoting appropriate legislation, policies, and action in this regard	1.79	No progress or moving away from the SDG target	1.27	Progress has been made, but is insufficient to meet the target

2 Gini coefficient measures inequality on a scale of 0 to 1, with higher values indicating greater inequality. Alternatively, it can be expressed as a percentage ranging from 0 to 100%, referred to as the Gini Index.

Table 1. Continued				
10.4 Adopt policies, especially fiscal, wage, and social protection policies, and progressively achieve greater equality	2.94	Progress has been made, but is insufficient to meet the target	1.12	No progress or moving away from the SDG target
Performance of Türkiye on indicators for SDG 10	Current value	Assessment	National target value for 2030	
Gini coefficient	0.415 (2021)	Major challenges remain.	0.36 (According to the VNR for Türkiye, United Nations, 2019). 0.275 (Not a national target, this value is the average of best performers according to Sachs et al., 2022).	
Palma ratio	2.01 (2021)	Major challenges remain.	0.9 (Not a national target, this value is the average of best performers according to Sachs et al., 2022).	
Source: OECD, 2022. Data is from UN DESA (2021), SDG Global Database, and OECD (2021)				
Notes: Values in the distance to target and OECD average distance columns show that a target is classified as a challenge when the distance from the target exceeds 1.5 standard units (s.u.), signifying a substantial deviation. Or when the country's position concerning the target surpasses that of the average observed across the OECD.				

These funds were allocated particularly through wage subsidies and incentives targeting women, young people, and minimum wage earners. However, adjusted wage share data from the AMECO database (European Commission, 2022) points out otherwise. The share of wages in GDP experienced a significant decline, dropping from 61.4% in 2000 to 40.6% in 2021, reaching its lowest ebb since 1988.

The primary challenge for Türkiye remains to be the unequal distribution of the benefits of economic growth. Inefficient redistributive policies hinder the achievement of Target 10.4, leading to profit-led growth (Target 10.1), and high poverty rates (Target 10.2). The report also indicates that 35% of the Turkish population believes that the country is not a suitable place for ethnic and racial minorities to reside (Target 10.3) (OECD, 2022). Table 1 presents Türkiye's progress toward targets for SDG 10. According to Table 1, all the sub-targets of SDG 10 shown in the first column are a challenge for Türkiye, as the distance to the target value in the second column is higher than 1.5. Moreover, Türkiye is further away from all the targets than those of OECD averages, especially for target 10.4. The data provided above and in the next section also confirm the findings of the table. OECD's (2022) country report shows that the current pace of progress for targets 10.2 and 10.4 is insufficient to meet the target by 2030. Besides, recent changes in target 10.3 have been stagnating or moving them further away from the target.

UN DESA (2021) SDG Global Database indicates that for SDG 10.1, the proportion of

people living below 50 percent of median income increased from 16.8% in 1994 to 17.3% in 2019, while for SDG 10.4, the share of GDP from labor, including wages and social protection transfers, exhibited a slight increase from 33.7% to 35.7% between 2004 and 2020. Taken together, Türkiye is committed to addressing economic and social inequalities and demonstrates efforts to promote a more equitable distribution of income and wealth within the country. However further policies are needed to enhance income distribution. Türkiye faces many challenges in progressing SDG 10 targets, especially in the last few years.

Recognizing the insufficient progress of Türkiye to achieve SDG 10 goals by 2030, we explore the links between functional and personal income distribution by using data on SDG targets 10.1 and 10.4. Thus, the study uses income distribution measured at both the individual/household level and the factor shares as its entry point into the analysis of inequality. We turn in the next section to justify this particular emphasis by relying on the literature that has investigated trends in labor share and rising disparities at the individual level. This approach allows us to question whether the recent decline in labor share offers a rethink of the inequality concept.

3. Equitable Growth: Factor Shares and Personal Income Distribution

Until the second half of the 20th century, the relative constancy of factor incomes was conceptualized as a “stylized fact” (Kaldor, 1961) and formulated as Bowley’s Law. After years of empirical observation of the relatively stable wage share, its visible decline starting in the 1980s marked a notable shift. The period of a fall in profit share observed between 1973 and 1979 was reversed from the 1980s onward, leading to profit recoveries in both the OECD and many European countries. In Germany, the United Kingdom, and Austria, a decrease of approximately 12% in wage share has been witnessed from the 1980s to the present day. In Japan, a similar trend led to a decline of around 15%. This comparable pattern is also observed in Türkiye, Mexico, and Korea, where a pronounced and consistent reduction in wage share is evident (European Commission, 2022).

Simultaneously, data indicates that income inequality has risen in numerous countries in recent years. For example, according to the World Inequality Report (2022), on average, a person within the top 10% of the global income distribution earns \$122,100 annually, while a person from the bottom half of the global income distribution earns \$3,920 per year. It is natural to conjecture that both facts, i.e., the rise in income inequality and the decrease in labor share are linked. Nonetheless, this relationship has been subject to limited investigation thus far.

At first glance, the connection between falling labor share and growing income inequality might appear evident. Personal income distribution depends on the distribution of labor and capital endowments. If the distribution of capital is more unequal than that of labor, a decrease

in the labor share would increase personal income inequality (Björklund & Jäntti, 1997; Daudy & Garcia-Penalosa, 2007; Wolff & Zacharias, 2007)2007. However, the two processes are also influenced by additional factors, such as the impact of social transfers and taxes, which may exert opposing effects. For example, from 2000 to 2015, inequality has risen (declined) even as labor share has risen (declined) in some countries, including Russia, Mexico, and Brazil (International Labour Organization, 2015, p. 14). Moreover, wage dispersion also plays a crucial role in increasing income inequality. Executive pay constitutes part of labor compensation and is encompassed within the labor share. The share of labor income has decreased recently even as the income of rich workers, including CEOs, has risen significantly.

Consequently, the reduction in the labor share doesn't reveal but instead masks the majority of the considerable increase in inequality witnessed in recent decades. The documented drop in the labor share would be notably greater if the gains experienced by the top 1 percent in terms of payroll and self-employment income were considered (Elsby et al., 2013, p. 47). Accordingly, the relationship between labor share and income inequality is more intricate than it might initially appear. Nevertheless, the decline in labor share is closely linked with income inequality, especially in advanced economies where the wage disparities are larger. This is expected because the share of labor constitutes a greater proportion of overall income for individuals within the lower and middle-income brackets.

Equally significant as a justification point for this link between the two is that factor shares connect income to productive activity. First, the long-term trend towards a falling share of wages alongside a rising share of profits in Türkiye and worldwide indicates that wages and labor productivity growth have become disconnected. An equitable income distribution could be seen as one in which higher labor productivity corresponds to higher compensation for labor (Atkinson, 2009). Second, because the factors that lead to a fall in the share of labor produce biased growth, the whole population will be affected unequally. Therefore, both the functional and the personal income distribution are influenced by the same factors, and a change in one affects the other. To tackle the inequalities suggested by SDG 10, distributional changes in both approaches must be treated together.

Various explanations have been put forth to explain the fall in the share of labor in the literature. In this part of our study, we explore theoretical perspectives and the growing empirical literature concerning possible factors influencing the functional distribution of income. Four principal explanations stand out: technological change, economic liberalization, international trade, declining bargaining power of labor, and financialization (ILO, 2012; Elsby et al., 2013, Giovanni et al., 2014; Furceri & Loungani, 2015).

