

#### UNIVERSIDAD DE GRANADA

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Programa de Doctorado en Ciencias Económicas y Empresariales

### **TESIS DOCTORAL:**

# Efectos de los refugiados sirios en el empleo y otros factores económicos en Jordania

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Doctoral Programme in Economic and Business Sciences

### **DOCTORAL THESIS:**

Effects of Syrian refugees' workforce on employment and other economic factors in Jordan

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## INTRODUCTION

#### 1. INTRODUCTION

#### 1.1 Research background

The radical rise of forced migration from 2010 was largely due to the Syrian conflict, but, unfortunely, still new similar crises are taking place, such as the South Sudan's crisis, the conflict in Ukraine, conflicts in sub-Saharan Africa, the flow of Rohingya' refugees in Bangladesh, the outflow of Venezuelans en Latin America and the Caribbean, the crisis in Yemen, and Libya.

The Syrian civil war started in 2011 has caused the Syrian Asylum to different world countries seeking refuge and avoiding death. This asylum has an important impact on developing host neighbours' countries such Jordan and its industries during the last years.

Almost 1.7 million people have fled from Syria to the neighbouring countries as Jordan since the conflict started in 2011. Many Syrians had already experienced several shocks before they fled the country, which eventually compelled them to give up their possessions and money to discover safety in the surrounding nations (UNHCR, 2020).

The impact of refugees is a difficult issue. It is not only the apparent impact on the economics, there is no doubt that Syrian refugees formed a vast challenge to Jordanian policies, a country with a humble budget and limited capabilities. In contrast to developed countries with strong financial, educational and health care structures, Jordan has had to endure a major challenge with very limited resources, on the one side, helping refugees for humanitarian reasons, but on the other side, it has to cope with a declining economic situation, both internationally and domestically.

According to Cohen et al. (1996) and King (2002, 2012) migration can be viewed through dichotomous typologies: internal vs. international migration; first-time migration versus continued migration for second or subsequent rounds of migration; temporary vs. permanent migration; regular vs. irregular migration; voluntary vs. forced migration, among others.

Staniewicz (2009) observed that the distinction between refugee movement and voluntary economic migration is rather thin. Refugees typically arrive from nations where there are political conflicts. Conflicts like this have the potential to deteriorate the economy, to the point that people begin to care more about it than politics, so that political and economic factors closely intertwined.

Coppel et al. (2001) identified four major consequences of international population changes. Firstly, there is the influence that immigration has on the host country's labour market. Although the possible adverse impacts that immigration can have on the wage and employment levels of locals are typically tested, immigration may also have a part to perform in reducing skill lacks in certain key sectors of the economy. Secondly, immigration expected to affect the budgetary position of the receiving countries regarding the amount recent arrivals receive through health, welfare, and education schemes are unlikely to balance the

increased tax revenues from new workers. Thirdly, it shown that immigration may be a key to the developing population challenge that faces many OECD countries. Finally, immigration can have an important economic impact on a specific country.

The 1969 Organization of African Unity (OAU) Convention defined a refugee as any person forced to flee their country "owing to external aggression, occupation, foreign domination or events seriously disturbing public order in either part or the whole of his country or his country of origin or nationality," in addition to the definition in Art. 1(2) of the 1951 Refugee Convention. "People who flee their country because their lives, security, or freedom have been threatened by generalized violence, foreign aggression, internal conflicts, massive violations of human rights, or other circumstances that have seriously disturbed public order" are also considered refugees, according to the Cartagena Declaration issued in 1984 and by United Nations High Commissioner for Refugees (UNHCR, 2017).

In the face of colossal human suffering and formidable costs from forced displacement crises, scholars, humanitarian actors, and diplomats began to investigate ways of prevention as early as the 1930s. They gave it a renewed impetus in the 1990s when the United Nations High Commissioner for Refugees (UNHCR) piloted a framework of "preventive protection" that illustrate the abolishment of causative factors of departures instead of the erection of hurdles that leave causes preserve but make departure extremely difficult. Precautions included bolstering national defence capabilities, advocacy, early warning systems, human rights monitoring, and conflict resolution. Yet, success has remained elusive the "basic causes" of forced displacement have long been the focus of the preventative literature. It makes a distinction between proximate factors (escalation of violence, persecution, threats and perceived threats, the collapse of livelihoods, and new opportunities in other areas). Structural or underlying causes (such as poor governance, poverty, low level of institutional development, inequality, human rights abuses, political exclusion, environmental degradation, and social fragmentation), and enabling conditions (availability of transport, financial resources, level of education, networks, legislative frameworks, and border control). With this framework, the main goal for development actors was to promote good governance, shared prosperity, and a broad agenda of poverty reduction (UNHCR, 2017). This will aid in preventing conflict, violence, and persecution (Sassen-Koob, 1984; Kugler & Rapoport, 2007; World Bank, 2017; Comolli, 2019).

Fichtner et al. (2015) established that violent conflict often results from horizontal inequalities inside a nation or between groups. Examples include conflicts due to ethnicity, language, religion, race, and area. Where horizontal imbalances overlap, political situations become more perilous. Thus, a case-by-case study of this kind needed. Usually, it should consider two different ways that forced emigration affects the country of origin's development. Forced displacement is a consequence of fragility, but it can also contribute to

fragility. Because it has a disproportionately negative impact on particular groups, it might change a community's social structure or leave a sizable leadership gap (World Bank, 2017).

For the nation of origin, forced displacement can have significant direct and opportunity costs, particularly due to the loss of capital and human resources. It mostly depends on who departs and who stays, as well as whether those who forcibly displaced choose to relocate within the nation or leave it for good. When forcibly displacements, service delivery and institutional capacity may be impacted. Many state employees are among those who displaced. Remittances, on the other hand, can support the resilience of the remaining population. In the Central African Republic, Muslim retailers who handled the majority of the trade and transportation activities forcibly displaced, resulting in a decline in imports from other nations and a rise in the price and scarcity of necessities (Coppel et al. 2001, Kugler & Rapoport, 2007, Stave & Hillesund, 2015).

Some host countries create a separate arm of government, frequently a ministry or a commissioner for refugee or IDP affairs, to handle matters relating to refugees. Normally, these authorities are in charge of coordinating with sectoral ministries and institutions and acting as a point of contact for negotiations with humanitarian players. They occasionally offer direct assistance to the displaced as well. They frequently create sizable administrative structures, which typically supported in part by humanitarian organizations, to carry out such activities (World Bank, 2017).

In this sense, Aras & Mencutek (2015) explained that the regulation of each country determines whether a person is an immigrant or a refugee individually. According to each regulation, if a person satisfies the conditions to be an immigrant, he will have the right to temporary refuge while he will wait to resettle in third-party safe nations.

Bahcekapili & Cetin (2015) described that the people who are compelled to flee their own country with the hope of finding a safer place are immigrants. While Akgündüz et al. (2018) indicated the existence of an additional term in dealing with refugees, which is asylum seekers, which applies to those refugees who meet certain conditions, and are therefore only they have the right to seek asylum in a third country.

Many times, both the political and economic systems might collapse at the same time (as was the situation with Albania after 1990, for example) (King & Gëdeshi, 2020).

However, UNHCR's support has successfully expanded to on-site care individuals fleeing conflict and disruption in practice. Persecution, insecurity, malnutrition, and harsh circumstances are expected characteristics of these situations. The reasons for fleeing are sometimes ambiguous or conflicting. However, with the help of the international community, the Office of the United Nations High Commissioner for Refugees (UNHCR) resumes to develop innovative strategies for the refugee crisis and look for long-lasting solutions in 1991. The UNHCR developed a futuristic strategy in 1991, the year of its

40th anniversary, with a focus on tragedy readiness, prevention, and encountering answers to the entire refugee problem, from exodus and relief to return and reintegration (UNHCR, 2017).

Overall, literature shows that displacement, particularly in places with poor access to services and few economic possibilities, can worsen inequality and the likelihood of violence. However, effective displacement mitigation strategies and development initiatives for both individuals who have been forcibly relocated and host communities can promote social cohesiveness. Numerous studies demonstrate that progressive policies that provide refugees and IDPs with the ability to move around, access social services, and ownership of property can foster social and economic integration without drawing negative reactions (World Bank, 2022).

#### 1.2. Justification of the research

The literature is profuse in studies on traditional economic migration and its determinants. However, new forms of migration are becoming relevant. In this sense, armed conflicts and natural disasters are having an increasing impact that transcends borders and whose consequences are becoming more and more prolonged in time, leading to more and more mass forced migration. Consequently, it would no longer be sufficient to explain differences between countries or the motivations of migration to explain migration processes. There is an important lack of studies about the effects of forced migration on the host countries. Therefore, to fill this gap, we formulated hypotheses for the most relevant socio-economic effects of refugees' inflow, obtained from different theoretical approaches.

A mixed migration happens across borders, including refugees running from persecution and war, trafficking victims, and those looking for better prospects. Forced displacement is an increasing phenomenon that receive more attention in the last years (Hakovirta, 1993; UNHCR, 2020).

Schmeidl & Jenkins (1998) made a short definition for the refugees as "forced immigrants" who leave behind their homes, possessions, loved ones, and close friends, as well as the places where they may have lived for generations.

The UNHCR (2019) reported that the total number of refugees worldwide surpasses 50 million for the first time following World War II, mostly due to the Syrian civil war. Due to the Syrian crisis, the Syrian civil war has become the most significant concern of humanitarian issues of our time, yet the world is still inadequate to meet the needs and inquiries of Syrian refugees and the countries hosting them. Due to the Syrian civil war, the problem of Syrian forced migration is deem to be one of the most important problems faced by the countries of the world, whether they are developed or developing countries (Stave & Hillesund, 2015).

Additionally, it considers as a crisis that has wider international implications, as conflicts continue to occur at any time and in any place. For countries such as Jordan, it posed a major challenge to policy and economic

sectors; given that, it is a country with a modest budget and limited capacities. Jordan has faced a major challenge with very limited resources, on the one hand supporting refugees for humanitarian reasons, and on the other hand having to cope with declining economic situations in its market. In this sense, movements' decisions by refugees, asylum seekers are entirely uncontrolled by the people, although such relocations of populations imply significant social consequences (Lee, 1966).

This is a major difference from research on other types of migrants. Traditional migrants could be consider agents who can take decisions about when to leave and where to go even though these decisions are sometimes extremely constrained.

Hakovirta (1993) revealed that, basically, forcibly displaced is an individual problem but it also affects itself in several ways on the economy, the society, and international relations, as it is linked to humanitarian and ethics, national security and development, and even to environmental and natural resources issue.

While VanWey (2000) clarified that approaches to the study of forced migration, such as our research, should be based on this distinction, since involuntary migrants (refugees) have different needs than the resident population, expatriates and economic immigrants, which affect the organization of labour markets, the satisfaction of educational and health needs, or the provision of basic services (electricity, water, garbage collection, etc.), among other aspects of the public management of the destination

Large-scale migration can result in population changes and can create new regional imbalances. Fragility and forced displacement may feed off one another, creating a vicious cycle that may be challenging to break out of (Nijkamp et al., 2011).

In 2013, The United Nations Development Program (UNDP) showed that host countries governments current spending rates raised significantly on government services that include public administration, defence, and water, education, and health sectors. Administration and defence sector been influenced more than other sectors by increasing the refugees demand for local municipal services. Therefore, increasing the financial burden on these municipalities to meet new current expenditures caused by the new demand such as sanitation services, garbage collection, disposal, pest control, and road maintenance. In addition, The Syrian influx led to the employment of more staffs working in the sector, which represented by the military and the General Security and Civil Defense Directorate (United Nations, 2013).

Since migration flows have grown swiftly in recent decades, policy-makers have been paying rising attention to issues related to international migration. Migration policies and integration of immigrants become primary topics in the political discussion in many countries. Moreover, a growing interest in the influence that migration has been on countries of origin (United Nations, 2013).

Therefore, the understanding of massive refugees' issue takes on a special significance in the context of the political and demographic challenges that any country could to face over the next few years.

#### 1.3. Scientific research object

The research object of this thesis is the impact of Syrian refugees on Jordan. These effects are analysed in the context labour market and other economic indicators.

#### 1.4. Research aim

When forced migration has significant impact on the host countries, and the refugee phenomenon is growing steadily and could occur at any time and in any place, the aim could be formulated as follows: To explore the impact of refugees' displacement on relevant socio-economic factors in Jordan.

#### 1.5. Research Objectives

Based on the interest of our study, we developed a list of the main objectives of this dissertation:

- 1. To identify the most relevant economic effects of international forced migration according to orderly and systematic analysis of different migration theoretical approaches.
- 2. To develop a methodology of evaluation of socioeconomic impact of international forced migration for host developing country, such as the case of Jordan.
- 3. To study the impact of refugees flows on labour market in Jordan

#### 1.6. Research methodology

The research uses the following methods:

- 1. Systematic, logical, comparison analysis of the scientific literature in the field of international migration and forced displacement. Indeed, the variables were selected based on different theoretical approaches of migration.
- 2. Statistical data analysis and interpretation: The thesis uses the Normal Distribution test, Unit Root test, Correlations test, ARDL test and Granger Causality test to investigate the impact of forced migration in the host country for a set of economic and labour market variables. This let us to identify the effects of different economic and labour market factors.

The results will later allow the contrasting of the hypotheses and enable the making of some practical recommendations.

#### 1.7. The relevance of the research

#### Scientific novelty and theoretical significance of the doctoral research

This work presents an in-depth analysis of the literature on international migration and refugees' displacement to date. In this sense, it has conducted an orderly and systematic assessment of the literature. It includes a bibliometric and Social Network Analysis (SNA) methods to clarify the state of art of forced migration and their effects on host countries. Besides, we used the social network analysis (an extended methodology used by scientists from different scientific fields to measure the connections and diffusion of knowledge on our research topic.

In addition, it is analysed most relevant theoretical approaches that deal with the topic of forced migration, such as immigration laws and observation theory by (Ravenstein, 1885). The push-pull theory (Lee, 1966). The theory of intervention opportunities (Stouffer, 1960). The systems model theory (Bertalanffy, 1968). The dual labour market theory (Stoikov, 1972). The efficient work theory (Wojtyna, 2000). The human capital theory (Becker, 1975). The world systems theory (Leiss, 1977; de Haas, 2010). The world society approach (Leighninger, 1977). The labour market theory (Cain, 1976). The migration network theory (Massey et al., 1993) and the Neoclassical Theory by (Galor & Zeira, 1993).

Based on the review of these theories and conceptual frameworks, relevant socio-economic indicators for the empirical analysis were collected. Hence, there is lack of studies that measures the impact of massive refugees' inflows using relevant socio economic indicators from different theoretical perspectives. In this sense, this dissertation includes:

#### **Economic indicators:**

- Gross Domestic Product Growth (GDP): Neoclassical economic theory, Push-pull theory, Intervening opportunities theory, Systems Model Theory, Societal Systems Theory.
- Foreign direct invest (FDI): Network migration theory, Migration systems theory, World systems theory, Intervening opportunities theory.
- Gross Domestic Savings (GDS): Human capital theory, the new economics of labour migration theory, Relative deprivation theory.
- General government net lending/borrowing (NET\_L/B).
- Gross National Expenditure (GNE).
- Inflation and Consumer Prices (ICP).
- Trade (T).
- Current Account Balance (CAB).
- General Government Gross Debt (GGGD).

#### Labour market indicators:

- Unemployment.
- Own-account workers.
- Not in the labour force.
- Total underutilized labour.
- Time-related underemployment.
- NEETs (Not educated nor Employee).
- Working Poverty.

This thesis measures the effects on the host country of one of the largest international humanitarian crises, which has led to a mass exodus of refugees to developing host countries. The findings relate to a broad period, including the whole of the 2000s, and thus provide valuable experience that can apply to similar situations, which unfortunately continue to occur.

The results also highlight the existence of different perceptions of the problem between developed and developing countries. Even in the strongest economies, the massive influx of refugees has a very severe impact and poses a major challenge for host countries.

Regarding this, traditional migration is from poorer to richer countries, which is why refugee arrivals in developed countries are often studied. However, differences between countries mean that some of the findings are not applicable to developing countries. In developing countries, there is a high level of employment, but a large proportion of workers are below the poverty line. Protection systems do not have the resources to function adequately. The informal sector is prevalent, and financial resources are limited, often relying on international funding.

Moreover, from an econometric point of view, this thesis identifies the main economic effects in the host country, as well as on the labour market, and highlights the importance of labour quality indicators.

#### Practical significance of the doctoral research

This thesis highlights the wider scope of international conflicts and the large increase of refugee displacement in contemporary times. The "Arab spring" in the countries of Tunisia, Egypt, Libya, and Yemen led to the inspiration of major protests in Syria against the government which ended in a major war with serious national and international effects (Stave & Hillesund, 2015).

Due to the Syrian crisis, the Syrian civil war has become the biggest concern of humanitarian issues of our time, yet the world is still incapable to meet the needs and inquiries of Syrian refugees and the countries hosting them. Due to the Syrian civil war, the problem of Syrian forced migration considered one of the most important problems faced by the countries of the world, whether they are developed or developing countries (Stave & Hillesund, 2015).

Moreover, developing countries such as Jordan have limited resources to cope with changes of such great magnitude, which has important consequences on their economic growth, so this humanitarian refugee's crisis puts a heavy pressure on all sectors of the Jordanian society, especially on the economics.

Therefore, due to the importance of this issue for all developed and developing countries, this research helps to understand and give more visibility about how a developing country such as Jordan deal with the Syrian Asylum starting in 2011, and what are its economic growth challenges. Moreover, researchers recommend studying migration flows over the time (Leung & Cohen, 2011; Kurekova, 2011).

It would presumably show the impact of migration in the host country and would provide results that are more general. Hence, the use of relatively new data, covering the period from 2000 to 2021, one of the most comprehensive observation periods on the evolution of refugee displacement. The study of economic indicators and the labour market situation, before and after the beginning of the conflict, could be consider innovative, as it provides a better understanding of the extent and evolution of the situation. Furthermore, knowledge about the effect of international forced migration becomes crucial in a time of economic uncertainty and new conflicts, because it contributes to a better awareness of the scope of the problem (Castagnone, 2011).

