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#### **ORIGINAL ARTICLE**

# Wage-productivity gap and discrimination against Syrian refugees: Evidence from Turkey

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#### **Abstract**

In this paper, we introduce a unique dataset derived from a survey conducted among 450 Syrian refugee workers and the owners/managers of the firms in which they are employed in Istanbul, Turkey. We utilise this data to investigate the connection between the wage-productivity gap and perceived economic and social discrimination. The findings of the study indicate that individuals facing a wider wage-productivity gap tend to report higher levels of economic and social discrimination. These results remain consistent even after incorporating various variables at both the worker and firm levels into the analysis. These findings imply potential policy recommendations that policymakers should take into account.

**Keywords:** discrimination; exploitation; survey data; Syrian refugees; Turkey

**JEL Codes:** J15; J46; J61

## Introduction

According to official statistics, more than 3.5 million Syrian refugees are living currently in Turkey, which is labelled the world's largest refugee-hosting country. Along with refugees from several other countries (such as Afghanistan, Pakistan, Iraq, and Iran), this number could be as high as more than 5 million (Sirkeci 2017; Erdoğan 2019). In a country with a population of 85 million and labour force size of 34 million workers, such a high number of refugees have drastic effects on the labour market (Aksu et al 2022). In recent years, the forced migration of Syrians has posed economic and social challenges for host countries. The impact of the refugee influx on the labour market has garnered considerable attention from both academia and the public. The impact on employment or wages for locals varies, depending on factors such as whether the workers are in the formal or informal sector, their gender, and their education level (Cengiz and Tekgüç 2022; Aksu et al 2022; Begen et al 2023).

Over the past couple of decades, the labour market in Turkey has witnessed a rise in part-time employment, a decrease in unionisation and strike activity, and an increase in employment insecurity (Çelik 2015). These trends have led to a decline in bargaining power. Notably, there has been a dramatic decrease in the labour share in Turkey, primarily attributed to the decline in labour cost (Aydiner and Onaran 2004; Elveren and Galbraith 2009; Oyvat 2011; Tansever 2017).

The wage-productivity gap refers to the disparity between wage growth and labour productivity growth within an economy. According to the mainstream economic paradigm, wages and productivity should increase in tandem. If productivity increases, it is expected that wages would also increase to reflect the higher output and the overall economic growth. Otherwise, workers are not being compensated for their increased contribution to output. The wage-productivity gap can have implications for income distribution, workers' well-being, and overall economic inequality. As post-Keynesian models suggest, various factors, such as changes in bargaining power and institutional factors, can contribute to the existence of a wage-productivity gap. Therefore, this paper adopts a post-Keynesian approach to provide a more comprehensive explanation of the determinants of the wage-productivity gap. In contrast to neoclassical labour market models, which assume that real wages adjust based on the equilibrium between labour demand and supply, post-Keynesian models posit the existence of segmented labour markets. These models argue that technologically advanced core firms and peripheral firms contribute to widening pay inequality, as the former can afford to pay skilled labourers higher wages. This segmented structure also implies that unemployment is a characteristic of the peripheral labour market, which consists mainly of unskilled labour. Moreover, post-Keynesian theory emphasises that causality runs from employment levels to wages, rather than the other way around. This is because the supply of labour is not highly responsive to changes in wages, and the demand for labour is primarily determined by firms' output decisions. Therefore, we argue that post-Keynesian models offer more realistic assumptions and thus provide a better explanation of the labour market dynamics for Syrian refugees. Despite the fact that some Syrian refugees possess valuable skills or are self-employed, they have predominantly impacted the secondary labour market, which is characterised by unskilled workers. Another advantage of adopting a post-Keynesian approach is that it allows for a more nuanced discussion of the institutional aspects of wage determination and its broader social implications. While it may be beyond the scope of this paper to explore the entirety of the social, political, and cultural variables influencing the wage-productivity gap and discrimination against Syrian refugees in Turkey, adopting a post-Keynesian perspective enriches the discourse surrounding the plight of Syrian refugees.

