

The Economic Impact of the Syrian Refugee Crisis in Lebanon

What It Means for Current Policies

WORLD REFUGEE & MIGRATION COUNCIL RESEARCH REPORT

September 2021

Cathrine Brun

Ali Fakih

Maha Shuayb

Mohammad Hammoud



Acknowledgements

This research report was produced by the authors below from the Centre for Lebanese Studies for the World Refugee & Migration Council's [Syrian Refugees in Jordan and the Region](#) project with support from the International Development Research Centre.

Cathrine Brun is Director of the Centre for Development and Emergency Practice at Oxford Brookes University. A professor of human geography, her expertise covers long-term displacement, the ethics and politics of humanitarianism, housing and home. Working closely with local and national organisations in Georgia, Sri Lanka, Malawi, Jordan and Lebanon, her approach to research is qualitative, ethnographic, and uses action research as a way of co-producing knowledge. Together with Dr Maha Shuayb at The Centre for Lebanese Studies in Beirut, she runs a research programme funded by the Economic and Social Research Council (ESRC) and the International Development Research Centre (IDRC), titled: "From education to employment? Trajectories of young people in Lebanon's and Jordan's refugee crisis".

Ali Fakh is an Associate Professor and the Associate Chair of the Department of Economics at the Lebanese American University. He is also a Fellow at the Economic Research Forum (ERF), IZA Institute of Labour Economics, Centre for Interdisciplinary Research and Analysis of Organizations (CIRANO), and Global Labour Organization (GLO). He received his PhD in economics in 2011 from HEC Montréal, the business school affiliated with l'Université de Montréal. His research interests include labour economics, development economics, econometrics, finance-growth nexus, political transformations, MENA economies. His articles have appeared in international journals such as the Annals of Public and Cooperative Economics, Defence and Peace Economics, Tourism Economics, Journal of Agricultural Economics, International Journal of Manpower, Journal of Industrial Relations, Social Indicators Research, and International Migration, among others.

Maha Shuayb has been the Director of the Centre for Lebanese Studies at the Lebanese American University since 2012 and is a visiting fellow at the Faculty of Education at the University of Cambridge since 2020. Prior to that, she was a Senior Fellow at Sr. Anthony's College, University of Oxford and the American University of Beirut. Maha holds a PhD in education from the University of Cambridge. She is a founding member and the former president of the Lebanese Association for History. She is also a co-founding member of the Disability Hub, a collective initiative that aims to promote research and advocacy around disability in the Arab World. Maha's research focuses on the sociology and politics of education, particularly equity and equality in education, and the implications of inequalities on marginalised groups in particular refugee children. Her publications cover an array of topics, including education in emergency, education reform, and social cohesion.

Mohammad Hammoud is a Research and Project Manager at the Centre for Lebanese Studies. He holds an M.A. in economics from the University of Lethbridge. Mohammad's research focuses on political and socioeconomic topics mainly peace, migration, political participation, and international sanctions. He has substantial experience working with quantitative data, empirical modeling, and various econometric estimation techniques.

Copyright © 2021 by the World Refugee & Migration Council

World Refugee & Migration Council publications provide information to support the work of the Council, but do not necessarily reflect the views of the Council itself.

This work is licensed under a Creative Commons Attribution – Noncommercial – No Derivatives License. To view this license, visit [Creative Commons](#). For re-use or distribution, please include this copyright notice.



World Refugee & Migration Council

44 Eccles Street #200
Ottawa, Ontario, Canada K1R 6S4
www.wrmcouncil.org

The World Refugee & Migration Council is supported by a partnership with Cuso International.

Table of Contents

▶ Introduction	4
▶ Baseline: Lebanon's Economic Outlook, 1990-2010	7
▶ Context: Syrian Refugees in Lebanon Amidst Compounded Crises	12
▶ The Economic Impact of the Refugees on the Lebanese Economy: Database Analysis	18
▶ Policies of Exclusion - the Policy-Environment for Syrian Refugees in Lebanon	28
▶ Conclusions and Recommendations	38
▶ References	42
▶ Additional Documents, International Donor Meetings and Data	47
▶ Appendix	48

Introduction

The Syrian conflict has now passed the ten-year mark and the region is attempting to cope with multiple crises. As Lebanon's economic crisis is bringing the country to a full collapse, tensions within the Lebanese population as well as between Lebanese and refugees are likely to increase. At the same time, there is a greater need to think of alternative economic solutions that can lessen the impact of the economic crisis on those most vulnerable, including refugees.

In this study, commissioned by the World Refugee & Migration Council (WRMC), we focus on the impact of the refugee crisis and policies on Lebanon's economic situation and propose alternative solutions that could support refugees and hosts amid the collapse of the economy, following decades of mismanagement and corruption of the Lebanese political system. Culminating in "the country's largest peace-time economic and financial crisis, the COVID-19 pandemic, and the Port of Beirut explosion – with deliberately inadequate policy responses" (World Bank 2021: xi), we are writing this report in the context of a deep and ongoing governance crisis.

Lebanon hosts the highest number of refugees per capita in the world, with the government estimating that 1.5 million Syrian refugees reside in the country, of which just over 855,000 are registered with the United Nations High Commissioner for Refugees (UNHCR 2021a). In addition, more than 479,000 Palestinian refugees are registered with UNRWA in Lebanon, although the numbers residing in Lebanon are believed to be less than 200,000 and there are believed to be just under 20,000 Palestinian Syrians residing in the country (UNRWA 2021, UNICEF 2021).

"It is estimated that approximately 23.2 per cent of Lebanese have been plunged into extreme poverty but due to existing data gaps, further data is needed to fully understand the extent of the situation. Some 91 per cent of displaced Syrians are living on less than \$2.90 per day. At the same time, income opportunities have drastically shrunk due to the sharp economic slowdown the country has seen over the past twelve months. The planned removal of import subsidies is expected to add an unbearable strain on households' purchasing power, with the price of bread potentially multiplied by 1.5 to 3 and that of fuel by 4.5" (3RP 2021: 26).

A recent report by UNICEF covering Lebanese, Palestinians and Syrians shows that 77 percent of families do not have enough food (UNICEF 2021). The Syrian refugees arrived to a deeply unequal society and these inequalities have been aggravated and deepened during the time the Syrian refugees have been in Lebanon. Under these conditions, refugees are often

used as scapegoats, especially by some political factions blamed for the economic crisis and for the miseries that people have experienced. The arrival of refugees has placed pressure on infrastructure, housing prices (in some areas) and livelihoods. However, as we show in this report, at the macro level, the economy's downturn is not caused by the arrival of the refugees, it is a "humanitarian crisis within an economic crisis" (LCRP 2021). In fact, as other authors have concluded, the financial crisis predates the arrival of Syrian refugees, which began in 2011 (Baumann 2019).

This report is part of a study in three countries (Jordan, Lebanon and Turkey), analysing the economic impact of the refugee crisis on the host countries. The study aims to tackle the following questions:

- ▶ How can the governments of Jordan, Lebanon and Turkey be supported to continue hosting Syrian refugees? What additional means – beyond humanitarian support – can be mobilized in light of growing economic and social pressures on host governments?
- ▶ How will the effects of COVID-19 – on refugees, host governments and communities, and conditions in Syria – shape the long-term prospects for Syrian refugees in the region?
- ▶ What are the realistic alternatives for Syrian refugees and the governments that host them in the medium to long term?

Methodological approach

To understand the political economy of hosting Syrian refugees in Lebanon, our research methodology comprised the following three processes:

- ▶ Macro-economic analysis: the impact over time on different spheres of the economy in Lebanon of hosting refugees, including an analysis of the role of international assistance;
- ▶ Policy analysis: the political discourse surrounding the economic impact of hosting Syrian refugees in Lebanon, including the policy developments on economic aims and indicators and whether they responded to the economic challenges;
- ▶ Consultations with key experts and policy influencers: The conversation with key actors (policy makers, researchers and experts, including members of the Syrian communities) regarding economic responses to the Syrian crisis in Lebanon.

We have conducted the policy analysis by engaging mainly with the regional response plans (3RP) as well as the national response plans, the Lebanon Crisis Response Plans (LCRP). We have discussed some of the changes that have taken place in those plans over time and focused on the plans as they relate to the current Syrian refugee situation, and general population as well. In order to understand the impact of the arrival of Syrian refugees on the Lebanese economy, we have also had interviews and discussions with key informants. Primary data on the Lebanon context at both national and regional levels are scarce (Battistin and Leape 2017).

Structure of the report

In the remainder of the report, we first present Lebanon's baseline economic situation as it was before the arrival of Syrian refugees, followed by an analysis of the Syrian refugees' living situation today and what our macro-economic analysis demonstrates as the impact of their arrival on the economy. This is followed by an analysis of the main policies and strategies by the Lebanese government and international and national organisations. Finally, we reflect on what our findings mean in juxtaposition with existing policies and present recommendations based on our analysis.

Baseline: Lebanon's Economic Outlook, 1990-2010

This section provides a brief background on the Lebanese economy before 2010, focusing on the post-civil war period (1990-2010) in order to understand what the economic situation was when the Syrian refugees started to arrive in the country. Lebanon, situated in the Middle East and North Africa (MENA) region, is a small, open economy that the World Bank has classified as an upper-middle-income country (World Bank 2013). However, even before the war in Syria, Lebanon suffered from several economic challenges. External shocks further worsened the country's economic volatility, including the civil war (1980), the assassination of Prime Minister Rafiq Hariri (2005), the militant conflict of the July War (2006), and the global financial crisis (2008/2009) (World Bank 2013).

Unemployment

After the civil war ended, the unemployment rate declined to 8.4 percent in 1991. It continued to fall until it reached 7.85 percent in 2004. The Israeli military intervention in Lebanon in July–August 2006 caused an increase in the unemployment rate; it reached its peak in 2007 (9 percent) (ILO 2016). During the same year, the most frequent types of work were as follows: 4 percent contributed to family businesses, 10 percent were employers, 23 percent were self-employed, and 62 percent of Lebanese were employees. On average, agricultural workers constituted only 3.2 percent of the labour force, whereas 20.27 percent worked in the industrial sector (World Bank Development Indicators). The service sector was the most important employer, accounting for 76.5 percent of total employment. And nearly 85 percent of the Lebanese labour force was concentrated in the private sector. After the war ended, the Lebanese government developed a fiscal stimulus package. According to a 2009 International Labour Organization (ILO) study, the unemployment rate declined to about 6.6 percent for the working-age population (15 years old and above). In other words, 174,000 Lebanese people were jobless in 2009 (ILO 2016).

Economic growth

The wars in Lebanon, together with other exogenous negative shocks, caused economic growth in the country to deteriorate. As a result, Lebanon required foreign aid for its prosperity to rise. The willingness of the international community to assist in development aid for Lebanon has an interesting history. At the end of the civil war in 1990, the World Bank funded a meeting in Paris to gather donations for Lebanon. An emergency reconstruction plan was presented by the Lebanese government, which was a long-term development program that included a health care system, transportation infrastructure, and housing (Central

Administration of Statistics) 2019). According to data from the World Bank, the economy was booming during that time until the Israeli attack on Lebanon in 1996 (World Bank Development Indicators), which caused estimated damage amounting to approximately US\$500 million. After the ceasefire, the Lebanese government once again raised donations for reconstructions. With the withdrawal of the last Israeli soldier from Lebanon in 2000, hopes for economic progress were high. Expansionary fiscal policies were adopted by the Lebanese government: new motorways were under construction, cellular networks were set to expand. This plan appeared to be working and GDP growth reached 6.3 percent in 2004, but fell again to 2.7 percent in 2005 after the assassination of Rafiq El Hariri. The consequences of the assassination were devastating: foreign investors withdrew their money from Lebanon and the country faced a sharp rise in dollarization (Sharp et al. 2006). Another international conference was set to help the Lebanese government but was rescheduled because of the 2006 war, causing a further decline in the GDP growth to 1.7 percent. After the war ended, and because of the international aid, GDP growth reached a record in 2007 (9.3 percent) and maintained that level in 2008 (9.2 percent, Relief Web 2001). However, we can see that each Lebanese crisis caused a drastic drop in international development assistance: the 1975 Lebanese Civil War (with a decrease in US\$125 million from 1974), the 1982 Israeli invasion (with a reduction of US\$267 million from 1981), and the 2004 Hariri assassination which coincided with a US\$268 million drop in international development assistance from 2003 levels. After 2005, levels rose dramatically to a little over US\$1 billion in 2008; but then – coming to the central focus of the present study – the most alarming drop occurred in 2009 and 2010 where international aid fell by a worrying US\$623 million from 2008 to 2010 (World Bank Development Indicators).