According to de Haas (2011), migration flows are multifaceted, patterned and have dynamic nature in this sense, the thesis clarifies the growing phenomenon of forced migration and performs a comprehensive review of theories and theoretical approaches specifics on refugees' displacement. Moreover, international conflicts are growing and affecting countries all over the world. Therefore, the findings of this research may be relevant contributions to the management of new conflicts for host countries.

In addition, the importance of this research is to address one of the most important international issues with significant implications not only for the refugees themselves but also for the host country of Jordan and the international community as a whole. Additionally, it is important also to highlight its emphasis on the economic and labour market aspect of related studies of these implications. In addition to the attempt to update the traditional view of the majority of the studies that analyse and discuss this subject; we will try to provide a comprehensive framework that analyses the overall negative and positive effects and repercussions of refugees.

Portes & Böröcz (1989) highlighted especially the dynamic and evolutionary nature of migration processes and its consequences for scientific investigations which turn out to be exposed to the risk that the theoretical apparatus used to apprehend such a migration process might lag behind its actual evolution (e.g. the recent asylum seekers migration). It only accentuates the necessity of the most sophisticated econometric methods in analysing migration processes (Castagnone, 2011). This thesis accommodates the complexity of receiving the Syrian refugees for the host countries.

Dickey & Fuller (1979), Akgündüz et al. (2015) and Aras & Mencutek (2015) addressed that the socioeconomic effects of forced migration on the countries of origin are difficult to quantify. The methodological challenges are significant, and there has not been any systematic research on this topic. There is always a relevant lack of primary sources of data for an empirical examination of the global refugee situation. However, the combination of several sources allow us the study of changes in the labour market of the host country and the evolution of refugees over time. In this sense, we used the last data from United Nations Refugee Agency and the International Labour Organization together the indicators from the World Bank (UNHCR, 2020; World Bank 2022).

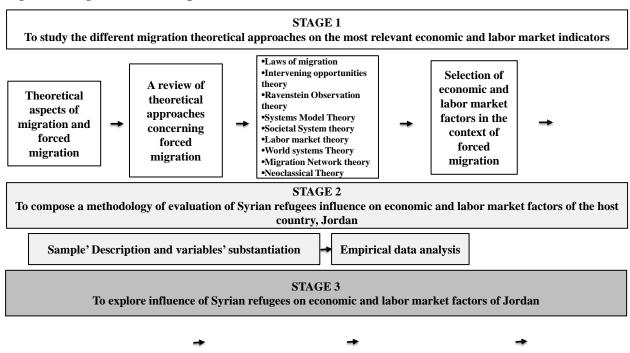
#### 1.8. Structure of the thesis

In accordance with the stated objectives and our object of research, the structure of this thesis is as follows: 1) introduction, 2) theoretical framework, 3) empirical analysis, 4) discussion 5) conclusions of the research work.

The first section includes the first introductory chapter. Next, the theoretical background introduces the refugee problem and explains how severe is the Syrian refugee's crisis and its effect on hosting countries. In addition, it presents definitions and concepts used in this research work. Finally, this section discusses different theories related to the research topic and, based on them, it proposes the theoretical hypotheses. Next, section 3 carries out the empirical analysis. For this purpose, firstly the data are descripted. The methodology is also explained, and these hypotheses are empirically evaluated, followed by a discussion of he results obtained in the different analyses carried out.

Finally, section 4 presents the conclusions, limitations and possible future lines of research derived from this research work, in accordance with the results obtained and the hypothesis testing carried out. In addition, Figure 1 shows a diagram summarising the different phases of the development of the doctoral thesis.

Figure 1. Stages in the development of the doctoral thesis.



Source: own elaboration

## THEORETICAL FRAMEWORK

#### 2. THEORETICAL FRAMEWORK

#### 2.1. Introduction to the refugee problem. Definitions and main concepts

The effects of migration flow on host countries is widely researched. When delving into research on migration, the problem first arises of differentiating the types of migrants who arrive in the country (Kupiszewska & Kupiszewski, 2005). The reason of migration is essential (especially for researchers) to properly address the nature and composition of international migration (United Nations, 1998). In this sense, movements' decisions by refugees, asylum seekers are entirely uncontrolled by the people, although such relocations of populations imply significant social consequences (Lee1966); Faist, 1997). There are major difference from research on other types of migrants, who could consider agents who take decisions about when to leave and where to go even though these decisions are sometimes extremely constrained. Approaches to the study of forced migration, such as this research, based on this distinction, since involuntary migrants (refugees) have different needs than the resident population, expatriates and economic immigrants, which affect the organization of labour markets. As well the satisfaction of educational and health needs, or the provision of basic services (electricity, water, garbage collection, etc.), among other aspects of the public management of the destination (Faist, 1997).

Early authors used simple typologies to categorise migratory trends. Fairchild (1925) contrasted invasion, conquest and colonization with immigration as such. They categorised societies as 'peaceful or warlike' and 'low or high culture'. He concludes to display that the varieties of migration and their effects by this praise. Later writers stressed the difference between migration and forced migration inflows. Formed in the former were seasonal, roaming and other momentary moves as well as more enduring migrations, which were primarily economic in nature. Forced movements included slaves and those driven by war and other political anxieties (Richmond, 1988).

Petersen (1958) designed a more detailed typology utilizing several extents. The first entangled the connection of 'man' to nature, the state, means and other men. The second involved the migratory force connected to each of the former, i.e. ecological stimulus (nature), migration policy (state), aspirations (norms) and what he yelled 'social momentum'. These factors forged different classes of migration, which he marked (i) primitive, (ii) forced/impelled, (iii) free and (iv) mass. Petersen presented an additional classification, founded on the values of the movement, into 'conservative' and 'innovating' classes. For example, group settlements were virtually conservative, allowing the migrants to maintain a standard lifestyle to differing degrees. In disparity, individuals desiring to migrate on their own ushered to 'pioneer' concerns and larger-scale voluntary actions to urbanization and social transformation.

Typologies of this sort fail to go above the explanatory level and have little descriptive or predictive value. Advancements in the sociological examination of developmental procedures throw mistrust upon the validity of determining evolutionary phases or proposing essential correlations between growth, demographic behaviour, technology, political systems, social institutions and economics. To the period that there are causal connections between these factors, they are more convoluted than such straightforward typologies would urge. Likewise, the discrepancy between the inflow of population that is 'voluntary' and 'involuntary', or 'forced' and 'free', is of debatable validity (Richmond, 1988).

Fairchild (1925) pointed out that man is everywhere languid, staying fixed until he forced to push out by some force. Like most psychological universals, this one can be corresponded by its contrary: man migrates because of wanderlust. Moreover, like all such universals, these cannot justify differential manners: if all men are inactive (or migratory) "by nature," why do some individuals migrate out and some not? If a simplistic analogy is used, it should be at trimmest as diverse as its mechanical analogue, which contains not only the idea of forces but also that of inactivity. Therefore, one might agreeably say that a social group at leisure, or a social group in a move (e.g., nomads), leans to stay so unless forced to alter; for with any viable imprint of life, a significance system is conceived to support that imprint (Spencer, 1898).

Schmeidl & Jenkins (1998) made a short definition for the refugees as "forced immigrants" who leave behind their homes, possessions, loved ones, and close friends, as well as the places where they may have lived for generations.

It can be challenging to pinpoint the precise moment at which someone qualifies as a migrant. United Nations (1998) addresses explicitly two dimensions of migration: the spatial and the temporal aspects. International migration considered to occur whenever a person moves from one country to another in the context of the spatial aspect. The temporal aspect, on the other hand, is stricter because it makes classification dependent on the fulfilment of specific time requirements. In other words, the length of a person's stay in another country determines whether they classified as a migrant, and more particularly, an international migrant is someone who wants to stay in another country for more than a year.

International migrants, according to the United Nations (1998), are people who relocate outside of their country of birth. Long-term migrants are those who move from their usual residence for at least a year. Short-term migrants, on the other hand, are people who relocate for a period of at least three months but less than a year, with the exception of those who do so for a holiday, recreational activity, business trip, visit friends or family, medical treatment, or religious pilgrimage.

Therefore, to address the nature and composition of international migration, it is imperative to address the motivation for movement appropriately. Although it is not specifically mention in the definition, there are precise classifications of movements included in international guidelines, for example, settlements, family reunion, education, training, and commerce, or to escape persecution, among other things (United Nations, 1998). However, the emphasis initially placed on the characterisation of migration by duration, which is

how the majority of migration data really produced, before moving back to the opportunities for describing and indeed in the last section.

The United Nations (1998) defined migration as "an event in which a person transfers his or her place of customary residence," (Jennissen, 2004; Poulain, 2008). In this context, the term "place of residence" used to mean the place where a person lives with their family and spends most of their time (i.e., periods of rest). As migration flows have grown rapidly in recent decades, policy-makers have been paying growing attention to issues related to international migration. Not only have migration policies and integration of immigrants become central topics in the political discussion in many countries but there also a growing interest in the impact that migration has on countries of origin. Varied countries have distinct laws governing citizenship acquisition, which naturally affects how different populations of foreigners and those born abroad are distributed across those nations (i.e. cross-sectional differences). Usually, there are more foreign-born people than native-born people do. The OECD publishes information on a variety of immigrant population traits, including age, gender, educational attainment, length of stay, and employment results (OECD, 2007).

A few things need to be spoke in regards to the various types of migration in addition to their definitions. King (2012) handled them rather nicely in his speech. Suter (2012) described migration in transit. Sub-Saharan migrants frequently use states like Türkiye, Lebanon, Egypt, Iraq or Jordan as stopovers (transit countries) on their way to their final destinations. Numerous additional authors have studied the subject of transit migrants (Collyer, 2007; Van Liempt & Sersli, 2013).

While Aras & Mencutek (2015) clarified that, the regulation of each country determines whether a person is an immigrant or a refugee individually. According to regulation if a person satisfies the conditions to be an immigrant, he will have the right to temporary refuge while he will wait to resettle in third-party safe nations.

According to Bahcekapili & Cetin (2015), they consider that the people who are compelled to flee their own country with the hope of finding a safer place are the immigrants.

While Akgündüz et al. (2018) indicate the existence of an additional term in dealing with refugees, which is asylum seekers, which applies to a few refugees who meet certain conditions and are therefore recognized, and only those who have the right to seek asylum in a third country.

In accordance to UNHCR (2020), the following table (1) describes differences between forced and unforced immigrants.

Table 1. Differences between forced and unforced immigrants.

Refugees	Migrants
Compulsory and forced, are considered part of the migrants.	Migration is voluntary and includes all types of migrants.
Searching for a safe place and the most human rights, in which the lack of better economic opportunities	Migration is in search of a better standard of life than job opportunities, education, housing, and so on.
They being force to stay in the countries to which they migrated and adapt to the conditions, no matter how harsh, because they cannot return to their homeland, where there is a danger to their lives.	They are free to return to their homeland if things do not go according to their expectations
In this case, the immigrant has decided to go to a country quickly and without planning due to his circumstances.	In this case, the immigrant will have decided to travel after planning and prolonged study, and it is possible to learn about the culture and language of the hosting country.

Source: (UNHCR, 2020)

According to Castles (1984), temporary migration can quickly become permanent migration. Here, time is a key consideration. When migrants put off making a decision to go home repeatedly, they finally fall under the category of permanent migrants. Castles (1984) cited the case of the temporary employees in Germany and Switzerland who eventually settled there permanently. Additionally, receiving special attention are undocumented immigrants King & DeBono (2013). Through unique regularization plans, they may become legal.

Staniewicz (2009) observed that the distinction between refugee movement and voluntary economic migration is rather thin. Refugees typically arrive from nations where there are political conflicts. Conflicts like this have the potential to deteriorate the economy, to the point that people begin to care more about it than politics. In reality, they emigrate for economic reasons and cite the 1951 UN Convention No. 3 as their justification for complying with immigration laws. It appears that political and economic factors closely intertwined. Many times, both the political and economic systems might collapse at the same time (as was the situation with Albania after 1990, for example) (King & Gëdeshi, 2020).

Labour migration, settlement migration, and refugees were often the main subjects of migration studies. The latter seen as the pinnacle of the "era of migration," as the entire 20th century is frequently referred to in "migration terms." (Griffiths et al., 2013).

According to these authors, there are two typical migration temporalities, one of which starts with immigration and continues through settlement, family reunification, and, typically, citizenship acquisition. The second temporality starts with arrival, continues with a brief stay, and ends with a return to origin (temporary labour migration), with the possibility of repeating the cycle in the future (i.e., re-entry). The latter referred to as "circular migration" at times (Griffiths et al., 2013).

# 2.2. How Severe Is the Syrian refugees Crisis? Syrian refugee's effect on hosting countries

Over 20 million refugees were among the anticipated 84 million individuals that forcibly displaced by the middle of 2021. Families and communities displaced all over the world today, most notably in Ukraine but also in Yemen, Ethiopia, and Venezuela. A global crisis that can worsen inequality and conflict is the rising number of refugees and internally displaced people (IDPs). This is especially true when economic conditions are fragile (World Bank, 2022).

In accordance with the UNHCR (2020) report in terms of total numbers and relative proportions of refugees and IDPs, global trends conceal significant growing and regional disparities across developing countries. Nearly 60% of all forcibly displaced people lived in Africa and the Middle East as of the end of 2015. Since 2001, there have been several times as many internally displaced persons (IDPs) in Sub-Saharan Africa as refugees. Before a rapid surge since 2011 to almost 4 million, the number of refugees was largely consistent during the time between 2 and 3 million. It was observed that the number of internally displaced persons (IDPs) varied significantly, ranging from 6 million to 12 million, primarily due to the ups and downs of conflicts in the Central African Republic, the eastern Democratic Republic of the Congo, Somalia, South Sudan, Sudan, and, more recently, northern Nigeria. While the number of Palestinian refugees has increased throughout the Middle East and North Africa, with the exception of Türkiye. In some of the host nations, particularly Syria, their living conditions have also gotten worse. Nonetheless, other refugees have ranged in number from 2 million to 4 million because of repeated wars, first in Iraq and then in Syria. Parallel to this, there has been a significant increase in IDPs, over 1 million in 2001 to over 13 million in 2015. Since 2011, the acceleration has accelerated very quickly, in large part because of the fight in Syria, but also because of the ongoing insecurity in Iraq, the crises in Libya, and the Republic of Yemen (UNHCR, 2020).

Noting that since 2001, the number of refugees in South Asia has fluctuated between 1.5 million and 2.5 million, mostly due to the development of the Afghan conflict. After varying between 1.5 million and 3

million from 2001 to 2012, the number of IDPs nearly doubled in 2013 and 2014 before declining in 2015 to a level that was still much higher than the average for the previous 15 years. The increase mostly brought on by fresh migrations out of northwest Pakistan. Moreover, since 2001, the number of refugees in East Asia and the Pacific has stayed constant at about 500,000. As some of the forced displacement situations were addressed in nations like Indonesia and the Philippines, the number of internally displaced persons (IDPs) dropped significantly from roughly 2.5 million to fewer than 1 million (though Myanmar remains a notable exception) (UNHCR, 2020).

While as for the number of refugees in Latin America and the Caribbean is still around 400,000. However, because of criminal violence, the number of internally displaced persons (IDPs) has almost quadrupled since 2001, reflecting an ongoing rise in Colombia and further migrations in Central America. Up until 2013, the number of refugees in Europe and Central Asia (including EU member states) varied between 1.5 million and 3 million, but it immediately increased as Syrian refugees began to enter Türkiye. IDP counts have ranged from 2 million to, more recently, 4 million. They are a reflection of the effects of earlier wars, such as those in the Caucasus, Cyprus, eastern Türkiye, and former Yugoslavia (UNHCR, 2020).

Since the beginning of the Syrian crisis in 2011, refugees have sought protection and safety in neighboring countries. The United Nations High Commissioner for Refugees (UNHCR) estimates that, as of September 2020, there are around 5.4 million registered Syrian refugees in the Middle East region, as shown in table 2. It noted that governmental sources, particularly in Jordan and Lebanon, report much higher numbers of refugees. As the conflict drags on into its tenth year, with no end in sight, the refugee situation has become protracted one and the burden on host countries is heavy.

Table 2. Number of Registered Syrian Refugees in Host Countries

Host Country	Data Source	No. of Syrian Refugees (UNHCR)	No. of all Refugees (World bank, 2021)	Percentage of total refugees
Türkiye	Government of Türkiye	3,654,866	3,759,817	65.1%
Lebanon	UNHCR	831,053	1,328,541	14.8%
Jordan	UNHCR	676,496	3,047,612	12.1%
Iraq	UNHCR	263,783	280,072	4.7%
Egypt	UNHCR	143,627	280,686	2.6%
Total		5,569,825	8,696,728	

Source: UNHCR 2022, WHO 2022, and World Bank refugees' data 2021.

The issue of asylum and refugees has increased due to the increase in its size and prevalence in various parts of the world. In addition to the violation of human rights, which has arisen considerably regardless of who violated those rights against the regime or from religious, ideological or political extremist groups;

This forced many individuals to flee and resort to other countries for protection, and to preserve their rights and lives (Matlin et al., 2018).

The issue of asylum has emerged dramatically and increasingly in the recent period of particularly in the Arab world. Before the international conflict in Syria in 2011, refugee numbers in Jordan were irrelevant, however, the Syrian crisis has led to a massive influx of Syrian refugees into Jordan in the last years; The 2015 General Population and Housing Census indicated that the total number of Syrians had reached 1.3 million. In addition, according to UNHCR statistics, in 2023, Jordan had hosted 743,733 registered Syrian refugees, 80% of whom lived in host communities, and 78% of Syrian refugees lived in the governorates of Mafraq, Irbid and Amman. This emergency population growth has put a great strain on Jordan's economic infrastructure and resources. The unemployment rate rose from 12.9% in 2011 to 15.3% in 2016 (UNHCR, 2023).

Francis (2015) Showed that the persistence of this situation without interference threatens Jordan's opportunities to benefit from its development project, which linked to it benefiting from the opportunity created by its demographic transition. This is among the expectations that most Syrian refugees will remain in Jordan for a number of years to come.

Figure 2 summarizes the situation of refugees by gender and age at Jordan in February 2023. According to UNHCR (2023) the main origins of refugees are Syria 89%, Iraq 8,3% Yemen, 1,7% Sudan 0.2%, Somalia,0.1%.