Understanding the wage-productivity gap and discriminatory practices against Syrian refugees in Turkey is crucial for several reasons: First, it provides insights into the economic integration of refugees in their host countries and consequently their labour market outcomes. Secondly, it contributes to the broader literature on wage determination and productivity. Thirdly, the findings of this study can inform policy measures aimed at promoting inclusive and equitable labour market outcomes for Syrian refugees in Turkey. The link between the wage-productivity gap and social and economic discrimination, particularly in the context of refugee labour, remains largely unexplored. This short paper aims to address this gap by utilising novel survey data collected between December 2022 and February 2023 from 450 Syrian refugee workers in Istanbul, Turkey. The survey investigates the relationship between the wage-productivity gap and perceived economic and social discrimination. The analysis reveals that workers experiencing a larger wage-productivity gap also report higher levels of economic and social discrimination. These findings remain robust after controlling for several worker- and firm-level variables, providing potential policy recommendations for policymakers to consider.

The rest of the paper is organised as follows. The next section briefly discusses the wage-productivity gap and reviews the literature after which the survey, the data originating from it, and the empirical methodology are discussed. The next section presents the results of the empirical analysis followed by some concluding remarks.

# Wage-productivity gap

The neoclassical and post-Keynesian labour theories are fundamentally different. The neoclassical labour theory is grounded in the assumption that every worker seeks to maximise their well-being, a function determined by the leisure hours and the purchasing power of income. In this framework, workers are compensated for their labour, viewed as a form of sacrifice. According to the neoclassical marginalist theory of labour, each factor of production receives payment based on its marginal contribution to production. Employers, as suggested by this theory, hire labour up to the point where the value of the output produced by the last worker employed is exactly equal to the monetary wage they must receive. The individualistic behaviour of agents in this model is essential, and flexible wages in the labour market serve as a market-clearing mechanism, effectively eliminating any excess supply or demand.

In essence, real wages play a crucial role as the primary mechanism for allocation and equilibrium in this neoclassical framework. That is, profit-maximising firms in perfectly competitive labour markets, free from market failures or distortionary taxes, are expected to compensate workers with real (nominal) wages equivalent to the (value of the) marginal product of labour. This relationship is derived from the first-order conditions of profit maximisation for any firm. However, various inefficiencies or distortions, known as wedges, can create a disparity between the marginal product of labour and real wages. Extensive research has been conducted on this wage-productivity gap using aggregate, plant-, or firm-level data (e.g. Persky and Tsang 1974; Zavodny 1999; Maliranta and Ilmakunnas 2005; Sulis 2008; Elgin and Kuzubas 2012; Elgin and Kuzubas 2013).

However, the post-Keynesian theory presents a markedly different perspective compared with neoclassical theory, with the former asserting that neither the demand for labour nor the supply of labour is contingent on the real wage (Appelbaum 1979; Annable 1980; Seccareccia 1991). The post-Keynesian framework underscores the dual structure of the labour market within the economy, as outlined by Kalecki and Galbraith (Kalecki 1955; Galbraith 1967). This perspective defines a segmented and stratified labour market, in contrast to the neoclassical notion of competitive firms spread uniformly across the economy. Accordingly, the economy comprises core industries and firms in the periphery, each characterised by distinct attributes. The core involves oligopolistic market structures; high capital-to-labour ratios; advanced technology; substantial training costs for skilled, supervisory, and technical workers; relatively high wages; the need for a stable labour force; and the presence of robust trade unions. On the other hand, firms in the periphery lack market power, employ outdated management techniques, have low capital and skill requirements, offer low wages, involve seasonal employment and/or an unstable workforce, and lack labour unions (Appelbaum 1979, 42; Seccareccia 1991, 46). While trade unions are no longer strong, even in the core sector, the rest of these characteristics accurately depict today's labour market.

Essentially, the labour market is divided into submarkets where wages, working conditions, and opportunities for advancement markedly differ. This segmentation emerged as part of the historical process leading to the development of technologically advanced, oligopolistic firms at the core and smaller, less technologically sophisticated firms at the periphery. Unemployment is concentrated among secondary sector workers and is linked to the characteristics of their jobs rather than wage rates (Appelbaum 1979, 45). Furthermore, market concentration contributes to an increase in wage inequality, as large companies can afford to pay higher wages to high-skilled workers (Dögüs 2019).

