

TÜRKİYE, MISIR, IRAK, ÜRDÜN VE LÜBNAN'DA BULUNAN SURIYELİ MÜLTECİLER: RAKAMLARLA GERÇEKLER

SYRIAN REFUGEES IN TURKEY, EGYPT, IRAQ, JORDAN AND LEBANON: FACTS AND FIGURES

Cansu ÜNVER ERBAŞ*

* Yrd. Doç.Dr., Çağ Üniversitesi, İktisadi ve İdari Bilimler Fakültesi, Uluslararası Finans ve Bankacılık Bölümü, cansu.u.e@cag.edu.tr

ÖZ

Bu makalede , 2011 Mart sonrası Suriye'den göç eden mültecilerin göç ettikleri hedef ülke üzerinde ekonomiye olan etkileri gözlemlenmiştir. UNHCR kayıtlarına göre Eylül 2017 itibarıyla, 3168757 Suriyeli mültecinin Türkiye'de, 122203 mültecinin Mısır'da, 244235 mültecinin Irak'ta, 654582 mültecinin Ürdün'de ve 1011366 mültecinin Lübnanda yaşadığı bilinmektedir. (<http://data.unhcr.org/syrianrefugees/country.php?id=122,01.09.2017>) Böylesine büyük bir mülteci kitlesinin hedef ülkeler içinde ucuz işçi sağlaması beklenilebilir bir durum. Diğer taraftan, oldukça yüklü miktarlarda yapılan finansal yardımlardan da bahsedilecek olunursa, \$556.765.964,00 ile en büyük yardım Lübnan'a, \$ 431.185.844,00 ile en büyük ikinci yardım Ürdün'e ve \$300.505.418,00 ile en büyük üçüncü yardım Türkiye'ye yapılmıştır.(UNHCR, September 2017). Bu makalede, Suriyeli mültecilerdeki yüzdelerle hedef ülkelerdeki bazı makroekonomik değişkenlerin (GSYİMH, TÜFE, ithalat, ihracat, işsizlik) yüzdelerle değişimleri arasında belirli bir ilişki bulunup bulunmadığı gözlemlenmiştir. Sonuçlar, bu ilişkinin olumlu olduğu yönündedir.

Anahtar Kelimeler: Suriye'li mülteci, GSYİMH, TÜFE, ithalat, ihracat, işsizlik, yüzdelerle değişim.

Jel Kodları: F66, J01, J15, J61

ABSTRACT

This paper looks at the impact of economics growth across most Syrian refugees host countries after the civil war in Syria in March 2011. Based on the figures by UNHCR, as of September 2017, there are 3168757 Syrian refugees living in Turkey, 122203 in Egypt, 244235 in Iraq, 654582 Jordan and 1011366 in Lebanon. (<http://data.unhcr.org/syrianrefugees/country.php?id=122,01.09.2017>). It is inevitable that the massive influx of Syrian refugees into those countries provides cheap informal labour. Not to mention, there are high volume of funding flowing into host countries with the largest \$556.765.964,00 to Lebanon, second largest \$ 431.185.844,00 to Jordan and finally the third largest \$300.505.418,00 to Turkey based on the figures by UNHCR (September 2017). This paper compares whether there is any sensible link between the percentage change in the number of Syrian refugees and some of the main macroeconomic variables such as GDP, CPI, import, export and unemployment in the host country. Findings support that the percentage change in the number of Syrian refugees and macroeconomic variables move along the same direction.

Keywords: Syrian refugees, GDP, CPI, import/export, unemployment, percentage change in difference

Jel Codes: F66, J01, J15, J61

1. INTRODUCTION

Syrian refugee crisis was first thought to be temporary but then worsen since the March 2011 until the present day. Although mostly affected the neighbour countries, it concerns the whole world. When the crisis has started and the first wave of refugees have sought for safer places to move, countries sharing border with Syria end up with large number of refugees. Due to the fact that it was unclear how long it would take, 'temporary' destination countries did not immediately react. However, the situation worsen and alarmed the world, and the increasing/ or unknown state of number of refugees those seeking for safer places until the conflict in their home is settled- which is unknown- has become of one of the world's number one issue.

Due to previous relationships with Syria, Turkey welcomed all refugees coming from Syria, and has the largest proportion of the Syrian refugees from the beginning. According to UNHCR-Mid Year Trend (June 2016) (<http://www.unhcr.org/statistics/unhcrstats/58aa8f247/mid-year-trends-june-2016.html>, 10.10.2017), Turkey itself host nearly a million more Syrian refugees than in European countries all combine. With this large number of refugees, Syria is, by far, the largest source country of refugees and it accounts for an increasing proportion of the global population. Based on UNHCR-Mid Year Trend (June 2013), (<http://www.unhcr.org/statistics/unhcrstats/52af08d26/mid-year-trends-june-2013.html>, 10.10.2017), 17 per cent of all refugees in the world were Syrian, and this is nearly doubled to 32 per cent in only three years' time (UNHCR-Mid Year Trend (June 2016), and no clear prediction to be made regarding this figures in the near future at this very instant. As of September 2017, there are 5201143 Syrian refugees living in Turkey, Egypt, Iraq, Jordan, and Lebanon with the latest updated figures provided by UNHCR (<http://data.unhcr.org/syrianrefugees/country.php?id=12,01.09.2017>). With the unknown pattern of the refugees, some

destination countries, such as Turkey, classified Syrian refugees as guests but not a refugee, Özden (2013:5). With this, it is problematic for the survival of Syrian refugees in the longer term- if needed- therefore they most likely to seek for shelter, outside of refugee camps. Thus, with the unclear prediction as to how long more it will take and with the unknown state of the refugees, the question here is to ask varies. (1) Did they already adopted in the host countries, (2) Do they have any impact on the labour market or economy across the destination countries, (3) Or does it not have any serious impact as it is thought at all.