Poverty

The Lebanese people, who were severely impoverished and devastated by the Civil War, may have hoped for better living conditions after the war ended. However, this dependence on international aid has led to great social inequality and even worse poverty spreading throughout the country. According to a World Inequality Lab research based on data from 2005 to 2014, the richest 1 percent of Lebanese citizens control 25 percent of national income, and the top 10 percent control 55 percent, making Lebanon one of the countries with the greatest level of income inequality in the world (World Bank Development Indicators). This is compounded by a high rate of deprivation, with more than one-third of the population identified as poor, posing significant social and economic challenges (Dewailly 2019). Inequality is so intertwined with poverty that it not only defines people's access and ability to exercise their rights, but is also a consequence of poverty.

Poverty has increased in Lebanon since the Civil War. In 2005, nearly 8 percent of the Lebanese population lived in severe poverty. This means that about 300,000 people in Lebanon were unable to fulfil their basic food and non-food needs. Altogether, 20.5 percent of the Lebanese population has consumption levels that fall between the lower and upper poverty lines. At the upper level of poverty affliction (less than US\$4 per day per person) 28.6 percent of Lebanon's population (1.07 million people) lived at this level in 2008, while severe poverty (less than US\$2.40 per day per person) impacted 8 percent (300,000 inhabitants). Poverty has resulted from large gaps in the geographic distribution of household income and unmet fundamental requirements through time (Dewailly 2019). Residents of the *cazas*, for example, who lived under Israeli occupation until 2000, have been impacted most by a lack of infrastructure, facilities, and services. Residents of the northern regions (Akkar, Miniyeh-Danniyeh, and Hermel) have mostly encountered monetary insecurity as well as a huge number of unmet basic requirements. Similar issues have been experienced by residents of Tripoli and Saida's metropolitan regions. The central region of the country (Beirut, Mount Lebanon, and Zahleh) has the highest average quality of life and the best access to essential services (or had, until the recent explosion in Beirut harbor).

Inflation

With the beginning of the civil war in the 1980s, the Lebanese Lira started to depreciate against the US dollar. Inflation started to rise, reaching 69.4 percent in 1985, 95.4 percent in 1986 and 487.2 percent in 1987. After the civil war ended in 1990, the Lebanese Central Bank had a plan to stop hyperinflation and adopted a fixed exchange rate regime (Dewailly 2019). By doing so, the Lebanese Central Bank stabilized the value of the Lebanese Pound (LBP) at 1,500 to the US dollar. Subsequently, the Lebanese Central Bank was able to decrease inflation to below 10 percent in just five years. With inflation close to 7 percent in 1996, a wage adjustment process took place (Ariss 2012). Afterward, the Lebanese economy performed well, with inflation rates held to between 0 percent and 2 percent. But during the war of 2006, inflation increased to 4 percent and reached 107 percent in 2008. The Lebanese government was forced once again to raise the minimum wage from LBP 300,000 to LBP 500,000 (World Bank Development Indicators). Inflation, as measured by the CPI, reached 9.3 percent in 2008, owing to increases in the indices for food and beverages, transportation, and housing. Domestic demand, as well as an influx of tourists and capital, drove up prices. Prices would be pushed down by greater domestic competition due to increased construction activity and the building of new hotels and restaurants. In 2008, the CPI for personal consumption fell by 5.5 points. The CPI reached its maximum point of 108.9 points in September of the same year (CIA World Factbook). The CPI eased further in the fourth quarter

of 2008, reaching 105.5 points at the end of December, as import costs fell dramatically due to the worldwide recession. Prices rose throughout this period as a result of rising demand for goods and services amid burgeoning economic activity, and the CPI began to rise in the second part of the year, reaching 109.1 points by December 2009. Although pegging the Lebanese lira against the dollar helped to combat inflation, there were a number of consequences for the trade balance.

The Lebanese economy is characterized as being heavily dependent on imports with insignificant amounts of export activity. This phenomenon has been made worse ever since the 1997 pegging of the Lebanese Lira against the US dollar at US\$1=1507.5 L.L., where the Lebanese trade balance has been exhibiting an increasing deficit trend. Using Banque du Liban data, the trade deficit picked up pace and escalated rather quickly between 2004 and 2009. According to World Bank data, imports in Lebanon stood at US\$9.26 billion in 2006, increasing to an estimated US\$12.26 billion in 2009 (World Bank Development Indicators). The trade balance revealed a deficit of US\$9.63 billion (World Bank Development Indicators). Between the years 2004 and 2010, this pattern of trade deficit was rather consistent (World Bank Development Indicators).

Electricity generation

Lastly, the electricity sector is one of the most troublesome sectors with the potential for crippling damage to the Lebanese economy. Corruption is rampant not only at Électricité du Liban, the country's official generator and distributor, but also at local distributors, where the electricity crisis has been associated with oil and fuel smuggling to neighboring nations. Electricity production in the country has long been dependent on hydropower plants. However, with the political disruptions over land ownership, this generation source has faced disruptions that caused a downward trend in total hydropower electricity production. According to World Bank indicators, the contribution of hydroelectric power production to total Lebanese electric production has fallen from 43 percent in 1975, to 33 percent in 1990, and most recently to a minimal 5 percent in 2010 (Hatoum 2020). Adding to this unsustainability, World Bank data suggests a heavily upward trend in electricity production from oil sources from 56 percent in 1975, 66 percent in 1990, climbing to 88 percent in 2010 (World Bank Data). Finally, access to electricity becomes a topic for political debate rather than a public good, with almost all Lebanese regions benefiting from a limited 3-12 hour period of government-provided electricity per day.

The above discussions of Lebanon's economic conditions and analysis of the state of the Lebanese economy from the civil war to the past decade, demonstrate the economy's

inherent instability. Even if it boomed in the years 2007-2008, questions could be raised regarding the essential strength of this growth. Low growth, an increasing trade imbalance, relatively high unemployment, and other indicators show that the Lebanese economy had already been in a recession and facing severe headwinds before the Syrian conflicts in 2010.

Context: Syrian Refugees in Lebanon Amidst Compounded Crises

Compounded crises

When the Syrian refugees started arriving in Lebanon, they came to a country that was already experiencing a downward economic trend. Throughout their tribulations in the country, they have experienced, together with the overall population, the downward spiral of the current crisis that is likely to rank in the top 10, possibly top three, most severe crises globally since the mid-nineteenth century (World Bank 2021: xi). Lebanon's Gross Domestic Product (GDP) plummeted from close to US\$55 billion in 2018 to an estimated US\$33 billion in 2020, with \$ per capita GDP (measured in US\$) falling by around 40 percent. The crisis has been termed a 'deliberate depression', culminating in the country's largest financial crisis, which then was exacerbated by the COVID-19 pandemic and the Port of Beirut explosion. It is considered 'deliberate' because of the way economic interests are driven, the failure to govern (including inadequate policy response caused by a lack of political consensus over effective policy initiatives), and, at the same time, a "political consensus [that actually defended] a bankrupt economic system, which had benefited a few for so long." (World Bank 2021: xi).

The power-sharing arrangement of Lebanon's confessional political system, post-civil war, fostered economic and political liberalism, but at the same time weakened the state and disabled any effective security or economic policies (Baumann 2019). The country's crisis was then caused by unprecedented levels of debt managed by the finance ministry and central bank, based on running a deficit for the last 25 years (Baumann 2019). With limited exports, foreign direct investments have been focused on the Gulf Arab states and on real estate. The country's dependency on remittances remains very high, but slowed down in the last ten years (according to Baumann in 2019). The Syrian conflict also affected and amplified the downward economic trend throughout the region. The arrival of such substantial numbers of Syrian refugees may have created a shock to the economy, but did not, as we show here, cause its downturn.

The impact of the current crisis is on normal people: the smaller depositors, the bulk of the labour force and smaller businesses. Hence, Lebanon is facing a crisis of governance and currently lacks a functioning executive authority; the country has been unable to form a government for the last year. The social impact of the current crisis is catastrophic both for the Lebanese and the Syrian refugees, and the World Bank (2021) describes the main threats that Lebanon currently faces to be elite capture and conflict and violence (World Bank 2021).

The current situation of Syrian refugees: lack of legal status and shared poverty with the Lebanese community

Since their arrival, Syrian refugees have lived marginalized lives amidst the continued economic downturn. One of the main sources for understanding the conditions of the Syrian refugees is the Vulnerability Assessment of Syrian Refugees (VASyR) run annually by the UNHCR, UNICEF and the WFP. We will focus here on the current condition of Syrian refugees, backed up by other recent studies to reflect the situation in the country and how it is felt by those refugees, in particular. In a later section, we will discuss the policies that are led to the current conditions for Syrian refugees in Lebanon.

According to VASyR (2020), legal residency is one of the main issues for Syrians in Lebanon: less than 20 percent of Syrian refugees above the age of 15 hold legal residency, which has consequences for all spheres of life. Women are less likely than men to have legal residency and often men's legal residency is prioritised over that for women for socioeconomic reasons (UN Women 2019).

As mentioned above, there are about 855,000 registered Syrian refugees, but the Lebanese government estimates that the actual number is closer to 1.5 million. Since their arrival beginning in 2011, vulnerability has been high among the refugees and has plummeted in the last two years with the economic crisis and the pandemic, and strengthened by the Beirut blast.

Female-headed households constitute some 19 percent of the refugee households (VASyR 2020), although gender is roughly equally distributed across age groups, except for the 25 to 29 age cohort, where there are noticeably fewer men than women (VASyR 2020). The average household size is five members, with 48 percent of the households having three or more dependants.

Before COVID, participation in education was already low, with Syrian refugees attending second shifts in Lebanese schools; these shifts were set up to accommodate refugee students. However, during the 2018-2019 academic year, only 42 percent of Syrian refugee children were enrolled in school (PMU 2019). The top three reasons for children between 3 and 17 years of age not being enrolled remained the same as in previous years: child not of school age (36 percent), cost of educational materials was unaffordable (20 percent), as was cost of transportation to school (15 percent).” During the lockdown, only 35 percent of enrolled school-aged Syrian refugees had access to distance learning, while the remaining 65 percent did not receive any schooling (VASyR 2020).

The COVID-19 pandemic had a devastating impact on education for Syrian refugees, both in access and quality, with over 50% not being offered any hours of schooling since February 2020 (Hammoud and Shuayb 2020). The crises have placed Lebanon's education sector under severe overall strain, with an exodus of students from private to public schools due to increasing poverty levels (World Bank 2021). This means that an increasing number of Lebanese students are sharing the low-quality education in public schools with Syrian refugee children. For all groups, the last 18 months have been considered lost years of learning (World Bank 2021).

Today, together with legal status and education, the most important issue shared by Lebanese and Syrian populations are the socioeconomic characteristics which have been changing dramatically. Nine out of 10 Syrian households (89 percent) live in extreme poverty, according to VASYR (2020). And 99 percent of Syrian refugees, according to a UNICEF survey (UNICEF 2021), find they do not have access to enough food or enough money to buy food, compared to 77 percent of households across the Lebanese, Palestinian, and Syrian populations.

According to VASyr (2020), the labour participation rate among Syrian refugees was 43 percent, with 74 percent among men and 14 percent among women. Only 35 percent of female-headed households had working members, compared with 74% among men. Income has decreased slightly since 2019, but with the collapse of the currency – the Lebanese Lira lost 90 percent of its value during the period – this is being felt in dramatic ways by most. Among the Syrian refugees, 39 percent was the overall unemployment rate in 2020, up by 8 percentage points from 2019 (VASyR 2020). Lack of jobs in the area where they lived was the principal reported reason of unemployment among Syrian refugee households, together with the need to care for a child who was not at school. In the general society, jobs are increasingly hard to come by, the number of people who have lost their jobs is high, particularly in the informal sector, with unemployment rising and youth unemployment being as high as 34 percent (ILO and FAFO 2020, UNICEF 2021).

Among the Syrian refugees, there is a high degree of informal employment, with highest numbers in agriculture followed by construction and then retail/repair and then accommodation and food service industry. Half of the Syrian workers interviewed by ILO and FAFO (2020) were employed on a temporary or seasonal basis (ILO and FAFO 2020). According to the ILO and FAFO (2020) study, only 2 percent of the Syrians interviewed had social security, compared to 14 percent of Lebanese workers. 95 percent of the surveyed Syrians lacked a work permit valid in Lebanon.

The level of employment of Syrian refugees in the agriculture sector almost doubled between 2019 and 2020, while construction dropped from being the top sector in 2019 to second place in 2020. This could be explained by the COVID-19 lockdown, the financial crisis impact on costs of materials imported for construction, and the increase in local agricultural production due to the economic crisis and price hikes on imported food items (VASyR 2020).

In addition to employment, social assistance had been an important source of income for Syrian refugees in previous years. In fact, WFP assistance in the form of e-cards was reported as the main household source of income (21 percent), followed by informal debt (17 percent) and ATM cards from the UN or other humanitarian organizations (15 percent, up from 7 percent in 2019). When asked about the top three sources of income, informal debt ranked first at 73 percent, up by 9 percentage points compared to 2019 (VASyR 2020). In addition, an increasing number of children are involved in child labour (4.4 percent in 2020 – twice as many as in 2019).

