



RESEARCH ARTICLE

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Increasing Effect of Syrian Temporary Refugees on Interregional Income and Wealth Inequality

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Abstract

This study aims to assess the impact of the additional population pressure on the interregional income and wealth distribution of the Syrian temporary refugees in Türkiye. Using Excel, we calculated the effect of the additional population pressure from the Syrians in the 26 sub-regions in NUTS 2 on the asset and income distribution among the regions. The asset and income distributions were estimated using the Gini, Theil, Atkinson, and CV methods. Subsequently, we determined the disruptive effect of Syrians on the interregional income distribution in each of the 10 distinct income components. The interregional income distribution deteriorated by 4% to 7% across different income groups. Additionally, we determined the disruptive effect of Syrians on the interregional wealth distribution across 16 different asset components. The deterioration in the interregional asset distribution according to real asset components occurred in a wide band between 1% and 18%. Upon comparing the interregional distribution of income and wealth components, we observed that the additional population pressure of Syrians significantly and steadily increased the inequality in the distribution of income components. Only a balanced distribution of income and wealth can prevent the Syrians, who form their shadow economy, from deteriorating the distribution of income and wealth.

Keywords: Social politics, welfare economics, migration, regional inequality, wealth distribution, income distribution, Syrian temporary refugees

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1. Introduction

The disproportionate distribution of income and wealth among the population of a region primarily highlights the differences in development between regions. This situation, in addition to the fact that the society does not receive a balanced share of income and wealth, also reduces the probability of getting a balanced share. Therefore, we should distribute income and wealth equally among regions and households. Sometimes, there is rapid displacement among the populations of the region due to reasons such as war, earthquake, drought, and famine. Regional wealth and income often do not change as rapidly as the population movement. For example, the housing stock in a region maintains approximately the same amount in the short term, whether there is immigration or not. In such a case, the region that receives rapid immigration becomes impoverished in terms of housing stock, at least for the short term. The rapidly increasing population has resulted in a decrease in the number of residences per capita and the total residential area in square meters. The population flow of Syrian temporary refugees has also led to this effect in some provinces within the country. The additional population growth has not allowed for the timely provision of real assets such as additional housing, workplaces, and vehicles. Similarly, achieving a rate of income acquisition to match the population growth rate has proven impossible. This, in turn, increases regional impoverishment. This study aims to assess the impact of the Syrian temporary refugees' additional population pressure on the interregional income and wealth distribution. We conducted this test using the Gini, Theil, Atkinson, and CV methods.

Chancel et al. (2022) used the Theil index to measure income inequality between countries from 1820 to 2020. Eva et al. (2022) used the Gini, Atkinson, and Theil indices to measure income inequality between the regions of the countries around the world between 2000 and 2018. Carrascal-Incera et al. (2020) used Theil and Gini indices to compare 14 European countries according to income inequality between cities between 1900 and 2010. López-Villuendas and del Campo (2023) calculated income inequality in EU countries according to NUTS 2 and NUTS 3 for 2000-2017 using CV and Gini indices. Antonov (2020) used the Theil index to measure interregional income inequality according to NUTS 2 for EU countries and Russia. Ezcurra (2019) analyzed the change in income distribution in EU countries according to NUTS 2 between 1996 and 2010 using Gini, CV, and the Theil indices. Liu et al. (2021) used the Theil index to determine 37 megacities around the world and interregional income inequality within these megacities.

Rey (2004) identified the development of income inequality in the USA from 1929 to 2000 between states and from 48 states to 3079 counties. Gezici and Hewings (2007) analyzed interregional income inequality in Türkiye between 1980 and 1997 according to NUTS 2. Yildirim et al. (2009) tested the interregional income inequality variation between 1987 and 2001 in Türkiye according to NUTS 1 and NUTS 2. Fan and Sun (2008) identified regional income inequality in China at the provincial level with the CV, Gini, and Theil indices for 1978-2006. Rey and Sastré-Gutiérrez (2010) measured interstate income inequality in Mexico between 1940 and 2000 with the Theil index. Tadjeddin (2015) determined the interregional inequality of wages according to the general, uneducated, and poorest labor force in Indonesia

with the CV index. Zabelina (2021) also measured the income distribution between regions of Russia with the Theil index. Artelaris (2021) tested the increase in interregional income inequality in Greece with the Gini, CV, and the Theil indices. Khan and Siddique (2021) used the Theil index for the interregional inequality of income in the US.

Kolomak (2013) measured the distribution of production, sectoral production, and the number of firms among regions in Russia. Soltow (1979) used Gini to compare the distribution of income and wealth in Denmark in 1789, whereas Pammer (2013) used Gini to compare the wealth distribution between 1820 and 1913. James (1988) determined the distribution of wealth by occupation and region in Britain in 1780 using the CV, Gini, and Atkinson indices. Yoo (2003) analyzed temporal development with Gini, Theil, and CV for inequalities by wealth types for 1986-2000 in rural China. Çiftçi (2009) calculated the distribution of wealth among regions in Türkiye. Çiftçi (2020, 2021) tested the effects of international capital flows and the pandemic on the distribution of wealth among regions in Türkiye with the Atkinson index. Zhong et al. (2010) calculated the interregional distribution of wealth in China using Gini. Kataoka (2013) determined the inequality in the interregional distribution of physical capital in Indonesia with the Theil index. Subramanian and Jayaraj (2006) analyzed the distribution of wealth by type in India with Gini. Jayadev et al. (2007) compared 1991 and 2002, measuring the distribution of total assets with Gini. Anand and Thampi (2016) used Gini to calculate the distribution of wealth by type in detail for the period 1991–2012 in India, between rural and urban areas. Iliev (2018) identified cross-regional disparities in gross fixed capital formation in Macedonia, utilizing Gini and Theil indices according to NUTS 3 classification. Malkina (2022) measured the inequality between regions of fixed capital investment in Russia from 2015 to 2021 with Gini and CV indices. Zhang et al. (2021) determined the distribution of human capital (HC), produced capital (PC), and natural capital (NC) in China and Japan with Gini and Theil. Frost et al. (2022) used the Gini index to measure inequality in real and financial wealth in Italy between 1991 and 2016. Davies et al. (2011) compared wealth inequalities in countries at the global level by calculating CV and Gini indices.