This paper will provide some figures and facts on the number of refugees across the destination countries: Turkey, Egypt, Iraq, Jordan and Lebanon. The percentage difference of Syrian refugees between 2011 to 2016-2017 (where possible) will be presented along with some macroeconomic figures such as: total unemployment (% of total labour force), consumer price index (CPI) with 2010 index, total labour force, real gross domestic product (GDP), export and import volume index (2000 = 100). All comparisons are made for each country separately. As it has roughly 7 years background, any research on the Syrian refugee crisis brings along some limitations which will be covered along with the concluding remarks.

2. RELATED LITERATURE

Since the civil war in Syria in 2011, people who are in danger seek for safer places to live. As majority of migration literature suggest, people mostly tend to migrate to closer areas as the closer the distance the less the migration cost. (Mayda, 2008:1264 Pedersen *et al.*, 2008:18 Karamera, 2000: 1751, Ünver, 2015:89). Most Syrian refugees have moved towards Turkey, Egypt, Iraq, Jordan and Lebanon. Not to mention, considering the fact that all these countries share the same religious background, majority of Syrian refugees feel safer in these countries. The question to ask is, how those refugees adopted in the host countries-

if so- and how those refugees have an impact on the economy.

Özden (2013:7), stated in her report that the Syrian refugees were recorded as guests in Turkey which means that they do not have a work permit, but have a right to stay in refugee camps. This is problematic in terms of refugees in regards of self-sufficiency, because they will need to depend on the financial aids for uncertain time period. This is the case in Jordan as well. Abisaab *et al.* (2014:9), pointed the issue for the survival of Syrian refugees in Jordan as they have no legal permit to work which is critical for self-sufficiency of refugees. Although, Turner (2015:5), pointed that encampment is a way of protecting the possible negative impact of Syrian refugees on the labour market due to a sudden increase in the migrants both in Lebanon and Jordan, by not including them in the labour market might be even greater issue. For instance, Aranki and Kalis (2014:1), also pointed out the difficulties that Syrian refugees are facing in terms of their legal status, as such majority of them have no work permit which impulse them to go under illegal work, face their identities for their survival. Similarly, Thibos (2014:4), pointed how problematic the Syrian refugees are in Lebanon as they have no legal rights to settle or work properly. In fact, including refugees in the labour market where needed most would have a definite positive impact on the market. For instance, Sak *et al.* (2017:12) also proposed the importance of supporting refugee entrepreneurship globally to G20 countries or Dahi (2014: 13) pointed that including refugees in the main sectors could lessen the tension between host community and refugees in Lebanon and Jordan.

It is serious because there is no clear agenda as to when it will all settle. Kirişçi (2014), pointed that at the beginning of the Syrian conflict it was not seen how long it would take thus Turkey have received generous amount of Syrian refugees with the prospect of new Syria establishment will bring goodwill amongst Turkey and Syria. However, it is still an on-going unease and

it is issue for the Syrian refugees in turkey as getting a work permit to be able to work and survive is not easy- they need proper passports, work permit, and comparing to Turkish citizens they positioned more difficult. İçduygu (2015:7), the conflict in Syria has been longer than it has predicted in which Turkey had to deal with the rising number of Syrian refugees for mostly political reasons. Having no better alternative but to leave your home country is no one's best dream, especially not knowing what to expect in the destination country.

As to the direct impact of refugees in the economy on the host countries, Cagaptay and Menekse (2014:4), showed various economic impact of Syrian refugees on the southern of Turkey where majority of refugees located. The figures shows that due to the closing of border the trade between turkey and Syria have negative consequences, but an increase in self-employed refugees balance this out. Also, the increased number of refugees in specific southern cities in turkey will result in an increase in the cost of living and unemployment. Ceritoglu *et al.* (2017:3), showed a detrimental employment impact of Syrian refugees- either by displacing native workers by taking informal jobs-by using a quasi-experimental design. Yet, this impact is still limited- due to the lack of data, unregistered refugees etc. Akgündüz *et al.* (2015:12), using the difference-in-difference method (before and after 2012), they showed that the price of houses and food- which are mostly needed in survival- have increased due to an increase in the number of Syrian refugees, but due to perhaps not adopting Turkish labour market they have not have any significant impact on natives' employment. Bahçekapili and Cetin (2015:9), applied difference-in-difference method by examining Southern Anatolia and the rest of Turkey separately for pre and after 2000-2012 and pre and after 2013-2014 periods, respectively. They highlighted an improvement in Turkey's trade since the arrival of Syrian refugees in

April 2011, but showed detrimental effect of unemployment and regional inflation.

