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The Degree of Inclusivity of Economic Growth in Turkiye: Developing a New Method*

ABSTRACT

This study investigates whether economic growth in Turkiye has been inclusive or exclusive since the establishment of the Republic in 1923. Inclusivity is used here as a substitute for sustainability. And if it has been inclusive or exclusive during this period, the study delves into the specific periods that contributed most to the inclusivity or exclusivity of economic growth. To achieve this objective, a novel method defined in the paper has been employed to measure the dimension of inclusivity or exclusivity in different specific periods. According to the findings, overall, economic growth during the Republic's Years has been inclusive; however, it only began to be notably inclusive after 1980. Since then, economic growth has significantly favored lower- and middle-income groups, compared to higher-income groups, indicating that it has been inclusive since 1980. The novel methodology, validated by its alignment with Gini coefficient trends in Turkiye, is a superior tool for measuring long-run income inequality and assessing inclusive growth.

Keywords: Economic Growth, Inclusivity Coefficient, Inclusive Growth, Sustainable Growth, Republic Years

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INTRODUCTION

While a constant increase in national income per capita is widely cosidered as a key indicator of a society's overall welfare and prosperity (Jeroen van den Bergh, 2009), it alone is insufficient to guarantee these outcomes. If the gians from constant economic growth are disproportionately concentrated in favor of a minority group of the population, the majority may experience little or no improvement in well-being. In such cases, rather than enhancing social welfare, economic growth simply increases aggregate income (See, Murphy, 2016). This imbalance may, in turn, deepen income inequality, erode social cohesion and ultimately generate social unrest (Parvin, 1973). Thus, it is necessary that the gains from sustained rise in per capita national income be distributed equitably –or even in favor of lower-income groups, particularly in countries characterized by high levels of income inequality. Achieving such a benign income growth requires implementing of well-designed indirect policy measures to promote inclusive growth (Anderson et al., 2015).

In this context, this study proposes an innovative methodology to assess the impact of sustained economic growth across the real income levels of different income groups within a country (See, Yalghouzaghaj & Muğan Etruğral, 2024). Offering a novel methodological contribution to the inclusive growth literature, this approach rigorously analyzes how the benefits of economic growth are distributed across various income groups over time. It thereby determines whether the sustained growth in per capita national income yields inclusive or exclusive growth during the study peroid. The methodology stands on a core principle: a reduction in income inequality coinciding with economic expansion signifies inclusive growth. Its primary strength lies in its simplicity and practical applicability, offering a clear and intuitive framework for both academics and policymakers. As such, this approach represents a significant contribution toward resolving persistent conceptual and methodological ambiguities in the inclusive growth literature (See, Ali & Son, 2007; Ali & Zhuang, 2007; Anand et al., 2013; Grosse et al., 2008; Hay et al., 2022; Ianchovichina & Lundstrom, 2009; Kakwani & Pernia, 2000; Klasen, 2010; Rauniyar & Kanbur, 2010; Ravallion & Chen, 2003). Fundamentally, the approach argues that sustained per capita national income growth accompanied by a decline in overall income inequality constitutes inclusive growth for a given country and period. Conversely, rising income inequality during economic expansion indicates exclusive growth. The study subsequently examines the key determinants driving inclusive economic growth within the country under investigation.

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Within this methodological framework, the study investigates the long-term distributional impacts of economic growth in Turkiye from 1923 to 2022. First, it quantifies how benefits from aggregate per capita income growth are distributed differentially across income groups during the observation period. Employing the novel methodology[5], the study then measures the degree of inclusivity or exclusivity of aggregate economic growth throughout the period 1923-2022. Subsequently, the analysis divides this long period into two distinct phases –1923 to 1980 and 1980 to 2022–, to clarify the specific era during which Turkiye's economy experienced the most robust inclusive growth. Finally, the study investigates the key drivers of inclusive growth in Turkiye during the period that aggregate economic growth mainly distributed in favor of lower-income groups, thereby promoting greater inclusivity.