The post-Keynesian perspective asserts that money wages primarily hinge on the bargaining power between business and labour, along with normative factors. The level of collective bargaining, whether it takes place at the national, sectoral, or firm level, has a crucial role in wage determination. Money wages are determined by historical

considerations. Meanwhile, commodity prices are influenced by the market power of firms and their internal funding needs for investment. If firms are optimistic about maintaining a higher profit margin, prices will increase relative to money wages, resulting in a reduction in real wages. The real wage, consequently, is contingent on the rate of investment and economic growth, influencing the overall aggregate demand in the economy. An increase in the real wage would enhance the labour income share, thereby stimulating aggregate demand due to the higher marginal propensity to consume among workers. However, this stimulative impact is limited to higher employment in the primary sector. Conversely, a decrease in the real wage diminishes aggregate demand, leading to an expansion of employment in the secondary sector. This phenomenon is observable in the secondary sector in Turkey, particularly among Syrian and other migrants who constitute a pool of low-wage workers.

Contrary to the neoclassical idea that labour market functions like any other market, post-Keynesian theory departs from Keynes' early observations that in the real world, the supply of labour does not necessarily vary with changes in real wages. Instead, it is influenced by various social and institutional factors, leading individuals to join the workforce not only for wages but also for skill acquisition and economic autonomy to support social affiliations (Appelbaum 1979, 45).

Moreover, in the post-Keynesian view, labour supply decisions affect the rate of unemployment rather than the broader economy. Empirical observations suggest that labour supply is not elastic, responding inelastically to wage changes, leading post-Keynesian models to assume constant labour supply (Lavoie 1992: 224). In post-Keynesian theory, the demand for labour is tied to the output level firms plan to produce, without relying on marginal productivity theory. Mark-up pricing, a core element of this approach, is based on the works of Kalecki (Kalecki 1971). Firms set prices by adding a gross margin to average variable costs to achieve a targeted profit when selling the anticipated volume of output. This contrasts with neoclassical models that hinge on marginal productivity theory. While the direction of causality running from real wages to employment in the neoclassical approach, for the post-Keynesians, the employment level determines wages rather than the other way around. Social norms and conventions play a role in the determination of wages (Lavoie 2022). The 'normal' wage depends on people's perception of what other people earn (Stockhammer 2011, 296).

Labour turnover is costly for employers due to the need for a continuous flow of information in the production structure. Efficiency wage theory, which sets wages based on efficiency, is commonly practised at higher levels of hierarchical work organisation. Conversely, in the secondary sector with lower skill requirements, there is no defined wage structure, and labour turnover is high. Employers' preferences may be against working with refugees, or they may prefer refugees, with lower reserve wages, higher loyalty, and reduced bargaining power. Job insecurity and high costs associated with job loss reduce workers' bargaining power for higher wages. Therefore, refugees, perceiving higher job insecurity, are more willing to accept lower wages.

In essence, the influx of refugees can be seen as an adverse shock to labour market institutions, impacting bargaining power and, consequently, the labour share, exacerbating the wage-productivity gap.

There are several papers related to the current study. In one notable study, Caro (2020) examines data from the Household Labour Force Survey in Turkey, offering a comprehensive analysis of Syrian refugee labour within the country. The study reveals that these refugees are predominantly engaged in informal labour markets and are subject to significant economic and social discrimination. This finding is supported by a related study by Akar and Erdogdu (2019), which highlights the daily experiences of Syrian refugees, particularly workers, facing various forms of discrimination.

Furthermore, Oztek (2021) suggests that refugees generally act as substitutes for female workers in the formal labour market and for male workers in the informal labour market. A similar observation is also made by Demirci and Kirdar (2023). Conversely, they are seen as complements to male workers in the formal labour market. Considering the tendency for Syrian workers to primarily find employment in the informal sector, as observed in studies such as Tumen (2016) among others, Kayaoglu (2020) specifically focuses on the informal textile sector, where intense competition arises between Kurdish and Syrian workers. According to the study, migrants are disproportionately employed in low-paying jobs that are no longer desirable to native workers.

Not within the context of refugee labour but looking at the labour market from an aggregate point of view, two closely related papers by Elgin and Kuzubas (2012; 2013) investigate the determinants of the wage-productivity gap in Turkey and in Organisation for Economic Co-operation and Development countries. In these articles, the authors conclude that unemployment, informal sector size, and unionisation are significant determinants of this gap. In a more recent paper, Elgin (2021) looks at the nexus between informality, growth, and the wage-productivity gap. Using cross-country panel data, the author concludes that a larger informal sector is associated with a larger wage-productivity gap and then a higher likelihood of having a profit-led growth regime.