Aiyar *et al.* (2016:12), looked at various refugee effects across European countries by statistics provided from IMF, and mostly observed small but positive impact on GDP in the short run, with accelerating long run impact which depends upon the integration of refugees in the labor market. Balkan and Tumen (2016:676), by applying difference-in-difference method, they look at the impact of Syrian refugees on the CPI in the regions of Turkey and found that the increased number of refugees decreased the level of consumer prices especially in informal-labour intensive sectors as they provide cheap informal labour. Achilli (2015:9), showed that after the arrival of Syrian refugees Jordan faced with an extra pressure on infrastructure which eventually result in an increased border restrictions until 2015, this reflects the decreasing refugee registration trend in Jordan. Stave and Hillesund (2015:40), looked at the impact of Syrian refugees on the labour market in Jordan upon their arrival. Having statistically showed that comparing to Jordanian population that refugees have lower educational background and lower work experience and the fact that very small share of Syrian refugees have work permit, they fail to be complement in the labour market. Fakih and Ibrahim (2016:15), empirically showed that the large number of Syrian refugees have no significant impact on the Jordan labour market by applying vector auto regressive method. One should argue that with different educational background, or demographic share, or work experience Syrian refugees may somewhat have impact on the labour market. However, having short time period might have bias results. (so it would have been better analysed with more time dimensions), Also, vast majority of Syrian refugees do not have work permit so they work in informal jobs which make it difficult to track down and the see the impact of unrecorded refugees on the labour market.

On the other hand, Refaat, and Mohanna (2013:763), based on figures obtained from Amel Association International. Syrian refugees appear to have a severe pressure on health sector not to mention on economy in Lebanon. Having such a traumatic event in their home countries, there is no doubt for Syrian refugees to get involved with health issues such as post-traumatic stress disorder. Indeed, Alpak *et al.* (2015:49), showed that in their empirical analysis based on 352 random refugees quite the high share of refugees face with the post-traumatic stress disorder with the highest percentage in woman and those who has similar health background history. With the pressure of the high share of refugees, the host countries have to deal with not only labour market but also health sector as well. El-Khatib *et al.* (2013:2), mentioned the difficulties that Syrian refugees facing in term of health issues in Lebanon and Jordan. For instance, Murshidi *et al.* (2013:207) pointed the issue in health sector which become even more severe after the arrival of Syrian refugees, as the need for treatment has increased but the necessary labour (doctor, surgical professions etc.), capital has risen in Jordan in 2013.

As can be spotted there are only very few empirical studies available in terms of Syrian refugees and their impact on the host countries economy. Indeed, Yazgan *et al.* (2015:187), reviewed Syrian refugee crisis related papers and point out the lack of empirical studies due to mostly the availability of data, mostly political and social issues regarded large influx of Syrian refugees has been on issue. In few more years' time, when more record of Syrian refugees are available, appropriate econometric model can be set and it may help to investigate the impact of refugees on any economic point of view the host country in a broader aspect .

3. DATA AND DESCRIPTIVE STATISTICS

Latest updated data on the number of Syrian refugees are obtained from UNHCR

([http://data.unhcr.org/syrianrefugees/region al.php](http://data.unhcr.org/syrianrefugees/regional.php),17.09.2017). The shares of male and female refugees are available for 2016 and 2017 only. Table.1- 5 shows the demographics of Syrian refugees in Turkey,

Egypt, Iraq, Jordan, and Lebanon, respectively. To begin with, Table.1 provides some demographic statistics for Turkey as follows;

Table 1: Demographics of Syrian refugees in Turkey

	2016		2017	
	Male	Female	Male	Female
Overall	53.19%	46.81%	53.19%	46.81%
0 - 4	7.1	6.6	7.1	6.6
5 - 11	8.2	8	8.2	8
12 - 17	8	6.8	8	6.8
18 - 59	28.3	23.6	28.3	23.6
60 +	1.6	1.7	1.6	1.7

In Turkey, the share of male is greater than female for the last two years. The share of working age (i.e. 18-59) have the largest proportion amongst all both in 2016 and 2017, which may reflect to the high number of potential cheap workers in the destination countries. Not being able to identify their educational background with current databases available, one can assume

that individuals escaping from their home countries due to the civil war have limited options- if so- to survive in the destination countries and one of them is to provide cheap labour. If anything better, but still minority, those who can establish their business will be in better condition. Table.2 shows similar figures for Syrian refugees in Egypt as:

Table 2: Demographics of Syrian refugees in Egypt

	2016		2017	
	Male	Female	Male	Female
Overall	55.81%	49.19%	51.21%	48.79%
0 - 4	5.61	5.3	5.6	5.4
5 - 11	10.1	9.6	9.9	9.5
12 - 17	6.5	6	6.6	5.8
18 - 59	26.3	26	26.6	25.7
60 +	2.3	2.2	2.5	2.4

The highest shares of refugees are those who are able to work within the range of age 18-59. Not to mention this share is potentially in an increase as the share of 0-17 in total is quite high as well. Figures from 2016 have almost not changed in 2017. One can consider that most refugees who settled in Egypt already have not moved elsewhere but stayed there. Within few years- if the crisis is still present- most

refugees are most likely to settle where they already are because (1) they will adjust in the new destination countries, (2) they will be less likely to move across as it will be costly and risky, (3) even the Syrian borders are open, with an on-going crisis, refugees might tend to stay and not take an unknown journey. This situation is not any better in Iraq as can be seen from Table 3.