Besides, according to the reports of department of statistics of Jordan, by 2019, the total population of Jordan by the end of 2018 is (10,309,000) people. While the total Syrian refugee population in Jordan for the same period is equivalent to (11%) of the total population in Jordan. The figure 2 also showed that the higher ratio is for the age of 18-59. The second place was for the age of 5-11 years. Then in the third place 12-17 years, as the third place. The fourth place was for the age 0-4 years. While the age of 60+ years has been in the last place. (UNHCR, 2020).

Active Registered People of Concern: 743,773 175.742 Jarash 661,854 23.6 % 24.7 % 61,993 8.3% 5,270 **0.7**% Zarqa SUD 22.5% 24.2 % Gender & Age

0-4 5-11 12-17 18-35 36-59 60+ Total % 130,983 **17.61%** 87,315 **11.74%** Male 45,093 72,994 57,655 110,827 72,802 16,205 375,576 50.5% Al Mafraq 43,602 68,927 54,664 105,360 74,804 20,840 368,197 49.5% 49,274 6.62% 19,784 2.66% 14,352 1.93% 9,520 1.28% Total 88,695 141,921 112,319 216,187 147,606 37,045 743,773 11.9% 19.1% 15.1% 29.1% 19.8% 5.0% 100.0% 8,772 1.18% 6,007 0.81% 96,954 13.0% Serious medical condition 44,113 5.9% Disability Al Agaba 4,410 0.59% 31,803 **4.3**% Al Tafilal 1.700 0.23% 558 **0.08%** 82,992 **11.16%** Child at risk 26.639 3.6% Other Zatari (C) 17,194 2.3% Single parent 45,001 **6.05**% 13,034 1.8% Older person at risk 7,334 1.0% Unaccompanied or separated child 1,913 0.3%

Figure 2. Jordan Situation of refugees by Gender & Age

Source: United Nations High Commissioner for Refugees, UNHCR, 2023

In addition, Figure 3 shows the year of arrival of refugees to Jordan and its evolution.

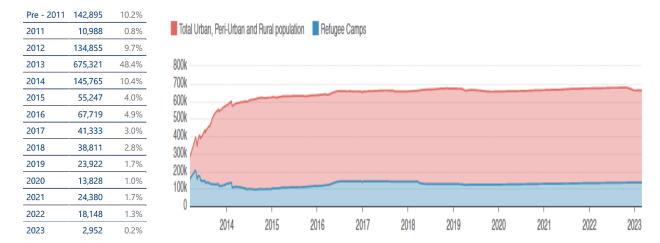


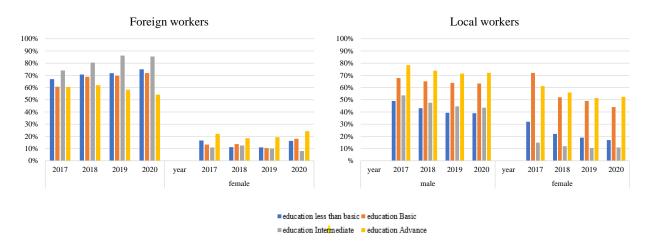
Figure 3. Refugees' arrivals to Jordan 2011- 2023

Source: Adapted from United Nations High Commissioner for Refugees, UNHCR, 2023

As for the Jordan case, by 2020, the UNHCR-Jordan published that Jordan did host 762,420 registered refugees of 57 nationalities, presenting it as the world's second highest per-capita refugee-hosting country; 88 per cent are Syrian than came after the beginning of conflict (see figure 3).

In addition, figure 4 shows a comparison of level of attainment of workers in Jordan by country of birth in the recent years. This figure shows that native workers have higher skills, which, together with their greater knowledge of the market and network of contacts, would give them a greater advantage in accessing the labour market. In the case of women, the differences between native and foreigners are very marked.

Figure 4. Comparison of the workers by level of attainment and country of birth in Jordan from 2017 to 2020.



Source: Adapted from UNCTAD, 2021, ILOSTAT (2022) and UNHCR (2022)

Numerous studies carried out on the effects of Syrian asylum on many aspects of life, including social and economic impacts, at several levels -- global, regional and national -- because of the widespread prevalence of Syrian migrants around the world. Hassan et al. (2016) showed that the views of European Union leaders divided into two parts; while some felt that refugee flows were a humanitarian crisis, Member States must act accordingly. There is a significant discussion in terms of the opportunities and challenges of the existence of refugees in the neighboring host countries. Large numbers of current discourses have concentrated only on their security implications and humanitarian Baloch (2017). Moreover, United Nations (2017) also pointed up those Syrian refugees have some negative influence on the economic growth of the hosting countries. The effect bears in both the short and the long run, pointing out that the inflow of refugees lowers the actual economic activities, especially in the countries of (Jordan, Türkiye, Lebanon, Iraq and Egypt). Others believe that these people are immigrants, not refugees because they want to go to the most developed countries of the European Union. Refugee flows "where they could have better opportunities to live", and that was why this segment of leaders viewed the influx of refugees as a challenge and a threat to host States and, economically. Hence, the view of some analysts, the large influx of refugees is an economic and social opportunity because of Europe's demographic challenge. The phenomenon of

population ageing is one of the main issues facing most EU countries and considered that one possible measure against the effects of ageing might be migration. New migrants were contributing to the population's long-term increase and increase in the number of young people.

Fallah et al. (2019) addresses that neighbouring developing countries host the extensive majority (85%) of the world's refugees, including from the Syrian conflict. Jordan, which shares a border with Syria, has encountered a substantial inrush of Syrians, with 1.3 million Syrians residing in Jordan as of the 2015 Population Census (see figure 3). Compared to a total population of 6.6 million Jordanians in 2015 the Syrian inrush defines a major increase in Jordan's population. The effect of such a tremendous influx of people on the host community, especially on their labour market, is a matter of extraordinary importance and debate. However, there is slight evidence of refugee effects in Jordan. Evidence to date is descriptive, examining practices of employment over time.

Other economists believe that refugees can negatively affect the well-being of host countries through the spread of disease, food scarcity and wage competition, overburdened education and health care facilities, environmental degradation, increased criminality and, on average, lower levels of refugees' human capital than host countries (Dadush & Niebuhr, 2016).

In addition, for the hosted countries of the Syrian refugees before and after the beginning of civil war. Hence, we highlight that the asylum has a significant impact on the sustainable economy of the most common countries in Middle East and Africa that did host the Syrian refugees, which they (Lebanon, Türkiye, Egypt and Iraq). Dadush & Niebuhr (2016) concludes that the impact of refugees on the economic growth of host countries be seen from several perspectives. Among them is the view of the negative impacts on the level of host countries' human capital, the view that the difficulty of integration into the host State and its association with the social environment and various cultural and religious backgrounds of refugees. As well as the view of the risk of internal conflicts, may increase in countries receiving more refugees.

Asylum in all its forms is one of the most important humanitarian issues facing the world. Political, social, security, economic and demographic dimensions, and the many conventions and conferences on this issue as well as regional and local treaties, all agreed to commit states to the need to deal with them humanely away from political interests and social differences. In addition, many studies and research studies have dealt with the effects and repercussions on host States in various respects and at various levels. The economic aspect has taken a large proportion of these studies' attention. The majority of them also focused on the negative effects of refugees on the economies of host States and the material costs involved, but the picture is greater. Negative aspects are only one part of them. This is what analysts and economists now argue is the notion of "refugee burden". If they instilled in the ammunition of the vocabulary used by Governments and humanitarian actors, they must be review.

Accordance to United Nations (2013), immigration considered as one of the most significant concerns in the modern global economy. It prophesied that over 110 million people now live outside their countries of birth. This has significant economic and political implications for both the sending and receiving countries. Coppel et al. (2001) identify four major consequences of international population changes. Firstly, there is the influence that immigration has on the host country's labour market. Although the possible adverse impacts that immigration can have on the wage and employment levels of locals are typically tested, immigration may also have a part to perform in reducing skill lacks in certain key sectors of the economy. Secondly, immigration is expect to affect the budgetary position of the receiving countries regarding the amount recent arrivals receive through health, welfare, and education schemes are unlikely to precisely balance the increased tax revenues from new workers. Thirdly, it show that immigration may be a key to the developing population challenge that faces many OECD countries. Finally, immigration can have an important economic impact on a specific country. These influences can either be negative, in terms of brain drain (though a brain drain can be helpful if it creates incentives for human capital investment in the source country) or positive since migrants' remittances are thought to be an important economic growth means for many labour exporting countries. In addition, in a multicultural world economy, an increase in growth driven by innovation helps everyone. The overall scale of these outcomes is hence likely to have the main influence on the immigration policies that implemented both in the source and host countries.

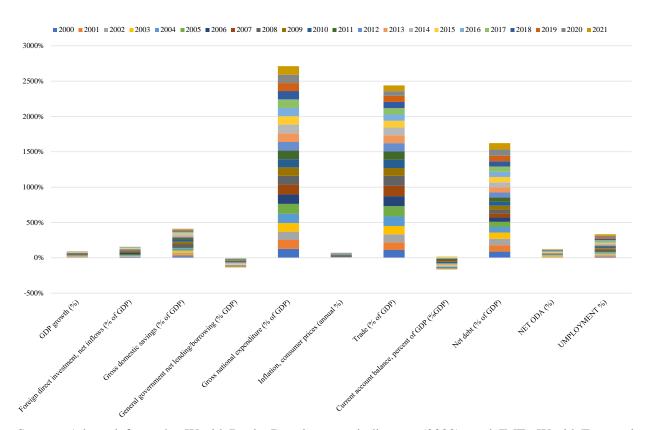
The following tables summarize the evolution of the economic and unemployment indicators before and after the beginning of asylum in Jordan. Table 3 and Figure 5 show the most relevant economic indicators of Jordan. Intuitively, one can observe an economy under the effects of the great recession, which, since the Syrian conflict, has increased domestic spending, imports and consequently public debt, while growth and investment stagnate, so that although official development aid is growing, it is not enough to compensate for the situation. Likewise, the profound impact of COVID-19 on the world must be considered, especially in 2020, although it is difficult to obtain accurate records of the affected Jordanian population, locals or refugees, there is no doubt of the slowdown in any economy (Kim & Kwan, 2021).

Table 3 Evolution of economic indicators of Jordan

YEAR	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
GDP growth (%)	4.25	5.27	5.78	4.16	8.57	8.15	8.09	8.18	7.23	5.02	2.31	2.74	2.43	2.61	3.38	2.50	1.99	2.09	1.93	1.96	-1.55	2.21
Foreign direct investment, net inflows																						
(% of GDP)	10.79	3.05	2.49	5.36	8.21	15.76	23.54	15.32	12.48	9.83	6.22	5.03	4.89	5.65	5.91	4.15	3.89	4.90	2.22	1.64	1.64	1.97
Gross domestic savings																						. A. M.
(% of GDP)	22.68	20.78	25.25	32.60	27.72	16.11	16.88	12.84	26.99	27.47	28.10	21.73	16.14	16.43	18.73	16.01	14.61	10.82	10.60	13.76	7.42	7.78
General government net lending/borrowing (%																						THE
GDP)	-4.00	-2.80	-4.50	-2.50	-1.10	-5.40	-3.90	-5.10	-4.80	-8.80	-7.80	-9.80	-14.30	-10.10	-8.50	-8.40	-3.70	-3.60	-4.70	-6.00	-8.60	-7.90
Gross national																						Jan 1
expenditure (% of GDP)	126.68	125.02	119.20	120.96	130.24	141.50	134.00	137.52	124.28	120.20	116.04	122.30	120.69	124.61	122.09	119.27	116.57	121.10	118.22	113.02	118.26	120.97
Inflation, consumer prices (annual %)	0.67	1.77	1.83	1.63	3.36	3,49	6.25	4.74	13.97	-0.74	4.85	4.16	4.52	4.82	2.90	-0.88	-0.78	3.32	4.46	0.76	0.33	1.35
Trade (% of GDP)	110.33	109.28	114.04	115.71	134.63	146.91	141.75	145.99	140.91	112.15	114.22	118.70	117.86	111.45	109.94	95.36	88.72	90.16	88.53	85.69	66.06	82.21
Current account balance,																						.4.
percent of GDP (%GDP)	0.30	-0.30	5.10	11.40	0.30	-17.50	-11.10	-16.30	-9.10	-5.10	-6.90	-10.00	-14.90	-10.20	-7.10	-9.00	-9.70	-10.60	-6.90	-2.10	-8.10	-10.10
Net debt (% of GDP)	87.40	90.80	91.17	87.81	78.57	73.48	60.20	59.40	52.69	55.77	57.46	60.27	69.05	72.23	72.34	75.81	74.35	73.61	73.95	77.29	87.88	91.71
NET ODA (%)	6.47	4.93	5.83	12.80	5.17	5.49	3.70	3.57	3.18	2.97	3.55	3.33	3.70	4.09	7.40	5.60	6.89	7.23	5.91	6.04	7.15	6.44
UMPLOYMENT %)	13.70	14.70	15.30	14.40	14.70	14.80	14.10	12.70	12.70	12.90	12.50	12.90	12.20	12.60	11.90	13.10	15.30	18.30	18.60	19.10	22.70	24.40

Source. Adapted from the World Bank, Development indicators (2022), and IMF- World Economic Outlook (2022)

Figure 5. Evolution of economic indicators of Jordan



Source. Adapted from the World Bank, Development indicators (2022), and IMF- World Economic Outlook (2022)

According to Central Bank of Jordan (2018), after the beginning of the Syrian asylum to Jordan, and in order for Jordan economy be capable to host such significant numbers of refugees, different countries started to send financial aids to Jordan with a total of (372.3 million USD) in 2012 as a foreign grants up to

(894.7 million USD). However, such grants were not enough to backbone the Jordan's economy since that the total (Current & Capital) Expenditures raised from (6.88 billion USD) in 2012 to reach (8.57 billion USD) by 2018.

However, the Jordanian government did succeed to stand up and raise her economy once again by seeking new investments that helped in decreasing the Percentages of Fiscal Deficit (Including Grants) to GDP from (-8.3) to (-2.4) and with total of (-1.8 billion USD) In 2012 down to (-727.6 Million USD).

As for the inflation rate, measured by the percentage change in the GDP deflator, reached (5.6) percent in 2013; because of the increase in demand of Syrian refugees in Jordan. The "electricity and water" price deflator also increased by (9.1) percent by 2013, after repeated interruptions of the Egyptian natural gas and the shift to heavy fuel and diesel in generating electricity.

However, due to the emergency plans implemented by the Jordanian government through facilitating the external and internal investment procedures and seeking for foreigner grants, it managed to decrease the inflation percentage from (5.6) in 2013 to (4.5) by 2018 (World Bank, 2022).

The Jordanian economy displayed resilience amid regional and domestic challenges in 2013. Despite the political and social unrest in the region, the disruption of Egyptian natural gas supplies, and the growing social and economic burden of hosting Syrian refugees, the real growth rate of GDP reached 2.8 percent in 2013 compared to 2.7 percent in 2012. Moreover, in 2018, the national economy grew by 1.9 percent, compared to 2.1 percent in 2017. Economic performance during 2018 affected by the continuing uncertainty in the region, which contributed to the low inflow of foreign direct investment to the Kingdom. On the one hand, and the slowdown in the performance of the "mining and quarrying" sector, which is considered one of the most volatile economic sectors due to its link to the global demand, on the other. However, the economic growth rate was higher than the average growth rate recorded for the Middle East and North Africa (MENA) countries during 2018, which stood at 1.4 percent. The economic growth was primarily driven by the growth of most economic sectors, particularly, real estate, "finance and insurance services", "transport, storage and communications", and manufacturing, which collectively contributed by 68 percent of the growth rate recorded in 2018 (World Bank, 2022).

The official statistics shows that Jordan's economic growth has remained stagnant over the past decade and been characterized by elevated levels of unemployment (18.3% in 2018; 24.1% for women and 38.9% among the youth). Persistently low levels of labour force participation (39.1% and 14.6% among women), and a largely segmented labour market split along the lines of gender and migration status.

However, the international community has acknowledged and supported the Jordan efforts as consequence of refugees hosting. Jordan hosts the second largest percentage of refugees per capita in the world behind Lebanon and they are carrying out a global public good on behalf of the international community. The latest refugee influx due to the war in Syria has stretched already limited resources and imposed severe stress on

Jordan's economy, host communities, fiscal position, and public services. The international community has helped; but matching resources with needs is increasingly difficult (World Bank, 2022).

The positive effects of international financial aid together with the work done by NGOs can see especially in the fight against child mortality and improvements in basic services such as clean water and sanitation, or also in the increase of the enrolment in the elementary school.

90%
80%
70%
60%
50%
40%
20%
10%

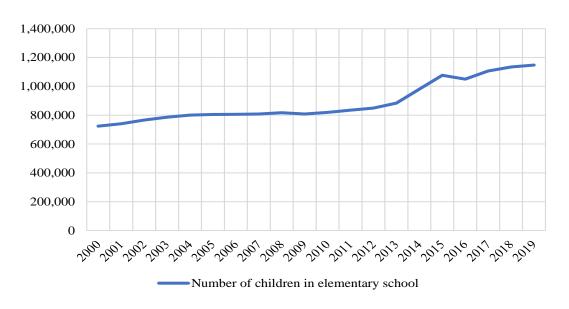
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020

— Under-five mortality rate (per 1000 live births)
— Proportion of population using safely managed drinking water services (%)
— Proportion of population using safely managed sanitation services (%)

Figure 6. Evolution of infant mortality and development of basic services in Jordan

Source. Adapted from the UNCTAD and the World Health Organization, 2021

Figure 7. Evolution of the number of children in elementary school in Jordan



Source. Adapted from the UNCTAD, 2021

However, the international aid and investment in Jordan still needed. In this sense, the Jordan Compact (2015) was a strategy to encourage the EU-Jordan trade agreement. The main goal was to transform the challenges brought about by the refugee crisis into a 'development opportunity.' To do so, the international community pledged to support Jordan to provide easier access to EU markets in return for allowing refugees to access its labour market. A vital part of attracting business and stimulating economic growth is improved access to the EU market. Host communities need better supporting.

However, trade agreements request time. By comparison, the Jordan-US free trade agreement, which entered into force in 2010, took five years to sustainably impact export volumes and job creation.