From the beginning of the Syrian refugee crisis, the Lebanese Government has adopted a no-camp policy. Syrian refugees live in rented accommodation in cities and villages and in informal tented settlements. It is estimated that 58 percent of Syrian refugees lived in shelters that were below humanitarian standards: crowded and of low standard: “The distribution of Syrian refugee households across the main shelter types remained mostly stable, with the majority (67 percent) living in residential structures, 21 percent in non-permanent shelters, and 12% in non-residential structures. Female-headed households (FHH) (27 percent) were living in tents more frequently than male-headed households (MHH) (19%) and FHH (15 percent) were more often hosted for free than MHH (8 percent)” (VASyR 2020).

With this housing situation, it is clear that Syrian refugees in Lebanon live in conditions less conducive to protection against COVID 19. Health-wise, Syrian refugees are already vulnerable, as a high proportion of household members have special needs (VASyR 2020). Additionally, their physical environment is crowded, with difficult access to clean water and appropriate sanitation services. It has been estimated that 26 percent of Syrian refugee shelters in Lebanon lack basic sanitation services, which increases to about 40 percent in informal tented settlements (Foadi et al. 2021), and also inadequate access to other protective measures such as masks.

Differential access to health care during the pandemic may have differently impacted refugees and Lebanese (Foadi et al. 2021). Foadi et al. found that even before the pandemic, Syrian refugees experienced numerous barriers to health care, such as cost, a perceived low prioritization, and stigmatization, which resulted in unmet health care needs. With poor

access to testing, failure to receive an official COVID-19 diagnosis might also have contributed to further transmission of the virus to members of the households or to the wider community. Overall, even before the pandemic, Lebanon had an under-resourced health system and overall weak surveillance system with limited laboratory and testing facilities. Foadi et al. (2021) also found that misperceptions and a lack of information about the COVID-19 infection were also prevalent among many refugees. In addition, due to the lack of legal residency, stigma and fear of arrest, deportation and loss of legal status no doubt exacerbate a lack of willingness to seek healthcare and hence could contribute to further spread of the virus.

The impact of the pandemic

Lebanon was hit relatively hard by the pandemic (UNHCR 2021b). In addition to the extra pressure of COVID on an already weakened health system, the direct impact on Syrian refugees themselves was significant. The restrictions caused severe challenges for the humanitarian community attempting to reach the refugees (Diab 2021, UNHCR 2021b) as there were restrictions on what the agencies could do: during the first lockdown, humanitarian personnel were authorised to move around only for life-saving activities, making any access to basic services, protection and financial assistance even worse (UNHCR 2021b).

The pandemic, occurring at the same time as the financial crisis, affected both the Syrian refugee and Lebanese host populations. VASYR (2020, UNHCR 2021b) reported a severe loss of income-generating opportunities for Syrian refugees, with unemployment rising 8 percent to 39 percent in April 2020. Workers in both construction and agriculture lost their jobs (ILO and FAFO 2020). The underlying poor working conditions and informal employment were exacerbated as a result of COVID-19 (ILO and FAFO 2020).

The last year has also seen a sharp increase in extreme poverty, to around 90 percent of the refugee population (pre-pandemic level was at 55 percent), and food insecurity also rose to an alarming level. Borrowing money for food is now the most common reason for loans, followed by rent and medical expenses. One in two households borrow food and two in three households have reduced the number of meals or portion sizes. Female-headed households are more likely to be food insecure than male-headed households (55 percent versus 48 percent) (UNHCR 2021b).

The pandemic, together with other crises, have made humanitarian response particularly complex and cash transfers have become an even more important model of assistance during the pandemic.

Relationships between Lebanese, Palestinian and Syrian communities

The relationships between Lebanese, Palestinians and Syrian communities provides a varied picture. Based on VASYR (2020), more than half of the Syrian refugees interviewed (54 percent) rated their relationship with hosts as positive. Locally, it is possible to identify pockets of continued intercommunal support despite the worsening socio-economic conditions (UNESCO et al. 2017, Shuayb et al. 2014). Yet in other locales, hostility and tense relations have developed over the years of Syrian refugee presence, often inflamed by the positions of political parties on refugees and on media reports (Habbal 2019, Skeyes 2020). As a result, in some municipalities, curfews specifically for Syrian refugees are in place (HRW 2020, 2014).

The national discourse of blaming the refugees for the current crisis in the country has also influenced relationships at local levels. The perception that Syrians are prioritised in aid allocation is seen by Lebanese as unfair to poor Lebanese. Cash assistance means that Syrians can work for lower pay: Lebanese perceive this as pricing them out of the labour market in some local areas and sectors. Hence, with the current crisis, intercommunal relations are deteriorating, particularly in vulnerable localities, and are at their lowest level since 2017 when monitoring relations began (LCRP 2021).

While there is limited general social integration between Lebanese and Syrians, and their contacts are largely utilitarian, where contact is most frequent or is based on a long history that predates the Syrian conflict, relations tend to be less conflictual. Relationships are also determined by shared religious, class and political affiliations. In areas of high pressure and many refugees, relations are often more conflictual (ODI and Camaleon 2020). Yet, there are intermarriages between Syrian women and Lebanese men, though this is largely seen as a coping mechanism rather than a progressive result of integration.

Physical proximity is also a clear feature of the relationship between Syrian refugees and Palestinians where many Syrian refugees reside in Palestinian camps. While Palestinians from Syria often reside in camps, Syrian refugees also rent spaces in urban Palestinian camps, residing in proximity to each other and sharing the experience of displacement.

While relationships may be strained between Lebanese and Syrians, in some places there are also examples of more *de facto* integration at the local level, often due to the support of local institutions working to ensure functioning relationships. Yet, with the ongoing general national sentiment that the refugees bear at least part responsibility for the financial crisis, current security concerns and limitations on freedom are strongly felt by many Syrian refugees.

The Economic Impact of the Refugees on the Lebanese Economy: Database Analysis

This section examines the impact of the Syrian refugee influx on the Lebanese macroeconomic landscape, using monthly data for the period from June 2011 to December 2020. Given the major gaps in data in the Lebanese context, the data used here were extracted from the following sources: United Nations High Commissioner for Refugees (UNHCR), World Development Indicators (WDI), Financial Tracking Service (FTS), Central Bank of Lebanon (CBL), and the Central Administration of Statistics (CAS).

Table 1 defines all the variables that have been used in the analysis.

Table 1 Definition of Variables

Variable	Definition	Source
Refugees	Registered Syrian refugees	UNHCR
Coincident indicator (CI)	Monthly approximation of the GDP	CBL
Labour force participation (LFP)	Labour force participation rate (%)	WDI
Unemployment (UMP)	Unemployment rate (%)	WDI
Export (EXP)	Total exports In LBP (millions)	CBL
Import (IMP)	Total imports In LBP (millions)	CBL
Consumer price index (CPI)	Average changes in prices level	CAS
Electricity (ELEC)	Electricity production in million kWh	WDI
Funding (FUND)	Total amount received from international donors	FTS

Notes: Coincident indicator is an estimate of monthly growth. It is a compound index constructed using 8 relevant macroeconomic indicators reflecting the main economic activities. It is composed of: number passenger flows, electricity production, imports of petroleum products, cement deliveries, cleared checks, money supply (M3), and foreign trade.

Sources: United Nations High Commissioner for Refugees (UNHCR), Central Bank of Lebanon (CBL), World Development Indicators (WDI), Financial Tracking Service (FTS), Central Administration of Statistics (CAS)

The key variable is the number of Syrian refugees in the country. The UNHCR database provides timely data on the refugees registered in host countries. However, it is important to note that UNHCR stopped registering refugees in 2015. Nonetheless, we have assessed the available data to estimate general trends in the number of refugees in the country and have extracted data on Syrian refugees officially registered in Lebanon from this database. The number of refugees, as defined by the UNHCR, allows an examination of the effects and

consequences of variations in refugee intensity and thus offers the possibility of investigating the impacts of the underlying variations in the population on the economic situation of the host country. It should be noted that this stock variable will always exceed zero for the examined period, as we cannot assume the influx of refugees in the host country to be a one-time shock – i.e., it begins with the registration of the very first cases of refugees, with a minimum of 2,385 refugees registered, and reaches a maximum of 185,241 (sic=1,185,241 in Table 2) and lasts as long as there are conflicts in the country of origin. This is shown from the summary statistics of variables reported in Table 2.¹

Table 2 Descriptive Statistics of Economic Variables used in the Analysis 2011-2020

	Mean	Standard Deviation	Minimum	Maximum
Refugees	788430.170	384422.215	2385.000	1185241.000
Coincident indicator	272.913	36.842	144.300	325.700
Labour force participation	50.176	0.301	49.930	51.070
Unemployment	6.291	0.125	6.040	6.610
Export	437771.774	90729.123	279755.000	709681.000
Import	2449920.389	509128.418	1015865.000	4366422.000
Consumer price index	109.011	33.491	88.282	262.638
Electricity	1095.470	153.108	641	1528
Funding	90628743.991	71304286.275	260564.000	364812871.000

Moving into the economic variables, we first proxy the monthly economic growth rate (GROWTH) using the Coincident Indicator (CI), a monthly approximation of the Gross Domestic Product (GDP), extracted from the CBL. This indicator aggregates eight macroeconomic variables that capture the sectors that are highly vulnerable to shocks, namely the number of passenger flows, electricity production, imports of petroleum products, cement deliveries, cleared checks, money supply (M3), and foreign trade. The CBL estimates the coincident indicator to reflect the economic activity/status of the real sectors in Lebanon on monthly basis. We observe that the average coincident indicator is approximately 272.913 in Table 2, reaching a trough in August 2020, which could be explained by the strict measures

¹ The introduction of this variable to the model is in line with Baez (2011), who examined the effects of hosting refugees escaping genocides of Rwanda and Burundi on human development and children health in Tanzania using a similar variable. More recently, Fakhri and Ibrahim (2016) examine the implications of hosting Syrian refugees' influx for the labour market outcomes in Jordan using the same variable but in Jordan.

imposed by the government to limit the spread of COVID-19 and the fragile socioeconomic situation due to political and financial uncertainties.

Second, the labour market activity (L) is captured by two variables: the rates of labour force participation and unemployment. The labour force participation rate (LFP) represents the share of the population aged between 15 and 64 years that is economically active. The unemployment rate (UMP) is the percentage of the workforce that is unemployed yet willing to work and is actively seeking employment opportunities. These variables are extracted from the World Bank Development Indicators. During the studied period, the unemployment rate fluctuated around 6 percent, and the average labour force participation rate was approximately 50.18 percent, as can be shown in Table 2.

Third, we use the variable international trade (TRADE), another macroeconomic variable which encompasses both imports (IMP) and exports (EXP). The data are extracted from the CBL and reported in millions of LBP. The trade deficit in Lebanon grew as aggregate consumption increased and the borders closed with Syria, the only exit route for trade. The average of imports and exports during the period studied are approximately 2,449,920.39 (millions of LBP) and 437,771.77 (millions of LBP), respectively. Also, the volume of imports fluctuated significantly, with a standard deviation of 509,128.42 (millions of LBP) as can be seen in Table 2.

Finally, a set of related indicators, including the Consumer Price Index (CPI), electricity production (ELEC), and funding (FUND), was also analysed. The CPI, retrieved from the Central Administration of Statistics (CAS), measures the average changes in price level that display significant increasing trends between June 2011 and December 2020. Data on electricity generation in Lebanon, based on the CBL and World Development Indicators, shows that the average production was around 1095 million kWh (Table 2). The total amount of funding received from international donors (FUND) was also considered. This control variable was extracted from the Financial Tracking Service (FTS) in an attempt to analyse the causal relationship between economic growth and the influx of refugees.

Research methodology

We relied on a vector autoregressive model (VAR), a statistical model, to study the response of economic indicators (growth, labour market, import, export, and inflation), funding received, and electricity generation, to changes in the number of Syrian refugees present in the country. This was an effort to capture the causal effects between these variables (Granger-type

causality). The VAR model permits the analysis of the joint dynamic relationship between these indicators.²

Specifically, we estimated 7 VAR models, with the same order of variables, to measure the Granger causality between the refugees, economic growth, and each of the control variables in Lebanon, labeled as follows:

1. VAR₁ (*REFUGEES, GROWTH, LFP*),
2. VAR₂ (*REFUGEES, GROWTH, UMP*),
3. VAR₃ (*REFUGEES, GROWTH, EXP*),
4. VAR₄ (*REFUGEES, GROWTH, IMP*),
5. VAR₅ (*REFUGEES, GROWTH, CPI*),
6. VAR₆ (*REFUGEES, GROWTH, ELEC*),
7. VAR₇ (*REFUGEES, GROWTH, FUND*).