Table 3: Demographics of Syrian refugees in Iraq

	2016		2017	
	Male	Female	Male	Female
Overall	53.99%	46.01%	53.79%	46.21%
0 - 4	8.3	8	8.3	7.9
5 - 11	8.5	8.1	8.7	8.3
12 - 17	5.3	4.6	5.2	4.6
18 - 59	30.7	24	30.4	24
60 +	1.1	1.3	1.2	1.4

Only in Iraq, quite the high share of refugees (ranging from 30.7 % to 30.4 % for male and 24% for female) are at working age group comparing to Turkey and Egypt (where the share of working age was around 26-28%). This share for Jordan and Lebanon is the lowest in comparison to Turkey, Egypt and Iraq as can be seen from Table.4 and 5 respectively. Curiously, both in Jordan and Lebanon, second largest group of refugees are children with age 0-

11 from 16% to 20% of total refugees. Studies both in Jordan and Lebanon express the difficulties that Syrian refugees are facing in terms of health issues and that the burden these destination countries have (El-Khatib *et al.*, 2013:3; Murshidi *et al.*,2013:206). The small share of working age group of Syrian refugees might bring more severe impact on the destination countries.

Table 4: Demographics of Syrian refugees in Jordan

	2016		2017	
	Male	Female	Male	Female
Overall	49.41%	50.59%	49.53%	50.47%
0 - 4	7.9	7.5	8	7.5
5 - 11	11.3	10.7	11.3	10.7
12 - 17	6.9	6.6	6.9	6.6
18 - 59	21.7	23.6	21.8	23.4
60 +	1.5	2.2	1.5	2.2

Table 5: Demographics of Syrian refugees in Lebanon

	2016		2017	
	Male	Female	Male	Female
Overall	47.55%	52.45%	47.47%	52.53%
0 - 4	9	8.6	8.5	8.1
5 - 11	12.2	11.7	12.4	11.8
12 - 17	6.8	6.5	7.1	6.8
18 - 59	18.3	24.1	18.3	24.3
60 +	1.2	1.5	1.2	1.5

Having millions of refugees generate financial burden that not only destination countries should deal with but the rest of the world since it of concern all around the world. Thus, the most essential refugee destination countries: Turkey, Egypt, Iraq, Jordan and Lebanon have had financial

request. The following tables from Table.6 to Table.10 shows the funding requirement figures for these countries in 2016 and 2017 which are obtained from UNHCR ([http://data.unhcr.org/syrianrefugees/region al.php](http://data.unhcr.org/syrianrefugees/regional.php), 17.09.2017)

Table 6: Funding Requirements in Turkey

	2016	2017	%Δ
Appeal	842928806	890172034	5.45
Received	557423456	300505418	-59.89
Gap	285505350	589666616	69.51
Coverage	66.00%	34.00%	-64.00
Updated	Jan-2017	Sep-2017	

Source: UNHCR, monetary variables are in US\$.

As can be checked from Table.6, only 66% of what appealed has been covered by 2016, and this figured has worsen by 64% in the following year. With the unpredictable number of refugees year by year and having not enough funding for their temporary settlement in destination country may cause both political and financial issues long run if not paid attention. Particularly, in Turkey- where the highest shares of Syrian refugees are located- this issue is crucial.

Similar figures are observed for Egypt in Table.7. With the minimum number of

refugees amongst other four destination countries, they were only able received 40% of what they claimed in 2016, and this drop by 22% per cent by next years' appeal. The contrast between the unstable need of refugees and the decreasing funding that are received might be explained by the fact that Syrian refugee crisis is becoming overwhelming for the world. Thus, one might expect that the destination countries experience even more considerable pressure.

Table 7: Funding Requirements in Egypt

	2016	2017	%Δ
Appeal	146578016	129664428	-12.25
Received	58676325	41422623	-34.47
Gap	87901691	88241805	0.39
Coverage	40.00%	32.00%	-22.22
Updated	Jan-2017	Sep-2017	

Source: UNHCR, monetary variables are in US\$.

Not for long ago, Iraq has experienced similar yet not as severe crisis as Syria itself. Right after the recovery has started in Iraq, it has become one of the essential destination countries for Syrian refugees. With the serious political and economic remaining of civil war in Iraq, its position

to host refugees might be even more challenging. By hosting large amount of Syrian refugees, the financial demands made by Iraq in 2016 were only comprised by 61%, which drop by almost 35% in 2017. (Table.7).

Table 8: Funding Requirements in Iraq

	2016	2017	%Δ
Appeal	285633934	228144832	-22.38
Received	173986183	97619755	-56.23
Gap	111647751	130525077	15.59
Coverage	61.00%	43.00%	-34.62
Updated	Jan-2017	Sep-2017	

Source: UNHCR, monetary variables are in US\$.

Jordan, have no better picture in terms of financial aid that gained in regards of Syrian refugees who are located in there at this present (Table.9). Over 60 % of what is requested has been covered in 2016, yet it declined by more than 50 per cent in the

following year. The figures for previous years are not available. Perhaps, at the beginning- right after the Syrian crisis started- the percentage of funding covered were higher, yet due to the cumulative pressure of refugees overwhelm the rest of the world.

Table 9: Funding Requirements in Jordan

	2016	2017	%Δ
Appeal	1105517045	1189871547	7.35
Received	683377874	431185844	-45.25
Gap	422139171	758685703	57.00
Coverage	62.00%	36.00%	-53.06
Updated	Jan-2017	Sep-2017	

Source: UNHCR, monetary variables are in US\$.