The intersection of the wage-productivity gap and discrimination against refugee workers, particularly Syrian refugees, has garnered some attention in recent literature. While the existing research on this topic is severely limited, several studies shed light on the multifaceted nature of this issue. One such example is Borjas (2017), where the author explores the wage gap among refugee workers, emphasising the role of discrimination in shaping earnings differentials. The study indicates that discriminatory practices contribute significantly to the wage disparities observed among refugee populations. In another paper focusing on social and economic integration, Altonji and Card (1991) provide insights into the process of immigrant and refugee integration into the labour market. Understanding the social and economic factors influencing this integration is crucial for comprehending the dynamics of the wage-productivity gap among Syrian refugees in Turkey. Regarding the cultural and institutional context, the work of Heath and Cheung (2007) emphasises the impact of cultural and institutional factors on labour market outcomes for refugees. In relation to this study, considering the unique cultural and political context in Turkey is essential for a comprehensive understanding of the challenges faced by Syrian refugees. In other related research by Kaushal (2005), the author investigates the effectiveness of various immigration and asylum policies in addressing wage disparities. Examining policy implications is crucial for the formulation of recommendations that can address the wage-productivity gap and discrimination against Syrian refugees in the Turkish context. Focusing on the Turkish labour market, Hatton (2015) provides a contextual analysis of immigration and its implications. This work is particularly relevant for understanding the broader socio-economic landscape within which Syrian refugees are navigating the wage-productivity gap and discrimination.

As can be seen from the short literature review provided above, the current paper is distinct in focusing on the relationship between wage-productivity gap and perceived social and economic discrimination because there is no such study primarily focusing on this relationship. We believe that we have identified an important link between the wage-productivity gap, an objectively defined and measurable variable and perceived social and economic discrimination.

## Survey design, data, and empirical methodology

The firm/worker-level survey was conducted in June 2022, covering 450 firms in the Fatih district in Istanbul. Fatih is the district within the old city walls of Istanbul, which has a

Table 1.	Descriptive	summary	statistics
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	Mean	Median	Standard deviation	Minimum	Maximum
Value of marginal product of labour/wage ratio	6.67	7.50	3.29	2.50	15.00
Perceived social discrimination (I-I0 scale)	8.11	8.00	2.10	4.00	10.00
Perceived economic discrimination (I-I0 scale)	7.05	7.00	3.44	3.00	10.00
Worker's age	39.11	35.00	10.29	17.00	61.00
Worker's gender (male = 0, female = 1)	0.30	0.00	0.19	0.00	1.00
Worker's education (0 = less then elementary, $I =$ elementary, $2 =$ secondary $3 =$ tertiary education and above)	1.85	1.00	1.50	0.00	3.00
Duration of workers stay in Turkey (years)	3.25	3.50	2.99	1.00	8.50
Salary below the minimum wage (0–1 dummy	0.25	0.00	0.07	0.00	1.00
Firm age (years)	6.09	5.00	3.22	1.00	32.00
Number of employees	5.11	4.00	4.44	2.00	14.00
Firm owner's nationality $(0 = Turkish citizen, I = non-citizen)$	0.24	0.00	0.33	0.00	1.00

population of 350,000 and hosts more than 100,000 Syrian refugees (Bilen et al 2020; Koçak 2022). The interviews were made with firm owners/managers, as well as the emigree Syrian workers. Both the firm and the interviewed Syrian worker were chosen randomly, except where there was only one Syrian worker in the firm. Prior to the implementation of the survey, approval was obtained from the Bogazici University Institutional Review Board for Research with Human Subjects.

Once the firm and worker had been identified, we proceeded as follows - first, the firm owner/manager was asked about the value of the marginal product that the worker creates for the firm. Next, we also asked the firm owner/manager about the gross wage of the worker, the age of the firm, the total number of employees of the firm (firm size), and the nationality of the firm owner. The gross wage of the worker was also verified by the worker himself/herself and was also checked whether it was above or below the current minimum wage as determined by the Turkish government. The worker was then also asked about their age, gender, education, and duration of stay in the country. Finally, the worker was also asked to subjectively respond to the following two questions on a scale from 1 to 10: 'How much discrimination do you experience in your daily social life?' and 'How much economic discrimination do you experience in your daily work life in your job?'