The study's findings reveal that economic growth in Turkiye has, over the long run, disproportionately benefited the lower- and middle-income groups compared to higher-income groups, suggesting that the overall increase in per capita national income from 1923 to 2022 has been inclusive. However, this inclusive pattern became more pronounced only after 1980 –a turning point in Turkiye's economic history, characterized by the liberalization of trade and capital flows. Between 1923 and 1980, although per capita income and incomes across all groups rose considerably, economic growth did not significantly impact overall income inequality. In other words, despite economic expansion, the persistent inequality of that era remained largely unchanged, reflecting a lack of inclusiveness. Conversely, the period following 1980 witnessed notable inclusive growth, supported by a modestly higher average annual increase in per capita GDP. This period contributed meaningfully to narrowing income disparities. Building on this, the study further investigates the key drivers behind Turkiye's post-1980 inclusive growth. It finds that increased integration into global markets, a shift toward export-led development, and the rise of new industrial centers in Anatolian provinces were critical in enhancing the inclusivity of the country's economic expansion during this era.

METHODOLOGY AND DATA

This research utilizes annual data for Türkiye spanning the period 1923–2022, amounting to 99 years of observations. Three separate datasets are employed, drawn from two principal sources. The first two datasets – national income per capita and population– are obtained from the 2024 edition of the Maddison Project Database (Bolt & van Zanden, 2024). National income is expressed in constant 2011 U.S. dollars and adjusted for Purchasing Power Parity (PPP).

The third dataset relates to income inequality and is sourced from the World Inequality Database (2024). It captures the distribution of pre-tax national income among different income groups and is restricted to the adult population, based on the assumption that individuals under the age of 15 do not generate any income. Consequently, national income is allocated solely to those aged 15 and above[6]. The measure used is market income, or pre-tax income (i.e., income before the deduction of direct taxes), which is adopted in this study as it provides a more accurate reflection of within-country inequality. Notably, recent influential contributions demonstrate that pre-tax income explains over two-thirds of the global variation in within-country income inequality (Blanchet et al., 2022; Bozio et al., 2024).

This study applies a comparative approach by dividing the population into four distinct income groups:

- ✓ the super-rich (top 1%),
- ✓ the rich (the subsequent 9%, completing the top decile),
- ✓ the middle class (the middle 40%),
- ✓ and the low-income group (the bottom 50%).

For every year in the period 1923–2022, the average income of each subgroup is computed and subsequently indexed to 1923 values (base year = 100). This procedure enables a long-term evaluation of income growth disparities across the various subgroups as well as in comparison with the national average. The method, presented formally in Equation (1), captures the evolution of income dynamics for each subgroup relative to the baseline year[7]:

$$\mathbf{E_t} = \frac{X_t}{X_{OL}} \cdot 100 \qquad (1)$$

In Equation (1), E_t represents the index value for each income subgroup and for Türkiye in the terminal year of analysis (2022 in this study). X_t denotes the average income of each subgroup and of the country in the final year, whereas X_{OL} indicates the corresponding average income in the base year, 1923. Based on this specification, the ratio

[5] We, the authors, are aware that despite its strengths, the methodology has certain limitations. It depends on sustained medium- to long-term income growth and performs less effectively in contexts characterized by stagnation or significant political interventions, such as 20th-century state-planned economies. These limitations are further discussed in the conclusion.
[6] This assumption is an acceptable approach for developed countries where child labor is rare. However, for the sake of facility, we assume that it is also valid for Turkiye.
[7] All the equations featured in this study were taken from Yalghouzaghaj & Muğan Etruğral (2024).

of final-year to initial-year average income is computed for each subgroup and for Türkiye, and the result is multiplied by 100. This procedure quantifies the cumulative income growth over the study period for both the subgroups and the national aggregate.

Once the final index values of average income for Türkiye and each income subgroup are established, they are compared with the national index. If an income subgroup exhibits greater cumulative growth than the national average over the study period, it is inferred that this subgroup has captured a relatively larger portion of the overall rise in national income per capita. Consequently, when the cumulative growth of the lower-income subgroups (namely, the middle class and bottom 50%) exceeds that of the national average, the outcome is interpreted as a decline in income inequality, or inclusive growth. In contrast, when the upper-income subgroups (the rich and super-rich) record higher growth than the national average, this indicates an increase in income inequality, referred to as non-inclusive growth.