Large inflows of refugees or immigrants may lead to a reduction in wages paid to native-born workers as they increase the total number of workers in the market. However, in the short term, the employment volume cannot be increased as much as the large inflows of refugees. Particularly, the income of low-skilled or unskilled workers has significantly decreased due to the influx of refugees or immigrants (Dustmann et al., 2013; Peri & Sparber, 2009). As a result, the decrease in wages and the increase in unemployment disrupt the income distribution.

Some previous studies on the impact of refugees on income inequality can be summarized in the following way: The study of Ozyilmaz et al. (2022) analyzed the effect of refugees on income inequality for the period of 1991 to 2020 in the 25 largest refugee-hosting developing countries. The study's findings indicate that refugees primarily contribute to an increase in income inequality. According to Nilsson and Ramadan's (2020) study, the increasing share of migrants from Iraq and Jordan in the Italian and Spanish regions results in an increase in the Gini coefficients in both countries. Manthei's (2020) model suggests that an increase in mostly low-skilled refugee immigration may lead to a rise in Germany's income inequality in 2015 and 2016.

Numerous studies have identified the disruption effect of refugees on wealth distribution, similar to income distribution. Since refugees typically migrate without their assets, the destination experiences no significant increase in wealth. The increasing population of refugees corrupts the wealth distribution in destinations. The increase in asset prices also refers to the deterioration in wealth distribution caused by refugees. Therefore, many studies have focused on increasing asset prices from refugees. For example, Saiz (2007) found that immigration pushes up rents and housing values in US destination cities. The reason for the increase is that while the number of houses is fixed in the short term, the demand increases due to immigrants. This finding may be partial evidence for the increasing effect of immigrants and refugees on wealth inequality. Other studies on immigration and real estate markets have produced findings of a positive relationship between refugees and housing rents or prices for Germany (Kürschner Rauck & Kvasnicka, 2018), Poland (Trojanek & Gluszak, 2022), Jordan (Rozo & Sviatschi, 2021), and Türkiye (Balkan et al., 2018; Erdem, 2021).

There are some studies analyzing the direct corruptive effect of refugees and immigrants on income and wealth distribution. For example, Berman and Aste (2016) analyzed the effect of wealth and income inequality on the large-scale immigration to the US, the UK, and Australia in the past few decades. It found that the effect of immigration on 10% - 15% of the wealth and income inequality increase can be attributed to immigration.

2. The Issue of Syrian Temporary Refugees in Türkiye and the Resulting Regional Population Pressure

Fakih and Ibrahim (2016) found that there is no Granger causality relationship between the Jordanian labor market and Syrian refugees. David et al. (2020) concluded that Syrian refugees have no impact on skilled local workers in Lebanon. Population pressure from Syrians can often complicate the living conditions of vulnerable groups (Beaujouan & Rasheed, 2020). But in general, refugees live cut off from the local economy. This situation is similar in Türkiye. While micro-entrepreneurship is becoming widespread among Syrians, Syrian temporary refugees are breaking away from the Turkish economy (Atasü-Topcuoğlu, 2019). Özgür (2020) draws attention to the formation of refugee economic enclaves by Syrians in Türkiye. Çiftçi (2022) presents similar evidence for Türkiye, arguing that Syrians are disconnected from not only the labor market but also socioeconomic life in general in Türkiye. Kul Parlak and Uludağ Güler (2022) also stated that Syrian entrepreneurship, especially in Istanbul Esenyurt and Fatih, is carried out in a kind of refugee enclave where production is shaped around the residences of the compatriots. However, this disconnection does not prevent the perception that Syrian entrepreneurs are in unfair competition against local entrepreneurs. Many studies show that Syrian micro-entrepreneurs have unregistered workplaces, do not have work and business licenses, do not pay taxes, and enter into unfair competition with local tradesmen in their neighborhoods (Cakici et al., 2018; Koyuncu, 2020; Taş & Tekkanat, 2018).

There is a similar situation in Lebanon. The shadow micro-entrepreneurship of Syrian refugees empowers refugees while offering them an alternative right to the city (Yassine et al., 2021). Refugees in Lebanon should be so aware of this power that three-quarters of them

declare they want to be entrepreneurs (Alexandre et al., 2019). Refugees are making new settlements as a temporary form of urbanization to build social cohesion (Moawad, 2020).

Sönmez (2016) pointed out that in the early period, Syrians reached a population density of 30% in some neighborhoods, signaling ghettoization. Cengiz and İncili (2022) in Kilis, and Cengiz and Özgür (2021) in Antakya, found that Syrian settlements show spatial clustering in both the city centers and their peripheries. Savran and Sat (2019) emphasized that Syrians form ethnic urban islets in the Ankara Altındağ district, while the segregation in refugee settlements has reached moderate and high-level severity. In fact, Haliloğlu Kahraman and Güngördü (2021) points out that the Ulubey and Önder neighborhoods of the Altındağ district are referred to as Little Aleppo. While the official population of Ulubey-Önder neighborhoods decreased from 18,039 to 6,268 between 2011 and 2019, the number of Syrians reached 15 thousand, according to the information obtained from the neighborhood headman (Haliloğlu Kahraman, 2022). The Bursa equivalent of “little Aleppo” in Ankara is the Çarşamba neighborhood in the Osmangazi district (Irgil, 2022). So, there are many different little Aleppos in the country. This situation, while prevalent in Türkiye, is also present in Egypt, Lebanon, and Jordan. The 6th of October in Greater Cairo is known as “little Damascus” (Suerbaum, 2020).

Günaydın Temel and Kahraman (2019) also concluded that in the example of the Ankara Önder neighborhood, Syrians adopted the exterior of the buildings they lived in into their own lifestyles. New construction permits are obtained in Önder and Ulubey neighborhoods, which were slum areas in the past (Savran Penbecioğlu, 2022). New constructions in these neighborhoods, where Syrians live in isolation from other places, increase the refugee enclave feature. Oner et al. (2020) noted that Basmane in Izmir has transformed into a Syrian enclave, commonly referred to as Little Syria. Aksaray in Fatih, İstanbul, is another neighborhood known as “Little Syria” due to its dense Syrian population and the large number of shops owned by Syrians (Mackreath & Sağnıç, 2017). In short, there are refugee enclaves in provinces of almost all sizes in Türkiye, where Syrians live in isolation. Even for a whole province like Gaziantep, the expression “little Syria” or “little Aleppo” is used (Chang, 2022; Fradejas-García, 2019).