The Government of Jordan (GOJ) launched the Jordan Response Plan for the Syria Crisis (JRP) 2018-2020 to consolidate efforts to respond to the impact of the Syria crisis on refugees and nationals. In a context where the return of refugees is unlikely in the short term coupled with an ever-present risk of donor and host country fatigue, the JRP focuses on targeting vulnerable individuals irrespective of their nationality and support to build the capacity of government structures.

Support is urgent to address Jordan's fiscal problems, ideally through grants and as part of an approach agreed with the IMF. Progress on these issues will define progress on commitments made in this compact on overall development and the job opportunities available.

As the war continues in Syria, the actors contributing to the Syrian refugee crisis in Jordan needs to change their policy responses from emergency to sustainable long-term approaches. This fact has major consequences for the Artery of the international community, the donor nations, and the Hashemite Kingdom of Jordan. Especially in light of the following the Arab uprisings in Middle East. The Syrian refugee community is still staying in Jordan until the present time in a comfortable diversion from the problems of the world and from the Syrian civil war. However, there are still some fears of a permanent Syrian presence in host communities emerged, which will increase the burden on infrastructures, education, health, economic ...etc. sectors of the hosted countries like Jordan (UNHCR, 2021).

As such issue, the traction as demand causes the breadwinners to work for fewer wages, to pay more money to cover the (rent, basic goods, and services), which may lead by time to and compete with Syria for degradation.

All these elements have caused the restrictions of resources, work prospects as well as rising costs, and a decline in the quality of public services. This economic burden on refugees can be call the negative externalities of refugees' Inflow. This economic burden of refugees on host communities can lead people to protest and build friction between refugees and their governments in light of the degradation of living standards because of the influx of refugees in hosted countries and their communities (Stave & Hillesund, 2015).

The Jordan Compact between the European Union (EU) and Jordan in 2016 contained humanitarian aid and macro-financial aid as well as trade concessions by the EU. One of the concessions of the Jordanian government in return for this aid was allowing Syrian refugees in Jordan formal entrance to the labour market. However, since 2016, Syrian refugees allowed to practice work in specific sectors, such as agriculture, construction, food, and manufacturing. These sectors employed refugee labour (and relatively few Jordanians) even before the Syrian civil war. Notifying that there is a cap of 200,000 on the number of permits offered; only 87,141 been taken up by the end of 2017.

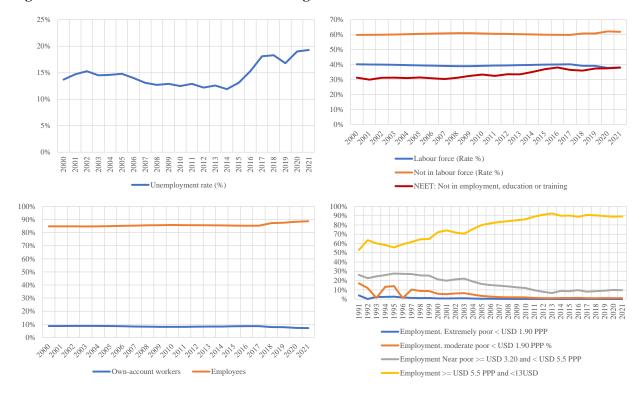
Table 4. Number of Syrian Refugees that work in the host country

<b>Hosting Country</b>	No. of Syrian Employments
Jordan	62,000
Lebanon	153,600
Türkiye	132,497
Iraq	163,545
Egypt	57,450

Source: World Bank, 2021.

The following figure summaries through specific indicators concerning the evolution of the labour market in the case of refugees in Jordan in the 2000s.

Figure 8. Evolution of some indicators for refugees of labour market of Jordan 2000 -2021



Source: Adapted from Ilostat, 2022

First, refugee arrivals before the Syrian crisis were low, and once they acquired refugee status they could be absorbed into the labour market. However, there has been a sharp drop in employment since 2014. Together with the impact of the Great Recession, the massive influx of refugees (who, after meeting the legal deadlines, acquire the right to work), increased the number of workers beyond the capacity of the market. Consequently, the number of people who are outside the labour market, neither studying nor working legally (NEET) is increasing. This situation adds a heavy burden to the host country's budgets.

Humanitarian aid slighted increasing, and although it has made it possible to deal with cases of extreme poverty, it is insufficient to cope with the large number of refugees. A large number of them forced to work in the informal economy or self-employment as the only way out. Overall, as a result, the precariousness of the labour market has increased.

Although become-rich-quick entrepreneurs are often in the newspapers, they are unusual. The fact is that self-employment is often a widespread way of coping with precocity and various barriers to entry into the labour market; hence, much of the literature focuses on this area (Esen & Binatli, 2017).

Regarding this issue, developing economies typically have large numbers of own-account workers producing goods and services where labour regulations often do not apply and where formal employment contracts are scarce. In this context, job insecurity is widespread, wages are volatile, and workers receive very few benefits from their employers. These conditions lead to self-employment and the segmentation of the labour market. Own-account workers are mainly in the "low-wage" sector and do not have full access to jobs in the "high-wage" sector (what segmentation theories call the "second sector"). This could partly explain the existence of labour market barriers and why poverty prevalent (Clemens & Hunt, 2017; Sak et al., 2018).

Self-employment, thus, offers an alternative to the entry barriers in more conventional wage employment in developing countries. Likewise, being an own-account worker somehow allows one to cope with the lack of social insurance protection and has a low entry cost (Clemens et al., 2018).

Besides, for those in the "second sector", there are all kinds of barriers that make wage employment inaccessible, such as for refugees, so self-employment can provide them economic independence and flexibility, as well as an option to earn a living income (often the only choice), which the labour market may not provide. In this regard, migration for labour reasons presents important differences with respect to forced migration and consequently implies a more complex process of integration into the labour market in host countries, although it tends to improve over time (Sarzin, 2021; Alshwawra, 2021; Muñoz-Mora et al., 2022).

Workers with refugee status have limited employment opportunities, often as low-skilled labour, and are often dependent on limited work permits issued by the host government (David et al., 2020; Alshwawra, 2021). As a result, the informal economy grows where there are more job opportunities for refugees

(Khawaldah & Alzboun, 2022). This sharp growth of the informal economy leads to a decrease in government tax revenues, which leads to a reduction in government spending on public goods and services. Governments, in turn, often raise indirect tax rates to compensate for increased spending, although this results in an increased burden for the entire population (Aksoy & Poutvaara, 2019).

In addition, because of the massive influx of refugees, the increase in the labour force may push down wages, especially in low-skilled jobs in the informal sector. Consequently, this will have a negative impact on the poorest workers, who will be expose to worsening working conditions (Alshwawra, 2021).

However, the literature has shown mixed or no evidence on the impact of forced migration on national labour markets (Clemens & Hunt, 2018; David et al., 2020; Khawaldah & Alzboun, 2022).

## 2.2. The State of the Art of Forced Migration

This section spreads out the theoretical standpoint of international and, in particular, forced migration processes and the impacts on host countries that justify their presence. Considering the aim of the research, firstly we perform a systematic analysis of literature in order to understand the main issues, indicators and trends of forced migration. Secondly, we review the theoretical approaches related to the topic. Finally, based on these analyses, we selected the most appropriate indicators to propose research hypotheses that be tested in the empirical section of this thesis.

Forced migration is a growing problem especially due to international conflicts that continue to occur in the world. In many cases, it implies sudden and massive inflows that exceeds the resources and capabilities of the host country.

The literature on forced migration is scattered, covers different perspectives, and generally contains widely varying and sometimes inconclusive findings, contributing too little consensus.

However, there is a growing interest in this field, especially because of increasing international conflicts in different parts of the world.

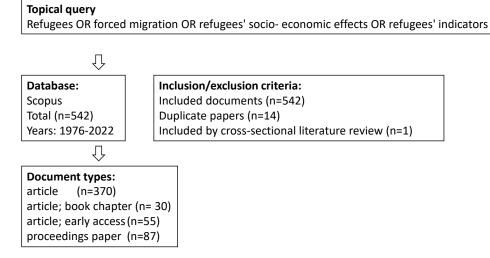
#### 2.2.1. Mapping the literature on forced migration

Information scientists utilize bibliometric and Social Network Analysis (SNA) methods to quantify the scholarly communications. In this section we use of bibliographic data and the open-source software Bibliometric, a software written in R-packages, for analysing and mapping the literature on forced migration and their effects on host countries. Besides, we use the social network analysis (an extended methodology used by scientists from different scientific fields) to measure the connections and diffusion of knowledge on our research topic.

By extracting descriptive and network data within bibliographic literature, one can perform citation analysis. Citation analyses use to deepen on the scientific growth in a specific field.

Hence, we first conducted a topical query and analysed 542 references from the online database Scopus focused on forced migration and their effects spanning the period 1976 - 2022. Figure 9 and 10 summarizes the main information of the analysis.

Figure 9. Flowchart of the systematic review conducted



Source: own elaboration

Figure 10. The main data of the performed literature review on forced migration socio-economic effects



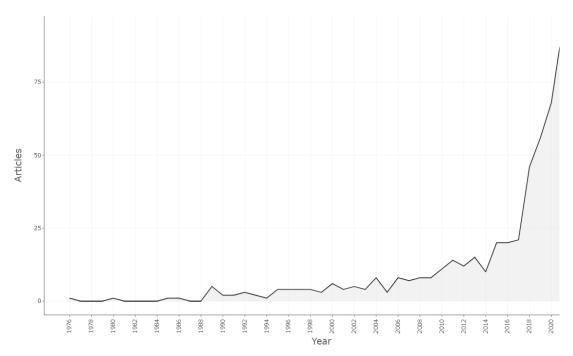
Source: own elaboration

This analysis aims to conduct a bibliometric analysis to answer the following research questions:

- What are the main issues on the research on forced migration?
- What is the annual scientific publication growth in economic literature on refugees?
- Which effects are most analysed in research on refugee's migration?
- What are the conceptual structures of the topic forced migration?

The research on forced migration is of growing great interest, as can be seen in the growing number of publications on the topic, especially since 2014 (see Figure 11).

Figure 11. Evolution of the number of publications in Scopus on forced migration, 1976-2022



Source: own elaboration

Figure 12 represents a Word cloud chart that summarizes the main topics addressed in these publications over the time. Literature has focused on the effects on labour market and employment, the economic growth and welfare, the effect on trade, the adopted policies that deal with the massive inflow of refugees, the evaluation of host countries conditions: health situation, education system capacity, wages, integration, inequality, prices, among others.

Figure 12. The main topics in literature on forced migration 1976 -2022



Source: own elaboration

Regarding the relevance and trends in research on the topic of study, the review of the literature on forced migration shows that the main research topics currently deal with several aspects related to the impact on labour markets in labour markets and policies to manage the ethnic enclaves and the integration of refugees. It confirms the growing interest in understanding the effects of forced migration, especially due to long-term international conflicts that have led to unprecedented mass migration, such as in Syria and Ukraine. As basic themes, those related to the impact of refugees on health, education, economic growth, and on new patterns of trade and the role of migrant networks.

In addition, topics that have remained as research niches include, research on the impact of conflicts in home countries, the local labour market, the situation of families, jobs and business.

Finally, emerging themes related to the research topic are the quality indicators of the employment; health and education, in line with sustainable development goals by United Nations (see Figure 12).

Niche Themes Motor Themes life civil-war integration Development degree (Density) ethnic enclaves employment labor-market schools \_ politics social networks labor market integration arowth education ethnic diversity health crisis war Emerging or Basic Themes clining Themes Relevance degree (Centrality)

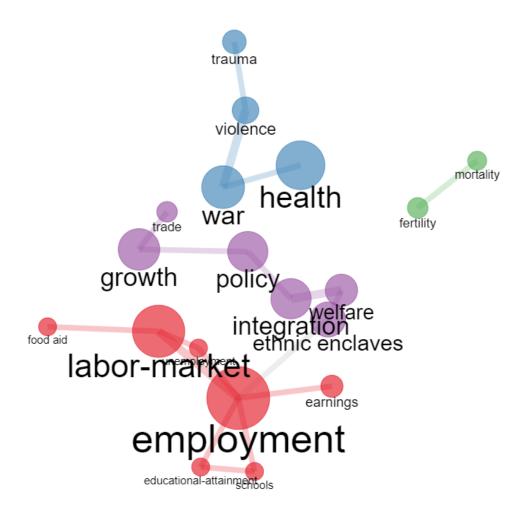
Figure 13. Spotlight topics of the forced migration

Source: own elaboration

In addition, through bibliometric analysis, we can observe the connections between the researched issues in relation to the forced migration. Based on the keywords of most cited works, a network to be constructed. The structure of the network made up of clusters represented in different colours, so that the structure of this network and the most relevant connections seen in a simple way (see below figure 14).

It shows a first group that includes connections between the neoclassic migration indicators, such as the level of employment and earnings, together with some development indicators related to quality and basic needs: level of attainment, food aid, basic education at schools (in red colour). Also, A second group of research focuses on some topics related to economic growth and welfare of host countries, trade and the integration of refugees' enclaves (in purple colour). A third group of research focuses on consequences of conflicts: war, health, violence, and refugees' traumas (in blue colour). Finally, after several years of conflicts as niches themes there are also some researches on fertility and mortality of refugees (in green colour).

Figure 14. Connections between forced migration topics



Source: own elaboration

#### 2.2.2. Migration theories and theoretical approaches related to the research topic

The concept that migrants and refugees are different rises throughout the academy for historical and contemporaneous political grounds. The significant surge of transoceanic European immigration in the late nineteenth and early twentieth centuries appeared when no records for refugee inflow nor international refugee inflow control documented. Consequently, foundational theories of immigration naturally disregarded the refugee question even if many of those prematurely migratory motions re-conceptualized as forced migrations (Zolberg, 1989). Immigration research in the United States, Canada, and Australia highlighted the acceptance of refugee inflow after World War II, but they simply conflate all individuals who pushed to settler states as "immigrants," yet of why they arrived (Patrias, 2000; Jupp, 2006).

Study on US immigration has been precisely compelling in the broader area of international migration analyses, whose foundational theories typically assume labour migration (FitzGerald, 2014).

The specialisation of refugee topics is a more contemporary academic effort with its study centres, journals, professional institutions, and study paradigms that concentrate on the situations of refugees, their boosters, and researchers. In the 1980s, academics established mainly in the United Kingdom highlighted the area about the belief that refugees are fundamentally distinct from migrants due to the push aspects that drive their inflow and the states' distinctive legal burdens to rescue refugees after World War II (Black, 2001; Richmond, 1988; Van Hear, 2012). There is a staunch undersized overlapping between refugee research and the sociology of international migration Van Hear (2012) and Mazur (1988) contended that either sociology makes a pertaining specific to refugee research from economics, geography, political science or anthropology, remains to be substantiated. On the other hand, according to Castles (2003), there is not sociological literature on forced migration and thus no evolved body of empirical studies and theory.

This research sheds light on different theories that discuss international migration and those aspects related to refugees' inflows to other countries internationally. As following.

## 2.2.2.1. Laws of Migration

The first person to talk about immigration laws is Ravenstein in his study Ravenstein (1885, 1889), when he put the foundation stone for laws of migration considered that immigration is caused by ambition to work in industrial and commercial centres. Through this immigration, the recruitment from the parts of the country where available redundant hands to cover the gaps resulting from the lack of work force.

The laws of migration consisted of seven paragraphs, which explained as follows Ravenstein, (1885):

- 1. The majority of migrants only travel a short distance, and as a result to this. There are nationwide shift or population displacement that results in "migration currents" moving in the direction of the major commercial and industrial hubs that receive the migrants.
- 2. When a town experiences rapid growth, the locals in the area around it flock there. As a result, immigrants from farther-flung areas fill gaps in the rural population, and eventually, the alluring power of one of the rapidly growing cities gradually spreads to the farthest reaches of the whole nation.
- 3. Dispersion is the reverse of absorption and resembles both processes in certain ways.
- 4. A counter current produced by each main migratory current to balance it out.
- 5. Most long-distance migrants desire to relocate to a significant industrial or commercial hub.
- 6. Residents of urban areas are less mobile than in rural areas of nation.
- 7. Females migrate farther than men do.

Stouffer (1940, 1960) introduced the idea of intervening chances while also taking internal migration, associated mobility, and distance into account. Building on Ravenstein's discoveries, Lee (1966) proposed a model of migration that connected favourable and unfavourable aspects of the origin and destination regions with the choice to move, taking into account supplementary barriers and individual characteristics. He made connections between the volume of migration and the population's diversity, the economy's swings, and the difficulty of overcoming impediments along the way.

Ravenstein's theory later led to Lee (1966) Push-Pull theory.

When Dr William Farr (Registrar General's Office for England and Wales from 1838 to 1879) was reading Ravenstein's study, he made an appropriate observation which was immigration continued without any specific law because of random fluctuations in immigration rates. In response to this observation, Ravenstein developed other laws of his theory, and Grigg (1977) identified these theories while not omitting anything from the old theory, but they still did not explain the random fluctuations in immigration rates that Farr was referring to, these laws were:

- 1. There is an influx of migrants across the border that is farthest from the major centres of absorption, even in the case of "counties of dispersion," which have people to spare for neighbouring counties. (Ravenstein, 1885:191)
- 2. These currents flow less swiftly, however far they are from the fountainhead that feeds them. (Ravenstein, 1885:191)
- 3. Demonstrated that the majority of migrants simply travel a short distance. (Ravenstein, 1885:198)
- 4. When estimating the number of displaced people, it is important to consider both the native population of the counties that provide the migrants and the population of the districts that receive them. (Ravenstein, 1885:198)
- 5. Migrants counted in a center of absorption will decrease proportionally with distance. (Ravenstein, 1885:199)
- 6. Dispersion is a process that is the opposite of absorption and has characteristics in common with it. (Ravenstein, 1885:199)
- 7. Each migration's primary current generates a counter current that balances it. (Ravenstein, 1885:199)
- 8. Countries with borders that are proportionately longer than their land area provide a larger range of inflow facilities than those with shorter borders. (Ravenstein, 1885: 175)
- 9. Migration streams sweep along with them many of the locals of the counties they pass [and] deposit many of the migrants who joined them at their starting point in their path. (Ravenstein, 1885:191)
- 10. Migration currents move along certain geographical pathways that are well defined. (Ravenstein, 1889:284). (Tobler, 1995)

According to Richmond (1988), the laws of migration and push-pull theory subject to a great deal of criticism, as they exaggerate the inevitability of the causes of migration, in addition to their inability to explain the empirical rules. Therefore, for this author, at the time of 1885, it was difficult for both Ravenstein and Farr to obtain clear reasons for the migration, as they need data available over at least 150 years to reach comprehensive and understandable data that should be analysed to obtain an explanation and clarification of the actual immigration laws (Dorling & Rigby, 2008).