Although this method provides insight into whether a country's economic growth over a given period has been inclusive or non-inclusive --thereby signaling shifts in overall income inequality-- it does not indicate the magnitude of that inclusiveness or non-inclusiveness. To fill this gap, the study introduces an "inclusivity coefficient," which facilitates a comparison of the average annual income growth rates of upper- and lower-income subgroups over the same period. This coefficient is defined as the ratio of the average annual income growth of upper-income subgroups to that of lower-income subgroups, as formalized in Equation (2):

$$\boldsymbol{I} = \frac{\frac{\mu_s + \mu_r}{2}}{\frac{\mu_m + \mu_l}{2}} \tag{2}$$

In equation (2), while $\boldsymbol{\mu_s}$, $\boldsymbol{\mu_r}$, $\boldsymbol{\mu_m}$ and $\boldsymbol{\mu_l}$, respectively indicate the average annual increase in income of super-rich, rich, middle class and low-income group, $\boldsymbol{I}$, stands for the inclusivity coefficient. With rewriting this equation, Equation (3) is obtained:

$$\boldsymbol{I} = \frac{\mu_S + \mu_r}{\mu_m + \mu_l} \tag{3}$$

In Equation (3), the inclusivity coefficient, denoted as $\boldsymbol{I}$, takes values between 0 and infinity. A value of $\boldsymbol{I}$=1 indicates that the overall rise in national income per capita during the period has been distributed evenly across all income subgroups. When $\boldsymbol{I}$>1, this suggests that upper-income subgroups have captured a disproportionately larger share of economic growth, leading to non-inclusive growth and a widening of income inequality. Conversely, when $\boldsymbol{I}$<1, it implies that lower-income subgroups have benefited more from the total increase in national income per capita, reflecting inclusive growth and a reduction in inequality. Thus, as $\boldsymbol{I}$ approaches 0, growth becomes increasingly inclusive, whereas values above 1 indicate a stronger tendency toward non-inclusive growth. An $\boldsymbol{I}$ value of exactly 1 signifies neutral growth, where all income subgroups experience the same rate of income growth.

In summary, this study adopts a comparative approach to assess the long-term inclusivity or non-inclusivity of economic growth in Türkiye. Within this framework, when national income per capita increases, a relatively greater rise in the incomes of lower-income subgroups –compared with both the national average and the gains of upper-income subgroups– indicates a reduction in overall income inequality, reflecting inclusive growth. By contrast, when the bulk of income gains are concentrated among upper-income subgroups, leaving lower-income segments at a relative disadvantage, inequality widens, signifying non-inclusive growth. The extent of such inclusivity or non-inclusivity is then evaluated using a newly introduced measure, the inclusivity coefficient.

THE INCLUSIVITY OF LONG-RUN ECONOMIC GROWTH IN REPUBLIC'S YEARS

As illustrated in Table 1, Turkiye's per capita national income rose at an average annual rate of 3.4% between 1923 and 2022, amounting to a cumulative 27.39-fold increase. However, this remarkable growth was not distributed evenly across income groups. Over the same period, lower-income segment –namely, the Low-income Group and the Middle Class –experienced more substantial gains in average income than higher-income groups such as the Rich and the Super-rich. Specifically, the Low-income Group and the Middle Class saw their incomes grow by 33.51 and 32.33 times, respectively –both figures exceeding the national average. In contrast, the Rich experienced a 28.42-fold increase, which was only slightly above the overall national per capita income growth. Notably, the Super-rich witnessed the smallest gain, with their average income increasing just 18.52 times. These results underscore the inclusive nature of economic growth in Turkiye throughout the Republican period, as the lower-income groups reaped comparatively greater benefits from long-term national income expansion.