Table 1

Population of Syrian Temporary Refugees and Turkish People in Türkiye (31 December 2022)

Province	Population		STR / Province		Province	Population		STR / Province	
	STR	Province	%	Rank		STR	Province	%	Rank
Kilis	87.672	145.826	60,1	1	Mardin	86.567	862.757	10,0	7
Gaziantep	460.850	2.130.432	21,6	2	Kahramanmaraş	96.494	1.171.298	8,2	8
Hatay	355.999	1.670.712	21,3	3	Osmaniye	38.618	553.012	7,0	9
Şanlıurfa	370.291	2.143.020	17,3	4	Bursa	183.463	3.147.818	5,8	10
Mersin	237.934	1.891.145	12,6	5	Others	1.359.293	68.701.680	2,0	
Adana	251.654	2.263.373	11,1	6	Total	3.528.835	84.681.073	4,2	

Note. STR: Syrian temporary refugee

Source: Directorate General of Migration Management, 2023, *Geçici Koruma* [Temporary Protection]. Ministry of Interior, Türkiye. Retrieved from January 01, 2023, <https://www.goc.gov.tr/gecici-koruma5638>

Actually, the phrase “little Syria” for the entire province is not accidental. In Gaziantep, where this statement originated, the proportion of Syrians surpasses 1/5 of the local Turkish population. There is a similar population ratio in Hatay. The Syrian population in Şanlıurfa, Mersin, Adana, and Mardin is between 1/10 and 1/5 of the resident population. For Türkiye in

general, the Syrian population, which exceeds 3.5 million, reaches 4.2% of the country's population. Moreover, the situation in Kilis, out of 81 provinces, is even more dramatic. The Syrian population in Kilis exceeds 2/3 of the urban residents (see Table 1).

3. Data and Methodology

The data used in this study are grouped under three main headings. The first set of data was population data and consisted of resident Turks and Syrian temporary refugee populations. The second dataset included asset variants. It was divided into two subcategories: real assets and financial assets. It consisted of a total of 16 different types of assets, 10 of which are real assets and 6 of which are financial assets. The third data set included income types. The income group was divided into two main groups: regional gross domestic product and regional income. Regional Gross Domestic Product consisted of three main sectors and five variables. Regional income also consisted of the annual income average calculated for five different income groups. Thus, we used a total of 28 indicators, which included two demographics, 16 assets, and 10 income indicators (see Table 2).

Table 2

Data, Symbols and Sources

Symbol	Variable (2020)	Sources
Population		
PT	Turkish people	TURKSTAT
PS	Syrian people	Erdoğan (2021)
Real Assets		
RB	Residential Building (m ²)	TURKSTAT (2002-2020)
WRB	Wholesale and retail trade buildings (m ²)	TURKSTAT (2002-2020)
OB	Other building (m ²)	TURKSTAT (2002-2020)
NRB	Non-Residential Building (m ²)	TURKSTAT (2002-2020)
TB	Total building (m ²)	TURKSTAT (2002-2020)
CR	Car	TURKSTAT
M&B	Minibus and bus	TURKSTAT
TRC	Tuck and small truck	TURKSTAT
MT	Motorcycles	TURKSTAT
MH	Motor vehicles	TURKSTAT
Financial assets		
SD	Savings Deposits	TBB
CDA	Commercial deposits	TBB
FCD	Foreign Currency Deposits	TBB
PMD	Precious Metals Deposits	TBB
OD	Other deposits	TBB
TD	Total deposits	TBB
Regional Gross Domestic Product at current prices by kind of economic activity (million TL)		
AG	Agriculture	TURKSTAT
IND	Industry	TURKSTAT
SER	Services	TURKSTAT
GV	Gross Value Added	TURKSTAT
GDP	Gross Domestic Product	TURKSTAT
Regional Income (TL)		
IL10	Avarage income received by the 10% of the population with the lowest income	TURKSTAT
IL20	Avarage income received by the 20% of the population with the lowest income	TURKSTAT
IH10	Avarage income received by the 10% of the population with the highest income	TURKSTAT
IH20	Avarage income received by the 20% of the population with the highest income	TURKSTAT
IA	Avarage income by the all people of Türkiye	TURKSTAT

Note. TBB: The Banks Association of Türkiye

The research employed three different inequality metrics: The Theil entropy index (GE_y), the Atkinson index ($A_{(\Omega)}$), and the coefficient of variation (CV). Among these three statistics, only the Atkinson index ranges from 0 to 1, whereas the other two inequality coefficients can take values exceeding 1. In all three indices, a value of 0 signifies a state of complete equality.

The *Theil entropy index* is an inequality coefficient derived in 1967 based on information theory. It is widely used, especially in the comparison of income inequality between countries (Çobanoğlu & Yılmaz, 2019). Equation 1 calculates the coefficient value as follows:

$$GE = \sum_{i=1}^n y_i \log \frac{y_i}{p_i} \tag{1}$$

The Theil generalized entropy index is represented by GE. In this context, y_i denotes the ratio of the GDP or a GDP component in a specific province or subregion to the overall GDP or GDP component of the entire country. Additionally, p_i represents the ratio of the Turkish or Syrian population within the p_i province or subregion to the total population of Turks or Syrians.

The *Atkinson inequality index* was derived by Anthony B. Atkinson (1970). Equation 2 displays the original formula for the coefficient:

$$I = 1 - \left[\sum_i \left(\frac{Y_i}{\mu} \right)^\epsilon f(y_i) \right]^{\frac{1}{1-\epsilon}} \tag{2}$$

In the formulation, I define the index coefficient, Y_i defines the income in the i observation, ϵ defines the sensitivity coefficient. The sensitivity coefficient can take values between 0 and ∞ . If the sensitivity coefficient is ∞ , this indicates that only transfers to the lowest income group are taken into account. If this value is 0, the distributions show only the linear utility function that ranks by income. The formula transformation for interregional inequality is as in Equation 3 (Çiftçi, 2010):

$$A_{(\Omega)} = 1 - \left[\frac{P_i}{P} \times \sum_{i=1}^n \frac{Y_i/P_i}{\bar{Y}/\bar{P}} \right]^{\frac{1}{1-\Omega}} \Rightarrow \Omega \neq 1 \tag{3}$$

$A_{(\Omega)}$ Atkinson coefficient is a sensitivity parameter that commonly takes 2 values due to the ease of calculating Ω . Y_i is the income or asset component in the province. P_i is the population in the region i . \bar{Y} is the average income or asset component in the country. \bar{P} is the average population.