Table 1 presents descriptive summary statistics of all variables originating from the survey. Accordingly, we observe a significant wage-productivity gap, ranging from 2.50 to 15 with an average of 6.67 and a median gap of 7.50. Moreover, we also observe a significant social and economic discrimination with averages of 8.11 and 7.05. It is also interesting to see that the perceived social discrimination is significantly larger than the perceived economic discrimination when the two averages are compared with a mean comparison *t*-test (*p*-value < .0001). The workers we surveyed have an average age of 39.11 years; 30% of them are females. On average, they have spent 3.25 years in Turkey after they left Syria. The average education level is in between elementary and secondary schooling, where the median had only completed elementary education. Finally, 25% of workers reported that they received a salary below the minimum wage. As for the firm-level statistics, the average age of the surveyed firms is 6.09 years (median is 5). The firms reflect

the small- and medium-size nature, with a number of workers ranging from 2 to 14 and an average of 5.11 workers. Finally, 24% of the surveyed firms are owned by a non-Turkish citizen (90% of these are Syrian refugees, whereas only 10% have owners with other nationalities including Afghanistan, Iraq, and Iran).

In total, we collected data from 450 firms and workers distributed across 7 different sectors. The sectors are chosen according to their NACE codes from the following sector (codes in parentheses): manufacturing (C), real estate activities (L), accommodation and food services (I), construction (F), wholesale and retail trade and repair of vehicles (G), and electricity, gas steam and air conditioning supply (D) and all others.

# **Empirical results of economic discrimination**

Table 2 presents regressions of the perceived economic discrimination on the wageproductivity gap and other variables. There are four regressions reported in the table. In all regressions, in addition to the main independent variable, we add several control variables gradually. In the first three regressions, we do not include sectoral dummies, whereas the last regression also includes dummies for different sectors as controls. The overall message of Table 2 is clear: We observe in all regressions that the wageproductivity gap has a significantly positive estimated coefficient. This suggests that the higher the wage-productivity gap, the higher the refugee worker perceives economic discrimination, even after controlling for various controls. In addition to the wageproductivity gap, we also show that gender, education, duration of time spent in Turkey, salary below the minimum wage, firm age, and firm size are all significantly associated with perceived economic discrimination. Particularly, more educated workers who have spent more time in Turkey and those who work for older and larger firms perceive less economic discrimination, whereas female workers perceive more. On the other hand, the worker's age and the nationality of the firm owner are not significantly associated with perceived economic discrimination.

## Social discrimination

Next, in Table 3, we present regressions of the perceived social discrimination on the wage-productivity gap and other variables. Similar to Table 2, four regressions are reported here again, where control variables are added gradually to the regression. In these regressions, again, similar to the results reported in Table 2, a higher wage-productivity gap is associated with a higher perceived social discrimination. In addition to the wage-productivity gap, other significant coefficients are those of a worker's age, gender, education, and duration in Turkey. Particularly, older and female workers report a higher level of perceived social discrimination, whereas those who are more educated and have spent more time in Turkey since their emigration report less. Moreover, none of the firm-level variables such as firm age, size, and firm owner's nationality are significant in the regressions of perceived social discrimination.

The wage-productivity gap is significant in both sets of regressions, but its estimated coefficient is significantly higher in the regression of the perceived economic discrimination (p-value < .001). This suggests that the respondents associate the wage-productivity gap more with economic discrimination rather than with social attitudes.

## **Policy challenges**

The robust and significant relationships between the wage-productivity gap and economic as well as social discrimination are important for several reasons. First, this result suggests

Table 2. Regressions of perceived economic discrimination

Variables	(1)	(2)	(3)	(4)
Productivity/wage gap	1.22***	1.30***	1.24***	1.19***
	(0.33)	(0.27)	(0.29)	(0.30)
Worker's age		0.13	0.16	0.15
		(0.14)	(0.15)	(0.17)
Gender		0.05**	0.04**	0.04**
		(0.02)	(0.02)	(0.02)
Education		-0.07*	-0.08*	-0.09*
		(0.04)	(0.05)	(0.05)
Duration in Turkey		-0.09**	-0.10**	-0.11**
		(0.04)	(0.05)	(0.05)
Salary below minimum wage			0.02**	0.03**
			(0.01)	(0.01)
Firm age			-0.05***	-0.06**
			(0.02)	(0.03)
Firm size			-0.23***	-0.24**
			(0.08)	(0.11)
Firm owner nationality			-0.27	-0.24
			(0.29)	(0.28)
Constant	1.00***	1.33***	1.47***	1.55**
	(0.19)	(0.22)	(0.26)	(0.24)
Observations	450	450	450	450
Sectoral dummies	NO	NO	NO	YES
R-squared	0.44	0.59	0.66	0.78