Previous research often highlighted technological change as a significant contributing factor, with the notion that these changes tended to be generally capital-augmenting rather than labor-augmenting (Karabarbounis & Neiman, 2014; Rognlie, 2015; Velazquez, 2023). In particular, the substitution rate between capital and labor has shown a consistent upward trend since the 1980s. This has led to an increased demand for capital and high-skilled labor, provided that high-skilled workers adopt new technologies and are complementary with equipment, thus showing high capital-skill complementarity (Maliar et al., 2022). This simultaneously reduced the demand for low-skilled workers. The transition from labor-augmenting to capital-augmenting technology was largely driven by significant advancements in information and communication technology (ICT). But, the increase in marginal productivity of labor has outpaced the increase in workers' compensation over the past five decades. For example, in the US, between 1948 and 1979, productivity grew by around 118.4%, while hourly wages for non-supervisory production workers expanded by about 107.5%. However, between 1973 and 2021, despite productivity growth of 64.6%, the hourly wage growth for the same group of workers was only 17.3% (Economic Policy Institute, 2022). In the case of Türkiye, average real wages in manufacturing increased by 120% between 1987 and 93 due to populist economic policies and increased activism among the labor unions. In the meantime, labor productivity increased, on average, by 14 % per year from 1988 to 1992. From 1993 to 2000, real wages increased by only 1.2% per year, whereas labor productivity growth was 0.1 % (Taymaz et al., 2021). From 2002–2012, labor productivity in the Turkish manufacturing industry rose sharply, while real wages continued to stagnate. Consequently, the slower expansion of labor income in comparison to overall income growth has contributed to the decline in the wage share. The decline in the relative cost of investment goods also led to the substitution of labor with capital, which in turn played a significant role in the reduction of the wage share.

Research reveals that globalization also tends to have adverse impacts on the labor share (Guscina, 2007; Harrison, 2005; Autor et al., 2013). Over the last four decades, there has been a significant increase in the trade volume between developed and developing countries. During the same period, there has also been a noticeable decrease in the labor share in developed countries. Both the comparative advantage model and the factor proportions model anticipate that firms tend to segment the production process across various countries. They relocate specific components to foreign nations that possess a comparative advantage in producing those particular parts. Accordingly, many developed economies have shifted the manufacturing of labor-intensive intermediate and final goods to countries with abundant labor and lower labor costs. This phenomenon is often referred to as offshoring. According to

Krugman (2008), developing countries mainly exported raw materials before the late 1970s. Since then, they have transitioned to being major exporters of manufactured goods and, more recently, selected services as well. Thus, wages in developed countries are likely to be suppressed when these countries engage in trade with developing nations that offer lower wages.

Increased capital mobility, openness, and globalization lead to a situation where labor becomes more substitutable, resulting in a reduction of labor's bargaining power (Rodrik, 1998). A significant shift in the institutional framework of the labor market of many developed and developing economies, including Türkiye has been the decrease in union membership. Thus, recent literature has discussed the effect of weakening labor market institutions and other related variables such as factors such as declining union density, minimum wage legislations, and lower unemployment benefits on the declining share of labor. Given that globalization is characterized by increased capital mobility relative to labor mobility, trade liberalization favors capital, decreases labor's ability to bargain, and results in a decline in the share of income (Stockhammer, 2013). This decline would likely be most pronounced in sectors experiencing the most significant drops in union coverage. For example, Kristal (2013) found that for the US, the reduction in the labor share of income was primarily concentrated in sectors that had previously exhibited higher levels of unionization.

Finally and most importantly, the globalization of financial markets and financialization have been introduced relatively recently into the discussion. First, non-financial corporations in developing economies have increasingly derived income from financial assets, held a growing share of financial assets relative to fixed capital in their portfolios, and transferred an ever-larger share of their earnings to financial markets in the forms of interest and dividend payments and stock buybacks over the last two decades. This was due to changes in corporate governance and the objectives of top management towards short-termism in firm decision-making and shareholder value maximization. A shift in the pattern of capital accumulation from the real to the financial sector through financial liberalization in developing countries was corroborated by the findings of several studies (Araújo et al., 2012; Correa et al., 2012; Demir, 2007). A transition to a more market-based financial system from the bank-based system, the increasing role of investment banks rather than development banks within the capital accumulation process, and the entry of foreign banks ensured the hegemony of financial capital. Second, the internationalization of production inevitably deepened the concentration of wealth and other financial instruments in ever fewer hands. This strengthened the position of capitalists and rentiers at the expense of the working class. While top executives might have gained from the financialization phenomenon by receiving compensation in the

form of pension funds and capital gains, for the typical worker, the available evidence suggests that the scope and magnitude of such benefits are notably restricted (ILO, 2012). This brought about the problem of a shortfall in aggregate demand due to a falling share of wages and capital in the form of money that cannot be used for productive investment.

Technology, trade, weakening labor market institutions, and financialization don't solely impact labor shares but also lead to larger inequalities. These factors disproportionately affect the relative positions of poor and low-skilled labor compared to high-skilled labor and capitalists. Thus, they result in uneven growth, affecting different segments of the population in varying ways. The empirical evidence supports this view. Daudey and García-Peñalosa (2007) found that a higher labor share is linked to lower inequality in 39 countries from 1970 to 1994. Adler and Schmid (2013) observed that declining labor income shares contributed to growing inequality in Germany from 2002 to 2008. Jacobson and Occhino (2012) suggest that lower labor share was associated with high inequality in the US until 2010. Dao et al. (2017) also found a negative correlation between labor share and the Gini coefficient in 49 countries for the period between 1991–2014. Sauer et al. (2020) identified that declining labor share is a key factor contributing to increased income inequality across 73 countries, mainly in advanced OECD countries, spanning 1981 to 2010. Erasuskin (2020) examined the connection between labor share and income inequality using the Gini coefficient and income shares for various quintiles across 62 developed and developing countries from 1990 to 2015. The analysis revealed a robust link between lower labor share and increased Gini coefficient.

4. Monetary Inequalities in Türkiye: Where Do We Stand?

As we have noted above, in the case of Türkiye, it is crucial to focus not only on the high overall inequality, as measured by indices like the Gini coefficient. Examining the disparities at the top and bottom ends of the income distribution and functional distribution of income comparatively becomes necessary, as they have a common set of drivers. Thus, in the retrospective analysis for Türkiye presented in this section, we focus on how rising inequality in recent decades has been accompanied by a falling wage share.

When examining the historical development of personal income inequalities, the Turkish economy had an even more skewed income distribution in the past.³ Studies conducted regarding income distribution between 1963 and 1994 are presented in Table 2, which presents

3 It should be noted that the first Income Distribution Survey was conducted by the Turkish Statistical Institute (TurkStat) in 2002. The income distribution surveys conducted before 2002 were carried out irregularly by different researchers and institutions. Therefore, the results of these studies are not directly comparable with the period after 2002 as these studies do not align methodologically.

the distribution of annual income by quintiles and the Gini coefficient. The income distribution in the Turkish economy up until the 1980s indicated substantial inequalities within the country. At the end of the 1980s, a slight improvement occurred in the personal distribution of income. However, the Gini coefficient was reported as 0.43 in 1987 and 0.49 in 1994. These results show a significant deterioration in income distribution in the Turkish economy between 1987 and 1994.

Table 2. Results of income distribution studies in Türkiye, 1963-1994.

	1963	1968	1973	1978	1983	1986	1987	1994
First quantile (P20)	4.5	3.0	3.5	2.9	2.7	3.9	5.2	4.9
Second quantile (P40)	8.5	7.0	8.0	7.4	7.0	8.4	9.6	8.6
Third quantile (P60)	11.5	10.0	12.5	13.0	12.6	12.6	14.1	12.6
Fourth quantile (P80)	18.5	20.0	19.5	22.12	21.9	19.2	21.2	19.0
Last quantile (P100)	57.0	60.0	56.5	54.7	55.8	55.9	49.9	54.9
Gini coefficient	0.55	0.56	0.51	0.51	0.52	0.50	0.43	0.49

Source: Gürsel et al. (2000).