Coefficient of variation (CV) is a widely used inequality statistics. Equation 4 contains the original formula:

$$CV = \frac{\sigma}{\bar{X}} \tag{4}$$

CV is the coefficient of variation, σ is the standard deviation, and \bar{X} is the arithmetic mean in the series. Based on the original formula, detailed calculations are made with the formulation in Equation 5.

$$CV = \frac{\sum_{i=0}^n \sqrt{\left(\frac{Y_i - \frac{\sum Y}{\sum P}}{P_i - \frac{\sum Y}{\sum P}}\right)^2}}{\sum Y / \sum P} \quad (5)$$

In the equation, CV represents the coefficient of variation, Y_i represents the income or wealth component in region i , P_i represents the population in the region, $\sum Y$ represents the total income or asset component, and $\sum P$ represents the population total.

4. Results of the Disruptive Effect of Syrian Temporary Refugees on Interregional Income Distribution

The author calculated the impact of the additional population pressure from Syrian temporary refugees in the 26 sub-regions of NUTS 2 on income distribution among the regions using Excel, with the results presented in Table 3. Accordingly, in each of the 10 different income components, the disruptive effect of Syrians on the interregional income distribution was determined. While the deterioration in interregional income distribution according to income groups ranged between 4% and 7%, it was observed that the deterioration among the rich was more severe than the deterioration among the poor. However, it cannot be argued that there is a very sharp divergence. In regional GDP and its components, Syrians increased the disruption in the services sector the most, out of the three sectors. Up to 8% deterioration was detected in the aggregated sectors and GDP. We concluded that there was a wider range of deterioration between regions, ranging from 1% to 8%.

Table 3

Regional Inequality Indices for 10 Different Kinds of Income

	Regional Gross Domestic Product (RGDP) and Sectors											
	Theil				Coefficient of variation				Atkinson			
	PT	PT+S	dif.	*%	PT	PT+S	dif.	*%	PT	PT+S	dif.	*%
AG	0,122	0,125	0,003	2,31	0,475	0,491	0,016	3,41	0,317	0,326	0,010	3,05
IND	0,058	0,060	0,002	3,48	0,595	0,604	0,009	1,49	0,197	0,205	0,007	3,61
SER	0,057	0,060	0,003	5,41	0,453	0,461	0,008	1,73	0,222	0,231	0,008	3,74
GV	0,034	0,037	0,003	8,01	0,362	0,372	0,010	2,75	0,135	0,144	0,009	6,43
GDP	0,034	0,037	0,003	8,01	0,362	0,372	0,010	2,75	0,135	0,144	0,009	6,43
	Income (TL)											
IL10	0,061	0,064	0,003	5,21	0,583	0,606	0,024	4,05	0,249	0,262	0,013	5,31
IL20	0,065	0,069	0,003	5,05	0,598	0,622	0,024	3,95	0,262	0,275	0,013	5,14
IH10	0,046	0,050	0,003	7,21	0,535	0,559	0,023	4,38	0,203	0,217	0,014	6,87
IH20	0,053	0,057	0,003	6,54	0,56	0,583	0,023	4,19	0,226	0,24	0,014	6,28
IA	0,062	0,065	0,004	5,82	0,583	0,607	0,023	4,02	0,25	0,264	0,014	5,68

Note. * % of change between P_T and P_{T+S}

5. Results of the Disruptive Effect of Syrian Temporary Refugees on Interregional Wealth Distribution

We calculated the impact of the additional population pressure from the Syrian temporary refugees in the 26 sub-regions in NUTS 2 on the wealth distribution between regions using Excel and presented the results in Table 4. We detected the distorting effect of Syrians on the interregional asset distribution in each of the 16 different asset components, with the exception of a single deviation.

The deterioration in the interregional asset distribution according to real asset components occurred in a wide band between 1% and 18%. However, this wide band gap resulted from the sharp differentiation in motor vehicles. In terms of the buildings area, the increase in interregional inequality caused by the population effect of the Syrians remained below 1%.

In the components of the financial assets, the impact of the Syrian population pressure is variable. For savings deposits, commercial deposits, and other deposits, the distorting effect of the Syrian population pressure on the interregional wealth distribution remained limited between 0 and 3%. Whereas severe deterioration of up to 18% was detected in terms of foreign currency deposits, precious metals deposits, and total deposits.

Table 4

Regional Inequality Indices for 16 Different Kinds of Assets

	Real assets											
	Theil				Coefficient of variation				Atkinson			
	PT	PT+S	dif.	*%	PT	PT+S	dif.	*%	PT	PT+S	dif.	*%
RB	0,262	0,263	0,001	0,27	1,263	1,283	0,020	1,62	0,650	0,654	0,004	0,56
WRB	0,166	0,167	0,001	0,71	0,955	0,979	0,025	2,61	0,500	0,508	0,008	1,56
OB	0,237	0,239	0,002	0,75	1,326	1,354	0,028	2,13	0,632	0,620	-0,012	-1,87
NRB	0,218	0,219	0,001	0,37	1,288	1,318	0,030	2,34	0,614	0,620	0,007	1,06
TB	0,187	0,187	0,000	0,16	0,914	0,928	0,014	1,53	0,526	0,528	0,002	0,43
CR	0,040	0,043	0,003	6,97	0,444	0,454	0,011	2,37	0,132	0,142	0,010	7,20
M&B	0,011	0,013	0,002	18,22	0,258	0,277	0,019	7,23	0,050	0,059	0,009	17,86
TRC	0,019	0,021	0,002	12,44	0,310	0,322	0,013	4,10	0,071	0,080	0,009	12,45
MT	0,090	0,093	0,003	3,24	0,621	0,644	0,023	3,76	0,315	0,328	0,012	3,88
MH	0,028	0,030	0,003	9,66	0,368	0,379	0,012	3,18	0,096	0,105	0,009	9,87
Financial assets												
SD	0,187	0,187	0,000	0,16	0,623	0,628	0,005	0,87	0,262	0,270	0,008	3,03
CDA	0,040	0,043	0,003	6,97	1,400	1,407	0,007	0,47	0,562	0,568	0,005	0,95
FCD	0,011	0,013	0,002	18,22	0,911	0,915	0,004	0,42	0,438	0,461	0,023	5,36
PMD	0,019	0,021	0,002	12,44	0,475	0,483	0,008	1,76	0,182	0,192	0,010	5,57
OD	0,090	0,093	0,003	3,24	2,370	2,387	0,017	0,74	0,713	0,718	0,006	0,79
TD	0,028	0,030	0,003	9,66	0,882	0,882	0,000	0,00	0,411	0,418	0,007	1,64