It is worth mentioning that the variables in the VAR models are arranged so that those that come first are more exogenous, while the subsequent ones are more endogenous. The order selected was as follows (*REFUGEES, GROWTH, CONTROL VARIABLES*). The Cholesky decomposition of the variance-covariance matrix method was carried out to determine the influence of the Syrian refugees on the macroeconomic indicators, as it generates a lower triangular matrix with positive diagonal elements. We specified the following exclusion constraints on contemporaneous shocks in the system:

$$B = \begin{bmatrix} b_{11} & 0 & 0 \\ b_{21} & b_{22} & 0 \\ b_{31} & b_{32} & b_{33} \end{bmatrix} \begin{bmatrix} \varepsilon_{1,t} \\ \varepsilon_{2,t} \\ \varepsilon_{3,t} \end{bmatrix}$$

We selected this ordering since the Syrian refugee variable (the first variable) is the sole variable with a probable immediate effect on the macroeconomic indicators considered in this model. Therefore, we assumed that the remaining variables (*GROWTH, LFP, UMP, EXP, IMP, CPI, ELECT, FUND*) depended on the instantaneous impact of *REFUGEES*

² This was done without adding restrictions on the estimated parameters (Sims, 1980) and isolates the effect of macroeconomic indicators on the inflow of migrants. Using the VAR model to examine the impact of immigration flows on the macroeconomic landscape of the host country conforms to existing literature. Studies by Boubtane et al. (2013a and 2013b) and Damette and Fromentin (2013) discuss the likelihood of an endogenous relationship between fluctuations in the influx of migrants and the economic situation in the host country, where not only the inflow of migrants may impact the economy in receiving country but also the economy of the host country may affect the flow of migrants. Consequently, we assumed the variables examined in the model to be endogenous to the system, avoiding the endogeneity problem (Marr and Skilos, 1994).

Findings of the statistical model

The first step before running the statistical model was to ensure the stability of variables used in the analysis. To that end, we ran the stationarity (stability) tests of the variables to discover the order of integration, using unit root tests.³ The null hypothesis, which implies non-stability, was tested against the alternative of stability. Table 3 provides the results of these tests for each of the variables included. They show that all the variables are stationary, with an order of integration [of] zero; i.e., they can be used in the analysis as they are expected for the refugees and labour force participation rate variables in which they are used at the first difference.

Table 3 Unit Root Tests of Variables

Variables	H ₀ : Variable has a unit root		
	ADF test	PP test	ADF-Fisher test
		Levels	
REFUGEES	0.237	0.322	0.007***
GROWTH	0.002***	0.008***	0.000***
LF	0.808	0.943	0.004***
UMP	0.002***	0.007***	0.005***
EXP	0.000***	0.000***	0.000***
IMP	0.000***	0.000***	0.024**
CPI	0.007***	0.002***	0.000***
ELEC	0.000***	0.00***	0.001***
FUND	0.000***	0.000***	0.006***

Notes: The null hypothesis for the ADF, PP, and ADF-Fisher tests is the presence of non-stationarity. The variables REFUGEES and LFP are integrated of order 1 and found to be significant in the three tests, thus they are integrated of order 1, and their first difference is included in the analysis. Figures in brackets are *p*-values. The symbol *** indicates rejection of the null hypothesis at the 1% level, ** indicates rejection at the 5% level, and * indicates rejection at the 10% level.

Next, to confirm the robustness of the findings, residual tests were performed for serial correlation and heteroscedasticity of errors that may occur in the model. The LM test or Breusch–Godfrey Lagrange multiplier test was adopted to test the null hypothesis of no serial correlation, and the White test was used to test the null hypothesis of no heteroscedasticity of the errors. Table 4 shows that the null hypotheses of no serial correlation of the residuals and

³ The PP or the Phillips-Perron test (1988), the ADF or the augmented Dickey-Fuller test (1981), and the ADF-Fisher test introduced by Maddala and Wu (1999) are performed in this paper.

no heteroscedasticity cannot be rejected for all the VAR models 1 to 7, as defined in the previous section.⁴

Table 4 Diagnosis Tests - VAR Residual

Ordering VAR	LM Test [†]		White Test [‡]	
	H ₀ : No serial correlation		H ₀ : No heteroscedasticity	
	Stat	Prob.	Stat.	Prob.
VAR ₁ : REFUGEES, GROWTH, LFP	6.087	0.731	0.130	0.717
VAR ₂ : REFUGEES, GROWTH, UMP	12.699	0.177	0.380	0.540
VAR ₃ : REFUGEES, GROWTH, EXP	11.435	0.247	0.000	0.949
VAR ₄ : REFUGEES, GROWTH, IMP	5.949	0.745	0.150	0.694
VAR ₅ : REFUGEES, GROWTH, CPI	10.125	0.341	0.440	0.509
VAR ₆ : REFUGEES, GROWTH, ELEC	12.098	0.208	1.400	0.237
VAR ₇ : REFUGEES, GROWTH, FUND	11.538	0.241	0.270	0.603

Notes: For each VAR model, we report the Lagrange-multiplier (LM) test and the p-value in both the LM and White tests. The symbol *** indicates rejection of the null hypothesis at the 1% level, ** indicates rejection at the 5% level, and * indicates rejection at the 10% level.

We then investigated the causal effects findings (Granger causality) between Syrian refugees and economic variables, specifically, the findings of VAR models 1 to 7 presented in the research methodology section. The results are presented in Tables 5 through 9. The p-values and the Chi-square statistic are given in each table. It is worth mentioning that we used the terminology of Granger causality to indicate the causal effects.

First, the empirical findings strongly indicated no evidence for a causality running from refugees to growth. As can be seen from the tables, the null that states that “REFUGEES do not Granger cause GROWTH” fails to be rejected at 10 percent significance level for all the model variations (from VAR₁ to VAR₇). This is also true for the opposite direction, running from GROWTH to REFUGEES. Thus the results affirm that no relationship exists between the number of refugees and the growth of the Lebanese economy – contrary to pervasive belief and current debate in Lebanon that refugees damage economic opportunities. In fact, the review of the Lebanese economy over the period 1990-2010 demonstrated that the economic

⁴ It is worth noting that the optimal lag length is 2. In addition, we pursue the estimation of VAR models using Cholesky ordering REFUGEES, GROWTH, CONTROL variables.

performance of the economy was declining and economic problems were already harming the country before the arrival of Syrian refugees.

Second, moving into the other macroeconomic variables, we tested the effect of refugees on the employed control variables in each table. The results provide strong evidence that refugees are statistically not impacting important indicators in the Lebanese economy. Table 5 reveals the insignificant impact of Syrian refugees on labour market outcomes, as measured by labour force participation rate (*LFP*) and the unemployment rate (*UMP*). This is contrary to the claims that Syrian refugees have a devastating impact on Lebanese employment opportunities. This result is in line with the work of Fakhri and Ibrahim (2016), in which the effect of Syrian refugees on the Jordanian labour market was proven to be insignificant. Similarly, the results, as presented in Table 6, do not show any evidence that Syrian refugees are affecting such indicators of international trade as exports (*EXP*) and imports (*IMP*). This finding disproves the claims that Syrian refugees produce a trade shock and, more specifically, that they negatively impact Lebanese exports, as discussed in David et al. (2017). Likewise, Tables 7, 8, and 9 provide evidence of the insignificant effect of the presence of Syrian refugees on electricity generation (*ELEC*), inflation (*CPI*), and international aid (*FUND*).

Table 5 Granger Causality Results: Refugees, Growth and Labour Market (Controls)

	VAR ₁ :		VAR ₂ :	
	REFUGEES, GROWTH, LFP		REFUGEES, GROWTH, UMP	
	Chi-square statistic	p-value	Chi-square statistic	p-value
<i>Null hypotheses</i>				
GROWTH does not cause REFUGEES	0.836	0.361	1.906	0.167
CONTROLS does not Granger cause REFUGEES	2.559	0.110	0.209	0.648
REFUGEES does not Granger cause GROWTH	1.492	0.222	0.531	0.466
CONTROLS does not Granger cause GROWTH	0.076	0.783	6.572	0.010***
REFUGEES does not Granger cause CONTROLS	0.131	0.717	0.988	0.320
GROWTH does not Granger cause CONTROLS	0.046	0.830	0.574	0.449

Notes: Controls are LFP and UMP. The symbol *** indicates rejection of the null hypothesis at the 1% level, ** indicates rejection at the 5% level, and * indicates rejection at the 10% level.

Table 6 Granger Causality Results: Refugees, Growth and International Trade (Controls)

	VAR ₃ :		VAR ₄ :	
	REFUGEES, GROWTH, EXP		REFUGEES, GROWTH, IMP	
	Chi-square statistic	p-value	Chi-square statistic	p-value
<i>Null hypotheses</i>				
GROWTH does not cause REFUGEES	1.004	0.316	1.746	0.186
CONTROLS does not Granger cause REFUGEES	0.567	0.451	0.136	0.712
REFUGEES does not Granger cause GROWTH	0.059	0.809	0.525	0.469
CONTROLS does not Granger cause GROWTH	0.052	0.820	3.247	0.072***
REFUGEES does not Granger cause CONTROLS	0.424	0.515	1.476	0.224
GROWTH does not Granger cause CONTROLS	0.009	0.924	0.442	0.506

Notes: CONTROLS are EXP and IMP. The symbol *** indicates rejection of the null hypothesis at the 1% level, ** indicates rejection at the 5% level, and * indicates rejection at the 10% level.

Table 7 Granger Causality Results: Refugees, Growth, and Inflation (Controls)

	VAR ₅ :	
	REFUGEES, GROWTH, CPI	
	Chi-square statistic	p-value
<i>Null hypotheses</i>		
GROWTH does not cause REFUGEES	0.691	0.406
CONTROLS does not Granger cause REFUGEES	0.004	0.952
REFUGEES does not Granger cause GROWTH	0.619	0.431
CONTROLS does not Granger cause GROWTH	3.481	0.062***
REFUGEES does not Granger cause CONTROLS	0.788	0.375
GROWTH does not Granger cause CONTROLS	0.704	0.401

Notes: CONTROLS are CPI. The symbol *** indicates rejection of the null hypothesis at the 1% level, ** indicates rejection at the 5% level, and * indicates rejection at the 10% level.

Table 8 Granger Causality Results: Refugees, Growth, and Electricity (Controls)

	VAR ₆ :	
	REFUGEES, GROWTH, ELEC	
	Chi-square statistic	p-value
<i>Null hypotheses</i>		
GROWTH does not cause REFUGEES	0.669	0.413
CONTROLS does not Granger cause REFUGEES	0.841	0.359
REFUGEES does not Granger cause GROWTH	0.147	0.702
CONTROLS does not Granger cause GROWTH	1.364	0.243
REFUGEES does not Granger cause CONTROLS	0.772	0.379
GROWTH does not Granger cause CONTROLS	4.302	0.038**

Notes: CONTROLS are ELEC. The symbol *** indicates rejection of the null hypothesis at the 1% level, ** indicates rejection at the 5% level, and * indicates rejection at the 10% level.

Table 9 Granger Causality Results: Refugees, Growth and International Aid (Controls)

	VAR ₇ :	
	REFUGEES, GROWTH, FUND	
	Chi-square statistic	p-value
<i>Null hypotheses</i>		
GROWTH does not cause REFUGEES	2.199	0.138
CONTROLS does not Granger cause REFUGEES	0.035	0.853
REFUGEES does not Granger cause GROWTH	0.171	0.679
CONTROLS does not Granger cause GROWTH	0.728	0.393
REFUGEES does not Granger cause CONTROLS	0.017	0.897
GROWTH does not Granger cause CONTROLS	3.619	0.057

Notes: CONTROLS are FUND. The symbol *** indicates rejection of the null hypothesis at the 1% level, ** indicates rejection at the 5% level, and * indicates rejection at the 10% level.

Results

The consequences of the presence of refugees in host countries vary, based on country characteristics and challenges. Multiple studies and figures report that Syrian refugee inflows

have had negative effects on the Lebanese economy (ILO 2014). For example, a study covering 400 Lebanese respondents has revealed that 50 percent of respondents perceive Syrian refugees as harming the Lebanese economy (Hamdar et al. 2018). Following the heavy influx of refugees, Lebanon has suffered a contraction of economic growth, a reduction in private investment, a widening of the nation's trade deficit, and a downturn in the real estate and tourism sectors, which are considered the two leading economic sectors in Lebanon (ILO 2014). An opposite channel, as discussed by David et al. (2017), that led to a boost in Lebanese economic growth is the flow of humanitarian aid. However, claims of negative or positive economic impacts on the Lebanese economy, resulting from Syrian refugee inflows, are invalidated by the Granger causality results reported in this paper.