Table 1: Total and Annual Growth Rate of Different Income Groups 1923-2022

Extent of Increase	PC	Top 1%	Top 9%	M 40%	L 50%
Total Increase	2739%	1852%	2842%	3233%	3351%
Annual Increase	3.40%	2.99%	3.44%	3.57%	3.61%
Inclusivity Coefficient					0.90

Note: The first part represents the total and annual average increase in income per capita of Turkiye and incomes of different income groups in Turkiye over the Republic's Years (1923-2022). The second part shows the degree of inclusivity, employing Inclusivity Coefficient.

Source: Authors' Creation

Regarding the degree of inclusivity, the table presents a calculated coefficient value of 0.90, indicating a relatively modest level of inclusiveness over the long-run. This value suggests that while economic growth was somewhat shared in favor of lower income groups, leading to a decrease in total income inequality, the extent to which it benefited the lower income groups was limited, pointing to only a slight degree of inclusive growth.

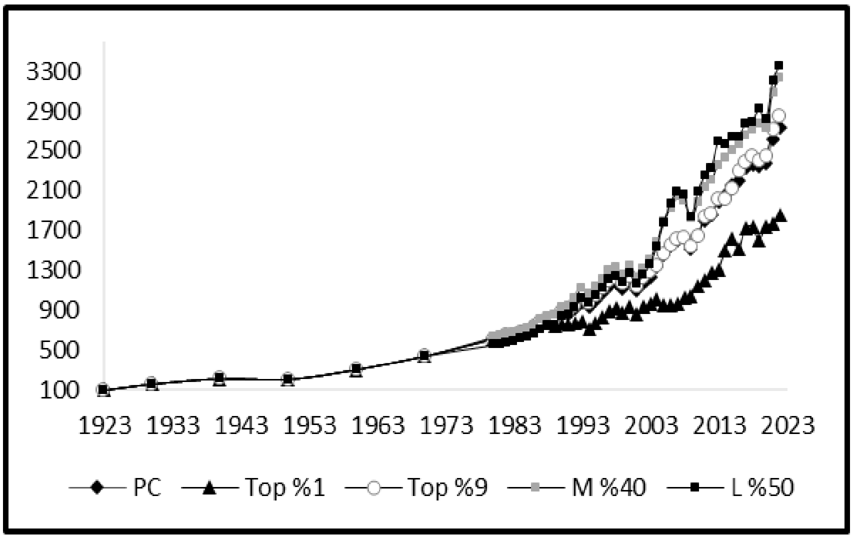

Figure 1: The Trajectory of Continuous Growth in Per Capita Income and The Average Income of Various Income Groups in Turkiye Over Republic Years

Source: Authors' Creation

The degree of inclusivity over the entire period, however, was not uniform. Specifically, from 1923 to approximately 1980, the effect of overall economic growth on income inequality in Turkiye remained nearly neutral. It was only during the 1980s –identified as the beginning of the Second Wave of Globalization[8]– (Pamuk, 2012), that the country experienced a phase of relatively higher economic growth coupled with greater inclusivity of economic growth. This trend is clearly illustrated in Figure 1 above.

Figure 1 paves the way for examining the Republic's years in two distinct sub-periods to better measure and understand the degree of inclusivity of economic growth in Turkiye: separately from 1923 to 1980 and from 1980 to 2022. By doing this, it not only allows us to better capture the patterns of inequality in different periods, but it also provides valuable information about the impact of globalization on Turkiye's overall economic growth performance during its integration into global markets and the distributional outcomes of this economic performance in this period. Therefore, the next section will depict these two different periods and provide a comparative analysis between them.

INCLUSIVITY OF GROWTH PRIOR TO AND DURING THE ERA OF GLOBALIZATION

Table 2 illustrates the annual average growth rates of GDP per capita alongside the income growth of various income groups in Turkiye across two key periods: 1923–1980 and 1980–2020. The data indicate that, although the country experienced strong per capita GDP growth during the early Republican period up to 1980, this growth contributed modestly to widening income inequality. In particular, the lower-income group saw only limited income gains, while other income groups experienced growth rates that closely mirrored the overall GDP per capita increase. This disparity is captured by the Inclusivity Coefficient of 1.02, signaling a lack of inclusiveness in economic growth during that timeframe –a pattern also depicted in Figure 2.