Note. * % of change between PT and PT+S

6. Discussion and Conclusion

Since 2011, there has been a massive influx of population from Syria to Türkiye. This population flow, unlike the classical migration flow, was uncontrolled, unbalanced, very fast, and sudden. The Syrians, who were initially hosted in the camps, soon spread from the camps into the country, and this spread was not stopped. The geographical distribution of Syrians within the country was also extremely uneven. There was agglomeration in metropolises and border provinces. This situation caused the additional population pressure on the regional income and wealth of the provinces to be unbalanced.

Statistical analyses reveal that the distribution of Syrians within the country does not align with the proportion of the region's population. It demonstrates that the Syrians lead to a decline in the distribution of income, both in terms of the regional GDP and its components, as well as the breakdown of individual income between the poor and the rich. Previous studies also support these findings (see Manthei, 2020; Nilson & Ramadan, 2020; Ozyilmaz et al., 2022).

Some studies analyze the direct corruptive effect of refugees and immigrants on income and wealth distribution, such as Berman & Aste's (2016) study. In the interregional wealth distribution, we have determined the distorting effect of the Syrian population pressure on the interregional distribution. These findings are consistent with the findings of the previous studies. Interestingly, the deterioration in the interregional distribution of real asset components is not too severe. What is expected is that there will be a much more severe deterioration in the distribution of assets than in the distribution of income. The additional population pressure exerted by the Syrians almost does not cause any deterioration in the interregional distribution of the real estate assets, which were put into use between 2002 and 2020. This could be due to the Turkish population's already highly distorted interregional real estate distribution. Because the additional population pressure of Syrians in motor vehicles, whose interregional distribution is close to 0, increases the inequality in interregional distribution much more severely than the distribution of real estate.

Upon comparing the interregional distribution of income and wealth components, it became evident that the additional population pressure of Syrians significantly and steadily increased the inequality in the distribution of income components. This situation is worrisome. Due to its inherent nature, wealth already distributes unevenly among people based on income. Society, accustomed to this pattern, responds less strongly to it. However, a population movement that leads to a significant decline in income distribution may elicit a more severe response from society. The severity of the deterioration, affecting both the rich and the poor, could potentially increase the discomfort of all segments of society due to the pressure exerted by the Syrian population. These findings reinforce the claims of tradespeople and merchants that the presence of Syrians weakens their competitiveness, as the additional pressure from the Syrian population disproportionately affects the rich rather than the poor. This partially explains the increase in anti-refugee sentiment.

Solving a chronic problem is a challenging task. When the masses, who have already been displaced and have not taken root in a place, are settled there, it becomes difficult to remove them. Overcoming the deterioration in the distribution of income and wealth caused by the Syrians, who form their own shadow economy, can only be possible with a balanced

distribution of income and wealth. There are three ways to do this: 1) Syrians are distributed evenly or dispersed. 2) Turks are redistributed or dispersed in a way that balances the situation. 3) Income and wealth are distributed evenly by the public according to the current population, or additional income and assets are provided and added to the deficient regions. The first two options are quite difficult. The second option is possible with a Keynesian approach.

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ETHICS

The author declares that this article complies with ethical standards and rules.

AUTHOR CONTRIBUTION

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CONFLICT OF INTEREST

The author declares no conflict of interest.

References

- Alexandre, L., Salloum, C., & Alalam, A. (2019). An investigation of migrant entrepreneurs: The case of Syrian refugees in Lebanon. *International Journal of Entrepreneurial Behavior & Research*, 25(5), 1147-1164. <https://doi.org/10.1108/IJEBR-03-2018-0171>
- Anand, I., & Thampi, A. (2016). Recent trends in wealth inequality in India. *Economic and Political Weekly*, 51(50), 59-67.
- Antonov, E. V. (2020). Territorial concentration of the economy and population in European Union Countries and Russia and the role of global cities. *Regional Research of Russia*, 10(3), 360-372. <https://doi.org/10.1134/S2079970520030028>
- Artelaris, P. (2021). Regional economic growth and inequality in Greece. *Regional Science Policy & Practice*, 13(1), 141-159. <https://doi.org/10.1111/rsp3.12363>
- Atasü-Topcuoğlu, R. (2019). Syrian refugee entrepreneurship in Turkey: Integration and the use of immigrant capital in the informal economy. *Social Inclusion*, 7(4), 200-210. <https://doi.org/10.17645/si.v7i4.2346>
- Atkinson, A. B. (1970). On the measurement of inequality. *Journal of Economic Theory*, 2(3), 244-263. [https://doi.org/10.1016/0022-0531\(70\)90039-6](https://doi.org/10.1016/0022-0531(70)90039-6)
- Balkan, B., Ozcan Tok, E., Torun, H., Tumen, S. (2018, June). *Immigration, housing rents, and residential Segregation: Evidence from Syrian refugees in Turkey* (Discussion Paper, No. 11611). IZA Institute of Labor Economics. <https://docs.iza.org/dp11611.pdf>
- Beaujouan, J., & Rasheed, A. (2020). An overview of the Syrian refugee crisis in Lebanon and its socio-economic impact. In J. Beaujouan, A. Rasheed (Eds.), *Syrian Crisis, Syrian Refugees. Mobility & Politics* (pp. 35-46). Palgrave Pivot, Cham.
- Berman, Y., & Aste, T. (2016). To what extent does immigration affect inequality? *Physica A: Statistical Mechanics and Its Applications*, 462, 1029-1039. <https://doi.org/10.1016/j.physa.2016.06.074>
- Cakici, A., Yilmaz, S., & Cakici, A. C. (2018). Türk esnafın Suriyeli mülteci esnaf hakkındaki tutumu: Mersin'de bir araştırma [The attitudes of Turkish tradesmen towards Syrian refugee tradesmen: A research in Mersin]. *PressAcademia Procedia*, 7(1), 367-371. <https://doi.org/10.17261/Pressacademia.2018.918>
- Carrascal-Incera, A., McCann, P., Ortega-Argilés, R., & Rodríguez-Pose, A. (2020). UK interregional inequality in a historical and international comparative context. *National Institute Economic Review*, 253, R4-R17. <https://doi.org/10.1017/nie.2020.26>
- Cengiz, D., & İncili, Ö. F. (2022). Kilis'te yaşayan Suriyelilerin mekânsal örüntüleri [Spatial patterns of Syrians living in Kilis]. *Göç Dergisi*, 9(2), 207-223. <https://doi.org/10.33182/gd.v9i2.810>
- Cengiz, D., & Özgür, E. M. (2021). Suriyeli mültecilerin Antakya'daki mekânsal ayrışma örüntüsünün haritalanması [Mapping the spatial segregation pattern of Syrian refugees in Antakya]. *Göç Dergisi*, 8(2), 347-364. <https://doi.org/10.33182/gd.v8i2.789>
- Chancel, L., Piketty, T., Saez, E., Zucman, G. et al. (2022). *World Inequality Report 2022*. World Inequality Lab. <https://wir2022.wid.world>