While there was a tendency to decrease income inequality between 2002 and 2007, there was no significant progress in inequality measures during the period from 2007 to 2021. All indicators of income inequality point to a shift in the year 2007. Improvement in income distribution during the first period was largely influenced by a proportional decrease in the incomes of the richest income group at the upper end of the income distribution. According to the data obtained from The Household Budget Survey (HBS) between 2002 and 2005 and the Income and Living Conditions Survey (SILC) since 2006 by the Turkish Statistical Institute (TurkStat), inequality trends in Türkiye in the last 20 years show that there has been some improvement in income inequality and poverty rate. The median equivalised household disposable income in 2021 has increased fivefold compared to 2006, reaching from 6.328 TL to 28,069 TL. There is a 10-fold difference between the income share of the bottom 20% and the richest 20%, which received 5.2% and 50% of the total disposable income, respectively, in 2002. By 2021, this difference decreased to 7 times, and the bottom 20% and the richest 20% of income groups received 6.5 and 46.7% of the total disposable income, respectively (Figure 1). While the income of low-income groups has been growing at a faster rate than the top income groups and the median income, it is observed that the income levels of the 40th, 50th, 60th, and 70th percentiles, representing the middle-income segment, have not significantly changed compared to the lowest and highest income groups. The main change is attributed to the increase in income among the low-income group. Moreover, income inequality has remained relatively stable throughout the last decade, as depicted in Figure 1.

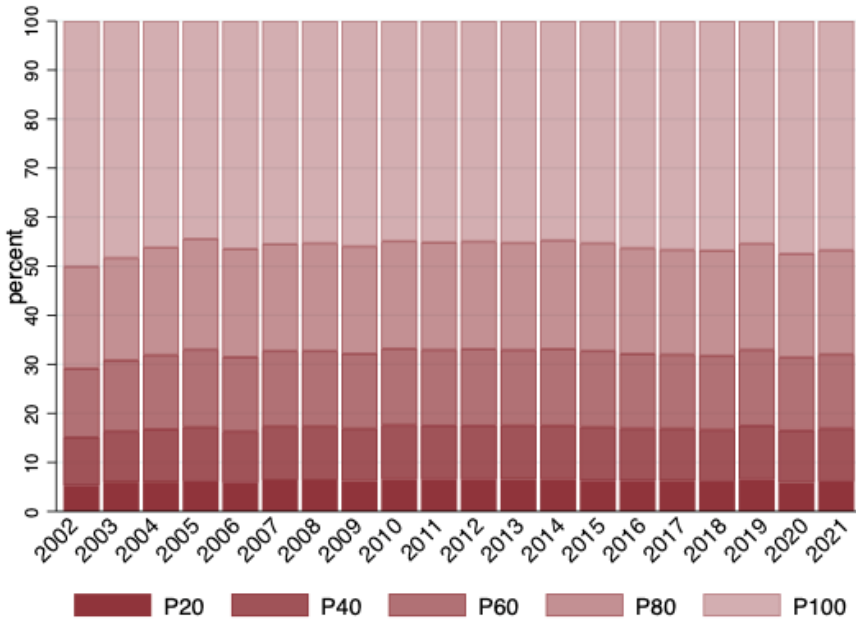


Figure 1. Distribution of annual equivalised household disposable income by quintiles ordered by equivalised household disposable income, 2002-2021.

Source: TurkStat (2022) Income and Living Conditions Survey (SILC).

Notes: The reference period of income is the previous calendar year.

SDG 10.1 dictates higher-than-average income growth for the bottom 40% of the population. Figure 5 compares the growth rate of annual equivalised household disposable income for the bottom 20% and 40% shares with that of the top 20% and the total annual equivalised household disposable income. We present data for both mean and median incomes, as income distribution is right-skewed, and using median data provides a more meaningful representation in this context. The growth rates of the mean bottom 20% and 40% shares have experienced slightly higher growth rates than the total income growth, except for the 2008-2010 and 2017-2021 periods. On the other hand, the growth rate of the share of the top 20% was higher-than-average growth during the Great financial crisis period until 2010, during the 2015-2018 period, and it has been on the rise since the last year. The growth rates of the percentiles based on median income tell a slightly different story. But the gist of what Figure 2 says is that the volatile and insufficient income growth for the bottom 40% challenges achieving SDG 10.1 by 2030. To record the desired achievement for the low-income groups, sustained and significantly higher growth rates for the bottom 40% must be attained.

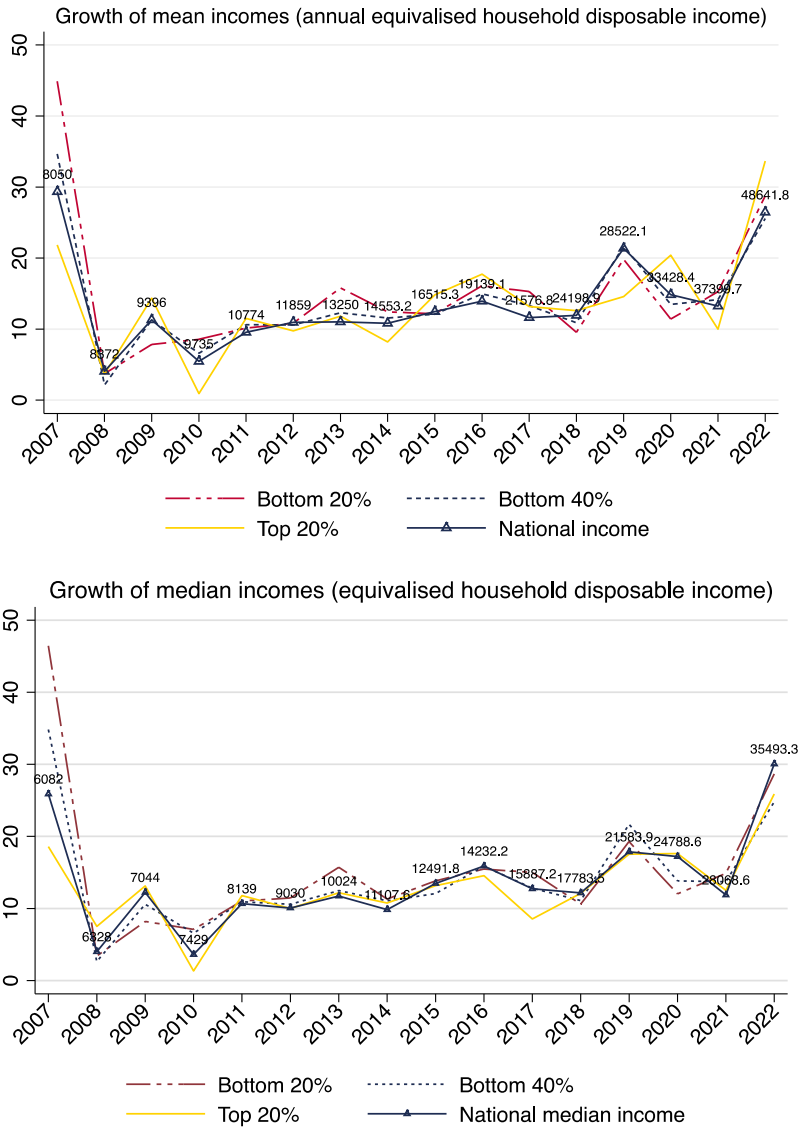


Figure 2. Growth of mean and median incomes of the Bottom 20%, 40%, and Top 20% compared to national income growth in Türkiye

Notes: National mean and median income as shown by the hollow triangle line plot indicates the growth rate in annual equivalised household disposable income, while data labels represent the total annual equivalised household disposable income in Turkish liras.

Sources: TurkStat (2022) Income and Living Conditions Survey (SILC).

Figure 3 reveals an asymmetrical pattern of economic benefits, where the poor have experienced some improvement while the rich continue to benefit disproportionately from

economic growth. Despite a decrease in inequality from 1980 to 2021, vertical inequalities persist and have not been sufficiently reduced over the years. In 1980, the top 10% of the population accounted for 60% of the national income, which decreased to 51.6% in 2021, as an encouraging development. During the same period, the average share of the bottom 40% in national income was 8%, with a rise from 6.5% in 1980 to 9% in 2021. This represents a 38% increase in the share of the bottom 40% over the same period.