[8] The era spanning from 1870 to the onset of World War I is often recognized as the first "golden age" of globalization (Zinkina et al., 2019).

Table 2: Growth Performance of Turkiye and Different Income Groups in Two Distinct Period

Period	Ann. Growth PC	Ann. G. Top 1%	Ann. G. Top 9%	Ann. G. M 40%	Ann. G. L 50%	*I*
1923-1980	3.22%	3.23%	3.22%	3.27%	3.04%	1.02
1980-2022	3.65%	2.68%	3.74%	3.98%	4.39%	0.77

Note: The abbreviations used in the table are as follows: Ann. Growth PC refers to the Annual Average Growth Rate of GDP per capita, Ann. G. Top 1% represents the Annual Average Growth Rate of the super-rich, Ann. G. Top 9% refers to the Annual Average Growth Rate of the rich, Ann. G. M 40% indicates the Annual Average Growth Rate of the middle class, Ann. G. L 50% refers to the Annual Average Growth Rate of the low-income group, and *I* stands for the Inclusivity Coefficient.

Source: Authors' Creation

In contrast to the earlier period, the second phase reveals a significantly altered economic landscape for Turkiye. During this time, the average annual per capita income growth not only exceeded that of the earlier decades but also exhibited a more favorable distribution toward low-income groups and the middle class. This shift suggests that, in the context of globalization, Turkiye experienced not only accelerated economic expansion but also a transformation toward a more equitable and inclusive growth trajectory. As indicated in Table 2, the average annual income growth for the low-income group reached 4.39%, which was considerably higher than the GDP per capita growth rate of 3.65% for the same timeframe. The middle class and the rich also recorded income growth rates above the national average, reinforcing the broader inclusivity of economic gains during this period.

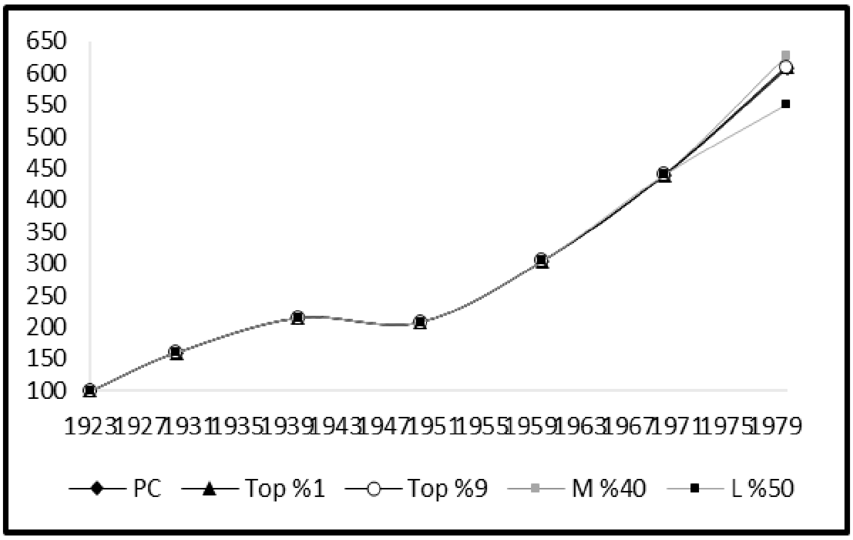

Figure 2: The Trajectory of Continuous Growth in Per Capita Income and The Average Income of Various Income Groups in Turkiye 1923-1980
Source: Authors' Creation