- Chang, C. A. (2022). A more effective refugee policy. *Insight Turkey*, 24(1), 135-152. <https://doi.org/10.25253/99.2022241.8>
- Çiftçi, A. N. (2022). *Türkiye’de yoksulluk kültürüyle mücadelede sosyal çalışma* [Social work to combatting culture of poverty in Turkey] (Publication No. 749982) [Doctoral dissertation, Kırklareli University Institute of Social Sciences]. Yükseköğretim Kurulu.
- Çiftçi, M. (2009). *Bireysel servetin bölgesel dağılımı perspektifiyle Türkiye’nin AB’ye uyum sorunu*. In K. K. Sümer (Ed.). *İÜ İktisat Fakültesi Ekonometri Bölümü Yayınları*.
- Çiftçi, M. (2010). Türkiye’de 60 yaş üstü nüfusun sağlık hizmetlerinin bölgesel dağılımından sağladıkları sosyal fayda düzeyleri [Level of social utility of regional distribution of health care services in Turkey for the population aged 60 years and over]. *Türk Geriatri Dergisi*, 13(4), 252-260. https://geriatri.dergisi.org/uploads/pdf/pdf_TJG_524.pdf
- Çiftçi, M. (2020). David Harvey’in mekân-zaman sabiteleri kuramının 2008 sonrası konut üretiminin desantralizasyonunda izdüşümü: Atkinson bölgesel eşitsizlik endeksi yöntemiyle Türkiye’den bir kanıt [Projection of David Harvey’s spatio-temporal fixe model on the housing production decentralization post- 2008: An evidence from Turkey with the Atkinson regional inequality index method]. *Balkan Sosyal Bilimler Dergisi*, 9(17), 170-184. <https://dergipark.org.tr/tr/download/article-file/1135741>
- Çiftçi, M. (2021). Pandeminin servet eşitsizliklerine yansımaları: İstanbul konut piyasası örneği [Reflections of the pandemic on wealth inequalities: The example of the Istanbul housing market]. In N. Demircan Çakar, M. A. Öncü & A. Gedikli (Eds.), *Covid-19 Sürecinde Sosyoekonomik ve Politik İncelemeler* (pp. 345-366). Umuttepe Yayınları.
- Çobanoğlu, F., & Yılmaz, H. İ. (2019). Türkiye’de yıllık hanehalkı kullanılabilir gelir eşitsizliğinin ölçümü [Measurement of annual household disposable income inequality in Turkey]. *Uluslararası Sosyal ve Beşeri Bilimler Araştırma Dergisi*, 6(42), 2633-2646. <https://doi.org/10.26450/jshsr.1374>
- David, A., Marouani, M. A., Nahas, C., & Nilsson, B. (2020). The economics of the Syrian refugee crisis in neighbouring countries: The case of Lebanon. *Economics of Transition and Institutional Change*, 28(1), 89-109. <https://doi.org/10.1111/ecot.12230>
- Davies, J. B., Sandström, S., Shorrocks, A., & Wolff, E. N. (2011). The level and distribution of global household wealth. *The Economic Journal*, 121(551), 223-254. <https://doi.org/10.1111/j.1468-0297.2010.02391.x>
- Directorate General of Migration Management. (2023). *Geçici Koruma* [Temporary Protection]. Ministry of Interior, Türkiye. Retrieved from January 01, 2023, <https://www.goc.gov.tr/gecici-koruma5638>
- Dustmann, C., Frattini, T., & Preston, I. P. (2013). The effect of immigration along the distribution of wages. *The Review of Economic Studies*, 80(1), 145-173. <https://doi.org/10.1093/restud/rds019>
- Erdem, N. (2021). Effect of Syrian refugees on housing rents in the Southeast of Turkey. In *Proceedings of the Institution of Civil Engineers-Municipal Engineer*, 174(4), 231-240. <https://doi.org/10.1680/jmuen.19.00018>
- Erdoğan, M. M. (2021). *Suriyeliler Barometresi-2020 Suriyelilerle Uyum İçinde Yaşamın Çerçevesi* [Syrians Barometer-2020 Framework for Living in Harmony with Syrians]. Eğiten Kitap Yayıncılık.
- Eva, M., Cehan, A., Corodescu-Roşca, E., & Bourdin, S. (2022). Spatial patterns of regional inequalities: Empirical evidence from a large panel of countries. *Applied Geography*, 140, 102638. <https://doi.org/10.1016/j.apgeog.2022.102638>
- Ezcurra, R. (2019). Regional disparities and within-country inequality in the European Union. *Revista de Economía Mundial*, 51, 139-162. <https://doi.org/10.33776/rem.v0i51.3907>
- Fakih, A., & Ibrahim, M. (2016). The impact of Syrian refugees on the labor market in neighboring countries: empirical evidence from Jordan. *Defence and Peace Economics*, 27(1), 64-86. <https://doi.org/10.1080/10242694.2015.1055936>
- Fan, C. C., & Sun, M. (2008). Regional inequality in China, 1978-2006. *Eurasian Geography and Economics*, 49(1), 1-18. <https://doi.org/10.2747/1539-7216.49.1.1>
- Fradejas-García, I. (2019). Humanitarian remoteness: Aid work practices from ‘little Aleppo.’ *Social Anthropology*, 27(2), 286-303. <https://doi.org/10.1111/1469-8676.12651>
- Frost, J., Gambacorta, L., & Gambacorta, R. (2022). On the nexus between wealth inequality, financial development and financial technology. *Journal of Economic Behavior & Organization*, 202, 429-451. <https://doi.org/10.1016/j.jebo.2022.08.011>
- Gezici, F., & Hewings, G. J. D. (2007). Spatial analysis of regional inequalities in Turkey. *European Planning Studies*, 15(3), 383-403. <https://doi.org/10.1080/09654310601017091>
- Günaydın Temel, D., & Kahraman, Z. E. (2019). Göçmen mahallelerinde konut dış mekânında uyarılma: “Küçük Halep,” Önder Mahallesi, Ankara örneği” [A spatial appropriation of the exterior space of housing units of immigrant neighbourhoods: The case of “Little Halep,” Önder Neighbourhood, Ankara]. *Ankara Araştırmaları Dergisi*, 7(2), 415-431. <https://dx.doi.org/10.5505/jas.2019.74936>
- Haliloğlu Kahraman, Z. E. (2022). Understanding location choice of Syrian refugees from country to neighbourhood level: Opportunities, restrictions and expectations. *Habitat International*, 125, 102597. <https://doi.org/10.1016/j.habitatint.2022.102597>
- Haliloğlu Kahraman, Z. E., & Güngördü, F. N. (2021). Understanding the local dynamics of Syrian refugee integration through the eyes of refugees and local residents: The case of the Önder Neighbourhood, Ankara. *Southeast European and Black Sea Studies*, 22(2), 305-328. <https://doi.org/10.1080/14683857.2021.2013683>
- Iliev, D. (2018). Interregional inequalities at NUTS level 3 in Macedonia. *AUC Geographica*, 53(2), 180-192. <https://doi.org/10.14712/23361980.2018.18>