As the home of the second largest share of Syrian refugees (as of 17 September 2017), Lebanon have similar pattern in terms of financial requests' coverage. Only in Lebanon, the funding that covered was dropped substantially by almost 70%. Many

questions remain unanswered in the sense how the destination countries would deal with the large- and an unstable repetition-share of refugees with a declining funding, yet unknown outcome of civil war in Syria.

Table 10: Funding Requirements in Lebanon

	2016	2017	%Δ
Appeal	1902410103	2034796909	6.72
Received	1051948838	556765946	-61.56
Gap	850461265	1478030945	53.90
Coverage	55.00%	27.00%	-68.29
Updated	Jan-2017	Sep-2017	

Source: UNHCR, monetary variables are in US\$.

With this question in mind, we obtained some main macroeconomic variables from World Development Indicators such as; unemployment, total (% of total labour force, modelled ILO estimate); consumer price index (2010 = 100) only for Lebanon it is missing in year 2011, and for Iraq it is missing in 2016; total labour force; GDP (constant 2010 US\$); export volume index (2000 = 100), not available for year 2016 for neither of the countries sampled; and similarly import volume index (2000 = 100), not available for year 2016 for neither of the countries sampled. Next section delivers some statistics and percentage change in difference of the number of Syrian refugees along with the macroeconomic variables to make comparison.

4. RESULTS

Results vary for each of the destination country, thus, are presented separately.

4.1 Turkey

Table.11 presents the number of Syrian refugees fled into Turkey since 2011. As can be viewed, the number of refugees has never stopped increasing in Turkey, although it decelerated. Comparing to 2016, the number of refugees increased by only 1 per cent reaching up to about 3 million refugees in 2017, although this may be justified by the oversupplied refugees previously. As one would expect, in 2012- a year after the civil war started- the number of refugees grew fifteen times greater, and the following year almost grew four times

greater. This sudden increase slowed down from 2013 onward due to the fact that majority of refugees have found a path to destination places and started settling since then, thus the percentage difference in the number of refugees decreased. Yet, the

pattern is still upward. In Table.12, we presented some macroeconomic variables and how they differenced during the large influx of refugees into Turkey to be able to compare with the percentage change in the number of refugees.

Table 11: Syrian refugees in Turkey

Year	Ref	Δ Ref	% Δ Ref
2011	8000	-	-
2012	104920.3	96920.3	1.716614287
2013	391874.4	286954.1	1.155222022
2014	727177	335302.6	0.599262223
2015	1891412	1164235	0.889207942
2016	2737115	845702.7	0.365430624
2017	2994015	256900.5	0.089650892

Source: UNHCR, calculated based on figures obtained from UNHCR

As can be seen, the percentage change in difference has a positive sign in almost all the cases. Although the gap between the percentage changes in all variables, having a positive sign in the difference may lead us to think that Syrian refugees have no

detrimental impact on the main economic indicators. Having said that, however, the narrowing difference comparing to the previous year might leave a question to be answered as to the impact of refugees would play out in the long run.

Table 12: Macroeconomic variables for Turkey

Δ CPI	Δ Unemp	Δ Labforce	Δ GDP	Δ Import	Δ Export
9.467021674	-0.64699936	506263	41081374989	1.888107083	45.30530352
8.687406577	0.583000183	726483	76314864361	18.51983582	-1.777179637
11.03512706	1.147999763	839549	50378111817	-2.276105381	17.14285524
10.40639013	0.355999947	568758	62116980108	3.24146951	3.449268837
11.35696936	0.093000412	569140	31282425424	.	.
% Δ CPI	% Δ Unempr	% Δ Labforce	% Δ GDP	% Δ Import	% Δ Export
0.08513096	-0.076364635	0.018819919	0.046779058	0.00829345	0.149723369
0.072224962	0.069071757	0.026401478	0.081454804	0.077858136	-0.005479077
0.084791753	0.123361244	0.029666283	0.050365785	-0.009252902	0.051628839
0.073875111	0.035394705	0.019609691	0.058795488	0.013151527	0.010075672
0.074841816	0.009044533	0.01924534	0.028356284	.	.

Calculated based on the figures obtained from World Development Indicators. Years 2011-2015, each row , respectively

4.2 Egypt

As can be observed from Table.13, except in 2014 and 2015, there is an upward pattern in the number of refugees that is highest in 2012 and 2013 following up the first wave of refugees sought for destination

countries. This might be fact that the eruption went during 2011-2014 in Egypt. The numbers of Syrian refugees have increased again in 2016. This is a state where refugees seek for a destination better than worst one at the time, confirming how dramatic the situation has been in Syria.

Table 13: Syrian refugees in Egypt

Year	Ref	Δ Ref	% Δ Ref
2011	.	.	.
2012	7308.033	69279.33	1.65156452
2013	76587.36	60591.77	0.566896801
2014	137179.1	-6614.44	-0.049408705
2015	130564.7	-13065.4	-0.105339176
2016	117499.3	3044.727	0.025581292
2017	120544	.	.