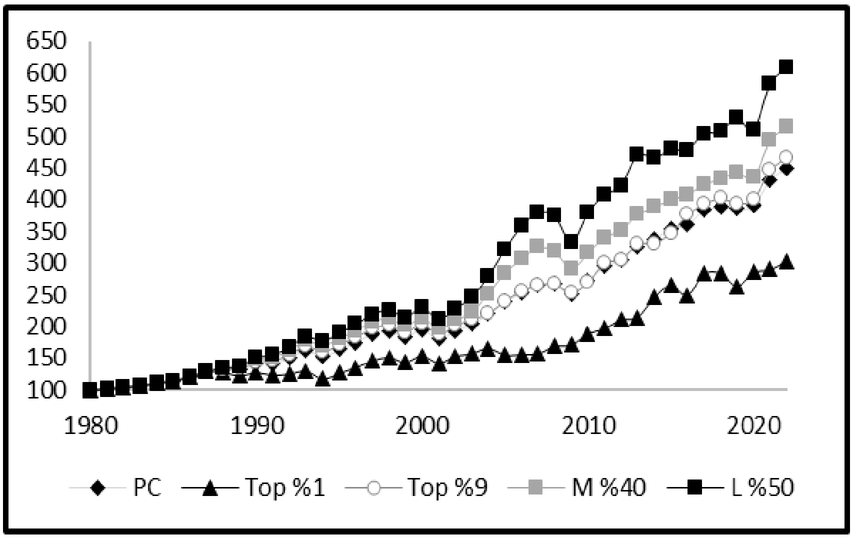

Figure 3: The Trajectory of Continuous Growth in Per Capita Income and the Average Income of Various Income Groups in Turkiye 1980-2022
Source: Authors' Creation

The only exception was the super-rich, whose annual income growth stood at just 2.68%, lagging behind the overall GDP per capita growth. This pattern highlights two important outcomes of globalization for Turkiye: not only did it usher in a phase of rapid economic growth, but it also ensured that the benefits of this growth were more equitably shared, particularly among the lower-income strata. This development marks a notable improvement in social welfare and inclusiveness, as clearly visualized in Figure 3.

Figure 3 clearly demonstrates that, particularly from the late 1980s onward, the low-income group and the middle class began to outperform higher-income groups in terms of income growth. This trend became more pronounced after the 2000s and remained consistent through 2022. This pattern supports the arguments regarding the positive effects of globalization for developing countries (Mills, 2008; Rodrik, 2007; Tabash et al., 2024) and specifically for Turkiye (Pamuk, 2021, p. 281). However, the impact of the recent surge in inflation is not reflected in the figure, as it only started becoming more noticeable after 2022.

VALIDATING THE COEFFICIENT: INSIGHTS FROM GINI COEFFICIENT TRENDS

The findings above, utilizing this novel methodology, align closely with the trends observed in the Gini coefficient for Turkiye, as illustrated in Figure 4[9]. This figure clearly demonstrates that it was only after the 1970s that overall income inequality began to decline. From that period onward, income inequality consistently decreased, continuing its downward trajectory until 2020, albeit with variations in the extent of change across different periods.

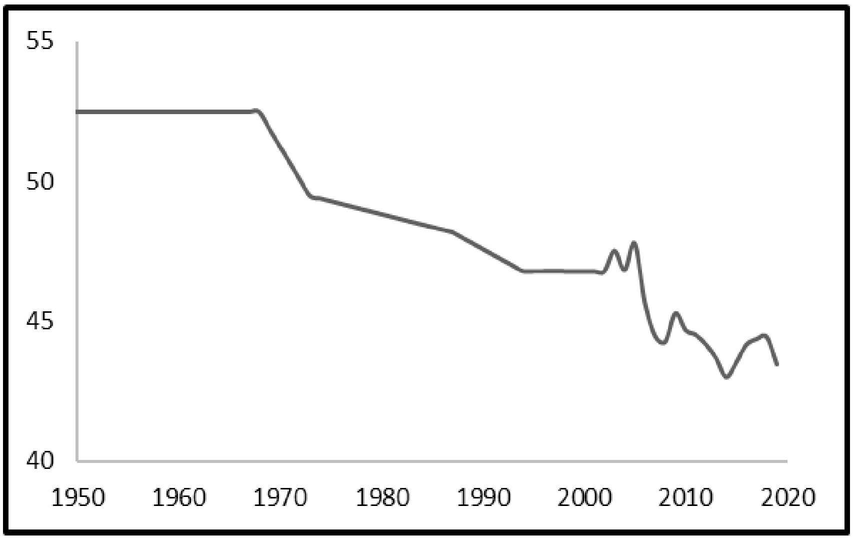

Figure 4: Gini Coefficient of Turkiye 1950-2020
Source: WIID (2024)

This alignment demonstrates our methodology's validity as a reliable measure for capturing changes in income inequality patterns and the extent of inclusive growth. Moreover, this consistency underscores its robustness in analyzing long-run income inequality dynamics, offering a more nuanced perspective on the inclusivity or exclusivity of economic growth.