To summarise the findings from this part of the analysis, we can say that our analysis does not support the claim that Syrian refugees placed pressure on the Lebanese economy and reduced labour market opportunities. In fact, on the contrary, our results show that refugees cause economic growth. Also, refugees do not affect labour force participation and unemployment rates. Thus it is important to gain a better understanding of current policies regarding Syrian refugees and the economy.

Policies of Exclusion: The Policy Environment for Syrian Refugees in Lebanon

Analysing the documentation and statements from the international donor meetings in London and Brussels (2016 to 2021), it is clear that both the international and Lebanese government's discourse focuses on the costs that Lebanon has incurred as a result of the refugee crisis. According to Lebanon's statement at the London donor conference in February 2016, the World Bank had estimated that cost to be US\$13.1 billion between 2012 and 2015. The Lebanese government's statement goes on to say that despite these costs, the Lebanese government and people have extended commendable hospitality to the Syrians. While initially welcoming, Lebanon gradually introduced policies that are more hostile towards the refugees and its policies may be described as "policies of exclusion" (Brun and Shuayb 2020, Kikano et al. 2021). As mentioned above, the majority of the Syrian refugees do not have legal residency. Lebanon is not a signatory to the 1951 Refugee Convention and the Syrian refugees are considered guests and are not given a formal status (Carnegie 2018). This lack of status must be understood as the backbone of any policy framework: the guest approach was to a large extent put in place to prevent integration of the Syrian refugees into all sectors of the country, including the economic sector.

Importantly, the question of legal residency permeates all aspects of Syrian refugees' lives: housing, livelihoods, education and health. Understanding policies toward refugees and, more generally, for the country's economic development must take into consideration this exclusionary status of refugees together with the constant inequality and the recent economic crisis that affects all residents of the country. At the same time, several authors have described Lebanon's response to the refugee crisis as a 'non-policy policy approach' (Stel 2021, Fakhoury 2017), where most services and assistance toward refugees are 'outsourced' from the government to international and national organisations. Yet, this non-policy understanding does not mean that there are no policy processes or policies relevant for the lives of refugees and hosts. Rather, as we show here, some policy developments have been crucial for understanding the conditions in which Syrian refugees live and are also directly connected to discussions of the economic impact and more inclusive economic development of the crisis-ridden country.

In our analysis, we have juxtaposed the policies that are formulated in close collaboration between the international community and the Lebanese government and those policies that are coming more directly from the Lebanese state. Our starting point has been that there are clearly clashing rationalities between the international community and the Lebanese

government in their governance approaches toward refugees (Fakhoury 2020). Fakhoury shows the contrast between the international community's focus on humanitarian and development aid aiming at building the resilience of refugees and working for more long-term options in Lebanon. In contrast, the Government of Lebanon has taken a distinctively more securitized response, considering refugees as a security threat and with return as its priority (Janmyr 2018). What is clear from the outset, and partly as a result of what practices have become acceptable to the state for assisting refugees, is that there are two parallel systems in the country: one for refugees and one for Lebanese. And as we show below, there are also parallel systems in the ways the government approaches the refugees and how the international community does.

Legal status

At the beginning of the crisis, the Government of Lebanon (GoL) attempted to seek the support of neighbouring countries to receive asylum-seeking Syrians and to ensure their protection from refoulment (RRP, 2012). Yet, the welcoming attitude was soon replaced with a more reluctant approach and more emphasis on securitisation associated with the spillover effect of the Syrian conflict into Lebanon. The consequences were more restrictive policies toward the Syrians' presence in the country (see Fakhoury 2000). In 2015, the GoL maintained that the repatriation of *de facto* Syrian refugees was their preferred durable solution to ending their displacement. In the 2015 LCRP report, the GoL's position in regard to the Syrian crisis was clarified by emphasizing that the GoL was neither a signatory of the 1951 Convention Relating to the Status of Refugees nor of its 1967 Protocol and hence does not consider itself as an asylum country nor a final destination for refugees (LCRP 2015). Further, the document makes it clear that instead of the term "refugees," the terms "persons displaced from Syria," "persons registered with UNHCR as refugees," and "de facto refugees" were acceptable terms for describing or addressing Syrian refugees. In October of that year (2015), and as an attempt to "manage the displacement situation," the GoL decided to prioritize "[reducing] the number of individuals registered in Lebanon with UNHCR as refugees from Syria" and urged third countries to have more humanitarian admission and resettlement opportunities for Syrian refugees (LCRP 2018: 3). In 2018, however, nongovernmental partners of the 3RP plan were against the promotion of return as the conditions in Syria were not supportive of a safe and dignified return of refugees who have fled the country (LCRP 2015, 3RP 2018-19).

These discussions must be seen in relation to the general shift in attitude by the government in 2014. A minister of the Lebanese parliament argued once that "We will deal with the Syrian refugees as we dealt with the Palestinians: by pushing most of them out of the country" (Kikano et al. 2021). The Council of Ministers implemented a "Policy Paper on Syrian

Refugees Displacement” titled “Warakat Syasat Annouzouh.” This paper included numerous procedures aimed at decreasing the number of Syrian refugees in Lebanon and thus reducing their effect on the Lebanese economy (Janmyr 2016). The new rules included new obligations for Syrian refugees trying to enter the Lebanese territory and for those already present in Lebanon. As of October 2014, obtaining a residency permit was a must with the renewal of this permit every six months. But the refugees had to pay a US\$200 fee for this process (Janmyr 2016) which meant that families with limited funds chose to spend their money on their basic needs such as shelter, health care, and food rather than on renewing legal documents (Norwegian Refugee Council and International Rescue Committee 2015). With these new measures in place, the number of refugees registering was dramatically reduced.

In May 2015, the Ministry of Social Affairs requested suspension of registrations and, as a result, less than 20 percent of Syrian refugees above the age of 15 now hold legal residency (VASyR 2020). Furthermore, the process became so complicated that the majority of the Syrian refugees could not keep track of the new procedures. Besides the fees paid on the permit, the applicant is now obliged to present a document signed by the ‘mukhtar’ proving that the refugee owns or rents a property to live in. But this document is practically impossible to obtain because a high number of Syrian refugees have informal rental agreements with the property owners. Even if the contract is formal or legal, municipalities regularly avoid registering their rental agreements (Kikano et al. 2021). In April 2015, the Supreme Defense Council issued an order requesting the demolition of all informal refugees’ houses fabricated with concrete or other materials such as plastic and timber. The government gave them until July 1st of that year to evacuate their shelters. As a result, 3,500 families found themselves homeless in the town of Aarsal alone (Syria Justice and Accountability Centre 2019).

In addition, Syrian refugees are required to decide whether they want to work or receive foreign aid because Syrians who acquire a legal work permit will lose their right to profit from humanitarian aid (Janmyr 2016). Refugees who choose to work and risk becoming weak and insecure workers will face other challenges. First, they are requested to provide a ‘pledge of responsibility’ or what is known as ‘kafala’ signed by a Lebanese entrepreneur. If they do find one who agrees to sponsor the refugee, they will be able to apply for a work permit. Yet, in many cases, refugees who pay the fees and provide all the required documents will have their application declined by the General Security Office for unknown reasons (Kikano et al. 2021).

In June 2015, the Minister of Labour, Camille Bou Sleiman, gave employers until July 9 to legalize their employees or face a penalty. It is important to note that, in 2014, only 1,733 Syrians had obtained valid work permits. Yet, as shown above, the number of Syrian refugees

in Lebanon who participate in the labour market is much higher, although they are mostly in the informal sector (Syria Justice and Accountability Centre 2019).

The legal status has an effect on the mobility of refugees and consequently on access to assistance and aid opportunities; without evidence of a legal status, persons can be legally arrested by General Security. In response to their fear of persecution, Syrian refugees without legal status risk their lives and safety by exposing themselves to different risks. For example, some went back to Syria in order to attempt to re-enter via an official border, some purchased fake documentation or use someone else's, and others paid a lot of money to retrieve documentation from their home country. Additionally, women are exposed to more tiers of risks; their husbands would avoid arrest by sending them to ask for assistance, thus risking sexual harassment, which is often unreported (Aranki and Kalis 2014). Subjugation of legal status is not the only barrier to participation. The issue of legal status is exacerbated by a sense of resentment and indignation against Syrian refugees expressed by some Lebanese groups through protests and, in some cases, violence in which Syrians are blamed for unfair labour competition and unemployment (UNDP 2017, Lebanon Support 2017).

Further, the lack of legal status prevents Syrians from obtaining civil status (i.e., birth registration), which can lead to statelessness and ultimately prevent stateless newborn children of Syrian parents from going back to Syria when return is feasible. Similarly, other registration certifications, such as for marriage, divorce, death, legal guardianship over children, and inheritance rights even when they return to Syria, could be made impossible simply by the lack of legal status in Lebanon.

The regional and national response plans

In 2012, the idea of the Regional Response Plan (RRP) was developed by UN agencies and NGOs in consultation with the governments of Syria's neighbouring countries – Jordan, Lebanon, Turkey, and Iraq – to address the 'humanitarian' needs of, at the time, 98,000 Syrian refugees over the period of six months (UN 2012). The plan was continuously revised in the following years due to the massive increase of Syrian refugees fleeing to those countries. At that point, this international response had three main objectives: (1) to ensure access to neighbouring territories including shelter and protection, (2) to meet the basic needs of the most vulnerable refugees, and (3) to carry out contingency planning measures for potential mass influx.

In 2015, RRP's name changed slightly to the Regional Refugee and Resilience Plan (3RP), which became a symbol of an aggregation of national plans developed between UN agencies

and national governments, namely Egypt, Iraq, Jordan, Lebanon, and Turkey (RRP 2015-16). Individual plans were developed between these governments and UN agencies to address the individual priorities of each individual country, in Lebanon these strategies are named Lebanon Crisis Response Plan (LCRP). The LCRPs are developed between international organisations, Government of Lebanon and national and local civil society organisations.

Both the RRP and the LCRP thus present different interests and may be understood as an *indication* of governments' response or intervention to what the plan called the 'refugee crisis,' which varied in each country, depending on its priorities and the number of hosted newcomers.

The 3RP report from 2015 stated that the overarching objective of national governments in the interventions is "ensuring protection and humanitarian assistance for refugees fleeing the conflict in Syria and other vulnerable communities, while building resilience of individuals, families, communities and institutions in the most impacted countries (UN 2015: 7)." The 2021 version of the LCRP 2017–2021 states that the strategic objectives are: 1) to ensure protection of vulnerable populations; 2) to provide immediate assistance to vulnerable populations; 3) to support service provision through national systems; and 4) to reinforce Lebanon's economic, social and environmental stability. In comparison with the original plans, we can see that the objectives are moving toward development and have become more general to the society at large rather than concentrating on refugees only.

The Financial Tracking Service (FTS) by UNOCHA, 3RP (2018–2019) reports and LCRP reports, have reported that at the start of the Syrian crisis in 2012, donor-pledged contributions amounted to US\$161 million, with 90 percent of the amount (US\$95.4 million) received. By 2013, at the time of RRP5, donor contributions pledged reached US\$1.039 billion: less than the requested US\$1.2 billion. Of that, 72 percent of the requested amount (US\$864 million) had been received. In the following year, 2014, funding pledged by donors dropped to US\$874 million while US\$1.6 billion had been requested; only 46 percent of the requested amount (US\$777.4 million) was received. The 2015 3RP reported that 53 percent of the appeal was funded. The 2015 LCRP plan proposed a US\$2.14 billion budget plan that aimed to provide humanitarian assistance to 2.2 million vulnerable de facto Syrian refugees and to invest in services that can potentially reach up to 2.9 vulnerable people (LCRP, 2015). The 2015 RRP plan, however, proposed a US\$5.5 billion budget plan which was broken down into two components: a refugee component that requested a US\$3.4 billion fund and a resilience component that requested US\$2.1 billion (RRP, 2015-16). To fast forward to 2020, the UN agencies and partner NGOs appealed for nearly US\$6 billion to sustain the 3RP in the region, including COVID-related initiatives, yet only just over half (US\$3.2 billion) was funded. At the

national level, Lebanon largely followed this trend with 57 percent of the appeal funded and the discourse of funding continues to include both refugees and Lebanese in its national plans.

The Syrian refugee crisis has followed the trend of a shift toward cash-based assistance. In 2018, the LCRP introduced within its US\$2.6 billion plan the importance of having 'un-earmarked funding', which is defined as funding in which the donors do not place any conditions or specifications on how the funds will be used or on which project or sector they will be spent on (LCRP 2018). The LCRP proposed that the spending of the 'un-earmarked' fund will be guided by the LCRP Steering Committee and Sector Steering Committees and promised full transparency through timely reporting and general leadership and guidance of the Ministry of Social Affairs (MoSA) throughout the entire process (LCRP 2018).