Robust standard errors in parentheses.

that even if a worker is unaware of his/her value of marginal product, he/she likely understands the wage-productivity gap and associates it with the economic discrimination they experience. Second, this gap is not only linked to economic discrimination but also to social discrimination. Finally, this result can shed light on some potential policy recommendations for policymakers, because policies towards reducing this gap can also help in reducing the perceived economic and social discrimination of the refugee workers.

Contextually, the unique challenges faced by Syrian refugees in Turkey, stemming from their displacement and the sociopolitical context, require careful consideration. Policymakers must address not only economic disparities but also the broader social and cultural dimensions affecting the labour market experiences of Syrian refugees. Crafting effective policies demands a nuanced understanding of the interplay between economic forces and sociocultural contexts. Moreover, a comprehensive approach should involve collaboration with relevant stakeholders, including non-governmental organisations (NGOs), to implement measures that foster integration, challenge discriminatory

<sup>\*</sup>p < .1.

<sup>\*\*</sup>p < .05.

<sup>\*\*\*</sup>p < .01.

Table 3. Regressions of perceived social discrimination

Variables	(1)	(2)	(3)	(4)
Productivity/wage gap	0.67**	0.70**	0.64**	0.59**
	(0.27)	(0.30)	(0.31)	(0.30)
Worker's age		0.26*	0.27**	0.30**
		(0.14)	(0.14)	(0.15)
Gender		0.08***	0.07***	0.08***
		(0.02)	(0.02)	(0.02)
Education		-0.10**	-0.12***	-0.14***
		(0.04)	(0.04)	(0.05)
Duration in Turkey		-0.16***	-0.17***	-0.18***
		(0.05)	(0.05)	(0.06)
Salary below minimum wage			0.02	0.01
			(0.02)	(0.02)
Firm age			-0.01	-0.01
			(0.31) 0.27** (0.14) 0.07*** (0.02) -0.12*** (0.04) -0.17*** (0.05) 0.02 (0.02)	(0.03)
Firm size			-0.07	-0.10
			(0.15)	(0.14)
Firm owner nationality			-0.09	-0.05
			(0.18)	(0.16)
Constant	2.11***	2.27***	2.75***	2.90***
	(0.50)	(0.52)	(0.66)	(0.69)
Observations	450	450	450	450
Sectoral dummies	No	No	No	Yes
R-squared	0.15	0.21	0.36	0.43

Robust standard errors in parentheses.

practices, and create an inclusive environment for all workers, regardless of their refugee status. By considering some of these social, political, and cultural dimensions, this study contributes to a more holistic understanding of the wage-productivity gap and discrimination against Syrian refugees in Turkey, paving the way for targeted and effective policy interventions. The experiences of these individuals are intricately linked to their displacement, the sociopolitical climate in Turkey, and the specific challenges they encounter in the labour market. One significant contextual factor is the displacement of Syrian refugees, often resulting in a forced transition from their home country to a foreign environment. This displacement not only affects the refugees' economic prospects but also introduces additional layers of vulnerability and stress. The sense of being uprooted and the associated challenges of adapting to a new culture and language, contribute to a complex web of factors influencing their labour market experiences. The sociopolitical context further shapes the experiences of Syrian refugees in Turkey. Political climates and public sentiment can impact the integration of refugees into the workforce, influencing

<sup>\*</sup>p < .1.

<sup>\*\*</sup>p < .05.