However, Stouffer (2006) also follows the concept of Ravenstein and the American Sociological Review's explanation of how distance and mobility interact. According to this author, the number of migrants is concurrently influence by two factors: new perspectives that enhance the flow of movement and intervening opportunities that slow down the migration process and reduce the amount of migration. Under the intervening opportunities, he is aware of any obstacles that prevent the movement of people, such as high transportation expenses, severe local laws, inadequate migrant education, a lack of local support, etc. At the same time, he asserts that distance is not a deciding issue in people's movement.

Rees & Lomax (2020) addressed that since Ravenstein publicised the Laws of Migration in 1885 and 1889, researchers have attempted to explain the movements or causes of population movements, or, more simply expressed, to explain the question "Why do people migrate?". It has always been essential to the study of migration. Since then, numerous theoretical perspectives from a wide range of disciplines (including economics, sociology, anthropology, etc.) have examined migration patterns at different dimensions (micro, meso, and macro) to comprehend the factors that affect migration (Fratsea, 2019).

## 2.2.2.2. Intervening opportunities theory

Typically, scholars who research migration start by defining voluntary and involuntary, or "forced," migration. The slave trade, mass expulsions, exiles, and movements resulting from religious or political persecution are a few examples of the latter. The level of development of the society in issue and the effects of migration on the social system of the receiving society characterized complicated typologies (Fairchild, 1925; Petersen, 1958). It was believed that voluntary movements were the consequence of a mix of "push" and "pull" factors (such as economic, political, and social pressures), adjusted by the impact of intervening opportunities and obstacles (Fairchild, 1925; Petersen, 1958).

Samuel Stouffer was the first to develop the theory of intervention opportunities to explain migration (Stouffer, 1940). This author shows a clear correlation between the number of opportunities available at a certain distance and the number of persons travelling that distance, the number of opportunities inversely proportional to the distance between them. Stouffer (1960) developed the idea of intervening opportunities in 1940 to offer a straightforward model explaining a large portion of the observed movement of the population across space. According to this theory, the number of persons travelling a certain distance from

a point depends more on the distribution of possibilities in space than it does on actual distance. More specifically, it hypothesized that the number of individuals moving s distance from a point is inversely proportional to the number of opportunities on or within that circle and directly proportional to the number of opportunities on the perimeter of a circle of radius s. He also made a note of the model's limitations in addressing notable directional drifts, where an uneven distribution of opportunities within the circle might make it easier to travel away from the beginning point in one direction than the other addresses. Nor are models considering the distance, alone, of much value in such a circumstance (Stouffer, 1960)

Stouffer (1960) updated his well-known theory of migration and intervening chances in the middle of the 1950s, adding the idea of competing migrants and testing the new version using information from the 1940 census on intercity mobility, 1935–1940.

The majority of migration theory studies have focused on distance and migration and advanced mathematical representations of the relationship (Ravenstein, 1885). Stouffer's notion of intervening opportunities is perhaps the most well-known of the more contemporary migration hypotheses. The latest individual to compare in-depth the amount of internal migration or the characteristics of migrants across a sizable number of countries appears to be Ravenstein. Additionally, forced migration such as the refugee movements following World War I have not been included in the so-called free migration category (Lee, 1966). According to Stouffer (1940), the actual distance is only significant as a gauge of the number of intervening possibilities (Wilson, 1967).

Wadycki (1975) showed that Stouffer's theory consistently holds over a range of different levels. In comparison to Stouffer's 1960 reformulation, several theoretical models of the migration process are more consistent with the 1940 definition of intervening opportunities. Interstate estimates show that the 1940 definition yields further accurate outcomes. For each of these reasons, it would seem that future tests of Stouffer's theory should take the 1940 formulation seriously.

Denslow & Eaton (1984) illustrated that the examination of migration-related factors provided. The writers by concentrating on the variations in migratory destinations concerning the dissuasive impact of distance can further our inquiry into the roles of information, intervening opportunities, and psychic costs. A reservation-wage migration model that they create suggests that the distance effect is stronger for low-wage destinations and weaker for high-wage destinations. Data from Brazil, Japan, Mexico, the United States, and Venezuela used to test the model.

Instead of using an absolute measurement of linear distance, one may use the opportunities that exist between an origin and a destination. In essence, Stouffer substitutes the notion of ordinal or rank-ordered distance for the ratio scale of linear distance (Jayet, 1990).

The sequential decision-making and information-processing model is the foundation of the notion of intervening opportunities. The sequential search and selecting process can be broken down into two steps.

First, by placing the alternatives in order of increasing spatial distance from their sources, decision-makers establish a hierarchy of the option alternatives. Second, starting with the location that is closest to the origin, the decision-makers work their way up the hierarchical order and choose based on the accessibility. According to this theory, the number of trips and the geographically cumulative opportunities related linearly. This hypothesis disregards the traditional view of spatial distance as a barrier to population migration. Instead, the focus is on the reality that migrants travel through geography to meet different requirements. Because there is an opportunity at an intermediary site B that can meet their demands, migrants from place A do not migrate to a more remote place C. People will only travel as far as is necessary to discover an adequate opportunity. The migration to a more distant location decreases when there are more intervening possibilities (Akwawua & Pooler, 2000).

To explain the connection between residential mobility and geographic distance, Stouffer (1940) theory of intervening opportunities focuses on the latter of these criteria for spatial interaction. Stouffer (1940) also indicated that in contrast to the gravity model, began with the premise that mobility and distance are not always directly or invariantly associated, as is supposed by fundamental gravity explanations of the flow of movement between two sites. Instead, Stouffer (1940) suggested that there was a direct link between movement and opportunities. To explain one of the supporting mechanisms behind the distance (decay) effect in influencing the spatial distribution of population migrations, Stouffer (1940) popularized the concept of intervening chances. According to the research, the number of individuals travelling a given distance directly correlated with the amount of possibilities at a certain distance and is inversely related to the number of acting opportunities (Stouffer, 1940). In this way, he also demonstrates that the ratio of possibilities in the destination to the intervening opportunities accessible in between is one of the critically neglected aspects in the study of mobility and distance. Opportunities for intervention found in a variety of ways (Elffers et al., 2008).

Akkoyunlu (2012) found that increasing intervention opportunities would increase foreign direct investments, which will increase the pressure on migration from Türkiye because of the accession. This will also change the demand for competing migrants. The idea of intervening opportunities and the theory of competing migrants both be use to explain the reduction in Turkish immigration into Germany that has occurred since 1991. Utilize data on total German foreign direct investments abroad, excluding Türkiye, to identify prospects for intervention and migration patterns from former the Soviet Union and Eastern European nations to Germany to identify potential competitors. Given that, despite an increase in total German direct investments over the study period, German direct investments to Türkiye did not change significantly, the total German foreign direct investments to countries other than Türkiye is a good criterion for intervening opportunities for the Turkish case. Fixed expenses and substantial tax responsibilities for foreign direct investments in Türkiye used to justify this.

Stouffer (1940, 1960) refused to be fascinate by the "grand theory" that prevailed at the time. He was a supporter of middle-level notions and close-to-the-data reasoning, which were consistent with his emphasis on empirical research. He developed the idea of "intervening opportunities" to explain migration flows, for instance. While Pettigrew (2015) showed that to comprehend the widespread African American migration up the Mississippi River to Chicago in the early 20th century, it is necessary to consider both the distance from Memphis, St. Louis and other communities along the migration route as well as the intervening opportunities they provided.

Stouffer (1940) demonstrated that a theoretical framework that sheds light on the causes of the brain drain is the law of intervening opportunities. Such analysis is particularly pertinent to highlight the possibility of intra-continental brain drain because highly qualified individuals can migrate internationally inside the boundaries of the same continent. Ouassif (2021) illustrated an appropriate example for Africa would be the migration patterns toward hubs like South Africa and the nations of Northern Africa.

Additionally, according to Kotsubo & Nakaya (2021), it has long been a central analytical concern in geography, spatial economics, and traffic engineering to comprehend spatial interactions such as human movement. The radiation model is one of the intervening opportunities models that offers a framework for understanding the spatial interactions produced by a person's distance-ordered decision-making process. However, particularly for short-distance flows, such traditional definitions of intervening opportunities have frequently failed to forecast realistic flow amounts. To solve this issue, they suggested a fresh formulation of intervening opportunities with a kernel function to provide fuzziness to destinations' spatial search behaviours and create a new radiation model alternative. When applied to four datasets of interregional flocks, the mobility patterns produced by the modified radiation model that included kernel-based intervening opportunities outperformed the original radiation model.

## 2.2.2.3. Ravenstein Observation Theory

Ravenstein (1885) established the immigration law, and after William Farr stated that there is no law explaining the reason for immigration in detail, Ravenstein re-examined his immigration law in 1889, this law called Ravenstein's observations theory.

Ravenstein's observations theory (1889) added that the majority of females migrate over short distances. The development in the field of transportation, industry, and trade leads to an increase in immigration. Heavy tax laws, repressive laws, lousy climate, social inadequacy of the person's conviction and forced displacement are among the most encouraging factors for migration, and their results cannot be compared with the theory of a person's migration to obtain a better job or obtain a better income. The predominant age group of immigrants is the late stage of adolescence and youth. Ravenstein's theories were quote and challenge in many of studies that followed (Lee, 1966).

Ravenstein explained that the main factors of migration fall into several categories, namely:

Factors related to the area of origin in which the person lives.

Factors related to the destination area a person will go to.

Person-related factors.

Multiple obstacles.

However, due to the significant relation between the laws of migration and observation theories related to Ravenstein, we explain the similarities and differences between the two theories:

The data used to conduct the migration theory of 1885 taken from 1881 in Britain. While the data used to make the theory of Ravenstein's observations in 1889 belonged to 20 countries.

Ravenstein reached the same results through the two studies or theories. Despite the criticism that took place in the immigration laws founded by Ravenstein, they were and still are the cornerstone of most studies that explain the reason for immigration (Lee, 1966).

Both theories agree that the majority of immigrants go to the nearest possible destination. The most remote areas are the areas least likely to have refugees. In the case of choosing a remote destination, it is either because it is a commercial or industrial base. Migration takes place in stages as the population moves towards the centre of commerce and industry. For every migratory stream, there is an opposite migratory stream. Rural areas have more immigration than urban areas (Lee, 1966).

## 2.2.2.4. Systems Model Theory

The systems theory was a daring attempt to use structural and functional concepts to understand and incorporate social reality. To integrate all the sciences, the early approaches to systems theory looked for and relied on similarities with other disciplines (both natural and social sciences). The emphasis was on totality, sum, mechanization, and centralization with the understanding and interpretation of "a system" as a complex of interdependent elements. According to Bertalanffy, it is possible to spot isomorphism's in the behaviour patterns of numerous phenomena across a wide range of domains, including biology, mechanics, demography, and economics. To contribute to the creation of a new formal "logico-mathematical discipline" that applies to "any system of a specific type independent of the particular qualities of the system or the parts involved," he outlined the general principles of general systems theory (Bertalanffy, 1950). Ludwig von Bertalanffy's, in a philosophy seminar at the University of Chicago in the 1930s, presented his Systems Theory. Bertalanffy was a biologist who pioneered the study of systems theory in the biological sciences; this eventually gave rise to the modern field of ecology. The study of natural systems is ecology, as it currently understood. Bertalanffy thought that nothing comprehended by focusing only on one aspect of what constitutes a crucial component of a system. Bertalanffy had multiple purposes from this theory: Many sciences, such as natural and social, have a general tendency toward integration. A broad theory of systems appears to be the focal point of such integration. Such a theory might be a crucial tool for pursuing

accurate theories in the nonphysical branches of research.; by establishing unifying principles that extend "vertically" through the realms of the several disciplines, this theory moves us closer to the ideal of scientific unification.; this may result in a much-needed unification in scientific education. The distinction between the molar and molecular, nomothetic and idiographic approaches given precise significance in the context of contemporary systems theory. System laws would apply to mass behaviour, and if they mathematically represented, they would take the form of differential equations similar to those utilized by Richardson Rapoport (1957). In contrast, explanations of the nature of game and decision theory would describe an individual's freedom of choice.

The dual labour market theory, world systems theory, and the world society approach put a special emphasis on factors acting at a combined macro-level. According to the world systems theory, market penetration across borders and economic globalization are two natural consequences that flow from migration (Leiss, 1977).

Systems Theory has attracted a lot of interest. It has put it in danger of losing credibility before its true commitment in many sectors of application h fairly explored. Enthusiastically offered to Federal and State governments as well as private individuals and organizations as a means of resolving complex social issues like mass transit, crime, and welfare dependency. It does so by donning the double halo of Science and Corporate Efficiency conferred by its association with the aerospace industry and the Pentagon. As with any circumstance where expectations are created and then not met. The response may call into question both fundamental concepts and impolite applications (Leighninger, 1977).

To model complex entities produced by the multiple interactions of components, systems theory suggests abstracting from some details of the structure and component composition and focusing instead on the dynamics that define the distinctive functions, properties, and relationships that are either internal or external to the system. The history of systems theories includes the contributions of such influential thinkers as Alfred North Whitehead, Ludwig von Bertalanffy, Anatol Rapoport, Nicolas Rizzo, Kenneth Boulding, Paul A. Weiss, Ralph Gerard, Kurt Lewin, Roy R. Grinker, Karl Menninger, in latest years, dynamical systems theorists and family systems theorists (Laszlo & Krippner, 1998).

Systems theory involves identifying the systems that a person is a part of, evaluating the impact of those systems, and using those systems to perform an intervention. A person can be a part of various systems, such as their family, community, workplace, place of worship, or other organizations. Every system influences the individual in some way (Myer & Moore, 2006).

Mele et al. (2010) proposed different building on general systems theory. Open system theory, a viable system model, and a viable system approach are a few examples. The relationships between organizations and the environment they are a part of are being examine by open system theory (OST). This emphasis is on the adaptability of organizations to changes in environmental situations (with or without the need for

information processing) (Chen & Stroup, 1993). The viable system is a cybernetic abstraction that used to describe autonomous groups. The study of how a system's actions lead to changes in the environment that are understood by the system itself in terms of feedback, allowing the system to adapt to new conditions, is known as cybernetics, which is an interdisciplinary study of the structure of regulatory systems. Therefore, the system can alter its behaviour. In cybernetics, the levels of complexity between the system and the environment are different because the environment possesses complexity levels that the system cannot perceive (Golinelli & Orsi, 2002). Finally, a novel interpretation of unified strategic organizational and management models called sub-systems and supra-systems proposed by the viable system approach (VSA). While supra-systems concentrate on the links between businesses and other influential systemic elements in their setting (Bodo et al., 2000; Golinelli, & Rovelli, 2005).

According to de Haas (2010), studies of migration systems now in existence frequently suffer from three major flaws that draw attention to limitations in the systems approach to the study of migration. First, systems theory implies that the system is already in existence; it is unable to explain how and why a system comes into being in the first place, even while it may provide answers to issues concerning how migration perpetuated. In general, the literature only considers the upward trajectory of migratory systems' evolution. Second, migrant networks and other direct or "endogenous" feedback mechanisms frequently receive more attention in the literature on migration than more extensive indirect feedback dynamics (de Haas, 2010). Although a significant portion of the story covered by this narrative. It pays little attention to the "contextual" influence of migration on the wider sending and receiving contexts that alter the initial circumstances that give rise to migration (de Haas, 2010). Third, the internal mechanics that power the migration system poorly understood. As noted already, many studies adopt a largely circular logic, which assumes that feedback reinforces the system. Very little effort made to conceive the feedback dynamics that could reverse migration-facilitating feedback dynamics and explain the endogenous decline of established migration systems (de Haas, 2010).

Parsons contributed a very strong, conservative strand to systems theory and made sure that it was associated with structural functionalism by concentrating on the system's purpose in preserving equilibrium. Attacks on this school of thought, first from structuralises who criticized its conservatism and lack of a social change theory, and subsequently from constructivists who opposed the reification of social structure, largely reversed the rise of this school of thought. Because of its affiliation with structural functionalism and the odour of metaphysics, systems theory—the foundation upon which Mabogunje founded his migratory systems approach severely dismissed by social theorists (Bakewell, 2014).

This theory is crucial to consider when discussing refugees because a refugee's systems in their new community may be severely constrained or unstable once they arrive. Many migrants relocated to areas where they have no other connections besides the organization. As a result, the agency must help the client

set up crucial systems. Once these procedures are in place, they can also assist the refugee in becoming more independent and enhancing their quality of life. For instance, the majority of refugees participate in English as a second language to improve their language. Improved English language abilities, however, can have positive effects on the refugee's capacity to find jobs, form social connections, or meet their medical or mental health needs (Miller, 2017).

The classificatory conflicts that established and maintained the refugee category illuminated by the sociology of knowledge approach, which also demonstrates how dominant frames in the area constrain scholarly understandings. Social scientists can use well-developed methodologies from the study of international migration and integration explain refugee experiences in countries of origin, transit, and destination by escaping the restrictions of the statutory refugee label. Particularly fruitful approaches include systems theory and a model of decision-making for refugee households (FitzGerald & Arar, 2018).

## 2.2.2.5. Societal System Theory

Leighninger (1977) talked about the origin of social theory through a brief history some people may view the arrival of the profiteers as flattery and confirmation that we are accomplishing something worthwhile. Some people would view it as the cost of innovation. Although systems theory as we know it now emerged in the late 1940s, its intellectual roots found as far back as the nineteenth century. This history is important to understand because it sheds light on some of the drawbacks of systems thinking. Both the classical and current phases of systems theory draw heavily on biology. Several generations of the sociological theory were born from the comparison of society to a biological organism, and the idea of the system established as a result. Herbert Spencer, an English sociologist, served as the leader of the first generation. After Charles Darwin's Origin of the Species published in 1859, it came to known as "Social Darwinism." (This designation alone is a good illustration of intellectual opportunism, given Darwin was not very interested in the social implications of his biological theories.) To highlight a society's complexity, interdependence, and capacity for evolutionary adaptation, the comparison between society and a biological entity made. This led Spencer to the realization that the only type of societal change that could occur was that which occurred at the glacial rate of biological evolution. Legislators and other well-intentioned individuals should not have planned to intervene in social issues since doing so would have had unintended repercussions and would have failed.