On the other hand, the middle 50% did not experience significant improvement, with their share rising by only 15% within 45 years. The 5% annual average growth rate between 2002 and 2011, which were the golden years of growth in Türkiye expanded the middle class and increased the income share of the middle 50 percent during this period. However, following recessions caused by crises, the post-2010 period has revealed a middle class with shrinking incomes and living conditions.

The national income share of the top 1% population in Türkiye has remained relatively stable with minor fluctuations in recent years after exhibiting a steady fall from 1980 to 2006. However, it is important to note that the share of the top 1% remains significantly high compared to other countries, indicating a concentration of wealth in a small portion of the population. The latest available Palma ratio⁴ reveals that Nordic countries such as Iceland, Norway, Sweden, Denmark, and Belgium exhibit a Palma ratio equal to or below 1, while the OECD average is 1.3. Türkiye stands out with a Palma ratio of 2.01, ranking as the third highest among OECD countries, surpassed only by Mexico and Costa Rica. This data confirms the concentration of wealth among the wealthiest individuals in Türkiye, highlighting the pronounced income inequality within the country (OECD, 2023). This guarded outlook confirms the latest report of OECD (2023) which indicates that Türkiye is stagnating or moving further away from the target 10.1.

4 The Palma ratio is the ratio of the richest 10% of the population's share of gross national income (GNI) divided by the poorest 40% share.

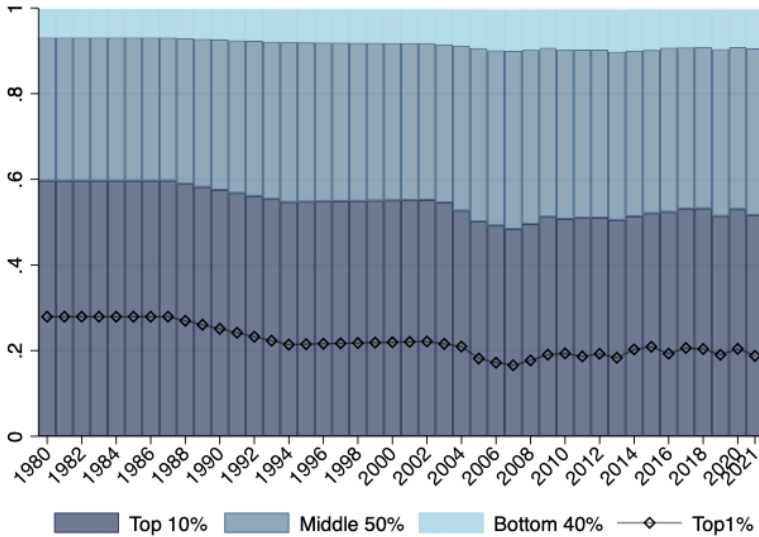


Figure 3. National income distribution for Türkiye (%).

Notes: The reader should be cautious about reading the data as the indicators are constructed by using pre-tax national income. For methodology, see 2020 Distributional National Accounts (DINA) guidelines, <https://wid.world/document/distributional-national-accounts-guidelines-2020-concepts-and-methods-used-in-the-world-inequality-database/>

Source: World Bank, World Inequality Database (2023), https://wid.world/data/#countrytimeseries/sptinc_p99p100_z;sptinc_p90p100_z;sptinc_p0p40_z;sptinc_p40p90_z/TR/1820/2021/eu/k/p/yearly/s

There has been significant progress in economic development in the 21st century, but this progress has come hand in hand with the concentration of wealth in the hands of a small group of individuals (Figure 4). In the year 2000, the top 10% of the population held 66.7% of the total wealth in Türkiye, where the median wealth per adult was \$3,838 and an average adult enjoyed \$12,324 per capita of wealth (Credit Suisse, 2014). Over time, wealth inequality estimates displayed an upward time trend, and the wealth gap between the richest and the poorest has widened. In 2021, the top 10% of the population held 70.8% of the total wealth while the gap between median wealth per adult and capita wealth was \$13,532. As wealth is more concentrated than income, the poorest percentile holds negative wealth. Additionally, more than one-third of all wealth, which is 40.7% is held by the richest 1% in 2021 (Credit Suisse, 2021).

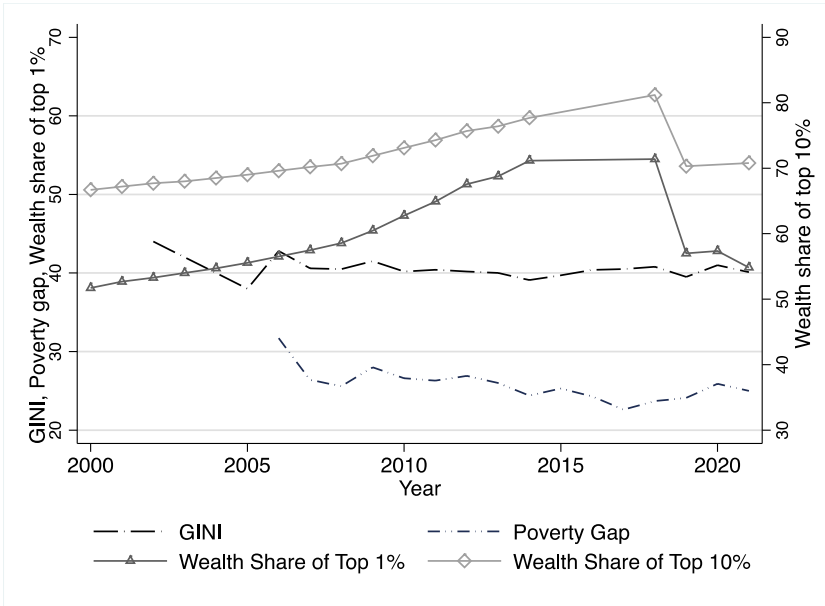


Figure 4. Income and wealth inequality measures for Türkiye between 2000-2022.

Notes: Wealth share of top 1% and 10% in GDP, poverty gap, and Gini coefficient for Türkiye over time.

Source: For the wealth share of the top 1% and 10%, Credit Suisse Global Wealth Databook (2014, 2018, 2021). For Gini and poverty gap, TurkStat (2022) Income and Living Conditions Survey (SILC).

The share of wages in total income has also decreased continuously, alongside the polarization in wealth distribution until 2020. Figure 5 demonstrates a prominent downward trend in the adjusted share of wages for selected countries over the past three decades. For Türkiye, the share of wages in GDP displayed a stable trend until the 1980s, while decreased by approximately 25% between 1979 and 1988. In the 1990s, strengthened union activities led to an increase in real wages, and the wage share reached its peak in 1991. However, following the crisis in 1994, expansionary monetary policies were implemented to address the growing current account deficit and deteriorating fiscal balance, aiming to suppress real wages and contract domestic demand. As a result, the wage share experienced a sharp decline after 1994. Subsequently, wages continued to remain at a lower level compared to the period before 1980.

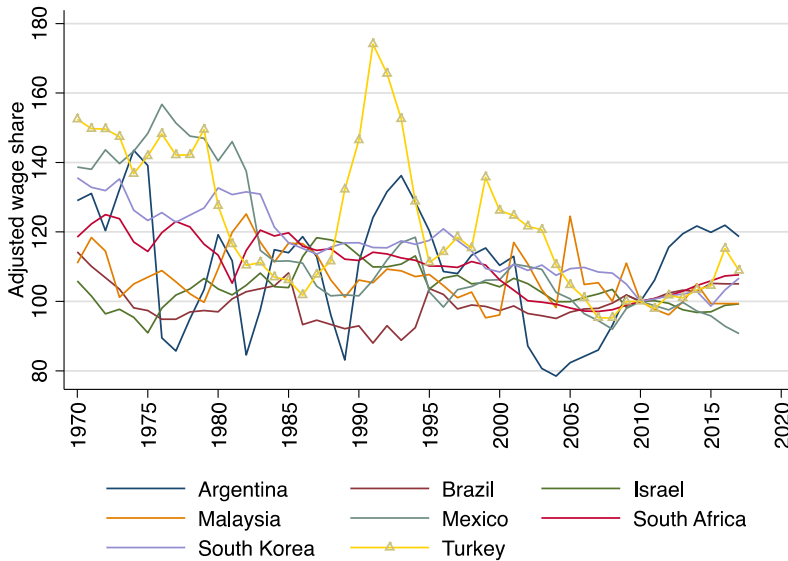


Figure 5. The adjusted share of labor in GDP over time in selected countries.

