

Investigating the effect of Syrian refugees on the gross domestic product and unemployment rate in Turkey between 2011-2017

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ABSTRACT: The Syrian civil war started in March 2011 and resulted in mass migration out of Syria into the neighbouring countries. Turkey has received the greatest number of refugees from Syria. As the Syrian conflict intensified and lengthened, the number of Syrian refugees in Turkey increased and the Syrian population started to reside in the neighbouring provinces and started to have important effects on the local economy. This paper examines the impact of Syrian refugees on the total gross domestic product and the unemployment rate in Turkey from 2011-2017. The results showed that the Syrian refugees has a strong positive impact on the unemployment rate in Turkey and a weak negative impact on the GDP of Turkey. For instance, the unemployment rate had been increased not only because of the flew of the Syrian refugees but also the Turkish employers were choosing the Syrian workers instead of the Turkish once since it is cheaper labour cost and there was no need to make any insurance for them. However, there was no enough data regarding the informal employment of the Syrian refugees. On the other hand, the impact on GDP can't be measured recently because there is a lack of time and further years needed to get an accurate result.

Keywords: Civil war, GDP, Unemployment rate, Syria, Turkey, Refugee

I. Introduction and Importance of the Study

According to the United Nations High Commissioner for Refugees (UNHCR) after the civil war had been started in Syria more than 3.2 million refugees came to Turkey searching for better life and future and that was between the period 2011-2017. This study aims to explain deeply the effect of the forced refugees on the Turkish economic circle regarding the GDP and unemployment rate.

The "Middle East" topic had been widely shared on news and social media. Since 2011 and the Middle East is not having a peaceful atmosphere because of what happened in Tunisia, Egypt, Yemen and Syria. Civil wars took control of the mentioned Arabic countries and that affected the neighbouring countries.

In 15th March 2011 the civil war had begun in Syria leading a conflict in most of the Syrian cities between Bashar Al-Assad army and the free army which made a lot of disasters and deaths all around the country pushing people to run away seeking for a better life and future for their families and themselves.

Syrians knocked all the doors around the world some welcomed them, and some closed the door in front of them. According to UNHCR it was stated in April 2018 that the Syria refugees number reached around 13 million divided into two categories, the first one is the Syrians who had to displace internally which amounted around 6.6 million and the second one is the Syrians who flew outside of Syria to other countries which amounted around 6.4. on the other hand, according to the same source, 3.5 million Syrians were settled inside Turkey in different regions the International Monetary Fund (IMF) in 2016 more than 8 million Syrians were displaced and 5.1 million left their home and became a forced refugee in different countries in the world and Turkey was the most hosting one with 3.2 million refugees according to UNHCR.

Many discussions were held between politicians and economists regarding the impacts of the Syrian refugees. Some says that they made a positive impact, and some said they damaged the economy. This paper will discuss mainly if the Syrians made a positive or negative impact on the Turkish economy regarding the GDP and unemployment rate.

So, the main question for this article: Does the Syrian refugees in Turkey have a positive or negative impact on the Turkish economy and the unemployment rate?

II. Literature and Research Background

Esen&Binatli (2017) examined how the Syrian refugees made a notable effect on the regional labor market in Turkey, they listed two types of unemployment to estimate the impact that they did, they used the formal and informal unemployment ratios. Further in their study they illustrated how the Syrian refugees were in different cities by giving the number of them in each city considering the period 2012-2016. Esen&Binatli pointed that the Syrian refugees now are representing a significant impact on the Turkish economy and they didn't mean it as it is in a negative or positive way yet, they talked about the established companies by the Syrian refugees in Turkey and how it gave a new careers paths and skills. Thus, Syrian refugees didn't have an impact on the labor market only.