Given its alignment with the changes in the Gini coefficient in Turkiye over the long run, our methodology establishes itself as a superior tool for measuring income inequality across extended periods and for assessing inclusive growth. This superiority is grounded in several key factors. First and foremost, its capacity to effectively track the distributional effects of economic growth across various income groups provides a more precise and nuanced understanding of the nature and dynamics of economic growth. Second, the concept of the Inclusivity Coefficient is both accessible and intuitive, making it comprehensible to scholars, policymakers, and the public. This accessibility ensures that it offers a clear depiction of the trends and characteristics of economic growth, fostering a broader societal understanding. Third, unlike commonly used indicators such as the Gini coefficient and the Palma Ratio, which may not fully capture the extent and trends of total income inequality (See, Cobham & Sumner, 2013), the Inclusivity Coefficient introduces a novel approach to analyzing changes in income distribution. This innovation enhances its analytical clarity and practical applicability. Finally, the methodology aspires to make a significant contribution to the inclusive growth literature, both by refining its conceptual framework and proposing a simpler and more effective measurement technique. In summary, all these factors establish our methodology as a more advanced and comprehensive tool compared to other definitions and measurement methods related to inclusive growth and income inequality.

[9] We obtained Gini coefficient data for post-tax national income in Turkiye spanning the period from 1950 to 2020. To extend our analysis, we assumed that the Gini coefficient data for pre-tax and post-tax national income are identical, based on two primary reasons. First, these post-tax figures represent the only long-run Gini coefficient data available for Turkiye, making them the sole resource for historical inequality analysis over such an extended period. Second, the impact of direct taxation during the Republican era in Turkiye has historically been minimal, lacking sufficient scope to systematically alter inequality trends. Therefore, this assumption does not affect the overall trend in the Gini coefficient data, whether based on pre-tax or post-tax national income.

DRIVERS OF INCLUSIVE GROWTH IN TURKIYE AFTER 1980

It is both rational and theoretically consistent to argue that factors such as economic liberalization and structural reforms, public investments in education and health, labor market reforms, minimum wage increases, and advancements in technology and digitalization may have contributed to inclusive growth in Turkiye since 1980. However, empirical evidence regarding the impact of these factors remains inconclusive. For example, the frequently debated role of economic liberalization and structural reforms has been found to have a negative effect on income distribution (Oyvat, 2011). Additionally, data on public investments in education and health reflect inconsistencies in the level of public expenditures in these sectors (World Bank, 2024). Furthermore, the impact of technological advancements on income inequality has yielded inconclusive results (Cetin et al., 2021; See: Gravina & Lanzafame, 2021).

Thus, in this paper it is argued that among the various factors contributing to inclusive growth during the era of globalization in Turkiye, integration into the global economy, export-oriented industrialization, and the emergence of new industrial centers in Anatolian Cities appear to be the most significant (Pamuk, 2021, pp. 265–282). The shift towards export-oriented industrialization, which emphasizes producing goods for export as a primary growth strategy, began in the 1970s and accelerated in 1980 after Turkiye opened its economy to global markets, reducing trade barriers and encouraging foreign direct investment (FDI). As a result, Turkiye moved away from its previous model of import substitution industrialization and embraced a more outward-looking growth model. This strategy helped Turkiye expand its industrial base, with key sectors such as textiles, electronics, and automotive manufacturing, driving export growth. The 1996 Customs Union agreement with the European Union further deepened Turkiye’s integration into global trade networks by enhancing market access, fostering competition, and improving the quality and diversity of Turkish exports (Larch et al., 2021).