Notes: The data selects 7 emerging economies economically similar to Türkiye and have higher inequality levels compared to the world average in terms of Gini coefficients, (i.e., South Korea, Brazil, Argentina, Mexico, Israel, Malaysia, and South Africa) between 1970 and 2017.

Sources: The adjusted labor share is adjusted for the self-employed income and thus yields a mean value above 100. In constructing the labor share series, the study relies on various data sources for each country. The data was primarily extracted from the AMECO database released by the European Commission and the Organization for Economic Co-operation and Development (OECD, n.d.). It is worth noting that the AMECO calculations for the wage share adjusted for self-employment result in a significantly higher share of GDP at factor costs (excluding taxes and subsidies) compared to other data sources. This difference arises because self-employment income is adjusted based on the proportion of employees among the total number of employed individuals. To ensure data comparability, the index of the adjusted labor share for all countries was calculated with the base year 2010 set at 100.

Developing countries depicted in Figure 5, namely Korea, Mexico, and Türkiye, also indicate that the global economic crisis in 2008 briefly halted this downward trend in the share of wages. But this lasted only for a short period. On the other hand, developed economies experienced an initial rebound in the wage share after the crisis began, followed by a subsequent decline from 2009 onwards. This phenomenon reflects the countercyclical behavior of the wage share, where wages tend to exhibit less volatility compared to profits during economic downturns.

Table 3 illustrates this fact. Income data of household disposable income quintiles has been disaggregated into 8 income groups as presented in the table below, based on the sources from which they were derived. According to Table 3, the main sources of income for low and middle-income groups typically derive their income from wage and salary in 2006. For the top

20% of income earners, the entrepreneurial, rental, and property income become important, as expected. In 2022, the significance of entrepreneurial income for all income quintiles except the top 20% has substantially decreased. Rental and property income the top 20% derived from also increased from 2006 to 2022.

Table 3. Distribution of annual equivalised household disposable income quintiles by type of income in Türkiye (in %) (Comparison of 2006 and 2022)

		P20	P40	P60	P80	P100
2006	Wage and salary	2.3	8.4	14.4	23.2	51.7
	Casual	28	27.8	19.8	15.1	9.2
	Entrepreneurial	4.4	8.5	10.9	17.3	58.9
	Rental income	1.6	3.3	7.1	15.8	72.2
	Property income	2.0	5.8	9.9	19.3	63.1
	Social transfers	3.1	8	18	26.2	44.7
	Inter-household transfers (Received)	11.0	14	16.1	21.5	37.4
	Other incomes	4.3	8.7	17.9	24.9	44.2
2022	Wage and salary	4.4	9.4	14.4	23.4	48.4
	Casual	29.2	24.9	21.6	16.4	7.9
	Entrepreneurial	2.7	5.3	7.9	13.1	71.1
	Rental income	1.3	3	8	14.8	72.9
	Property income	3.9	6.8	10.4	14.8	64.1
	Social transfers	5.4	12.4	19.5	25.6	37.2
	Inter-household transfers (Received)	10.6	14.2	18.8	20.4	36
	Other incomes	21.8	24.3	23.1	17.4	13.3

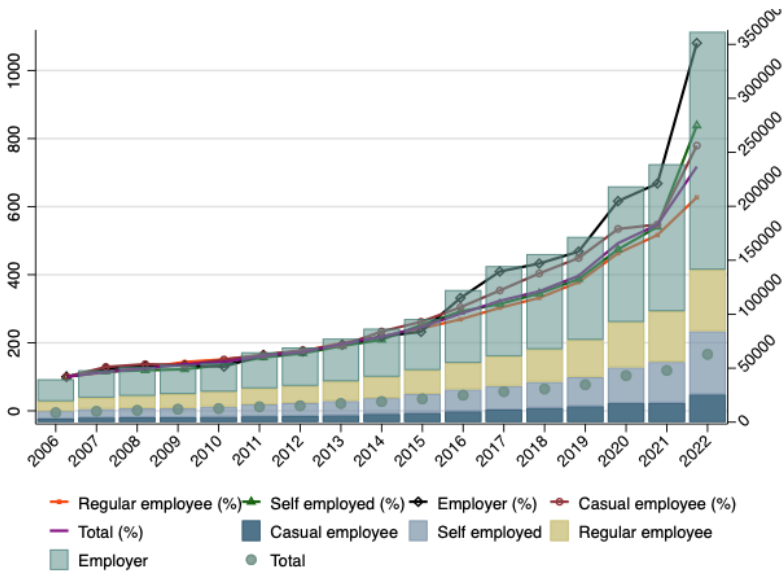
Source: TurkStat (2022) Income and Living Conditions Survey (SILC).

According to Table 4, the highest annual average income is earned by the employers, amounting to 220,481 TL in 2022. For wage and salaried workers (regular employees), the average income is calculated as 56,899 TL, for self-employed it is 58,696 TL, and for daily wage workers (casual employees) it is 25,632 TL. Compared to 2006, the income of wage and salaried workers increased by 527% in 2022, while the income of employers increased by 980% (Figure 6). In Türkiye, between 2006 and 2022, the proportion of employed individuals earning wage income increased to 70%, while the proportion of employers showed a decrease. Therefore, it is expected that the labor share would increase during the examined period. However, while the annual average income of employers increased more than that of wage and salaried workers between 2006 and 2022, the labor share decreased substantially, according to Figure 5. This indicates, in line with the developments discussed above, that lower wage shares are accompanied by a high degree of income inequality.

Table 4. Employed by status in employment and mean annual income at the main job in Türkiye (2006-2022)

		2006	2018	2022
Employed by status in employment (%)	Regular employees and casual employees	58.9	68	70
	Own account worker	22.3	17.1	16
	Unpaid family worker	13.1	10.5	9.5
	Employer	5.7	4.5	4.4
Mean annual income at the main job by employment status (TL)	Regular employee	9.069	30.106	56.899
	Casual employee	3.289	13.280	25.632
	Self-employed	7.002	24.134	58.696
	Employer	20.403	88.285	220.481

Source: Employed by status in employment (%): TurkStat (2022), Labor force statistics. Mean annual income at the main job by employment status, 2006-2022: TurkStat (2022) Income and Living Conditions Survey (SILC).

**Figure 6.** Index of mean annual income and mean incomes in TL at the main job by employment status in Türkiye (2006-2022).

Notes: An index has been created to show the development of a mean annual income at the main job by employment status (2006-2022), which is shown in the vertical axis on the left. The reference value (base year) is set to 100 in 2006. The vertical axis on the right indicates the mean annual income at the main job by employment status, measured in TL. Line graphs show the cumulative percentage change in mean incomes at the main job by employment status, and bar graphs show mean annual income and mean incomes at the main job by employment status in TL. The reference period of income is the previous calendar year.

Source: TurkStat (2022) Income and Living Conditions Survey (SILC).