Ihsan &Hulya (2017) explained how the Syrian refugees affected the Turkish economy negatively and positively by mentioning many different points through their paper. An integration problem faced the Syrian refugees in Turkey said Ihsan &Hulya. What is integration? Integration can be defined as it is the ability of the outcomes to live along with the citizens economically, culturally and socially. To solve this problem an understanding of the Syrian refugees influence on the Turkish economy must be conducted. Thus, a study had been done by Ihsan &Hulya, they examined the Turkish economic trends before and after the inflow of the Syrian refugees in 2011 to Turkey. Ihsan &Hulya claimed that since the inflow of the Syrian refugees to Turkey in 2011 the unemployment rate has been changing since then. They stated that the unemployment rate in Turkey increased 1% which it rose from 10.30% to 11.3% in September 2016 and non-farm unemployment rose 1.3% also the jobless rate among the mentioned rates aged 15 to 24 increased 1.4%. They made a point where an increase in GDP has no relation with an increase in per capita income which the last declined from \$9,261 in 2015 compared with \$10,395 in 2014 and they referred this declining to the Turkish Lira depreciation mainly. They added that the consumer confidence remains low, driven by election uncertainty, growth in real GDP has been mainly caused by private consumption. Economist relate this to the Syrian refugees, real wage growth, decline in oil prices, and the wealth effect that is caused by the currency depreciation and they referred that to the existence of the Syrian refugees.

III. Research Method

To apply or statistics analysis approach and findings, regression analysis will be needed to go further in our study and to do so a data collected from different resources will be used to investigate the relationship between three different variables: Syrian refugees, GDP in Turkey and unemployment rate.

First, the correlation coefficient will be applied to the study to see and examine the relation between the Syrian refugees that flow to Turkey and the GDP. And the relation between the Syrian refugees and the unemployment rate in Turkey.

Secondly, regression analysis will be used to go further in the study and to give detailed statistical analysis between the variables mentioned above.

Data Sources:

- From World Bank the data of the GDP and unemployment rate from 2011-2017 will be provided.
- From Turk stat the data and time series of the unemployment rate in Turkey will be described deeply.
- From UNHC the data of the Syrian refugees that came to Turkey since the civil war started in 2011 will be provided.

IV. Data Analysis and Results

Where X_1 is the unemployment rate, X_2 is the GDP and X_3 is the number of Syrian refugees in Turkey between 2011-2017. In Table 4 it is shown that there is a strong positive relation between the unemployment rate and the flew of the

Syrian refugees to Turkey. On the other hand, it is shown that there is a weak negative relation between the GDP and the number of Syrian refugees in Turkey.

Earlier in this paper it was mentioned that Turkey had and still having a struggle with its unemployment rate. However, the Syrian refugees had made it worse as the results showed in Table 4 but there is multi factors should be considered regarding this issue. For instance, the informal employment rate in Turkey especially after the flew of the Syrian refugees to Turkey but there was no solid data for this but after meeting many Syrians in Turkey and Turkish employers, there was an interesting fact which the Turkish employers had mentioned that hiring a Syrian is cheaper and more efficient for them in some sectors like services and trade since Syrians were born as traders and took this ability from their fathers and grandfathers. So, the Turkish employers found that the Syrians wages are less than the Turkish once and they can be more efficient that Turkish in the sectors mentioned before. And since that most of the Syrian employees are not provided a work permits that made even easier for the Turkish employers and less cheap which made it difficult to get an accurate data regarding this. Which further studies should be done widely.

The GDP relation with Syrian refugees flew had shown that the lack of time prevented to get an accurate result since the GDP factor can't be figured easily within a short period. Also taking in consideration the population of Turkey which amounted of 80 million persons and the Syrian refugees were counted as 3.2 million persons. For instance, it is hard to say that the Syrians made any impact on the Turkish GDP in negative or positive way, which it takes more years and further studies to figure the result out.

	X_1	X_2	X_3
X_1	1	-0.23	0.97
X_2		1	-0.28
X_3			1

Table 4: The Correlation Matrix for Unemployment And GDP

V. Recommendations

This study needs to be done again after collecting more data for the informal employment in Turkey to have a clearer picture of how the Syrians made an impact on the unemployment rate in Turkey. On the other hand, due to the lack of time regarding the GDP, it is not quite clear now if the Syrian refugees made any negative or positive impact and it is more accurate if the study will be applied on the Turkish regions especially the small cities with high numbers of the Syrian refugees because in that case it will be more defined.

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Internet Resources:

Ministry of interior directorate general of migration management(<http://www.goc.gov.tr>)

Url-1 <https://data.worldbank.org/country/Turkey>

Url-2 (<https://aa.com.tr/en/economy/turkey-unemployment-rate-falls-to-103-percent-/1063869>)

UrL-3 **Statista.com (The statistics portal)**

UrL-4 **statistics.laerd.com**

UrL-5 <http://www.statisticshowto.com>