A significant outcome of these developments has been the diversification of Turkiye’s export base. While the economy had previously relied heavily on agricultural exports, the shift towards industrialization enabled Turkiye to become a leading exporter of industrial goods, including textiles, electronics, machinery, and automobiles. This diversification reduced Turkiye’s vulnerability to global agricultural price fluctuations and allowed it to compete in higher-value global markets. Increased participation in global value chains also enabled Turkish firms to adopt advanced technologies and improve productivity, further strengthening their position in international trade.

The rise of Anatolian Cities as new semi-industrial hubs has been a key feature of this transformation. Cities such as Gaziantep, Kayseri, Konya, and Denizli, often referred to as "Anatolian Tigers," have experienced rapid industrialization, largely driven by small- and medium-sized enterprises (SMEs) that have embraced export-oriented strategies. These cities have contributed to Turkiye's industrial growth by expanding production in sectors such as textiles, machinery, and food processing. The emergence of these new industrial centers has not only diversified Turkiye’s industrial landscape but has also contributed to regional economic development, reducing the concentration of industrial activity in traditional urban centers like Istanbul, Bursa, and Izmir.

The integration of these Anatolian cities into global markets has had profound social and economic effects. The industrialization of these regions has generated employment, raised income levels, and contributed to the development of local infrastructure. Many of these cities have also benefited from the inflow of FDI, which has supported the modernization of production facilities and the adoption of new technologies. This rise in regional industrialization has helped narrow the economic gap between more developed urban centers in western Turkiye and previously underdeveloped regions in the interior.

CONCLUSION

This research explores the pattern of economic growth in Turkiye from the founding of the Republic in 1923 through to 2022, with a particular emphasis on determining whether the growth experienced during this period has been inclusive or exclusive. To do so, it adopts an original methodology that defines growth as inclusive when it leads to a decline in overall income inequality. The analysis divides the historical timeline into two main phases –1923 to 1980 and 1980 to 2022– in order to highlight the medium-term period that had the greatest influence on the inclusiveness of growth.

The study finds that while economic growth in Turkiye has generally followed an inclusive path since the Republic's establishment, the inclusivity became more evident after 1980. Between 1923 and 1980, growth did not exhibit inclusive features. After 1980, however, economic growth increasingly favored lower- and middle-income groups over higher-income segments, signaling a significant shift toward greater inclusivity. This trend aligns with the goals of sustainable development, as inclusive growth supports both social justice and long-term economic resilience.

The innovative method employed in the study, supported by its consistency with Turkiye’s Gini coefficient trends, proves to be a more effective tool for evaluating long-term income inequality and inclusive growth. Its strengths lie in its accuracy in capturing distributional changes, the intuitive nature of the Inclusivity Coefficient, and its advancement beyond conventional indicators like the Gini coefficient and Palma Ratio. These features offer a more detailed, accessible, and holistic understanding of economic growth, making the methodology a noteworthy addition to the inclusive growth literature, which still faces significant challenges regarding its definition and measurement.

Nonetheless, despite its strengths, the proposed methodology and the Inclusivity Coefficient metric are not without limitations. Specifically, the metric is designed to evaluate the distribution of medium- to long-term total income growth across various income groups and, as such, presupposes a consistent increase in national income per capita over time. In the absence of such growth, the metric fails to yield meaningful insights into the distributional dynamics or the inclusive or exclusive nature of economic growth. Additionally, the metric does not effectively capture distributional dynamics in cases where total income patterns are significantly altered by direct and drastic political interventions, such as the state-planned economies of China and the Soviet Union in the 20th century. Therefore, the Inclusivity Coefficient is best applied in economies experiencing sustained medium- to long-term economic growth, where the benefits of the total growth are, more or less, shared among all income groups.

Ultimately, this methodology provides both scholars and policymakers with a robust and more intuitive tool to assess distributional patterns of total economic growth over the medium to long term by accurately capturing income changes across different income groups. By applying the Inclusivity Coefficient, it enables the identification of whether economic growth benefits lower- and middle-income populations, thereby guiding the design and implementation of more targeted policies that promote inclusive growth, social equity, and sustainable development.

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