The World Bank report (2019) indicates that inequalities have narrowed in the last 10 years in Türkiye which is classified in the group of middle-high income countries compared to other OECD countries. For example, between the mid-1980s and the late 2000s, there was a notable increase in the Gini coefficient among OECD countries, with a rise of 10%. Additionally, the ratio of the top 10% to the bottom 10% of income earners reached its highest level during the same period. However, when evaluated in line with international comparisons, Türkiye lags behind many European and OECD member countries in terms of income inequality. According to Figure 7, which shows the most recent Gini coefficient data for 165 countries and 8 regions, the countries with the lowest Gini values are Western and Central Europe, former Eastern Bloc, and Scandinavian countries, whereas the average Gini coefficient values of the European Union and OECD member countries are 30,32 and 32,28, respectively. The Gini coefficient value for 2018 is calculated as 41.9 for Türkiye, which is 3.9 points above the world average Gini index value calculated for the countries covered and exceeds the average value of 40 for low and middle-income countries and middle-high-income countries. When evaluated from this perspective, Türkiye is positioned among the countries with high Gini values in the world ranking, along with Latin American and Caribbean countries.

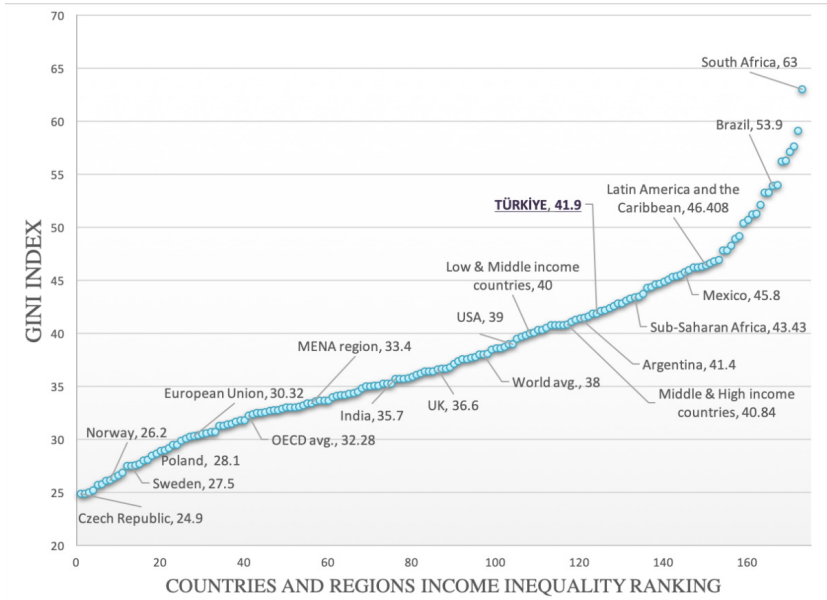


Figure 7. Gini index of income inequality in 165 countries and 8 regions.

Notes: This figure uses data on the Income Gini coefficient. In the case of regions, the study uses the median as a measure of central tendency and location.

Source: World Bank, World Development Indicators (2021). <https://databank.worldbank.org/source/world-development-indicators>

5. Paths to Achieving an Inclusive Society: Future Policy Prospects in Türkiye

The majority of income for the wealthiest income group comes from entrepreneurial and interest income, and the substantial contribution of these income sources to inequality compared to other sources remains the main source of income inequality. Different functional income groups can be asymmetrically affected by economic policies. Therefore, it is critical to formulate policies that focus on different income groups, as inequalities among different factor incomes are an important determinant of inequalities in the Turkish economy.

Redistributive policies

Income distribution primarily results from the income-generation processes through which different income groups derive their earnings. Inevitably, inequality arises because of economic policies affecting different income-generation processes in various ways. The fight against income inequality should directly aim to eliminate the inequalities generated by different income-generating structures, such as increasing real wages to increase the share of the bottom 40% or taxing high-income earners.

They are considering social transfers and the tax system in Türkiye, Cuevas et al. (2020) but also to poverty and inequality reduction. This paper provides the most comprehensive assessment of the distributional incidence of Türkiye's fiscal policy to date. It analyzes the combined and individual incidence of direct and indirect taxes, transfers, and social spending and benchmarks Türkiye's achievements against peer countries. The results show that fiscal policy significantly reduces income inequality in Türkiye, driven by social spending on education and health, and complemented by direct taxes and transfer schemes that countervail the inequality-increasing impact of indirect taxes. At the bottom of the income distribution, targeted transfers are insufficient to compensate for the effect of taxes, resulting in net increases in poverty. In the context of upper-middle-income countries, Türkiye's performance is below the median. This is driven by the relatively larger negative impacts of indirect taxes and the more limited positive impacts of direct transfers and taxes. From a policy perspective, the paper contributes to identifying entry points for improving the equity impact of the fiscal package. Among these, targeting the minimum subsistence allowance (AGI notes that indirect taxes, which constitute 10.3% of the gross domestic product (GDP), form the primary source of revenue for the central budget in Türkiye. They also highlight those social expenditures accounted for 18% of the total GDP in 2016, with 16% of these expenditures allocated to education and healthcare. Reports analyzing the impact of taxes and social transfers on

income inequality and poverty suggest that fiscal policy has been successful in reducing income inequality, particularly through the redistributive effects of education and healthcare expenditures, resulting in a decrease in the market Gini coefficient from 0.48 to 0.38 after accounting for taxes and transfers. However, due to the disproportionate tax burden placed on the poor through indirect taxes, the report argues that the poverty gap ratio has increased from 2.7 to 5.3.

In Türkiye, since the implementation of neoliberal policies after the 1980s, the regulatory measures aimed at reducing corporate taxes have led to an increase in indirect taxes. The new tax structure at the expense of indirect taxes has resulted in an increased tax burden on labor. Because the middle-class groups can be considered wage earners, and they have a higher propensity to consume than that top income earners, they allocate nearly one-third of their budget for essential consumption items such as food and clothing, making them regular and high contributors to the tax system (OECD, 2019). From this perspective, as indicated in the policy framework section of VNR (2019) for Türkiye, restructuring the tax system and reducing the proportion of indirect taxes would contribute to achieving income distribution fairness and alleviating poverty in Türkiye, and thereby attain SDG 10 by 2030.

Wage policies

Policymakers should strive for policies that foster a strong correlation between the increase in labor productivity and the growth of workers' compensation. Linking labor productivity with the growth of real wages is key to keeping the share of labor in national income constant. This requires strengthening labor market institutions, stronger wage protection, and setting a framework to provide adequate minimum wages. This may not only help diminish wage disparities, but it can also potentially enhance labor productivity.

Poverty reduction policies targeted at regions

Addressing the needs of less developed regions is crucial. However, regional inequality is more complex and influenced by an interrelated set of several elements. First, there are broader societal and political implications for this type of inequality, and they can be persistent and self-sustaining. Second, many developing countries face challenges in producing regional data due to limited capacities and lower standards within their statistical authorities. A primary challenge in sub-national economic analysis is the definition of the unit of analysis, as the term region can encompass different meanings, varying both within individual countries and across different countries. For the majority of developing countries using survey information to assess income distribution, conventional cross-sectional indicators of income inequality

and relative poverty at the regional level are estimated with limited accuracy in the smallest regions, owing to small sample sizes (OECD, 2014).

Türkiye's diverse development levels and population size create disparities in poverty and inequality. The number of the regional poverty rate by equivalised household disposable income according to the 50% of the median income by SR Level 2 classification indicates that in 2022, the Türkiye average is 14.4% (TurkStat, 2022). Among the 26 regions, the poverty rate ranges from 3.7% to 15%. Türkiye can establish funds to boost economic and social progress that lag behind the national average in terms of inequality and poverty rates.