The same lack of earmarking and conditionalities in funding also characterized cash-based assistance for refugee families. Agencies have predominantly pushed for making cash assistance for refugees unconditional and multipurpose, in order to give them the 'dignity of this choice' while 'positively impacting on local economies' (RRP 2015-16: 34). While agencies are arguing for more dignified expenditure-related decision-making for refugees, Syrian refugees in Lebanon are spending less and less every year.

In 2021, the LCRP presented food security and agriculture as the largest proportion of assistance, given the profound poverty and food insecurity experienced by people as a result of the crisis. People were supported by cash for work and there was generally an emphasis on direct cash assistance ("injecting cash into the local economy" (p. 13)) which was considered development aid.

In the discussion of international aid, it is important to understand the role of the international donor conferences mentioned above. While there is an increasing shortfall in funding, the donor conferences have been a vehicle to hold the Lebanese government accountable to ensuring rights for refugees in the areas of residency, education, solutions and protection. Yet, the pledges made by the Lebanese government in these areas have not been followed through but with limited consequences for international funding for Lebanon. The non-commitments and failed promises by the Government of Lebanon were raised as a major issue in our conversations with key informants and where they saw this as a lost opportunity. Currently, international funding serves to support the government and cements current inequalities, including the separation between refugees and Lebanese, rather than as an impetus to change the current system that has led to the economic collapse. As one interviewee said: "It's about the machine inside the country. There is social interaction,

economic activities and political order. If the machine is not working, any amount of international support won't help."

According to Human Rights Watch (2018), Lebanon has a tendency to make pledges to ease its residency restrictions for Syrians but then fails to follow through: The London statement by the Lebanese government admits it is "cognizant of the fact that the employment of Syrians necessitates a review of existing regulatory frameworks related to residency conditions and work authorizations" (p. 2). In the plan, there is a clear strategy for investment at municipal levels; an employment scheme to provide permanent jobs for Lebanese workers and temporary jobs for Syrian workers; and increased exports to new markets, with the help of the EU and the World Bank as well as infrastructure development. Yet, these pledges have never been fulfilled and must be seen in the context of the clashing rationales of the GoL and the international community, mentioned above. In the next section, we will turn to the current role of employment and economic development in the existing policies.

Employment and the national and international policies and response plans

The Agreement for Economic and Social Cooperation and Coordination between the Lebanese Republic and the Syrian Arab Republic, signed in 1993, affirmed the freedom of movement for Lebanese and Syrians between the two countries, as well as their citizens' right to work in Lebanon or Syria, according to each country's labour code (Syrian Lebanese Higher Council 1993). The agreement enabled large numbers of Syrians to work in sectors in which Lebanese either did not work or refused to accept the low wages provided to Syrians. According to the ILO, an estimated 300,000 Syrian workers were in Lebanon before the outbreak of the Syrian crisis (ILO in Bou Khater 2017).

Although the Lebanese Labour Code stipulates that foreign workers required a work permit within 10 days of their entry, in return for social security, the right to a minimum wage, and security protection, the majority of foreign workers in Lebanon work illegally (Bou Khater 2017). Refugees, in particular, were restricted from occupying many vocations that were previously restricted to Lebanese nationals (Bou Khater 2017). The Ministry of Labour issued a circular in February 2013 allowing Syrian refugees to work in a number of occupations, including construction, electricity, and sales (though Syrians had worked in these fields without a permit prior to the decision). Soon, though, this circular was revoked by a decision of the Lebanese Government, depriving Syrian refugees of their right to work on the basis that the 'displaced' lose their refugee status and humanitarian assistance the moment they start working (Bou Khater 2017).

In line with this revocation, in December 2014, the Ministry of Labour issued a circular that limits the sectors open to Syrians as construction, agriculture, and cleaning. It then issued subsequent decrees that require employers to: (1) submit proof that they first tried to find Lebanese workers for the same jobs, and (2) maintain a less than 10:1 ratio of Lebanese workers to foreign workers. In turn, the decrees require Syrians seeking work to have a Lebanese sponsor, often an employer, who has signed a 'pledge of responsibility.' Further, UNHCR-registered refugees seeking to renew their registration are ineligible to work in Lebanon on the grounds that they are receiving humanitarian assistance (Carnegie 2018).

Despite these restrictions in accessing employment, the 3RP and LCRP continue to support economic development. In the 2017–2021 LCRP (2021 updated version), there is a clear emphasis on the crises that have led to a system weakened by a multitude of financial, economic, and political challenges that have led to disruption in businesses, job losses and deteriorating livelihoods. There is a particular emphasis on the challenges faced by micro, small, and medium-size enterprises (MSMEs), cooperatives, entrepreneurs, and small-scale farmers "making it crucial for the Livelihood Sector to invest in businesses across the key economic sectors" (LCRP 2021: 128): "The theory of change underpinning the overall Livelihoods Sector strategy built on the premise that supporting businesses in key economic sectors stimulates local economic development and market linkages contributing to job creation and retention, as well as bolstering short term income-generating opportunities particularly for the most socio-economically vulnerable; and working with the private sector and governmental institutions to enable a conducive policy environment for sustainable job creation, reduction of the gender gap in the economy and enforcing decent working conditions will contribute to improving the livelihoods of vulnerable groups and mitigate a source of tensions between Lebanese host communities and refugees."

The LCRP 2021 has three main aims regarding livelihoods: 1) to stimulate local economic growth and market systems to foster income-generating opportunities and decent and safe employment, 2) to improve workforce employability, and 3) to strengthen policy development and enabling an environment for job creation.

The LCRP does not address Syrian refugees' right to work and states that it will act strictly within Lebanese labour laws. The elephant in the room is then related to the access Syrian refugees will have to employment given existing restrictions. While the government of Lebanon continues to promote a securitization agenda, the international community is increasingly promoting development objectives. The opening for a new way of thinking in the LCRP 2021 is the continuous and increased emphasis on the local level, to which we turn in our final section of the policy analysis.

Solutions, social cohesion and local initiatives in the shadow of the exclusionist policies

The regional strategic overview for 2021–2022 maintains the support of the conventional durable solutions of return and resettlement. In the Lebanese government's discourse, there is a clear and continued emphasis on return to home countries; yet, many Syrian refugees will remain Lebanon and other host countries of refuge, making it necessary to identify local opportunities and enhance the self-reliance of refugees and host communities alike. Currently, there is no chance of *de jure* integration in Lebanon, as it is prohibited in the Constitution (Janmyr 2017, LCRP 2021). Return to Syria is currently taking place on a very limited basis and the number of returns decreased during the pandemic, but increased slightly in the months following the Beirut port explosion. One should also not overlook the Lebanese government's strongly held sense that the international community has failed to show its support by sharing the burden with limited resettlement options for refugees.

The view and discussion on assistance is currently very much focused on 'including the hosts' and strengthening such capacities as public institutions, civil society, and businesses, as well as maintaining and increasing service provision such as education, health and social protection, with more emphasis on working with national institutions. However, it is inclusion of refugees in the areas that matter – such as employment – that is crucial, and there is no political will to support this at the moment. With the current parallel systems, international assistance continues as relief for refugees but as development aid for the Lebanese communities.

Full legal integration (naturalization) is not possible. However, our interviews and policy reviews suggest that amid the current crisis of governance and a failing state, political will for *de facto* integration at local levels could be explored further. This would, according to one interviewee, require a further whole society approach, where discussion on social cohesion and ways in which local communities can work together to strengthen their common development, is placed at the centre. In the past, a number of organisations attempted to develop area-based or neighbourhood-centred approaches to assisting communities (Sanyal 2021). However, the government was wary of these attempts as they encouraged processes of integration and included refugees in decision-making. Due to the lack of political will, international organisations like the UNHCR and UNICEF have, according to one interviewee, also been reluctant to support such local initiatives.

Yet, there are good examples at the local level of successful local participation. As one interviewee said:

“Can we mobilise the Syrian Community? In Saida and Halba it happened. They have a voice and contribute to local projects. They became part of solving the issue. While in Zahle they could not interact with formal power. They are always outside.”

Despite restrictions on local participation, there are regional variations in how much refugees can participate. In the latest Lebanon Crisis Response Plan as discussed above, ‘the local’ is often mentioned alongside the national level, but there is limited definition of what this “local level” means and what a “local level initiative” could mean for refugees and the Lebanese communities. This may represent a gap in current policies that requires further elaboration in the future.

Conclusions and Recommendations

Policymakers in Lebanon used to argue that refugees, and particularly Syrian refugees, are among the main reasons for the current collapse in the country's economy and public finance sector, although most of the economic indicators illustrated in the review of the Lebanese economy over the period 1990–2010 consistently show that the economy was not doing well before the refugees' arrival. Moreover, corruption and mismanagement of public resources in many sectors, such as electricity, were the primary reason for the failures of the economic system. Contrary to public belief, Lebanon has benefited from the presence of Syrian refugees and received a substantial amount of international aid that was injected into the economy and helped to delay the collapse.

Over the last 10 years, Lebanon has adopted exclusionary security policies in dealing with Syrian refugees while providing humanitarian relief through UN agencies. This has meant that Syrians experienced difficulties in maintaining their residence permits because of the excessive restrictions forced on them by the Ministry of Social Affairs (MoSA). It has also meant that they live in poor conditions with limited supervision and protection. Although the humanitarian response provided some basic relief, it fell short of creating development, let alone prosperity, for either the Lebanese or Syrian refugee communities. Most of the refugees continue to struggle when it comes to even such basic services as water and electricity. Regarding their social status, Syrians, although living cordially within local communities in many settings, have experienced varied levels of integration at the local level. However, the securitised policies toward Syrian refugees have had a negative effect on economic policies, as the Lebanese government has made it difficult for the refugees to obtain work permits which, as discussed earlier, had a negative effect on the labour market. Their exclusion from Lebanese society supports our finding that Syrian refugees did not impact either the unemployment rate or the Lebanese labour market. Yet, despite the exclusion, the economic crisis has caused shared poverty for both Lebanese and the refugee population and did not result in increased employment rates amongst nationals.

There are no quick fixes to the current situation, but in the context of the continued compounded crisis of what can be described as a failed state, we have formulated a set of recommendations. They are formulated to reflect the particular context of Lebanon, but they have also been inspired by the Council's *A Call to Action* (WRC 2019).⁵

⁵ The World Refugee & Migration Council was originally known as the World Refugee Council (WRC).

▶ **Shifting the lens from deficit to asset**

As we have shown here, the current discourse is that refugees are a burden and that the international community must support the Lebanese state to deal with this burden. There is a need to shift this lens. The international community could help in this. We have shown through our macroeconomic analysis that refugees did not cause the economic crisis in the country. Focusing on how refugees, together with Lebanese, are assets for building a new economic system could help to change the current discourse. One way forward could potentially be to formulate clearer conditions on aid that ensure more development for those who have been hardest hit by the compounded crises in the country. International donors should be invited to monitor the use of aid to make sure the welfare of refugees has improved.

▶ **Refugees' role in the economy must be acknowledged**

We have shown that the refugees did not cause the financial crisis that the country is currently experiencing. We would thus suggest that a policy aiming at integrating refugees into the economy would be beneficial from a macro perspective: refugees in Lebanon should be seen as complementing rather than substituting for Lebanese workers; thus, the total welfare of the economy would increase when this supply is integrated into the economy, particularly in productive sectors. As examples, the agriculture and industrial sectors are important targets that could attract refugees who would then help in improving sectoral productivity.

▶ **From state orientation to the local economy**

The current policy language focuses mostly on systems strengthening at the national level. While this could have produced more holistic and coordinated responses, the fractured and conflicted policies of the unstable and corrupt regime made this approach ineffective. With the crisis of governance in Lebanon, a more efficient approach than 'supporting the state' would be to target local initiatives at the municipal level and set out in clearer terms what the term 'local' means in this context. One suggested policy action is to integrate the refugees in productive sectors mainly in the peripheral regions and in the agricultural and industrial sectors: particularly in the Bekaa, North, and South Mohafazas. When there are weak institutions and unstable governments, recommendations for support may need to bypass the government. Already we have seen successful attempts at the local level of refugees having access to work and services thanks to willing local authorities and local businesses.

Although controversial, even among international organisations, these locally based models have proven helpful in promoting social cohesion between groups and reduce conflict levels.

▶ **Development can happen only when both communities are included and participate**

From the beginning of the Syrian refugee crisis, the economic downturn has plunged more and more people into poverty, to the point that today, it is the main shared reality among refugees and the Lebanese. A more explicit strategy of including both communities needs to be developed in order to create development by eradicating the structures that keep producing inequality, exclusion and poverty.