Source: UNHCR, calculated based on figures obtained from UNHCR

Apart from macroeconomic variables, one should include the political stability of a country to control for an exact impact of Syrian refugees on the economy, and due to limited data availability this shall wait for later on studies. Nevertheless, the increasing percentage difference in GDP is promising in regards of country's well-being in parallel with the increasing number of refugees. The increasing negative percentage difference in the volume of import and export however, indicates the worsening trade pattern which may be a

result of the eruptions in Egypt- closed borders due to eruptions, lack of entrust cross borders, but not the increasing number of Syrian refugees. If anything that keeps GDP improving it can be explained by the recovery of labour force by the high per cent of working age group of Syrian refugees (Table.2 above). Yet, an econometric model is still needed to control for both political instability and of the number of Syrian refugees on the economy in Egypt.

Table 14: Macroeconomic variables for Egypt

Δ CPI	Δ Unemp	Δ Labforce	Δ GDP	Δ Import	Δ Export
7.833809071	0.670000076	633940	4936014071	42.32863647	-6.944667752
11.10688233	0.539999962	707848	4976735913	-30.61663443	-1.028823946
13.08753568	-0.03999996	539051	6785221915	29.23615555	-6.84322411
14.71614336	-0.32999992	696319	10470182113	11.09033975	9.195910588
21.6611164	-0.82600021	566368	10742134895	.	.
% Δ CPI	% Δ Unempr	% Δ Labforce	% Δ GDP	% Δ Import	% Δ Export
0.068735216	0.05431699	0.022055208	0.021913331	0.186086697	-0.035565787
0.089977133	0.041731063	0.024064825	0.021618429	-0.131219796	-0.005378745
0.096559632	-0.003032598	0.017945834	0.028740101	0.125674987	-0.0365284
0.098475121	-0.02537485	0.022714435	0.042784909	0.043870657	0.048780488
0.129220698	-0.066468191	0.018102519	0.042072749	.	.

Calculated based on the figures obtained from World Development Indicators. Years 2011-2015, each row, respectively

4.3 Iraq

Considering Iraq has just evaded from civil war in 2011, the number of Syrian refugees are still the highest in 2012. Still, it is a case of deciding better of the worse. However, the number of refugees has decreased gradually since 2015 might be explained the fact that they fled into other alternative destination places.

The general figures for the macroeconomic variables have a steady increase as presented in Table.16. The percentage change in difference of total labour force has increased stable at around 4%- the slow recovery aftermath of the war with the new working group of people from Syria. With a 6-7 years of on-going in Syria, yet the largest refugee share of all world by far, it might still take several more years to play

out the impact of the Syrian refugees on the destination countries.

Table 15: Syrian refugees in Iraq

Year	Ref	Δ Ref	% Δ Ref
2011	.	.	.
2012	33059.97	105357.1	1.228818899
2013	138417.1	83170.22	0.462051153
2014	221587.3	24996.46	0.106783453
2015	246583.8	-4677.41	-0.019150475
2016	241906.4	-2885.36	-0.011999166
2017	239021	.	.

Source: UNHCR, calculated based on figures obtained from UNHCR

Table 16: Macroeconomic variables for Iraq

Δ CPI	Δ Unemp	Δ Labforce	Δ GDP	Δ Import	Δ Export
6.442352627	0.050000191	307533	20761078739	38.31107752	12.27315664
2.109620135	-0.13100052	327079	11154988530	25.30527368	-1.567304095
2.556913012	-0.15499973	333864	1266201402	-8.139378277	11.13548649
1.628947193	0.494999886	336108	8743301563	-18.06033733	17.66202876
.	0.567000389	318476	20998495921	.	.
% Δ CPI	% Δ Unempr	% Δ Labforce	% Δ GDP	% Δ Import	% Δ Export
0.059091883	0.003279992	0.038704684	0.130285713	0.168050808	0.11384173
0.018619999	-0.008616471	0.039583884	0.063630649	0.097409891	-0.013850108
0.022112526	-0.010291805	0.038851189	0.006975585	-0.030329586	0.094411766
0.013836906	0.032500568	0.037644857	0.046875	-0.070751479	0.13345473
.	0.035973758	0.034408698	0.104265403	.	.

Calculated based on the figures obtained from World Development Indicators. Years 2011-2015, each row , respectively

4.4 Jordan

Jordan- the destination country with the third largest share of Syrian refugees as of September 2017 (UNHCR), demonstrates an ever rising number of refugees, although decelerating (Table.17). Looking at the macroeconomic variables during the same period in Table.18, the percentage change in GDP is steady at around 2%. The percentage change in total labour market has a growing pattern which may be

justified by the new group of working age refugees. Both the percentage change in CPI and import seem to be decreased from 2014 onward, but the percentage change in the volume of export remained

increasing. According to Achilli (2015), with the uprising pressure of Syrian refugees, Jordan has come up with border restrictions until 2015 which might result in trade constraint eventually.

Table 17: Syrian refugees in Jordan

Year	Ref	Δ Ref	% Δ Ref
2011	.	.	.
2012	53297.38	378614.2	1.56062328
2013	431911.6	168541.9	0.326516052
2014	600453.4	24608.67	0.040160524
2015	625062.1	24902.3	0.039061614
2016	649964.4	8358.986	0.012778513
2017	658323.4	.	.