While Jackson (1985) illustrated the differences between the natural theory and the system theory so the well-established processes for developing and verifying theory in the natural sciences are largely responsible for science's success in describing, predicting, and managing natural systems. The clarification of inquiry methodologies appropriate to the systems under its purview is also likely to be critical to the

effective development of social systems science. Unfortunately, social systems science cannot simply adopt the effective techniques utilized by natural sciences. Hernes & Bakken (2003) indicated that, when working with social systems, systems scientists whom this run the risk of using completely wrong techniques. In the "soft" systems heritage, alternative methods of investigation been created that are better suited for application in connection to a sizable class of social systems. Even these soft systems techniques are problematic for many social systems, though. A more radical and critical approach to developing and validating social systems science is required for such social systems.

It is without a doubt one of the most influential sociological ideas of the last 30 years. It provides an integrated framework for the examination of social reality at a highly aggregated level, similar to comparable initiatives (Bourdieu, 1977; Turner, 1986).

There is no unified social systems theory, just as there is no single systems theory, according to theory history. It appears that most people agree that systems are objects that distinguished from their surroundings, and made up of at least two interconnected and distinct components. Additionally, a variety of theoretical traditions has produced systems of theoretical viewpoints that are both fundamentally similar to and incompatible with one another (Mayrhofer, 2004). The social system of any country is stable over a long period unless external influences influence it. In the case of the migration of civilians seeking asylum to the host countries in large numbers because of crises or wars, there is a change in the social system of the host country, where the basic components differ in terms of population, culture, customs, traditions, and other social forms.

## 2.2.2.6. Labour Market Theory

Concerning migration, labour market theories frequently include different or enlarged and supplemented sets of theories connected to the incidence, appearance, and persistence of unbalance in the labour market such as the host community labour market, but they essentially modify and develop the accomplishments of neoclassical and Keynesian approaches (Cain, 1976). Overall, Kryńska in 2000 illustrated three fundamental categories of theories identified as following (Jarmolowicz & Knapińska, 2011).

- Market segmentation theory is the first group, where this group of theories focuses on the main causes that led to the imbalance in the labour market. The labour market includes both the labour of the host country and the migrants hosted in that country. Such ideas include segmentation, in which the problem of labour force mobility constraint is a key factor in explaining the mechanisms causing and establishing disequilibrium in the labour market. The presence of immigrants from the labour force in the short term is sudden and uncontrollable, but over time the situation can change and a better balance is achieved in market segmentation in the long term
- The second group characterized by the unbalanced results from delayed procedures of labour market adjustment. The influx of refugees certainly affects the procedures for adjustments to the labour market,

as these adjustments need a lot of time and effort to include refugees in the formal labour market, and so on. The theory of human capital, the theory of the natural unemployment rate, and the theory of labour market search are all included in this category. These ideas emphasize the connection between labour market imbalance and limitations on refugees' mobility, particularly professional mobility.

• The third set of theories assumes that the rigidity of wages may be the root of the unbalanced labour market. It explained by theories like the insider-outsider theory and the efficient work theory. The theories concentrate on providing justifications for why some firms choose to pay employees more than the minimum wage. On the contrary, the refugee's need for work is exploit, leading employers to give minimum wages or even less. However, the topic of labour force mobility only briefly addressed here. Refugees can move from one place to another according to their chances of obtaining a job that guarantees them a decent living. It rather emphasized that employers' compensation decisions influence employee movement patterns and intensity; the greater the salary, the less likely an employee is to migrate. Accordingly, from this viewpoint, the wage structure in a specific labour market determines how mobile an employee is (Jarmolowicz & Knapińska, 2011).

# A. First group Segmentation theories

The distinction between supply and demand for labour and all related phenomena enables the identification of market segments that exhibit a high degree of uniformity. According to Jarmolowicz & Knapińska, (2011), Kryńska in year 2000 showed examples of these characteristics include the idea of restricted entry to certain industries or the division of specific segments of the labour market, between which labour force mobility is constrained. Syrian refugee can work in these sectors in Jordan, such as, construction, agriculture and general cleaning services, factories, shops and restaurants. Syrians can also work in sectors that require craft skills such as handicrafts and textiles. Due to specific requirements of heterogeneous workplaces that specifically exclude some employee groups, labour force access to these sectors may be limited. As a result, segmentation theories can be broken down into at least two key components. First, there are many tiers of the labour market, each of which offers workers a range of conditions regarding their pay and employment practices. Second, there are more people ready to work in those sectors than there are available jobs, which limits entry into those levels at least temporarily. Refugees who can work expected in this category of lower-paid work (Dickens & Lang, 1992).

The dual labour market theory and the internal-external labour market theory are two of the most significant segmentation theories. The former, proposed by Doeringer & Piore, asserts that the labour market divided into two segments, each of which is distinguish by distinct characteristics and in which employees and employers behave according to fundamentally different principles of behaviour. The labour market seen as both a single, uniform territory and as a variety of markets with various structures and features (Stoikov, 1972).

The primary sector includes steady, well-paying jobs with opportunities for advancement, whereas the secondary sector consists of lower-status, worse-paid jobs, the number of which varies in an economy based on changes in the state of the economy and the number of immigration workforce available in the country (Wachter et al., 1974).

Free access to employment opportunities on the primary market is constrained by clearly specified employment standards, a precisely defined professional career ladder, and finally, the processes for routinely evaluating employees and firing them. The purpose of the selection process used when employing personnel for the primary sector is to prevent the hiring of individuals who cannot fulfil their duties in the manner required by the demands of this sector. However, in the secondary sector, employees change occupations frequently due to the unattractiveness of the workplace. Immigrants, young employees, some women, and other people who been forced into the secondary sector predominate as indicated by Kryńska in 2000 (Jarmolowicz & Knapińska, 2011).

Dickens & Lang (1992) pointed out that their literature talks on the subject of variations among labour market sectors. The first distinction is the pay scale, which based on credentials or prior work history. It indicates that higher wages dominate the primary labour market while lower pay dominates the secondary one. Additionally, it frequently noted that other issues, such as racial, sexual, or national prejudice, have a significant influence on this situation. The group of workers with dark complexion continued to have quicker salary growth in tandem with improving credentials than the group of workers with white skin. Additionally, those with darker skin tones who began their professional careers in the secondary labour market were less ready to migrate to the primary labour market. The issue of a dual labour market was therefore, discovered at least in the American context and from the perspective of the research on racial segmentation, and this theory should be regard as having been empirically confirm or positively verified. The dual labour market theory incorporates macroeconomic considerations into its explanation of the causes of external migration. It posits that there will always be a labour shortage in highly developed nations for several jobs that, due to prestige concerns, not carried out by the residents of these nations. These jobs include hazardous ones that require difficult working conditions, little pay and minimal education requirements. Immigrants are aiming for this segment of the market (Wachter et al., 1974).

Additionally, according to Jarmolowicz & Knapińska (2011), Kryńska in 2000 demonstrated that the internal-external labour market hypothesis, another representative segmentation theory, postulates that the labour market comprises internal and exterior labour markets. When employing these categories, researchers frequently define only the first one. The areas that the internal market does not cover refer to as the external labour market, which includes all remaining areas where the internal market has not yet grown. The internal labour market characterized by employment entities, such as businesses, where remuneration and the use of the labour force are subject to ongoing rules and regulations. These are the organizational

units where stated institutional principles used to carry out market activities such as labour price determination, labour allocation, and training. These principles also establish the requirements for entering internal markets, the rights of those employed there, and the relationships between specific jobs required for internal employee mobility. Through these theories, the authorities can exploit the refugee workforce to work and fill the needs of the labour market by training them to provide the characteristics necessary to occupy them with the available jobs (Jarmolowicz & Knapińska, 2011).

#### B. Second Group Theories based on delays in adjustments to the labour market

The human capital theory is also worth presenting hypotheses that indicate large adjustment delays are appearing in labour markets. In the United States, this theory developed by Becker (1975) and published in a special edition of the Journal of Political Economy (Becker, 1990). Except for G.S. Becker, the principal proponents of the human capital theory are T.W. Schultz and T. Mincer. G.S. Becker, who felt that salary differences were brought on by differentiated equipment in a particular employee's human capital in terms of their education, professional qualifications, abilities, and professional experience, is given particular credit for the development of this idea. They gained through individual choices to invest in one's own labour force potential. A dichotomous split of labour force qualities into general and specialized ones introduced by the human capital theory. Employees with universal qualifications frequently given jobs that involved performing easy tasks and did not call for much training. Workers, however, granted prominent roles, which pays higher and characterized by less change at work (Wachter et al., 1974). Thus, we can see how one's qualifications can affect the mobility of labour resources in this situation. Employees with general qualifications may be more inclined to move jobs, whereas those with specific qualifications may frequently "stay" with their current employers regardless of the income they would earn.

Moreover, Jarmolowicz & Knapińska (2011) showed in their findings that the rate of nominal wage growth and the unemployment rate negatively correlated.

If the market operated under the presumptions of perfect competition, the unemployment rate would be zero, according to the notion of the natural unemployment rate. Natural unemployment is mostly a result of a lack of clear information on open positions and unemployed labour. In addition, labour is not very mobile and there is little competition between employers and employees. In other words, the limitations and flaws in how the free-market mechanisms operate are what produce the majority of unemployment. Because of this, the natural unemployment rate hypothesis grouped with other theories that emphasize the length of the adjustment phase (Jarmolowicz & Knapińska, 2011).

Additionally, Jarmolowicz & Knapińska (2011) indicated that according to Kryńska in 1998 study. The labour market search theory is another notion that fits into the trend of theories about "certain delays. It also fits into the trend of the so-called new microeconomics, which has abandoned one of the fundamental tenets of perfect competition in the labour market, namely the requirement of complete information access for

both transaction parties. The effect is that the job market is no longer transparent. In this situation, neither the employers nor the employees are fully aware of the circumstances (particularly concerning pay) in other businesses and locations. Employees must consider potential benefits resulting from the relationships between wages in enterprises in closer and more distant environments as well as the most comprehensive information on wages in the largest number of companies to make the best decision regarding their professional careers (in the geographical sense). They must spend a lot of time looking for work to make their decision logical and potentially the most profitable. There are always those workers who want to be shortly jobless to hunt for better employment opportunities. This explains that the refugee workforce cannot wait until job opportunities with a distinct income are available, as they are in dire need to provide their daily strength, which makes them always under the pressure of secondary work, which characterized by prejudice, racial discrimination, low wages and long working hours (Jarmolowicz & Knapińska, 2011). Finding linkages between the microeconomic theory of how people find and offer jobs (together with the accompanying mobility processes) and the microeconomic relationships between inflation and unemployment has received a lot of attention in the search theories on the labour market (described by the Phillips curve). The efficiency of the hiring and job-searching processes has taken centre stage as the most crucial concern. The effectiveness of the search process grows in both areas together with the size of the labour market. The larger the labour market, the greater the link between information costs and potential earnings. In other words, the fewer benefits from the search process there are, the more partial the labour markets (sectors) are, and the less efficient the search process itself is, the higher the level of unemployment is (so-called "search unemployment,") or (and) the fewer jobs are available (Jarmolowicz & Knapińska, 2011).

## C. Third Group Theories based on wage inflexibility

According to theories based on wage inflexibility, wage rigidity is what leads to an unbalanced labour market Jarmolowicz & Knapińska (2011). The efficient work theory, also known as the motivating job theory, the efficiency-shaping pay theory, the theory of work versus efficiency, and the pro-efficient wage theory are all examples of this trend (Wojtyna, 2000). According to this theory, businesses set fixed wages higher than the wages necessary to maintain market equilibrium. It is considered that employment does not imply that a person would perform their job effectively and efficiently. Therefore, the employer is keen to provide a higher wage than the market wage to increase this efficiency (Wozniak, 2010).

However, according to Wojtyna (2000), in contemporary economic thought, there can determine four main concepts explaining the creation of motivating wages, which emerged in the '80s of the twentieth century (Wojtyna, 2000; Wozniak, 2010). The first of them is called the model of 'idling' or 'idling at work" and C. Shapiro and J.E. Stiglitz formulated it – it argues that wages defined at levels much higher than the labour market balance wages are an instrument to discipline employees (Shapiro & Stiglitz,1984).

Employees' usefulness equals their pay in term of putting in the bare minimum of effort, however, if they overextend themselves and caught then their usefulness reduced to the amount of their unemployment compensation. Although the prospect of being fired serves as a motivator, employees may not respond as effectively if other employment opportunities exist Wojtyna (2000). The model of the staff fluctuation rate, which Salop (1979) first discussed in the literature. Shapiro & Stiglitz (1984) suggests that maintaining wages above the equilibrium level may be advantageous given the high costs associated with changing jobs. This is the second idea related to the efficient work theory. However, pay increases are lucrative up to the time that rotational savings equal the additional expenses brought on by wage increases.

The model of negative selection, created by (Weiss in 1990) is the third strategy within this notion. It predicated on the idea that employees might be better or worse and that businesses desire to hire only the better ones while offering them higher wages. Additionally, it expected that the workforce is not uniform. As a result, one of the crucial roles of pay is the selection of workers during the hiring process; pay levels above the level of market equilibrium enable the hiring of superior workers. Therefore, by paying greater wages, employers are selecting individuals who are inefficient (Wozniak, 2010). However, it is a hint that an applicant does not have the required credentials if he or she is eager to accept a position with the organization at a lesser salary. The reaction to the unpleasant shock, which would be to cut the pay to market level, would simultaneously pose the risk of the best people quitting their jobs (as it is the easiest for them to find new jobs). However, if the adjustment is purely quantitative (i.e., dismissals), then the managers' actions will determine the "quality" of the fired workers (Woityna, 2000).

The gift exchange model created by Akerlof (1982) and the fair wage model produced by G.A. Akerlof and J.L. Yellen comprise sociological principles as the final method of explaining the occurrence of motivating wages (Akerlof & Yellen, 1990). These ideas suggest that if workers receive pay that is above the typical salary for the type of work, they do and believe that their compensation is fair, they will work more effectively and with greater dedication. According to G.A. Akerlof, as stated by E. Kwiatkowski, an organization receives a "gift" from its staff in the shape of dedication that goes beyond the required minimums, whilst the staff receives a "gift" in the form of better pay (Akerlof, 1982).

According to the "a fair salary for fair work" paradigm, if workers believe they being treated unfairly, they will put forth less effort and dedication, whereas if their pay is higher than that of a comparable set of workers, they will be inspired to put up the greater effort. The tendency to keep salaries relatively high stems from worries that if they were to decline, employee dedication and productivity would drop. Employee utility maximized in this model, where the important role of the relationship between the received salary and the wage seen as fair and the level of unemployment. Similar to earlier models, a wage excess over the market equilibrium wage will result in real pay stickiness and mandatory unemployment (Wojtyna, 2000).

The insiders-outsiders idea put out by Lindbeck & Snower (2001) is a different theory that fits into the stream of theories explaining the unbalance in the labour market through the inflexibility of wages (Lindbeck & Snower, 2001). The fundamental strategy for explaining the problem entails categorizing the workforce into insiders and outsiders (Jarmolowicz & Knapińska, 2011). These classifications correspond to groupings of employees who are members of trade unions (insiders), employees who are not members of trade unions, and unemployed employees (outsiders). It believed that this split is not define probably because the primary differentiating factor is each group's capacity to influence the result of compensation discussions. The position of insiders is comparatively strong and safeguarded by the existence of notable expenses associated with acclimating new employees to their workplaces, such as costs associated with recruitment, selection, and training, as well as costs associated with firing existing employees. Therefore, since they shielded from direct competition by the barrier of the employer's exchange costs, outsiders can only indirectly affect the probability of insiders losing their jobs and lowering their pay (Jarmolowicz & Knapińska, 2011).

The natural unemployment rate and the NAIRU rate are not interchangeable ideas; there are significant variations between them. Although both notions pertain to the idea of balance unemployment, the first one incorporates several additional neoclassical trend assumptions and implies flexibility of prices and wages in a short period (perfect competition, recommendations to apply instruments of the monetary policy to shape the actual unemployment rate outside the balanced state). The NAIRU concept, however, based on neo-Keynesian foundations (such as imperfect competition and suggestions for using economic policy to influence total demand) (Wozniak, 2010).

#### 2.2.2.7. World System Theory

Leiss (1977) proposed the world systems theory. He considers the best distribution of resources, including capital and goods, between the central regions of the entire economic system and its constituent peripheral and semi-peripheral regions. According to the world systems theory, migratory processes are explain in terms of interactions between various societies. It asserts that migration is a major factor in how civilizations as a whole change. In this regard, the world systems theory provides a global definition of migration flows, trade, foreign direct investment, and refugee's workforce are examples of mobility variables flow that are part of international interaction between nations and frequently result in differences in the economic standing of those nations. As a result, nations with more developed economies draw immigrants from those with less developed economies.

In theory, investigations that identify a person's refugee situation on arrival, instead of using nationality as a proxy, could reasonably tease out the outcomes of being a forced immigrant. For example, such impacts may differ for refugees who directly escaped violence compared to family members supported later under immigrant family reunification conditions (FitzGerald & Arar, 2018). While Pedraza-Bailey (1985)

illustrated how various waves of refugee, migration from the exact place can affect by different elements so that the refugees of the same nationality cannot be consider pursuing the same phases over time.

Massey et al. (1993) concluded that the movement of production and market elements, such as labour, capital, and goods, improves the effectiveness and profitability of the overall system. He also indicated that companies start looking for mineral raw materials and lower labour prices abroad as the mineral raw materials in wealthy countries start to run out and the labour costs rise. In actuality, this causes a flow of capital and goods from the centre to the edges. As a result, the migration of people in the other direction occurs naturally. Moreover, according to Massey, the world systems theory cannot be categorize as "macroeconomic" because it has little to do with wage and unemployment differences between nations. Instead, it combines societal and economic views, creating a sort of crosscutting worldview.