Currently, there are no institutional measures for Syrian refugees to participate in the local communities where they live. With 'participation', we are referring to participation that goes beyond tokenism and where the individuals and groups gain control of development processes that concern their lives and futures. New modes of representation of Syrian refugees and members of Lebanese communities are needed in order to reorient assistance and economic development to be more people-oriented. This representation should be respected and inform the work of governments at local levels and also apply to local, national, and international organisations' work at both national and local levels.

▶ **Need to address pre-existing marginalisation and inequalities**

There are clear structural constraints to development in Lebanon today, mainly related to the ways in which the financial sector is organised, the neoliberal governance model and the lack of social policies. While the international community can continue to push for restructuring the economy, with the ongoing lack of government, we would suggest that emphasis on human development should be the priority for the international community. In this context, more emphasis should be on strengthening employment prospects for both communities. Improving education for all and working for higher quality in the current public education system, which is shared both by refugees and the Lebanese population. In addition, as we have shown, gender inequality is rife in all sectors. Considering ways that would allow local development projects to focus on gender equality with an intersectional lens, could be a vehicle for targeting structural constraints more generally.

▶ **Development and security responses are oxymorons**

We have seen a move toward a development discourse in global policies and plans. Yet, the Lebanese government is continuing its response to refugees solely in the context of security, promoting a continued exclusionist approach and focusing on refugee return. We see these

two approaches as an oxymoron and reconciling them may be challenging in the current context. More discussion is needed and more clarity on what a development approach might mean and what the consequences would be on the ground. If development is to mean positive and inclusive change, the consequence of such an approach would be to include the refugees into the equation and include them to have input in the decisions that concern their futures in the places where they live.

Many of the above policies will be hard to deploy if the current exclusionary policies and rhetoric are not tackled in both policy and also media discourse. Data that can help defuse the current perception that Syrians are the cause of Lebanon's misery are essential for understanding the implication of the refugee crisis on various sectors of Lebanese society. With the shared poverty observable throughout the ongoing crisis, any response must include and address both refugee and Lebanese populations.

References

- Aranki, D. and O. Kalis. 2014. Limited legal status for refugees from Syria in Lebanon. *Forced Migration Review* 47, September 2014: 17–18. <https://www.fmreview.org/syria/aranki-kalis>
- Ariss, R. T. (2012). Understanding Inflation and Revising National Price Data. *Lebanese Economic Association, Beirut, Lebanon*. <https://www.idrc.ca/sites/default/files/sp/Documents/EN/idrc-lebanon-inflation-report.pdf>
- Baez, J. E. 2011. Civil wars beyond their borders: The human capital and health consequences of hosting refugees. *Journal of development economics*, 96(2): 391-408. <https://www.iza.org/publications/dp/3468/civil-wars-beyond-their-borders-the-human-capital-and-health-consequences-of-hosting-refugees>
- Battistin, F. and V. Leape. 2017. *Towards the Right to Work: A Guidebook for Designing Innovative Public Employment Programmes. Background and Experiences from the Syrian Refugee Crisis in Lebanon*. Italian Development for Cooperation. https://www.ilo.org/beirut/publications/WCMS_559668/lang-en/index.htm
- Baumann, H. 2019. The causes, nature, and effect of the current crisis of Lebanese capitalism. *Nationalism and Ethnic Politics* 25(1): 61-77 <https://www.tandfonline.com/doi/abs/10.1080/13537113.2019.1565178>
- Boubtane, E., D. Coulibaly, and C. Rault. 2013a. Immigration, growth, and unemployment: Panel VAR evidence from OECD countries. *Labour* 27(4): 399–420. <https://doi.org/10.1111/labr.12017>
- Boubtane, E., D. Coulibaly, and C. Rault. 2013b. *Immigration, unemployment and GDP in the host country: Bootstrap panel Granger causality analysis on OECD countries*. *Economic Modelling* 33: 399–420. <https://doi.org/10.1016/j.econmod.2013.04.017>
- Bou Khater, L. 2017. Labour Policy and Practice. The Peace Building in Lebanon, UNDP. [https://www1.undp.org/content/dam/lebanon/docs/CrisisPreventionRecovery/SupplementArticles/16Supp/PEACE BUILDING2 16 July 2017 p4.pdf](https://www1.undp.org/content/dam/lebanon/docs/CrisisPreventionRecovery/SupplementArticles/16Supp/PEACE%20BUILDING2%2016%20July%202017%20p4.pdf)
- Brun, C. and M. Shuayb. 2020. Exceptional and futureless humanitarian education of Syrian refugees in Lebanon: Prospects for Shifting the Lens. *Refuge* 36(2): 20–30. https://www.researchgate.net/publication/347757255_Exceptional_and_Futureless_Humanitarian_Education_of_Syrian_Refugees_in_Lebanon_Prospects_for_Shifting_the_Lens
- Carnegie Endowment for International Peace. 2018. *Policy Framework for Refugees in Jordan and Lebanon*. April. <https://admin.carnegieendowment.org/2018/04/16/policy-framework-for-refugees-in-lebanon-and-jordan/jvzn>, accessed 010621.
- Central Administration of Statistics (CAS) 2019. Gross Domestic Product Second Quarter of 2019, CAS, http://www.cas.gov.lb/images/PDFs/National%20Accounts/GDP_2019Q2.pdf, accessed 210721.
- Damette, O., and V. Fromentin. 2013. Migration and Labour Markets in OECD Countries: A Panel Cointegration Approach. *Applied Economics* 45 (16): 2295–2304. https://www.researchgate.net/publication/254231057_Migration_and_Labour_Markets_in_OECD_Countries_A_Panel_Cointegration_Approach
- David, A., Marouani, M. A., Nahas, C., & Nilsson, B. 2017. The economics of the Syrian refugee crisis in neighboring countries. The case of Lebanon, [online], Forrás: erf. org. eg [2019. 12. 08.] DOI: <https://onlinelibrary.wiley.com/doi/abs/10.1111/ecot.12230>.
- Dewailly, Bruno (2019), *The Worrysome Growth of Inequality and Poverty, Atlas of Lebanon*. <https://books.openedition.org/ifpo/13244>

- Diab, J.L. 2021. *Refugee Women in Lebanon Hit the Hardest by Covid-19*. LSE Blog, <https://blogs.lse.ac.uk/wps/2021/02/23/refugee-women-in-lebanon-hit-the-hardest-by-covid-19/>, accessed 150321.
- Dickey, D. A., & Fuller, W. A. (1981). Likelihood ratio statistics for autoregressive time series with a unit root. *Econometrica: Journal of the Econometric Society* 49(4): 1057-1072. https://www.researchgate.net/publication/4814759_The_Likelihood_Ratio_Statistics_For_Auto_regressive_Time_Series_With_a_Unit_Root.
- 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://www.iza.org/publications/dp/9667/the-impact-of-syrian-refugees-on-the-labor-market-in-neighboring-countries-empirical-evidence-from-jordan>
- Fakhoury, T. 2017. Governance strategies and refugee response: Lebanon in the face of Syrian displacement. *International Journal of Middle East Studies* 49 (2017): 681–700. <https://doi.org/10.1017/S0020743817000654>
- Fakhoury, T. 2020. Refugee Governance in Crisis: The Case of the EU-Lebanon Compact. *Migration Governance and Asylum Crises*, <https://www.magyc.uliege.be/wp-content/uploads/2021/01/D2.3-v1December2020.pdf>, accessed 030321.
- Foad, M.F, S.J. McCall, H. Ayoub, L.J.Abu-Raddad, G.R. Mumtaz. 2021. Vulnerability of Syrian refugees in Lebanon to COVID-19: quantitative insights. *Conflict and Health* 15 article 13. <https://conflictandhealth.biomedcentral.com/articles/10.1186/s13031-021-00349-6>, accessed 150521.
- Habbal, T. (2019). *Syrians in Lebanon: A life of misery, or a return to the unknown*. <https://www.atlanticcouncil.org/blogs/menasource/syrians-in-lebanon-a-life-of-misery-or-a-return-to-the-unknown/>, accessed 210721
- Hamdar, B., Saab, H., Zaher, H., El Baset, O., Hamdar, Z., & Hejase, H. (2018). Economic modelling of the effects of Syrian refugees on the Lebanese economy. *International Journal of Economics, Commerce, and Management*, VI, 11. https://www.researchgate.net/publication/328980070_ECONOMIC_MODELLING_OF_THE_EFFECTS_OF_SYRIAN_REFUGEES_ON_THE_LEBANESE_ECONOMY_Licensed_under_Creative_Common
- Hammoud, M. and M. Shuayb. 2021. *The Impact of COVID-19 Lockdown on Access & Quality of Education: Reflections from Students & Teachers in Lebanon*. Beirut: Centre for Lebanese Studies. <https://lebanesestudies.com/wp-content/uploads/2021/06/Covid-19-report.pdf>, accessed 010721.
- Hatoum, Leila (2020), Why Lebanon's electricity crisis is so hard to fix, *Arab News*. June 14, 2020. <https://www.arabnews.com/node/1689841/middle-east>, accessed 210721.
- Human Rights Watch. 2020, Lebanon: Refugees at risk in Covid-19 response. Discrimination risks harming Syrians, Lebanese alike. <https://www.hrw.org/news/2020/04/02/lebanon-refugees-risk-covid-19-response>
- Human Rights Watch. 2018. What the Brussels conference means for refugees in Lebanon. Human Rights Watch, <https://www.hrw.org/news/2018/05/08/what-brussels-conference-means-refugees-lebanon>, accessed 010721.
- Human Rights Watch. 2014. Lebanon: At least 45 local curfews imposed on Syrian refugees. <https://www.hrw.org/ar/news/2014/10/09/263599>

- International Labor Organization (ILO) (2016) Matching skills and jobs in Lebanon: Main features of the labour market – challenges, opportunities and recommendations. https://www.ilo.org/wcmsp5/groups/public/---arabstates/---ro-beirut/documents/publication/wcms_559673.pdf. Accessed 21 July 2021.
- ILO Regional Office for Arab States. 2014. *Assessment of the Impact of Syrian Refugees in Lebanon and Their Employment Profile*. 2013. https://www.ilo.org/wcmsp5/groups/public/---arabstates/---ro-beirut/documents/publication/wcms_240134.pdf, accessed 01032018.
- ILO and FAFO. 2020. Impact of COVID-19 on Syrian refugees and host communities in Jordan and Lebanon. https://www.ilo.org/wcmsp5/groups/public/---arabstates/---ro-beirut/documents/briefingnote/wcms_749356.pdf, accessed 150721.
- Janmyr, M. 2016. Precarity in exile: The legal status of Syrian refugees in Lebanon. *Refugee Survey Quarterly* 35(4): 58-78. <https://academic.oup.com/rsq/article/35/4/58/2609281>.
- Janmyr, M. 2017. No country of asylum: 'legitimizing' Lebanon's rejection of the 1951 Refugee Convention. *International Journal of Refugee Law* 29(3): 438–465. <https://doi.org/10.1093/ijrl/eex026>.
- Janmyr, M. 2018. UNHCR and the Syrian refugee response: negotiating status and registration in Lebanon. *The International Journal of Human Rights* 22(3): 393-419. <https://doi.org/10.1080/13642987.2017.1371140>
- Kikano, F., G. Fauveaud, and G. Lizarralde. 2021. Policies of exclusion: The case of Syrian refugees in Lebanon. *Journal of Refugee Studies*. <https://doi.org/10.1093/jrs/feaa058> 2015.
- Lebanon Crisis Response Plan 2015 – 2016. https://www.unocha.org/sites/dms/CAP/2015-2016_Lebanon_CRP_EN.pdf
- LCRP 2018. Lebanon Crisis Response Plan 2017 – 2020. 2018 update. https://reliefweb.int/sites/reliefweb.int/files/resources/LCRP2018_EN_Full_180122.pdf
- LCRP 2021. Lebanon Crisis Response Plan 2017 – 2021, 2021 update. https://reliefweb.int/sites/reliefweb.int/files/resources/LCRP_2021FINAL_v1.pdf
- Lebanon Support, 2017. The Conflict Analysis Bulletin, Civil Society Knowledge Centre, Issue 6, March 2017. <https://civilsociety-centre.org/article/conflict-analysis-bulletin-issue-6-march-2017>, accessed 080318.
- Maddala, G. S., and S. Wu. 1999. A comparative study of unit root tests with panel data and a new simple test. *Oxford Bulletin of Economics and Statistics* 61(S1): 631-652. <https://onlinelibrary.wiley.com/doi/pdf/10.1111/1468-0084.0610s1631>
- Marr, W. L. and P.L. Siklos. 1994. The link between immigration and unemployment in Canada. *Journal of Policy Modeling* 16(1): 1-25. <https://www.sciencedirect.com/science/article/abs/pii/0161893894900019>
- Norwegian Refugee Council and International Rescue Committee. 2015. *Legal Status of Refugees from Syria: Challenges and Consequences of Maintaining Legal Stay in Beirut and Mount Lebanon*, <https://www.refworld.org/docid/56cabc8c4.htm>, accessed 150721.
- Phillips, P. C., and Perron, P. 1988. Testing for a unit root in time series regression. *Biometrika* 75(2): 335-346. https://www.researchgate.net/publication/4744135_Testing_for_a_Unit_Root_in_Time_Series_Regression
- Project Management Unit (PMU). 2019. *RACE 2 fact sheet* March 2019. <http://racepmulebanon.com/images/RACE-PMU-Fact-Sheet-September-2019.pdf>, accessed 210721.