Source: UNHCR, calculated based on figures obtained from UNHCR

Table 18: Macroeconomic variables for Jordan

Δ CPI	Δ Unemp	Δ Labforce	Δ GDP	Δ Import	Δ Export
4.708333333	-0.69999981	72815	718493504.2	11.22056489	-15.3971744
5.258333333	0.400000572	59877	787299511.9	10.92654465	14.45810425
3.3	-0.70000076	105730	886009669.2	-2.496609198	2.044675481
-1.025	1.203000069	104222	705570412.7	-2.685624387	1.678724253
-0.91666667	0.138000488	90482	605134283.2	.	.
% Δ CPI	% Δ Unempr	% Δ Labforce	% Δ GDP	% Δ Import	% Δ Export
0.044204514	-0.055776879	0.035767556	0.026157203	0.077685408	-0.089220069
0.047161703	0.03225811	0.028483973	0.027897469	0.070262879	0.08400712
0.028503563	-0.057142919	0.0483905	0.030491248	-0.015630725	0.011336818
-0.00876724	0.096228461	0.045513599	0.023634329	-0.017091372	0.009212685
-0.00790628	0.010476806	0.037902014	0.01983463	.	.

Calculated based on the figures obtained from World Development Indicators. Years 2011-2015, each row , respectively

4.5 Lebanon

Lebanon hosts the second largest share of Syrian refugees across the world (UNHCR, as of September 2017). The largest influx of refugees has been recorded in 2012 with a maintaining increase until 2015, than started decreasing afterward (Table.19). By looking at the macroeconomic variables in Lebanon during the same period in Table.20, the percentage change in GDP

has a constant increase at around 1 per cent each year. However, based on figures obtained from Amel Association International (Refaat and Mohanna ,2013:764), it is pointed that there is a severe pressure on health sector as well as the economy in Lebanon. When looking at the general figures, the percentage changes in total labour force is increasing steadily at around 6 per cent while holding up in 2014 onward.

Table 19: Syrian refugees in Lebanon

Year	Ref	Δ Ref	% Δ Ref
2011	.	.	.
2012	56888.81	491904.3	1.624299082
2013	548793.1	518708.8	0.641849149
2014	1067502	102902.9	0.091963544
2015	1170405	-1168052	-1.991975607
2016	2352.667	.	.
2017	.	.	.

Source: UNHCR, calculated based on figures obtained from UNHCR

Table 20: Macroeconomic variables for Lebanon

Δ CPI	Δ Unemp	Δ Labforce	Δ GDP	Δ Import	Δ Export
.	0.048000336	116776	852797346.6	11.50865405	0.775702271
6.202542163	0.021999836	125809	356546817.9	4.818994111	-17.98875396
0.885301208	0.006999969	116426	719511478.5	-4.999841986	-45.23802527
-4.46004803	0.308000088	94526	529000828.2	0.494537907	-15.47885279
-0.93296992	0.245999813	73561	727240983.5	.	.
% Δ CPI	% Δ Unempr	% Δ Labforce	% Δ GDP	% Δ Import	% Δ Export
.	0.007770817	0.068842449	0.021760633	0.067625571	0.00194517
0.05394303	0.003541506	0.069218185	0.008959681	0.027020506	-0.046104045
0.00746919	0.001124222	0.060053985	0.017839445	-0.028048757	-0.126164453
-0.03820505	0.048245627	0.046241864	0.012916046	0.002809831	-0.047162074
-0.00818084	0.036931364	0.034564752	0.017488063	.	.

Calculated based on the figures obtained from World Development Indicators. Years 2011-2015, each row , respectively

5. CONCLUSION

In general, when looking at the percentage change in difference for the number of Syrian refugees and the main macroeconomic variables, we observe no severe negative impact of refugees on the economy of the destination countries; in fact the impact is almost always positive and promising. Having said that however, without an econometric model we fail to investigate unobservable variables along with the macroeconomic variables.

With this aside, one shall distinguish between short run and long run impacts of refugees on the economy of the destination countries. At first, the sudden and substantial increase in the number of Syrian refugees might allow for a shock across destination countries, but not allowing them to enter in the labour market might create even greater pressure. Based on the vast majority of the migration literature, the impact of migrants mostly depends on the time elapsed for their adjustment in the destination countries. Thus, it remains unanswered as the appropriate data in this regard is inattentive.

Other issue is the financial aid that the destination countries obtained in regards of protecting, controlling, and for the survival of Syrian refugees. The data on the funding that destination countries received is available for 2016 and 2017 only, for five essential destination countries- Turkey, Egypt, Iraq, Jordan and Lebanon. The massive decrease in the coverage of what demanded comparing to 2016 is alarming.

With the increasing number of refugees- though decelerating- the Syrian refugee crisis is full of unpredictable outcomes which the crisis concerns the all world. How long more would it take? What would be the economic and political outcomes of the refugees at country and global level? Due to the limitation on the data, we will leave some limitations and suggestion for future research in follow up. In order to be able see the outcomes of the Syrian refugees on the economy of the destination countries, an appropriate econometric model is needed. Due to the data availability- either time period or possible control variables for destination countries, it is challenging to establish an econometric model. Knowing the fact that it is problematic to keep a record of Syrian refugees – if not in refugee camps- , and also the fact that majority of them have no work permit, tracking the exact number of refugees in the labour market and attempt to examine their role in the labour market, on the economy, or any economic activity, is of an growing issue of concern. Perhaps, it is more satisfactory to explore the impact of Syrian refugees at local level (i.e. region, district, area, specific sector in a specific area) with micro elements (i.e. the productivity impact of refugees in specific sector, firm, company). This research area remains multiple unanswered questions. With the current data availability, macro studies are limited, yet ready to boost once suitable data is available.