World systems theory focuses on the structure of the global market, particularly the "penetration of capitalist economic relations into peripheral, non-capitalist societies," which occurs because of the coordinated actions of neo-colonial governments, multinational corporations, and national elites. This focus is different from that of national economies, which are more concerned with labour markets. Land, raw commodities, and labour from countries of origin brought into the global market economy, disrupting established systems, which leads to international migration. International migration made easier by globalization's impact on transportation, communications, and cultural and ideological connections. According to this theory, policies regarding foreign investments and the global flow of capital and goods have a greater impact on international migration than wage or employment differences between nations (Russell, 1995).

Depending on the degree of colonial and semi-colonial penetration to which they have been subjected, structural-historical and world systems theories can explain why migrant patterns originate in specific regions of the Global South. These hypotheses are less effective at explaining why some groups of people and communities in particular labour-exporting nations are more vulnerable to these influences. For this intent, a more empirically based framework is required. The "new economics of migration" formed to overcome this deficit. It contends that family mobility, rather than personal migration, is the solution to the economic uncertainties caused by incompletely established markets in regions impacted by the infiltration of capitalist businesses and other institutions (Portes, 1997).

Zlotnik (1998) observed that labour and capital typically flow in opposite directions. Due to a decline in interest in jobs in the manufacturing sector, which brought on by a structural shift toward a service-based economy, central regions require low-skilled workers. In contrast, as the economy begins to import capital, the demand for agricultural labour in the periphery decreases because of a more capital-intensive sector. Low-skilled employment is what forces the surplus of farm workers to migrate to the central region (in the manufacturing or service sector).

The area of refugee examinations and theories is a more recent scholarly effort with its research centres, journals, professional associations, and research paradigms that concentrate on the situations of refugees, their promoters, and legal scholars. In the 1980s, academics were established primarily in the United Kingdom and shaped the specialization around the belief that refugees are fundamentally various from migrants due to the push factors that drive their motion and the states' special legal burdens to protect refugees in the post–World War II regime (Richmond, 1988; Black, 2001; Van Hear, 2012).

When studying past metropolises and their colonies in this context, Jennissen (2004) concluded that, the latter enjoyed a competitive advantage in terms of trade. Jennissen (2004) further emphasized that the world systems theory's perspective on global commerce viewed as contentious because free trade believed to lessen income and employment gaps, which in turn reduces migration.

According to Bijak (2006), he indicated that the world systems migration theory, migration is a normal by-product of capitalism's development and the expansion of the global market. It argued that global free trade lessens movement between capital- and labour-intensive nations since the latter import labour-intensive items, which boosts employment in the former and decrease net migration. However, the world systems theory asserts that the factors brought on by market dynamics and the world economy are the most important in promoting migration (Bijak, 2006). The effects of wage and unemployment differences balanced by the flows of capital (or capital-intensive products) in the other direction. Jennissen (2004) highlighted how the world systems theory aids in a better understanding of the migratory patterns between far-flung nations. The world system theory designates that foreign investment influences outward migration by undermining the traditional peasant economies of low-income countries.

Different studies discussed the forced migration case in light of the world system and social theories. They indicated that foreign refugees must also steer pressures with the host community in public spaces and organisations in ways that encamped refugees do not instantly face. Hence, they are segregate and ease their influence on the economic and social aspects of the hosted countries (Pavanello et al., 2010; Zetter & Deikun (2010). Entry into the informal economy raises the risk of labour exploitation Jacobsen (2006), even as it can propose new opportunities for entrepreneurship. Many small enterprise opportunities are unrestricted in refugee niches that occasionally spatially affixed as enclaves, including in camps (Portes, 1995).

The world systems theory views migration because of globalization and a way to modify the way the world's markets are structured (Leiss, 1977; Sassen-Koob, 1984; Massey et al., 1993; Kurekova, 2011).

While international migration, according to Kurekova (2011), is a result of some structural labour market disruptions brought on by a growth in manufacturing and agricultural exports as well as the capital movement in the form of foreign direct investment from developed to developing nations. Therefore, capital

mobility is essential to the global system Kurekova (2011). However, capital and labour mobility always connected in some way, and they said to be the two halves of the same coin (de Haas, 2008).

Favell (2008); Kurekova (2011) stated that although the world systems theory was still prevalent in works by writers like Castles & Kosack (1973), it was not as prevalent as it had been in earlier years. It primarily results from a dearth of testable theories Bijak (2006); Kurekova (2011). As noted by Bijak (2006), the stylized facts served as the foundation for the development of the world systems theory (i.e. empirical evidence). Meanwhile, Betts (2013) presents the concept of survival migration for forced immigrants. Which has the values of breaking down the political/economic contradiction and identifying the agency of those who relocate while catching the point that some people are encouraged to move by existential stakes preferably than the urge to maximize consumer utility or some lesser objective in the hierarchy of needs. Furthermore, some scholars with reliance on different aspects of world systems theories presented to discuss the case of migration and forced migration-related issues have recognised that the context of reception for refugees is different. For example, for decades the US government feted Cubans more favourably than other groups (Portes, 1997). Luthra et al. (2018) studied the integration in the Europe and they found that after using the appropriate rules, national-origin populations with high levels of refugee entries do not have appreciably different educational, political and economic outcomes than other sorts of immigrants. The legal level of people may be more significant over time than the subtle, temporary resettlement advantages.

# 2.2.2.8. Migration Network Theory

The network migration hypothesis postulates that migrant social networks are crucial in understanding why there is continuous global movement (Massey, 1988; Massey et al., 1993; Kurekova, 2011). The network theory of migration, due to Massey et al. (1993), examines the elements that contribute to continual mobility over time and place. Forthcoming every new immigrant strengthens the relationships he or she already has with the endpoint of their destination. These connections enable newcomers to find work and support in host nations. At some point, as the number of network ties increases, the phenomena become self-sustaining. Every new immigrant lowers the cost of subsequent migration for a group of friends and family members, encouraging some of them to move abroad. This increases the number of people with connections abroad, which in turn lowers the cost of subsequent migration for a new group of people, encouraging some of them to move abroad, and so on. Migration networks regarded as a viable source of income (i.e., risk diversification strategy). It believes that highly developed migrant networks greatly benefit most community members in finding employment at their new location, making emigration a dependable and stable source of income. Additionally, a progressive drop in cost implies a continual reduction in migration risk. Therefore, such results are expansion of self-perpetuating networks (Massey et al., 1993).

Massey et al. (1993), van Meeteren & Pereira (2018) and de Haas (2021) defined in different related studies that the migrant's network consists of old migrants who encourage people from their old country to seek

refuge in the host country by providing jobs. Thus, giving them the opportunity of establishing a new life in the host country and possibly gain the nationality of the host country or gain a permanent residence permit allowing them to be treated as the natives. People who are seeking to establish a new life and build a future career use this concept. Sociologists such as Massey et al. (1993) have observed that the first migrants from a community usually come from the middle class, and are the individuals who have enough resources to absorb the costs of the trip, but are not so affluent that foreign labour is unattractive.

Additionally, it explains why migration processes continue in the absence of some conventional (i.e., neo-classical) causes, including pay inequality or favourable labour market laws. The migration network theory has developed into a set of concepts and ideas that defined and has taken centre stage in the literature on migration (Massey et al., 1993). Those with a social connection to migrants, non-migrants, and previous migrants in both the sending and receiving nations form migrant networks (Massey et al., 1993). These connections are the result of links to family, friendships, or mutual interests (e.g., shared community origin). They are viewed as a type of social capital that promotes access to global labour markets in that environment (access to information, resources etc.). According to some, migration networks reduce the expenses and dangers associated with moving (Massey et al., 1993). For it to occur, the number of migrants must first reach a critical level, which will increase migration and widen the network of migrants. In that setting, migration processes frequently transform into social structures that partially self-replicate and "expand outward to embrace greater elements of the sending community" (Taylor, 1986; Massey & España, 1987; Massey, 1990a, 1990b).

VanWey (2000) showed in review of Thomas Faist paper of international migration in year (2000) discussed migration trends in terms of the distribution of migrants among nations, a topic widely known as migration regimes by Dustmann et. al. (2005) noted how the existence of diaspora networks is likely to have an impact on migrants' decisions about the choice of destinations.

Network theory is extremely helpful in describing the durability of global migratory movements through time (Jennissen, 2004). The network theory helps explain why international migration flows may even rise when the initial migration incentives decrease or vanish, in contrast to many other migration theories. Furthermore, Jennissen (2004) stated that the absence of the factors necessary to trigger migration—such as physical danger—in the sending country prevents migratory flows from continuing on a big scale and in an unbalanced direction. He uses the comparison of labour migration from and to Germany between Turkish and Italian workers as an example. When compared to migration flows between Italy and Germany, migration flows between Türkiye and Germany dramatically increased after November 1973 (when the "Anwerbestopp 1973" passed). However, as Jennissen (2004) emphasized, the disparity cannot figured solely through the lens of theories (conceptual frameworks) that explain the continuing migration flow (i.e., its persistence). The first factors driving labour migration that lasted after the passage of the aforementioned

"Anwebestopp 1973" regulation were crucial in comprehending these patterns. It turns out that whereas the disparity in economic conditions between Italy and Germany had substantially closed by 1973, Türkiye had not been able to lessen its "economic backwardness" in comparison to Germany. In addition, Türkiye's economy got worse (after 1973) because of the nation's political unrest (Jennissen, 2004).

According to Gathman (2004) when migration costs are high, to begin with, the first network effects will increase migration opportunities more for the middle and upper-middle classes. Migration and forced migration may therefore increase inequality at first, as the upper middle of the distribution gets wealthier from remittances received by refugees. However, as the network grows larger and migration costs continue to fall, we see from the Low-Cost scenario that further reductions in migration costs will benefit primarily the lower and lower-middle classes in the village, which will reduce inequality of the wealth level in the society of immigrants Gathman (2004). While Mckenzie & Rapoport (2007) showed that as they do not yet have any connections to depend upon, first time forced migrants who move to a new destination country typically, incur high migration costs. Later on, as the networks are well established, migration becomes more affordable for incoming migrants who conducted an empirical study on migration from Mexico to the United States and discovered that as communities expand through migration networks, wealth typically loses its significance as a barrier to individual movement. The destitute are hence more prone to emigrate. Moreover, In a recent study that was conducted by Mckenzie & Rapoport (2007) in a study that was considering the possible effect of migration networks on the dynamics of forced migration and inequality and how it affects the country of Mexico which has been witnessed to harbour an increasing number of immigrants from neighbouring countries. Additionally, they illustrated that as community migration and refugee networks grow, wealth becomes less of a constraint on individual refugees, and the poor become more likely to migrate. At high levels of migration prevalence, we find that this forced migration leads to a reduction in inequality. Large networks spread the benefits of refugees to members at the lower end of the consumption and wealth distributions of the community, thereby reducing inequality. Nonetheless, they also found some evidence that forced migration benefits the upper-middle of the consumption distribution when networks are low and found suggestive evidence for a Kuznets relationship with migration increasing inequality at lower levels of migration stock and then reducing inequality as one approaches the migration levels prevailing in the MMP communities. Furthermore, they stated that international forced migration is costly and that initially, only the middle class of the wealth distribution may have both the means and incentives to migrate, potentially growing inequality in the forwarding society. However, the migration networks that been formed reduce the costs for prospective migrants, which can reduce inequality. This paper demonstrates that fortune has a nonlinear effect on migration, alike empirically and theoretically, and then analyses the empirical evidence for an invertible U-shaped connection with both emigration and

inequality in rural sender's societies in Mexico. We discover that the general effect of migration is to reduce income inequality throughout societies with a substantial amount of previous migration after instrumenting. According to De Haas (2010), this theory explains how migration affects and modifies the developmental space that is connected to migration processes de Haas (2010). In that regard, migration affects the economic, institutional, social, and cultural traits of the "ends" that receive and send migrants. Migration systems theory has far more to do with geographic sciences, as noted by Castles (2010), whereas migration network theory has its roots in anthropology and sociology. This does not imply, however, that neither theory affects other areas, such as the economy. Indeed, the networks and Diasporas' effects on the economy are pervasive (Buch et al., 2006).

The crucial significance of interpersonal connections between migrants and non-migrants explored by migration network theory. To put it another way, there are specific connections between the countries of origin and destination that cause migration flows. Castles (2010) pointed out colonial relationships, international trade, and foreign direct investments as potential links of this nature.

In contrast, the theory of migration network systems contends that migration affects the entire social and developmental environment at both the origin and destination, or more precisely in the tangible areas where it occurs (de Haas, 2008, 2010).

Network theory and another conceptual framework, especially Mabogunje' study of migratory systems, have a lot in common (Mabogunje, 1970).

Kurekova (2011) observed that conceptually speaking, the circular cumulative causation perspective and migratory systems theory have a lot in common. According to both ideas, migration is a phenomenon that sustains and propels itself.

## 2.2.2.9. Neoclassical Theory

Galor & Zeira (1993) highlighted the importance of heterogeneity in the determination of macroeconomic activity, in contrast to the representative agent approach that dominated the field of macroeconomics for several decades. It has presented a fresh perspective that heterogeneity, and hence income distribution, is crucial in determining overall economic activity and growth both in the short and long term.

While according to Bauer & Zimmermann (1999) the origin of the Neoclassical theory was Adam Smith in (1776) and Ravenstein (1889), who created and developed the neoclassical method of migration analysis. This model's central tenet is that, given a financial limit, people maximize their utility. Wages are the topic of the main argument. Geographical disparities in the demand and supply of labour markets are a major reason for migration. In contrast to locations with a strong supply of labour relative to capital, which faced with low equilibrium wages, regions with a scarcity of labour relative to capital characterized by high equilibrium wages. Due to the wage gap, people move from low-wage to high-wage locations. What migrations theories such as world systems and similarly added is that in the long run, such factors get the

balance right, so people will not have not incentive to migrate in the long term. However, even in developed countries, migration happens, and therefore, other theories attempt to explain that migration is a neverending process.

Constant & Massey (2002) conducted a comparative study between the neoclassical and innovative economic theories of labour mobility. The former presupposes that people relocate permanently abroad to maximize their lifetime profits, whereas the latter presupposes that they do so temporarily to address market weaknesses in their home country. As a result, the conceptualizations of return migration produced by the two models are highly dissimilar. On the contrary, Dustmann (2003) believes that the neoclassical static model projections frequently do not match up with empirical data. Analysing, for instance, the rise in black migration from the southern US to the north between 1915 and 1960, which happened despite a narrow wage gap. They argue that a dynamic model with endogenous movement costs can account for these migrations adequately. This related to endogenous growth. Economic growth is based on an endogenous factor (such as technical progress, or innovation), which enables long-run steady growth.

Since there are already fewer constraints on international migration within the European Union, neoclassical economic theory utilized to explain these patterns. So, if the refugees have a fast and simple reaction to the conflict, why they are not returning? Why the refugees still are travelling to host countries? That led to long-run equilibrium, as neoclassic theory addresses (Jennissen, 2004).

Kazlauskienė & Rinkevičius (2006) mentioned the main preconditions of the neoclassical macro-level migration theory. International labour migration is a result of pay disparities between nations. Migration will halt when these differences disappear. The migration of the highly skilled labour force, or the international flows of intellectual capital, is a response to the variations in intellectual capital return that can vary due to the general level of job payment, thus influencing a very different migration character that can be in contrast to the migration of unqualified labour. Additionally, the mechanics of labour markets have a substantial impact on international labour flows; other types of markets have little bearing on such migration and the government can manage migratory flows by controlling or influencing the labour markets in the nations that import and export labour.

De Haas (2008) found shortcomings in the theories used for migration research. Where he comments that people's aspirations play a vital role in determining their inclination to migrate, such factor generally overlooked by neoclassical, structuralist, and push-pull theories, which presume that needs are essentially stable. Since aspirations are often not constant, the perception of "overpopulation" concerning available local economic prospects frequently depends on the amount of aspiration. Kurekova (2009) analysed the salary differences between the EU8 the UK and Ireland and their connections with migration patterns after UE enlargement in 2004.

In addition, De Haas (2010) observe that neoclassical, "push-pull," and other place-utility migration theories assume a negative linear relationship between sending countries' development and migration and that many studies consistently apply this assumption. Then he describes the neoclassical theory as the most well-known and sophisticated use of the functionalist social science paradigm in migration research in his study. Cesaratto (1999) and De Haas (2011) addressed that Neo-classical economic theory uses regional variations in labour supply and demand to explain migration at the macroeconomic level. Neo-classical migration theory sees migrants as autonomous, logical, and income-maximizing individuals who choose to relocate based on a cost-benefit analysis. They are supposed to go where they can be the most productive, that is, where they can earn the highest salaries, presuming freedom of choice and complete access to information.

This study demonstrated that the theories can't give a complete explanation of migration Bonfiglio (2011) Neoclassical theory and other functionalist theories, as well as historical-structural theories like conflict theory, see migration primarily as a reaction to imbalances and inequality, meaning that a sedentary global society is characterized by an equilibrium and equality state. Many theoretical and empirical approaches also frequently fail to describe how migration flows structured and change over time, as well as fully take into account sending-country policies, non-economic factors describing, and exploring migration dynamics. These approaches also tend to concentrate on a single category of migrants, such as "refugees" or "labour migrants," and to label them as either "refugees" or "labour migrants." In addition, Xu (2011) under the neoclassical economic theory considers that migration is a sort of investment meant to boost a person's human resource productivity and optimize perceived utility as determined by the present value of a future revenue stream. This view holds that recently arrived immigrants would choose whether to remain in their initial location or move to locations with the highest predicted net return. The labour market circumstances (especially wages and employment possibilities) at both the possible origin and destination related to the predicted net return. Galor (2011) pointed out that the representative agent paradigm, which had predominated macroeconomics, implicitly rejected the classical theory. The influential neoclassical method disregarded heterogeneity and, thus, the income distribution for macroeconomic analysis. It implied that the association between apparent inequality and economic growth represented the impact of growth on income distribution. Over the past two decades, theories and subsequent empirical data have shown that income distribution has a significant impact on the economic process, challenging the neoclassical perspective.

Massey et al. (1993) conclude that the neoclassical theory contends that individuals migrate to a country because of its economic prospects (such as higher income) to maximize their utility. The neoclassical method assumes that people who migrate are rational and have perfect information. Additionally, there is no future uncertainty and complete employment. The neoclassical theory used to explain international trade.

T-factor price equalization will result from economic integration in the form of increased movements of goods and services or increased factor mobility under certain constrictive assumptions (such as perfectly functioning markets, the absence of transaction costs regarding the exchange of goods and services, and restricted factor mobility). This provided that countries are sufficiently similar in terms of their factual basis.