Policies for closing the gaps in the skills of the workforce by building an inclusive education

If we are heading towards higher structural unemployment in the future due to the latest advancements in information technology and its impact on the future job markets remains an important issue to be solved. To adapt to the changes in rapidly changing job markets, Türkiye must establish mechanisms for training the workforce in future skills via developing courses, vocational training programs, industry-academia partnerships, hands-on training for advanced technologies, and government initiatives to equip the youth with the necessary skills to meet future demands. Increases in human capital must go hand in hand with technology, and these labor market policies will contribute to reversing higher inequalities caused by technological change via increasing human capital and the supply of skills. Inequalities stemming from earnings dispersion and the gap between wage and profit earners that the study highlights can be reduced by helping these groups to acquire educational qualifications, and record increases in their lifetime incomes. Considering the interaction between SDGs, the study mentioned that Targets SDG 1 and SDG 10 are strongly impacted by targets under education (SDG 4) and economic growth (SDG 8). Thus, implementing inclusive education policies for future skills is also effective on all these endogenous targets where Türkiye records slower progress among the others. Introducing social protection schemes in developing countries like Türkiye is key in this regard.

Regulating financial markets

The concentration of wealth and financialization is a crucial source of inequality and societal tension. In the case of Türkiye, the integration of financial markets and capital account liberalization increased financial fragility, aggravating general economic instability, and triggering the crisis. Unregulated financial markets have not only worsened inequality but have also reinforced instability. Regulation of the financial sector and reestablishing its function in directing resources toward productive and sustainable investments is crucial.

6. Conclusion

In this study, we claimed that to address the question of personal income inequality, it is necessary to examine the changes in functional income distribution. A statistical preliminary analysis that has been presented focused on the reduced labor share and an unsatisfactory improvement in personal income inequalities. We have also highlighted the underlying reasons for this claim.

Since 2010, the issue of inequality has come to the fore and has become a central topic of discussion in academia and among policymakers. The rising levels of income inequality have captured the interest of international organizations such as the International Monetary Fund (IMF), OECD, World Bank, and United Nations. However, the question arises as to whether SDGs effectively address the broader issue of inequality, other than recognizing the importance of tackling inequality on a global scale by incorporating a specific goal that addresses both vertical and horizontal inequalities.

We have pointed out that the current formulation of SDG 10, as it stands, faces considerable challenges in adequately addressing the increasing levels of inequality within and between countries because the absence of benchmarks or variables for measuring inequality reduction is an issue throughout SDG 10. Thus, SDG 10 should be viewed not as a framework for substantial achievements in reducing inequality at the national and global levels by 2030, but rather as an initial step in including inequality issues in the global agenda and establishing foundations for further progress in the future.

This chapter examined the trends in income, wages, and wealth distribution, which represent the monetary inequalities since the year 2000. Despite observing a decline in income inequality since the 2000s, the data on income and poverty indicates there has been limited improvement since 2006. There continues to be a deepening income gap between the poorest 20% and the richest 10%. The share of wages in total income has consistently decreased, while polarization in wealth distribution has been increasing until 2022. Furthermore, the redistribution of income through labor market policies, taxation, and transfers has been insufficient in reducing the tension caused by inequality and poverty within society. These findings indicate that Türkiye still faces substantial challenges in achieving the SDG 10 target by 2030. To make significant progress, Türkiye must undertake a comprehensive range of policies and strategies to effectively reduce inequality. These measures should encompass the implementation of inclusive education policies rising inequality in recent decades is related to an increase in the share of income held by the top wage earners, regional policies to combat

the divergence in poverty rates, and provide poor relief to regions that lag behind the national averages, and restructuring tax-transfer system which will improve the redistributive potential of fiscal policy to mitigate the market income disparities. Lastly, one limitation of this study is the lack of regional inequality assessment. Aggregate national averages that we have addressed above conceal significant variations in poverty and inequality within a country. Dividing data into regional segments proves valuable in comprehending the origins and trends of income inequalities and poverty in Türkiye and developing countries.

References

- Adler, M. & Schmid, K.D. (2013). Factor shares and income inequality. Empirical evidence from Germany 2002–2008, *Schmollers Jahrbuch*, 133(2), 121–132, doi: 10.3790/schm.133.2.121.
- Araújo, E., Bruno, M. and Pimentel, D. (2012). Financialization against Industrialization: A regulationist approach of the Brazilian Paradox. *Revue de La Régulation. Capitalisme, Institutions, Pouvoirs*
- Atkinson, A. B. (2015). *Inequality: What Can Be Done?*. Cambridge, MA and London, England: Harvard University Press. <https://doi.org/10.4159/9780674287013>
- Atkinson, A. B., & Bourguignon, F. (2000). Introduction: Income distribution and economics. In *Handbook of Income Distribution* (Vol. 1, pp. 1–58). Elsevier. [https://doi.org/10.1016/S1574-0056\(00\)80003-2](https://doi.org/10.1016/S1574-0056(00)80003-2)
- Atkinson, A. B., & Bourguignon, F. (2014). *Handbook of income distribution*. Elsevier. https://books.google.com/books?hl=tr&lr=&id=qwR-BAAAQBAJ&oi=fnd&pg=PP1&dq=atkinson+handbook+income+distribution&ots=1TGqf_r0yP&sig=esYK2Hyc0a9VHPx-TpPiHdq27Sk
- Autor, D. H., Dorn, D. & Hanson, G. H. (2013). The China Syndrome: Local Labor Market Effects of Import Competition in the United States. *American Economic Review* 103(6), 2121–68.
- Björklund, A., & Jäntti, M. (1997). Intergenerational Income Mobility in Sweden Compared to the United States. *The American Economic Review*, 87(5), 1009–1018.
- Bourguignon, F. (2015). *The Globalization of Inequality*. Princeton University Press. <https://press.princeton.edu/books/hardcover/9780691160528/the-globalization-of-inequality>
- Chancel, L., Piketty, T., Saez, E., Zucman, G., & et al. (2022). *World Inequality Report*. World Inequality Lab wir2022.wid.world.
- Correa, E. & Vidal, G. (2012). Financialization and global financial crisis in Latin American countries, *Journal of Economic Issues*, vol. 46, 541–548.
- Credit Suisse. (2014). *Global Wealth Databook*. <https://www.credit-suisse.com/about-us/en/reports-research/global-wealth-report.html>
- Credit Suisse. (2021). *Global Wealth Databook*. <https://www.credit-suisse.com/about-us/en/reports-research/global-wealth-report.html>
- Cuevas, P. F., Lucchetti, L., & Nebiler, M. (2020). What are the Poverty and Inequality Impacts of Fiscal Policy in Turkey? *Commitment to Equity (CEQ) Working Paper Series*, Article 100. <https://ideas.repec.org/p/tul/ceqwps/100.html>
- Dao, M. C., Das, M., Koczan, Z. & Lian, W. (2017). Why is labor receiving a smaller share of global income? Theory and empirical evidence, IMF Working Paper WP/17/169.
- Daudey, E., & Garcia-Penalosa, C. (2007). The personal and the factor distributions of income in a cross-section of countries. *Journal of Development Studies*, 43(5), 812–829.