6. REFERENCE LIST

1. ABISAAB, J., Balsari, S., Siam, Z. A., Fuller, A., Hamill, K., & Leaning, J. (2014). Syrian Refugees in Jordan: Urgent Issues and Recommendations. *Boston, MA: The FXB Center for Health and Human Rights at Harvard University.*
2. ACHILLI, L. (2015). Syrian refugees in Jordan: a reality check. *Migration Policy Centre, EUI*
3. AIYAR, S., Barkbu, B., Batini, N., Berger, H., Detragiache, E., Dizioli, A., ... & Spilimbergo, A. (2016). The refugee surge in Europe. *Europe: Imfstaff Discussion Note (SDN/16/02).*

4. AKGÜNDÜZ, Y., Van Den Berg, M., & Hassink, W. H. (2015). The impact of refugee crises on host labor markets: the case of the Syrian refugee crisis in Turkey.
5. ALPAK, G., Unal, A., Bulbul, F., Sagaltici, E., Bez, Y., Altindag, A., ... & Savas, H. A. (2015). Post-traumatic stress disorder among Syrian refugees in Turkey: a cross-sectional study. *International journal of psychiatry in clinical practice*, 19(1), 45-50.
6. ARANKI, D., & Kalis, O. (2014). Limited legal status for refugees from Syria in Lebanon. *Forced Migration Review*, (47), 17.
7. BAHCEKAPILI, C., & Cetin, B. (2015). The Impacts of Forced Migration on Regional Economies: The Case of Syrian Refugees in Turkey. *International Business Research*, 8(9), 1.
8. BALKAN, B., & Tumen, S. (2016). Immigration and prices: quasi-experimental evidence from Syrian refugees in Turkey. *Journal of Population Economics*, 29(3), 657-686.
9. CAGAPTAY, S., & Menekse, B. (2014). The impact of Syria's refugees on southern Turkey. *Washington Institute For Near East Policy*, 1.
10. CERITOGLU, E., Yunculer, H. B. G., Torun, H., & Tumen, S. (2017). The impact of Syrian refugees on natives' labor market outcomes in Turkey: evidence from a quasi-experimental design. *IZA Journal of Labor Policy*, 6(1), 5.
11. DAHI, O. (2014). The refugee crisis in Lebanon and Jordan: the need for economic development spending. *Forced Migration Review*, (47), 11.
12. EL-KHATIB, Z., Scales, D., Vearey, J., & Forsberg, B. C. (2013). Syrian refugees, between rocky crisis in Syria and hard inaccessibility to healthcare services in Lebanon and Jordan. *Conflict and health*, 7(1), 18.
13. 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.
14. İÇDUYGU, A. (2015). Syrian refugees in Turkey. *The Long Road Ahead*. Transatlantic Council on Migration. Transatlantic Council on Migration, Migration Policy Institute. Brussels. Available online at <http://www.migrationpolicy.org/research/syrian-refugeesturkey-long-road-ahead>, checked on, 3(8), 2016
15. KAREMERA, D., Oguledo, V. I., & Davis, B. (2000). A gravity model analysis of international migration to North America. *Applied Economics*, 32(13), 1745-1755.
16. KIRIŞCI, K. (2014). *Syrian refugees and Turkey's challenges: Going beyond hospitality* (pp. 1-46). Washington, DC: Brookings.
17. MAYDA, A. M. (2010). International migration: A panel data analysis of the determinants of bilateral flows. *Journal of Population Economics*, 23(4), 1249-1274.
18. MURSHIDI, M. M., Hijjawi, M. Q. B., Jeriesat, S., & Eltom, A. (2013). Syrian refugees and Jordan's health sector. *The Lancet*, 382(9888), 206-207.
19. ÖZDEN, S. (2013). *Syrian refugees in Turkey*. MPC – MIGRATION POLICY CENTRE
20. PEDERSEN, P. J., Pytlikova, M., & Smith, N. (2008). Selection and network effects—Migration flows into OECD countries 1990–2000. *European Economic Review*, 52(7), 1160-1186.
21. REFAAT, M. M., & Mohanna, K. (2013). Syrian refugees in Lebanon: facts and solutions. *The Lancet*, 382(9894), 763-764.

22. SAK, G., Kaymaz, T., Kadkoy, O., & Kenanoğlu, M. (2017). *Forced migrants: Labour market integration and entrepreneurship* (No. 2017-61). Economics Discussion Papers.
23. STAVE, S. E., & Hillesund, S. (2015). *Impact of Syrian refugees on the Jordanian labour market*. ILO.
24. THIBOS, C. (2014). One million Syrians in Lebanon: A milestone quickly passed.
25. TURNER, L. (2015). Explaining the (non-) encampment of Syrian refugees: security, class and the labour market in Lebanon and Jordan. *Mediterranean politics*, 20(3), 386-404.
26. ÜNVER, C. (2015). Does Broadband Facilitate Immigration Flows? A Non-Linear Instrumental Variable Approach. *Ekonomi-tek-International Economics Journal*, 4(1), 69-104.
27. YAZGAN, P., Utku, D. E., & Sirkeci, I. (2015). Syrian crisis and migration. *Migration Letters*, 12(3), 181-192.