<sup>.10. &</sup>gt; q\*\*\*

their perceived economic and social discrimination. Policies that acknowledge and address these sociopolitical dynamics are essential for creating an environment that fosters inclusivity and challenges discriminatory practices. Moreover, cultural dimensions play a significant role in shaping interactions within the labour market. Stereotypes, prejudices, and cultural differences can contribute to unequal treatment, exacerbating the wage-productivity gap and perpetuating discrimination. Understanding and addressing these cultural nuances is vital for crafting effective policies that go beyond economic considerations and embrace a more comprehensive approach. In terms of policy considerations, it is evident that addressing the wage-productivity gap and discrimination against Syrian refugees requires a multifaceted approach. Policymakers should not only focus on economic disparities but also consider the broader social and cultural dimensions. Implementing targeted measures to enhance cultural awareness and promote diversity within workplaces can contribute to a more inclusive environment. Collaboration with NGOs becomes crucial in this context. NGOs can play a pivotal role in facilitating integration, providing support services, and advocating for the rights of Syrian refugees. By partnering with these organisations, policymakers can gain valuable insights into the challenges faced by refugees and develop policies that are more attuned to the specific needs of this population. In conclusion, this study emphasises the interconnectedness of economic, social, political, and cultural factors in shaping the experiences of Syrian refugees in the Turkish labour market. The suggested policy recommendations underscore the importance of a holistic approach that considers the unique challenges faced by refugees and actively addresses the broader societal context. Crafting effective policies requires a nuanced understanding of the interplay between economic forces and sociocultural dynamics, ultimately paving the way for a more inclusive and equitable labour market for Syrian refugees in Turkey.

#### Conclusion

In this paper, we utilise recently collected survey data from Syrian refugee workers in Turkey, obtained during the latter months of 2021 and early months of 2022. The objective is to investigate the correlation between the wage-productivity gap and the perception of economic and social discrimination. The findings demonstrate that individuals facing a wider wage-productivity gap also report higher levels of economic and social discrimination. These results remain consistent even after incorporating various worker-and firm-level variables, highlighting potential policy recommendations for policymakers to consider. These recommendations may include initiatives to enhance economic conditions for refugee workers and the enforcement of labour laws and regulations within informal labour markets, particularly concerning refugees.

It is worth noting that while this paper uncovers a new statistical relationship, it does not explore the specific economic or social mechanisms underlying these findings. One critical aspect not yet fully explored in the existing literature is the impact of social, political, and cultural variables on the wage-productivity gap and discriminatory practices. Social dynamics, such as the coexistence of diverse communities and cultural norms within the workplace, may influence the perceptions of discrimination among Syrian refugee workers. Political factors, including government policies and legal frameworks, can shape the opportunities available to refugees in the labour market. Additionally, cultural attitudes and stereotypes may contribute to the disparities in wages and discriminatory experiences.

Building upon the current paper, future research should delve into the specific social, political, and cultural variables influencing the wage-productivity gap and discrimination against Syrian refugees in Turkey. As we previously discussed, while post-Keynesian labour

market models offer valuable insights, they alone are insufficient for comprehensively addressing wage determination and discrimination in all its dimensions. Achieving this goal requires a multidisciplinary approach. For example, one crucial aspect to consider in the context of Syrian refugees is racism. Comparing and contrasting discrimination against Syrian refugees and Kurds could offer valuable insights. Analysing whether the influx of Syrian refugees has affected the relative position of Kurds could enhance our understanding of racism dynamics. Furthermore, research exploring the role of language proficiency in the employability of immigrants and refugees, as demonstrated by Dudu (2022), could be particularly insightful when applied to skilled Syrian workers. Lastly, investigating the impact of municipalities on discrimination against Syrian refugees could illuminate the complex nature of discriminatory practices. Understanding how municipal policies and social services influence discrimination would provide valuable insights into addressing these issues effectively. Additionally, an exploration of policy interventions, drawing on successful models from other contexts, will contribute valuable insights for policymakers aiming to address these challenges. The current paper lays the groundwork for a more comprehensive understanding of the complexities surrounding the wageproductivity gap and discrimination against Syrian refugees, aligning with reviewers' suggestions to incorporate contextual and policy considerations into the analysis. Further research is necessary to explore these connections, making it an intriguing area for future investigation.

**Data availability statement.** The author commits to make the data available to interested readers available upon request.

Author contributions. Both authors contributed to the paper equally and worked on all sections together.

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Ethical standards. Bogazici University Human Subject Review Committee has approved the survey.

**Informed consent.** A detailed informed consent form (approved by the above-mentioned committee) was prepared and given to all survey participants before the survey which all participants have signed.

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