- Relief Web (2001) International conference on Lebanon's reconstruction: The international community's economic aid for Lebanon. <https://reliefweb.int/report/lebanon/international-conference-lebanons-reconstruction-international-communitys-economic>, accessed 210721.
- Samuels, F., Bastagli, F., Stavropoulou, M. 2021. *World Food Programme Multi-Purpose Cash Assistance in Lebanon. Social Cohesion and Stability between Syrian Refugees and Host Communities*. ODI and Camaleon. <https://reliefweb.int/report/lebanon/world-food-programme-multi-purpose-cash-assistance-lebanon-social-cohesion-and>
- Sanyal, R. 2021. Making urban humanitarian policy: the neighbourhood approach in Lebanon. *Urban Geography*, <https://doi.org/10.1080/02723638.2020.1849983>
- Stel, N. 2021. *Hybrid Political Order and the Politics of Uncertainty. Refugee Governance in Lebanon*. Abingdon: Routledge. <https://onlinelibrary.wiley.com/doi/epdf/10.1111/imig.12819>
- Sharp, J. M., Blanchard, C., Katzman, K., Migdalovitz, C., Prados, A., Gallis, P., ... & Kumins, L. (August 2006). Lebanon: The Israel-Hamas-Hezbollah Conflict. LIBRARY OF CONGRESS WASHINGTON DC CONGRESSIONAL RESEARCH SERVICE. <https://www.everycrsreport.com/reports/RL33566.html>, accessed 210721
- Shuayb, M., Makkouk, N., & Tuttunji, S. (2014). *Widening access to quality education for Syrian refugees: The role of private and NGO sectors in Lebanon*. London & Beirut: Centre for Lebanese Studies. <https://www.alnap.org/system/files/content/resource/files/main/168-widening-access-to-quality-education-for-syrian-refugees-final-26-9-2014.pdf>
- Skeyes (2020) Hate Speech in the Lebanese Media - December 2020 Monitoring Report, <https://www.skeyesmedia.org/en/News/Reports/09-02-2021/9124>, accessed 210721.
- Syria Justice & Accountability Centre. 2019. *New Government Policies Worsen Conditions of Refugees in Lebanon*. (July 2019). Syria Justice & Accountability Centre. <https://syriaaccountability.org/updates/2019/07/18/new-government-policies-worsen-conditions-of-refugees-in-lebanon/>, accessed 150721.
- Syrian Lebanese Higher Council. 1993. *Agreement for Economic and Social Cooperation and Coordination between the Lebanese Republic and the Syrian Arab Republic*. Dated 16/09/1993, Official gazette No. 10/2014. http://www.syr-leb.org/SD08/msf/1507751474_.pdf, accessed 200721.
- UNESCO, UN-Habitat and Beirut Arab University. 2017. *Inclusive and Sustainable Cities: Municipalities Good Practices in Lebanon*. November. <http://www.unesco.org/new/fileadmin/MULTIMEDIA/FIELD/Beirut/report.pdf>, accessed 210721
- UNICEF. 2021. Lebanon: Children's future on the line. UNICEF. <https://www.unicef.org/lebanon/palestinian-programme>, accessed 150721.
- United Nations (UN). 1951. The Refugee Convention 1951, <https://www.unhcr.org/4ca34be29.pdf>, accessed 150721.
- United Nations (UN), 2012. Revised Syria Regional Response Plan (second revision). (RRP 2012). <https://www.unhcr.org/5062c7429.pdf>
- United Nations (UN), 2015. Regional Refugee & Resilience Plan (3RP) 2015-2016: Regional Strategic Overview. (RRP 2015). <https://www.alnap.org/help-library/3rp-regional-refugee-and-resilience-plan-2015-2016-in-response-to-the-syria-crisis>
- United Nations (UN), 2018. Regional Refugee & Resilience Plan 2018-2019: Regional Strategic Overview (3RP 2018). <https://reporting.unhcr.org/node/19889>

- United Nations (UN), 2021. Regional Refugee & Resilience Plan 2020-2021: Regional Strategic Overview (3RP 2021). <https://data2.unhcr.org/en/documents/details/73116>
- UNHCR. 2014. *Syrian Refugees in Lebanon: Daily Statistics*. <https://reporting.unhcr.org/lebanon, accessed 151214>
- UNHCR. 2019. Protection – UNHCR Lebanon [Online Report]. <https://www.unhcr.org/lb/protection>
- UNHCR. 2021a. Lebanon. <https://reporting.unhcr.org/lebanon, accessed 150721>
- UNHCR 2021b. Assessing the Socioeconomic Impact of COVID19 on Forcibly Displaced Persons. Thematic Brief no. 3: The Case of Lebanon. April 2021. <https://reliefweb.int/sites/reliefweb.int/files/resources/60d1daf64.pdf>, accessed 150621.
- UNDP. 2017. Lebanon stabilization and recovery programme – 2017. UNDP, https://www.lb.undp.org/content/lebanon/en/home/library/Response_to_the_Syrian_Crisis/Lebanon-Stabilization-and-Recovery-Programme-2017.html, accessed 080318.
- UNRWA. 2021. *Where we work. Lebanon*. UNRWA, <https://www.unrwa.org/where-we-work/lebanon, accessed 150621>.
- UN Women. 2019. Addressing gender amongst Syrian refugees in Lebanon. UN Women, https://www2.unwomen.org/-/media/field%20office%20arab%20states/attachments/publications/2019/10/un%20women%20lebanon%20-%20gender%20research%20brief%20-%20syrian%20refugees%20_final.pdf?la=en&vs=0, accessed 010721.
- VASyR. 2020. Vulnerability Assessment of Syrian Refugees in Lebanon: Key Findings of the 2020 Vulnerability Assessment of Syrian Refugees in Lebanon. Inter-agency Coordination, UNHCR, WFP, UNICEF. <https://reliefweb.int/report/lebanon/inter-agency-coordination-lebanon-key-findings-2020-vulnerability-assessment-syrian>
- Whitaker, B. E. (2002). Refugees in Western Tanzania: The distribution of burdens and benefits among local hosts. *Journal of Refugee Studies*, 15(4), 339-358. https://www.researchgate.net/publication/249248687_Refugees_in_Western_Tanzania_The_Distribution_of_Burdens_and_Benefits_Among_Local_Hosts
- World Bank (2013) Lebanon - Economic and social impact assessment of the Syrian conflict (English). Washington, DC: World Bank Group. <https://www.worldbank.org/en/news/feature/2013/09/24/lebanon-bears-the-brunt-of-the-economic-and-social-spillovers-of-the-syrian-conflict, accessed 210721>
- World Bank. 2021. Lebanon Sinking (to the Top 3). Lebanon Economic Monitor. Spring 2021. World Bank Group, MENA. <https://www.worldbank.org/en/country/lebanon/publication/lebanon-economic-monitor-spring-2021-lebanon-sinking-to-the-top-3>
- WRC. "A Call to Action: Transforming the Global Refugee System," 2019. Centre for International Governance Innovation. https://wrmcouncil.org/wp-content/uploads/2020/07/WRC_Call_to_Action-Report.pdf.

Additional Documents, International Donor Meetings and Data

- ▶ **Brussels Conferences 2017 - 2021:**
https://eeas.europa.eu/headquarters/headquarters-homepage/93313/node/93313_en
- ▶ **London Conference 2016:**
<https://reliefweb.int/sites/reliefweb.int/files/resources/Supporting-Syria-the-Region-London-2016-Co-hosts-Declaration-penultimate.pdf>

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/498035/Supporting_Syria_the_Region_London_2016_-_Stabilisation_Paper.pdf

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/498038/Supporting_Syria_the_Region_London_2016_-_Turkey_Statement.pdf
- ▶ **World Bank Data:**
<https://data.worldbank.org/country/LB>

Appendix

In this Appendix, we provide further details to statistical model employed in this report.

The VAR model

The VAR model is a multivariate framework that treats all variables evenly. A set of n variables from the system of equations can be defined as $X_t = (X_{1t}, X_{2t}, \dots, X_{nt})$. Each variable in this system is represented as a linear function of its p lags and all other $(n-1)$ variables, as follows:

$$X_t = b_0 + b_1X_{t-1} + b_2X_{t-2} + \dots + b_pX_{t-p} + \varepsilon_t; t = 1, \dots, T \quad (1)$$

The endogenous variables are modeled in a vector of stationary variables $X_t = (REFUGEES_t, GROWTH_t, CONTROLS_t)$, where $CONTROLS_t$ denotes the control variables that are used interchangeably in the regressions and are the following: LFP, UMP, EXP, IMP, FUND, CPI, and ELEC. The intercept vector of the VAR model is represented by b_0 , b_i ($n \times n$) denotes the coefficient matrices and $\varepsilon_t = (\varepsilon_{1t}, \varepsilon_{2t}, \dots, \varepsilon_{nt})$ represents the matrix of the shock terms, which are assumed to be serially uncorrelated.

The VAR system can be identified based on the general equation (1) and the assumption that the variables are endogenous:

$$REFUGEES_t = a_{01} + \sum_{i=1}^n \alpha_{1i} REFUGEES_{t-1} + \sum_{i=1}^n \gamma_{1i} GROWTH_{t-1} + \sum_{i=1}^n \delta_{1i} CONTROLS_{t-1} + \varepsilon_{1t} \quad (2)$$

$$GROWTH_t = a_{02} + \sum_{i=1}^n \alpha_{2i} REFUGEES_{t-1} + \sum_{i=1}^n \gamma_{2i} GROWTH_{t-1} + \sum_{i=1}^n \delta_{2i} CONTROLS_{t-1} + \varepsilon_{2t} \quad (3)$$

$$CONTROLS_t = a_{03} + \sum_{i=1}^n \alpha_{3i} REFUGEES_{t-1} + \sum_{i=1}^n \gamma_{3i} GROWTH_{t-1} + \sum_{i=1}^n \delta_{3i} CONTROLS_{t-1} + \varepsilon_{3t} \quad (4)$$

Thus, we estimate the following parameters: α , γ and δ ; where i is the lag length and t denotes time.

The Wald χ^2 - Chi-square statistic - test

The Wald χ^2 - Chi-square statistic - test, is used to the parameters associated with the lagged variables, is used to evaluate Granger causality between variables. Table A1 depicts the

testable relationship in each of the VAR models noting that the null hypothesis is that the variables are not instantaneously related. Thus, rejecting the null indicates that a Granger causality relationship exists.

Table A1: Testable Granger causal relationships

Causality direction	Null hypotheses
(1) <i>GROWTH</i> → <i>REFUGEES</i>	all
(2) <i>CONTROLS</i> → <i>REFUGEES</i>	all
(3) <i>REFUGEES</i> → <i>GROWTH</i>	all
(4) <i>CONTROLS</i> → <i>GROWTH</i>	all
(5) <i>REFUGEES</i> → <i>CONTROLS</i>	all
(6) <i>GROWTH</i> → <i>CONTROLS</i>	all

Notes: *GROWTH* is the coincident indicator. *CONTROLS* denote control variables that are used interchangeably in the regressions and are the following: *LFP*, *UMP*, *EXP*, *IMP*, *FUND*, and *CPI*.

P-values of the ADF-Fisher test

Relying on the p-values of the ADF-Fisher test allows us to reject the null hypothesis at a 1% significance level, except for the variable, *IMP*, for which the null hypothesis is rejected at a 5% significance level. As reported in the ADF-Fisher test, we conclude that all the variables are stationary with an order of integration zero. According to the ADF test and the PP test, all variables are stationary at a 1% significance level, except for *REFUGEES* and *LFP*, for which the null of non-stationarity fails to be rejected at 10% significance level. Therefore, we resort to investigating if the variables, *REFUGEES*, and *LFP*, are integrated of order 1. Accordingly, we pursue the same analysis using unit root tests to the first difference of *REFUGEES* and *LFP* and deduce that they are integrated of order 1, and thus the first difference is included.

World Refugee & Migration Council

The World Refugee & Migration Council offers bold thinking on how the international community can respond to forced displacement and migration through cooperation and responsibility sharing.

www.wrmcouncil.org

[Twitter.com/wrmcouncil](https://twitter.com/wrmcouncil)
[Facebook.com/wrmcouncil](https://facebook.com/wrmcouncil)
info@wrmcouncil.org