- Demir, F. (2007). The rise of rentier capitalism and the financialization of real sectors in developing countries, *Review of Radical Political Economics*, 39(2), 351–359
- Economic Policy Institute. (October 2022). The Productivity–Pay Gap. Retrieved from <https://www.epi.org/productivity-pay-gap/>
- Elsby, M. W., Hobijn, B., & Şahin, A. (2013). The decline of the US labor share. *Brookings Papers on Economic Activity*, 2013(2), 1–63.
- Erauskin, I. (2020). The labor share and income inequality: Some empirical evidence for the period 1990–2015, *Applied Economic Analysis*, 28(84), 173–195. <https://doi.org/10.1108/AEA-04-2020-0028>
- European Commission. (2022). *Annual macro-economic database (AMECO)* [Data set]. https://economy-finance.ec.europa.eu/economic-research-and-databases/economic-databases/ameco-database_en
- Furceri, D., & Loungani, M. P. (2015). *Capital account liberalization and inequality*. International Monetary Fund.
- Giovannoni, O. G., Lu, L., Nguyen, D., & Xu, A. (2014). What do we know about the labor share and the profit share? Part II: Empirical studies. *Part II: Empirical Studies (May 21, 2014)*. *Levy Economics Institute at Bard College Working Paper*, (804).
- Guscina, A. (2007). Effects of Globalization on Labor’s Share in National Income. *IMF Working Paper No. 06/294*, Available at SSRN: <https://ssrn.com/abstract=956758>
- Gürsel, S., Levent, H., Selim, R. & Sarıca, Ö. (2000), Bireysel Gelir Dağılımı ve Yoksulluk: Avrupa Birliği ile Karşılaştırma, TÜSİAD, 2000-12.
- Harrison, A. (2005). Has Globalization Eroded Labor’s Share? Some Cross- Country Evidence. Mimeo. University of California–Berkeley.
- International Labour Office. (2012). *Global Wage Report 2012/13: Wages and Equitable Growth*. International Institute for Labor Studies, Geneva: International Labour Organization. Retrieved from https://www.ilo.org/global/research/global-reports/global-wage-report/2012/WCMS_194843/lang-en/index.htm
- International Labour Office. (2015). *Income inequality and labour income share in G20 countries: Trends, impacts and causes*. ILO, OECD, IMF, WB. Retrieved from <https://www.oecd.org/g20/topics/employment-and-social-policy/Income-inequality-labour-income-share.pdf>
- Jacobson, M. & Occhino, F. (2012). Labor’s declining share of income and rising inequality, *Federal Reserve Bank of Cleveland*, available at: www.clevelandfed.org/newsroom-and-events/publications/economic-commentary/economic-commentary-archives/2012-economic-commentaries/ec-201213-labors-declining-share-of-income-and-rising-inequality.aspx
- Kaldor, N. (1961). Capital accumulation and economic growth. In *The Theory of capital: proceedings of a conference held by the International Economic Association* (pp. 177–222). London: Palgrave Macmillan UK.
- Kalecki, M. (1971). *Selected Essays on the Dynamics of the Capitalist Economy 1933–1970*. Cambridge University Press.
- Karabarbounis, L. & Neiman, B. (2014). Capital depreciation and labor shares around the world: measurement and implications, Technical Report, *National Bureau of Economic Research*.
- Kristal, T. (2013). The Capitalist Machine: Computerization, Workers’ Power, and the Decline in Labor’s Share within U.S. Industries, *American Sociological Review*, 78(3), 361–389.
- Krugman, P. (2008). Trade and Wages, Reconsidered. *Brookings Papers on Economic Activity*, 39(1), 103–154.
- Maliar, L., Maliar, S., & Tsener, I. (2022). Capital-skill complementarity and inequality: Twenty years after. *Economics Letters*, 220, 110844.
- Milanovic, B., & Milanovic, S. S. V. P. P. B. (2010). *The Haves and the Have-Nots: A Brief and Idiosyncratic History of Global Inequality*. ReadHowYouWant.com.
- OECD. (n.d.). *Productivity, Productivity Archives, Unit Labor Costs–Annual Indicators, Labor Income Share Ratios* [Data set]. Retrieved May 1, 2018, from <https://stats.oecd.org/#>

- OECD. (2021). *Income Distribution Database* [Data set]. <https://stats.oecd.org/Index.aspx?DatasetCode=IDD>
- OECD. (2022). *The Short and Winding Road to 2030: Measuring Distance to the SDG Targets*. OECD Publishing. <https://doi.org/10.1787/af4b630d-en>.
- Paprotny, D. (2021). Convergence Between Developed and Developing Countries: A Centennial Perspective. *Social Indicators Research: An International and Interdisciplinary Journal for Quality-of-Life Measurement*, 153(1), 193–225.
- Piketty, T. & Saez, E. (2014). Inequality in the long run, *Science* 344 (6186), pp. 838–843.
- Rodrik, D. (1998) Capital Mobility and Labor. Harvard University, mimeo, available at <http://www.hks.harvard.edu/fs/drodrik/Research%20papers/capitalm.pdf>
<http://www.hks.harvard.edu/fs/drodrik/Research%20papers/capitalm.pdf>
- Roemer, J.E. (1998). Equality of opportunity. Harvard University Press.
- Roemer, J.E. (2002). Equality of opportunity: A progress report. *Social Choice and Welfare*, 19, 455–471.
- Rognlie, M. (2015). Deciphering the fall and rise in the net capital share: accumulation or scarcity?, *Brookings papers on economic activity*, (1), 1–69.
- Sachs, J., Lafortune, G., Kroll, C., Fuller, G., & Woelm, F. (2022). From Crisis to Sustainable Development: The SDGs as Roadmap to 2030 and Beyond. Sustainable Development Report 2022. Cambridge University Press. <https://www.sustainabledevelopment.report>
- Sauer, P., Rao, N.D. & Pachauri, S. (2020) Explaining income inequality trends, An integrated approach. *WIDER Working Paper 2020/65*.
- Stiglitz, J. E. (2012). *The Price of Inequality: How Today's Divided Society Endangers Our Future* (1 edition). W. W. Norton & Company.
- Stockhammer, E. (2013). Why Have Wage Shares Fallen? A Panel Analysis of the Determinants of Functional Income Distribution, International Labour Organization (ILO) project 'New Perspectives on Wages and Economics,' ILO Working Papers 470913 / Conditions of Work and Employment 35, Geneva: International Labor Organization
- Sustainable Development Goals | United Nations in Türkiye. (n.d.). Retrieved June 13, 2023, from <https://turkiye.un.org/en/sdgs>
- Taymaz, E., Voyvoda, E., & Yilmaz, K. (2021). Transition to democracy, real wages and productivity: Evidence from the Turkish manufacturing industry. Koç University-Tüsiad Economic Research Forum, Working Paper No: 2111.
- Turkish Statistical Institute. (2022). *Income Distribution Statistics* [Data set]. <https://data.tuik.gov.tr/Kategori/GetKategori?p=gelir-yasam-tuketim-ve-yoksulluk-107&dil=2>
- Turkish Statistical Institute. (2023). *Relatively Poverty Statistics, Number of the relatively poor, poverty rate and poverty gap* [Data set]. <https://data.tuik.gov.tr/Kategori/GetKategori?p=gelir-yasam-tuketim-ve-yoksulluk-107&dil=2>
- United Nations. (2018). *The Sustainable Development Goals Report*. <https://unstats.un.org/sdgs/files/report/2018/the-sustainable-development-goals-report-2018-en.pdf>
- United Nations. (2019). *Turkey's Sustainable Development Goals 2nd Voluntary National Review Report "Strong ground towards common goals."* High-Level Political Forum on Sustainable Development. https://hlpf.un.org/sites/default/files/vnrs/2021/23862Turkey_VNR_110719.pdf
- United Nations Department of Economic and Social Affairs SDG Indicators Database. (2021). *SDG country profile, Turkey* [Data set]. <https://unstats.un.org/sdgs/dataportal/countryprofiles/tur>
- U.S. Bureau of Labor Statistics. (2023). Production and Nonsupervisory Employees, Total Private [CES0500000006], retrieved from FRED, Federal Reserve Bank of St. Louis; <https://fred.stlouisfed.org/series/CES0500000006>, August 15, 2023.

- Velasquez, A. (2023). Production Technology, Market Power, and the Decline of the Labor Share. *International Monetary Fund*. Working paper No: 32.
- Wilkinson, R., & Pickett, K. (2010). *The spirit level – why equality is better for everyone*, London: Penguin.
- Wolff, E. N., & Zacharias, A. (2007). The Distributional Consequences of Government Spending and Taxation in the U.s., 1989 and 2000. *Review of Income and Wealth*, 53(4), 692–715. <https://doi.org/10.1111/j.1475-4991.2007.00251.x>
- World Bank. (2019). *World Development Report The changing nature of work*. <https://documents1.worldbank.org/curated/en/816281518818814423/pdf/2019-WDR-Report.pdf>
- World Bank. (2021). *World Development Indicators* [Data set]. <https://databank.worldbank.org/source/world-development-indicators>
- World Bank. (2023). *World Inequality Database* [Data set]. <https://wid.world>