- Irgil, E. (2022). When the government comes to the neighbourhood: Everyday regulations and Syrian refugees' encounters with local state authorities. *Journal of Refugee Studies*, 35(2), 893–909. <https://doi.org/10.1093/jrs/feac008>
- James, J. A. (1988). Personal wealth distribution in late eighteenth-century Britain. *Economic History Review*, 41(4), 543–565. <https://doi.org/10.2307/2596601>
- Jayadev, A., Motiram, S., & Vakulabharanam, V. (2007). Patterns of wealth disparities in India during the liberalisation era. *Economic and Political Weekly*, 42(38), 3853–3863.
- Kataoka, M. (2013). Allocation of human capital across regions and economic growth in Indonesia. In *the Japan Section RSAI 50th Annual Meeting. Diunduh pada* (Vol. 21). http://jrsai.jp/Annual_Meeting/PROG_50/ResumeB/rB03-1.pdf
- Khan, M. S., & Siddique, A. B. (2021). Spatial analysis of regional and income inequality in the United States. *Economies*, 9(4), Article 4. <https://doi.org/10.3390/economies9040159>
- Kolomak, E. (2013). Spatial inequalities in Russia: Dynamic and sectorial analysis. *International Journal of Economic Policy in Emerging Economies*, 6(4), 375–402.
- Koyuncu, A. (2020). Toplumsal kabulde ekonominin imkânı: Konya'daki Suriyeli girişimciler [Economic opportunity in social acceptance: Syrian entrepreneurs in Konya], *İnsan ve Toplum*, 10(3), 100-131. <https://dergipark.org.tr/tr/pub/insanvetoplum/issue/71115/1131640>
- Kul Parlak, N., & Uludağ Güler, Ç. (2022). Göçmen girişimciliği bağlamında Suriyeli girişimciler: İstanbul ili örneği [Syrian entrepreneurs in the context of refugee entrepreneurship: The case of Istanbul province]. *Yönetim Bilimleri Dergisi*, 20(46), 849-884. <https://doi.org/10.35408/comuybd.1061833>
- Kürschner Rauck, K., & Kvasnicka, M. (2018, December). *The 2015 European refugee crisis and residential housing rents in Germany* (Discussion Paper, No. 12047). IZA Institute of Labor Economics. <https://docs.iza.org/dp12047.pdf>
- Liu, Z., Zhang, M., & Liu, L. (2021). Benchmark of the trends of spatial inequality in World Megaregions. *Sustainability*, 13(11), 6456. <https://doi.org/10.3390/su13116456>
- López-Villuendas, A. M., & del Campo, C. (2023). Regional economic disparities in Europe: Time-series clustering of NUTS 3 Regions. *International Regional Science Review*, 46(3), 265–298. <https://doi.org/10.1177/01600176221125703>
- Mackreath, H., & Sağnıç, Ş. G. (2017). *Türkiye'de Sivil Toplum ve Suriyeli Mülteciler* [Civil Society and Syrian Refugees in Türkiye]. Yurttaşlık Derneği. <https://hyd.org.tr/attachments/article/217/turkiyede-sivil-toplum-ve-suriyeli-multeciler.pdf>
- Malkina, M. (2022). How the pandemic affected interregional inequality in Russia. *Area Development and Policy*, 8(2), 162–181. <https://doi.org/10.1080/23792949.2022.2137538>
- Manthei, G. (2020). *The effects of refugee immigration on income inequality in Germany: A case study* [Working Paper, No. 72]. Albert-Ludwigs-Universität Freiburg, Forschungszentrum Generationenverträge (FZG), Freiburg i. Br. <https://www.econstor.eu/handle/10419/234743>
- Moawad, P. (2020). Temporary forms of urbanism in contested urban spaces in Lebanon: The case of Dbayeh camp. In L. Andres, A. Y. Zhang (Eds.), *Transforming Cities Through Temporary Urbanism* (pp. 73-87). The Urban Book Series. Springer, Cham. https://doi.org/10.1007/978-3-030-61753-0_6
- Nilsson, B., & Ramadan, R. (2020). *Migration and inequalities around the Mediterranean Sea* [LIS Working Paper Series, No. 788]. Luxembourg Income Study (LIS). Luxembourg.
- Oner, A. C., Durmaz-Drinkwater, B., & Grant, R. J. (2020). Precarity of refugees: The case of Basmane-İzmir, Turkey. *Journal of Ethnic and Migration Studies*, 47(20), 4651–4670. <https://doi.org/10.1080/1369183X.2020.1732591>
- Ozyilmaz, A., Bayraktar, Y., Isik, E., Toprak, M., Olgun, M. F., Aydin, S., & Guloglu, T. (2022). The impact of refugees on income inequality in developing countries by using quantile regression, ANN, fixed and random effect. *Sustainability*, 14(15), 9223. <https://doi.org/10.3390/su14159223>
- Özgür, E. M. (2020). Göç, ikametgâh ayrışması ve entegrasyon: Türk kentleri için bir değerlendirme [Immigration, residential segregation and integration: An assessment for Turkish Cities]. *Coğrafya Dergisi*, (41), 221-240. <https://doi.org/10.26650/JGEOG2020-0032>
- Pammer, M. (2013). Interregional and intraregional wealth inequality in nineteenth century Austria. *Jahrbuch für Wirtschaftsgeschichte/Economic History Yearbook*, 54(1), 37-55. <https://doi.org/10.1524/jbwg.2013.0003>
- Peri, G., & Sparber, C. (2009). Task specialization, immigration, and wages. *American Economic Journal: Applied Economics*, 1(3), 135-169. <https://doi.org/10.1257/app.1.3.135>
- Rey, S. J. (2004). Spatial analysis of regional income inequality. *Spatially Integrated Social Science*, 1, 280-299.
- Rey, S. J., & Sastré-Gutiérrez, M. L. (2010). Interregional inequality dynamics in Mexico. *Spatial Economic Analysis*, 5(3), 277–298. <https://doi.org/10.1080/17421772.2010.493955>
- Rozo, S. V., & Sviatschi, M. (2021). Is a refugee crisis a housing crisis? Only if housing supply is unresponsive. *Journal of Development Economics*, 148, 102563. <https://doi.org/10.1016/j.jdeveco.2020.102563>
- Saiz, A. (2007). Immigration and housing rents in American cities. *Journal of Urban Economics*, 61(2), 345–371. <https://doi.org/10.1016/j.jue.2006.07.004>
- Savran Penbecioğlu, S. (2022). Syrian refugees as the victims of urban regeneration: A case study of Ankara, Önder and Ulubey neighborhoods. *GRID - Architecture Planning and Design Journal*, 5(2), 170-192. <https://doi.org/10.37246/grid.1026611>

- Savran, S., & Sat, N. A. (2019). Ankara'da Suriyeli göçmenlerin yer seçimi tercihlerinin incelenmesi ve bir etnik kentsel adacık örneği olarak Önder, Ulubey, Alemdağ mahalleleri [Exploring the locational preferences of Syrian migrants in Ankara and a case study of Önder, Ulubey, and Alemdağ neighborhoods as an ethnic urban enclave]. *Ankara Araştırmaları Dergisi*, 7(2), 283-302. <https://doi.org/10.5505/jas.2019.33154>
- Soltow, L. (1979). Wealth distribution in Denmark in 1789. *Scandinavian Economic History Review*, 27(2), 121-138. <https://doi.org/10.1080/03585522.1979.10415654>
- Sönmez, M. E. (2016, October 13-14). Suriyeli sığınmacıların Gaziantep şehrindeki mekânsal dağılışı ve geleceği [Spatial distribution and futurity of Syrian refugees in the city of Gaziantep]. *TUCAUM Uluslararası Coğrafya Sempozyumu* (pp. 392-400). Ankara. https://tucaum.ankara.edu.tr/wp-content/uploads/sites/280/2016/12/Int_semp_BC9.pdf
- Subramanian, S., & Jayaraj, D. (2006). *The distribution of household wealth in India* (No. 2006/116). WIDER Research Paper.
- Suerbaum, M. (2020). *Masculinities and displacement in the Middle East: Syrian refugees in Egypt*. Bloomsbury Publishing.
- Tadjoeddin, M. Z. (2015). Spatial dimensions of key employment outcomes in Indonesia. *Journal of Comparative Asian Development*, 14(3), 466-509. <https://doi.org/10.1080/15339114.2015.1096552>
- Taş, D., & Tekkanat, S. S. (2018). Yerel halk ve Suriyeli sığınmacılar arasında bir kent: Elazığ örneği [A city between the local people and the Syrian refugees: Elazığ example], *Aksaray Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 10(4), 77-90. <http://aksarayıibd.aksaray.edu.tr/tr/pub/issue/42407/497238>
- Trojanek, R., & Gluszak, M. (2022). Short-run impact of the Ukrainian refugee crisis on the housing market in Poland. *Finance Research Letters*, 50, 103236. <https://doi.org/10.1016/j.frl.2022.103236>
- Yassine, B., Al-Harithy, H., & Boano, C. (2021). Refugees hosting other refugees: Endurance and maintenance of care in Ouzaii (Lebanon). *Journal of Refugee Studies*, 34(3), 2871-2890. <https://doi.org/10.1093/jrs/fez098>
- Yıldırım, J., Öcal, N., & Özyıldırım, S. (2009). Income inequality and economic convergence in Turkey: A spatial effect analysis. *International Regional Science Review*, 32(2), 221-254. <https://doi.org/10.1177/0160017608331250>
- Yoo, K. (2003). Emergence of wealth inequality in China: Evidence from rural household survey, 1986-2000. *East Asian Economic Review*, 7(2), 155-182.
- Zabelina, I. (2021). Interregional inequality in environmental and economic development in the Russian Federation. In *E3S Web of Conferences* (Vol. 258). EDP Sciences. <https://doi.org/10.1051/e3sconf/202125806013>
- Zhang, B., Nozawa, W., & Managi, S. (2021). Spatial inequality of inclusive wealth in China and Japan. *Economic Analysis and Policy*, 71, 164-179. <https://doi.org/10.1016/j.eap.2021.04.014>
- Zhong, W., Vakulabharanam, V., Ruparelia, S., Ming, Y., Deshpande, A., Banerjee, L. (2010). *Wealth inequality: China and India* (Working Paper). New York. The New School.