De Haas et al. (2015) addressed that many migration theories offer contradictory hypotheses about the factors that influence return migration. At the same time that the new economics of labour migration sees return migration as the logical stage after migrants have amassed enough assets and expertise to make investments in their places of origin, neoclassical migration theory collaborates migration with failings to incorporate at the location.

Verme (2017) the study makes the case that the solution to the issue lies in modelling utility, choice, risk, and knowledge in a short-term context. The job of modelling forced displacement is now feasible thanks to recent advancements in game theory, neuroeconomics, and behavioural economics, which lack some of the necessary theoretical components in neoclassical economics. Empirics is undoubtedly constrained by the dearth of high-quality data, but this illustration demonstrates how welfare economists can begin using available data.

Goyke & Dwivedi (2018) found that the disequilibrium perspective of neoclassical theory would have predicted that there would be an increase in the number of primary migrants (those who do not return to their homeplaces) going to urban regions and a shift toward childless, single migrants with high human capital. A modified gravity model would also forecast a growing concentration of urban-bound migrants in fewer, larger metropolitan hubs. They believe that the concentration of migration in major urban centres is responsible for the rise in the proportion of female migrants to urban areas. Women are more likely to hold college degrees than men are, and they are better equipped to participate in urban economies.

FitzGerald & Arar (2018) showed n models of labour migration, a strategy based on neoclassical economics adds security against violence to the economic utility people pursue (Morrison, 1994). Violence and poor economic conditions can reinforce one another on a macro level (Zolberg, 1989). The extent to which quantitative studies support various economic theories for refugee movements varies. Moore & Shellman (2007) studied incomes and GDP per capita in the nation of origin. Neumayer (2005) found to GDP was adversely correlated with refugee movements.

According to Hunter & Simon (2023), neoclassical arguments based on the premise of utility maximization and rational choice, in which people viewed as independent economic players and migration been influenced by a cost-benefit analysis.

# 2.3. Hypotheses Formulation.

# Hypotheses related the economic impact of refugees.

#### Refugee's Effect on GDP. H1.a.

McCarthy & Vernez (1997) Study indicated that following the belief that immigrants on intermediate have less capital per capita than residents, immigration decreases technological advancement as well as the rate of growth of the economy. The difference in findings on the effect on the GDP from refugees is noteworthy. In addition, McCarthy & Vernez (1997) concludes by noting that immigration and economic trends in California are on a collision course. The wave of Syrian refugees influences the Turkish economy and society positively through various channels, like public finances. However, Gatina (2014) proposed that immigrants from wealthy countries could affect positively the hosting country's GDP, especially if they had a proper income before migration and had earned some wealth, which such thing can provide them further income in the form of bank interest or dividends and increase their ability to accumulate more savings. On the other hand, Bosetti et al. (2015) show that highly skilled immigrants have a positive effect on the innovation capacity of the recipient countries both for industries of innovation and knowledge sectors, which reflect positively on the hosting country's economy. Akgündüz et al. (2015) pointed out a negative relationship between refugee inflow and economic growth that the increasing number of Syrian refugees to Türkiye after the Syrian civil crisis led to an increase the amount of demand for goods and services, therefore increasing the inflation and by default affected on the economic growth synchronic. However, Taylor et al. (2016) concluded in his study of refugees in Rwanda for the period of 2015, that the growth in refugee demand increases host-country incomes and spending, such things lead to the generating of additional rounds of spending effects in the local economy of hosting countries. He also indicated that hosting refugees in camps requires different sorts of services to be provided, salaries to be paid for staff responsible for assisting refugees (e.g., U.N. staff, Medical teams. etc.) and other supplies to run the camp. Such expenses lead to an increase in the burden on the donor countries alongside the agencies and especially the hosting countries nonetheless. However, due to the international aids sent to hosted countries, such process can affect positively on their economy. In this sense, Esen & Binatli (2017) pointed out that since 2011; Türkiye has provided help to Syrian refugees under transient protection, amounting to 1% of the GDP, however, it still insufficient to serve the refugee' needs, and cover the hosting country' expenditures. Nonetheless, Baloch et al. (2017) indicated that the refugee inflow carry significant economic implications both positively and negatively for the host country based on the hosted countries' economic status. In addition, his study of Afghan refugees in Pakistan's estimated outcomes yields evidence that Afghan refugees have a positive impact on the economic growth of Pakistan, both in the short and the long term. Fernández-Reino et al. (2018) in his study of immigrants in Spain for the period 2008 to 2014, showed that Spain's GDP following the significant inflow of immigrants in yearly 2000s aggregated almost 9% between

the years 2008 to 2013, in synchronize with the financial and economic crisis hit Spain. Moreover, Holler & Schuster (2020) indicate costs of registration, processing of asylum applications, the requirement of basic needs and shelter, integration measures, the initial basic welfare aid, handling and management, and integration of refugees are other sorts of costs affiliated with the refugee inflow process that affect hosting countries' economies.

Comprehensively analysed the influence of refugees on the Gross Domestic Product in Tourism (GDPT). Butnaru et al. (2018) analysed the period of 2000-2016 years and 26 European Union countries and found that the convergence process of GDPT per capita was fairly slow and oscillating, alternating periods of conjunction with those of divergence. Additionally, Lin (2019) illustrated that there is a positive connection between the cultural diversity of immigrants and economic growth due to the cross-country differences in educational sectors and the resultant cultural contrasts in skill endowments and workers' comparative benefit across tasks. Khan et al. (2019) as well indicated that the remittance inflow related to migrants and refugees in Pakistan affected positively on economic growth in the long term by motivating migrants to transmit remittances via proper channels to Pakistan so that inflows of remittances appropriately used in profitable investments. However, David et al. (2020) in his study of Syrian refugees in Lebanon after 2011, indicated that the inflow of Syrian refugees results in a marginally positive effect on Lebanon's economic growth, through the reinforced humanitarian aid, flows from international organizations and countries as a support for the economy for receiving the refugees. While Rocha et al. (2020) indicated in his analysis of the Venezuela case from 2005 to 2020, that the migration of Venezuelan citizens abroad affected the gross domestic growth by reaching (-30 per cent) by the year 2020.

Nonetheless, AlShwawra (2021) Through his study of refugees reside in Jordan indicated that obtaining refugees could lead to losses stashing from upholding the refugees out of the developing revolution of the host country, as well as the cost of space, benefits and employees demanded to deliver the basic livelihoods for them. However, no negative impact indicated.

Overall, we propose the following hypothesis **H1.a.** The Refugee's positively impact the level of GDP of the host country.

## Refugee Effect on Foreign Direct Investment (FDI). H2.a.

Sassen-Koob (1984) also pointed out that one of trait of industrial development in the major new immigrant-sending countries is the importance of export production and such thing leads to the development of a world market for these countries, which in return jointly linked to substantial growth in FDI of receiving country. However, it affects in negative side on weak economic' countries that host immigrants through decreasing export and import due to insufficient growth in demand. Kugler & Rapoport (2007) suggested that both Foreign Direct Investment, FDI, and migration are substituted and negatively connected to each other's, in which more migration rates in hosting countries lead to less FDI rates and conversely the more experienced

emigration will lower the ratio of skilled home residents and act as a deterrent to FDI. Furthermore, Sanderson & Kentor (2009) showed that capital flows influence growth first, with the latter guiding to a substantial change in a migration flow in the state of negative impact. Federici & Giannetti (2010) also indicated in his results that there is indirect connection between migration and FDI, in which migrant workers provoke FDI inflows in their origin country.

Moreover, Javorcik et al. (2011) study performed for the United State of America covering the years 1990-2000 indicated results that propose that US FDI abroad correlated positively with the existence of migrants from the host country. Therefore. The analyzed data additionally display that the connection between FDI and migration is more powerful for migrants with tertiary education. However, Nijkamp et al. (2011) confirmed in his paper on immigrants worldwide that there is a positive connection and impact of immigration on FDI, especially if the number of highly skilled immigrants and migrants is increasing.

Nonetheless, Burchardi et al. (2016) demonstrated an indirect relationship between immigrants and FDI in the United States of America covering the years 1880, 1900, 1910, 1920, 1930, 1970, 1980, 1990, and 2000 waves of the US census, and the 2006-2010 five-year sample of the American Community Survey. For an average US county, the significant increase in number of individuals with ancestry from a certain origin country has increased by 4 percentage points the possibility for at least one company from this US Country to participate in FDI with the origin country. In addition, increases by 7% per cent the number of regional jobs at subsidiaries of firms headquartered in the same source country Burchardi et al. (2016). When Khan et al. (2019) indicated that, the remittance inflow related to migrants and refugees in Pakistan indirectly affected foreign direct investment in the long term. Additionally, Comolli (2019) in the case of Mexican immigrants in the United State of America concluded that the specific factors of trade theory's forecasts as unskilled labour did display substitutability with capital flows and support the theoretical connection of skilled labour and FDI sharing a statistically significant relationship. Illustrating that immigrant's effect on FDI is in relying on their skills as workers within the hosting countries.

Additionally, David et al. (2019) pointed out that humanitarian aid includes a growth in the real exchange rate ('aid' and 'large' aid methods in comparison with the 'deposed' scenario). Therefore, the resulting price increase initiates a 'Dutch disease' influence, which clarifies the moderately limited effect on the growth of aid flows in Lebanon's economy. Mayda et al. (2022), in the study of refugee's impact on foreign direct investment in the United States of America for the period of 1990 to 2000 and from 2005 to 2015, indicated in their analysis that a 10% growth in refugees increases external FDI flows to their countries of origin by 0.54%. FDI projects by 0.24% and FDI jobs by 0.72%. In addition, there is a positive influence on FDI as it is highest for refugees.

Therefore, we propose the following hypothesis **H2.a.** The Refugees have a negative impact on the foreign direct investment of the host country.

# Refugee Effects on Gross Domestic Savings. H3.a.

Carroll et al. (1998) showed through their study of immigrants in the United State of America from 1980 to 1990 illustrated that immigrants from good socioeconomic status countries do have higher saving rates than immigrants from low socioeconomic status countries, which eventually imply a significant impact on the hosting country's saving patterns. However, Swaleheen (2008) in his paper highlighted that the urbanization ratio and the old and young reliance ratios have a considerable negative effect on the saving rate while the population growth rate of both locals and foreigners influences the saving rate positively. Gatina (2014) indicated that there is a negative connection between local household saving rates and immigrants' saving rates in the case of Australia and that is either because remittances were not assume due to the absence of data or by the shift in immigrants' saving habits behind migration. Also suggested that there is a negative connection between the national household saving rate of the hosting country and immigrants' saving rates, due to the unaccounted remittances or changes in saving habits for the immigrants after immigration (Gatina, 2014). While Dadush (2018) illustrated that there is a positive effect of hosting Refugees on Domestic savings, since it can assist in the expansion of various sectors such as utilities and construction (electricity, water, etc.) and that will lead to improving the capital building which can be financed from the increased domestic savings or expanded capital flows from abroad.

Khan et al. (2019) as well indicated that the remittance inflow related to migrants and refugees in Pakistan affected positively the gross domestic savings in the long term through the transfers sent from different channels by the migrant's families. Moreover, Lin (2019) does find evidence of the positive wage influence of foreign STEM inrush on college natives, especially for individuals in high social occupations, since migration flows are endogenous. David et al. (2019) also illustrated that humanitarian aid includes a growth in the real exchange rate. Which resulting price increase initiates a 'Dutch disease' influence, and effect economic growth and savings. Additionally, Khawaldah & Alzboun (2022) indicated that Jordan has fragile economic growth, restricted resources, and an absence of public finances, and the direct cost of Syrian refugees in Jordan since 2011 is summed to be USD 11,032 billion roughly. This total cost encloses the costs of delivering education, health, water, electricity, items and goods, and other sorts of services to refugees in addition to the transport losses and security costs. In 2019, the total budget of Syrian refugees in Jordan was around USD 2.4 billion which had to be covered by the government with a lack of significant international financial aid.

Having regard, the above we propose the following hypothesis **H3.a.** The Refugees have an negative impact on the Gross Domestic Savings of the host country.

# Refugee's effects on General Government Net Lending / Net Borrowing. H4.a.

We highlight there are no studies that directly link net lending and net borrowing to refugees in host countries. Therefore, we will study the difference between the two studies, one of which is a scheme for the growth of the Swedish economy, and the second represents realistic facts after the Russian-Ukrainian crisis to find the nature of this impact whether it is positive or negative. However, Swedish National Debt Office (2015). The Swedish economy expected to grow in 2015-2017, due to strong domestic demand. The Debt Office forecasts GDP growth of 3.1 per cent for 2015, 2.8 per cent in 2016 and 2.4 per cent in 2017. The Debt Office expects net borrowing requirements to be SEK 45 billion in 2015. This is SEK 25 billion lower than previous forecasts. The reason for the decrease is mainly due to the increase in tax income. Net borrowing requirements in 2016 are estimated at SEK 33 billion. This is 8 billion SEK higher than the previous forecast. The increase is mainly due to a significant increase in spending on refugees' immigration. For 2017, the Debt Office projects net borrowing requirements at SEK 47 billion.

Central government net lending estimated at -0.9 per cent as a percentage of GDP in 2015, -1.0 per cent in 2016 and -1.1 per cent in 2017.

- The Debt Office expects net borrowing requirements to be SEK 45 billion in 2015. This is SEK 25 billion lower than previous forecasts. The reason for the decrease is mainly due to the increase in tax income.
- Net borrowing requirements in 2016 are estimated at SEK 33 billion. This is 8 billion SEK higher than the previous forecast. The increase is mainly due to a significant increase in spending on immigration.
- For 2017, the Debt Office projects net borrowing requirements at SEK 47 billion.
- Central government net lending estimated at -0.9 per cent as a percentage of GDP in 2015, -1.0 per cent in 2016 and -1.1 per cent in 2017.
- Central government debt estimated at 1,442 billion SEK at the end of 2015 and 1,469 billion and 1,511 billion respectively at the end of 2016 and 2017. This is equivalent to 35 per cent of GDP for all years.

Therefore, refugees increase the country's borrowing rate leading to enhance economic growth, and thus have a negative impact. Furthermore, Zamore (2018) showed in his study in the United State from 1980 through 2017. The study explores the host government's efforts to adopt a stronger, active approach to refugees and development, and the restraint to these tries by part of donor countries. That restrain reached a zenith in the 1980s when refugee and development crises deluge the South. These crises are due to events and policies internal to Southern host countries. Refugees displaced by liberation struggles and disputes by

Cold War parties, and the debt crisis was precipitated in a big part by excessive lending by private Northern banks, coupled with an unusual rise in interest rates on the part of the US Federal Reserve. This study recommends Reverse Aid in the Countries and Regions that Host the World's Refugees Following a huge increase in lending to developing countries in the 1970s; they have a negative impact on the Leander and positive on the borrower by increasing the borrowing rates. When the US Federal Reserve raised interest rates to unusual levels, countries in sub-Saharan Africa and Latin America could no longer afford to repay their loans. Fearing a financial meltdown within the banking sector, the US government provide money to lending institutions, which in turn is lent to borrower governments, on the condition that the latter prioritizes debt servicing and austerity first of its goals. Lissakers (1983) added that the US representative to the IMF Executive Board during the 1990s wrote in 1983, the IMF became an "enforcer of the banks' loan contracts," urging austerity in debtor countries to "free foreign exchange to service debts.

Moreover, Venton et al. (2019) in their study show how important since it affects whom you can ask for money from. For instance, borrowing \$100 million in property funds to lend host country governments (such as the Jordan Integrated Urban Shelter scheme), to host refugees is considerably different from borrowing \$10 million from the government to establish a finished house development. Credit guarantees are comparable to an insurance policy that guards a lender against a borrower's default. In terms of finance for refugees, this would include a donor providing a loan guarantee on behalf of the host nation rather than giving directly to it. This lowers the host nation's cost of capital, or borrowing cost, which in turn attracts money from private sector lenders who might not have otherwise considered lending to that host nation due to risk. Credit guarantees assist in lowering the cost of financing for host nations, which in turn lowers the relative cost of the debt payment. The net lending and borrowing indicate that all countries affected in times of war and the influx of refugees to these countries, but they are not the only factor affecting the economies of those countries, but depending on other factors such as trade rates, total debt, the rate of domestic product, etc... They indicate that refugees increase borrowing rates, especially those countries with fragile economies so the effect of refugees is negative on net lending/borrowing (Venton et al., 2019).

Additionally, Kibuka-Musoke & Sarzin (2021) illustrated that in recognition of the global public good that middle-income nations are supplying; blending arrangements employed to help them pay the costs of hosting substantial displaced populations. To cut the interest rate on the loan or offer more liberal payback terms, blending entails combining a grant with a loan. For middle-income borrowing nations, which traditionally had access to concessional funding, these arrangements are particularly alluring. The Economic Resilience Initiative of the European Investment Bank (EIB) and the Global Concessional Financing Facility (GCFF), which run by the World Bank, are two examples of blending agreements that been applied in situations involving forced displacement. AlShwawra (2021) indicated that In February 2016, Jordan received USD 1.7 billion in the shape of grants and grant equivalents for its Syrian refugee

reaction plan against Jordan's commitment to assure 200,000 job opportunities for Syrians residing in Jordan.

Therefore, we propose the following hypothesis **H4.a.** The Refugee's positively impact the General Government Net Lending / Net Borrowing of the host country. In other words, the increase in the number of refugees increases the need for external funding.

# Refugee's Effects on Gross National Expenditure. H5.a.

Ekberg (1999) through his study of Sweden in the period from 1950 to 1999. The age distribution of the immigrants and their access to the labour market are important factors in their net contribution to the public sector. The net contributions of the immigrants resulted in increased income for the native Swedes during the 1950s, 1960s, and 1970s. Due to the immigrants' declining employment, there are now adverse income impacts. The annual income effects, whether favourable or negative, have only ever represented 1-2 per cent of the GDP. Their annual net contribution to the public sector will shift by 0.1 per cent of the gross domestic product for every percentage unit change in the employment rate of immigrants. Therefore, refugees contributed to an increase on the gross national expenditure.. Hence, Dao (2011) indicated in his paper has examined how security affects economic growth in emerging nations. By analysing a sample of thirty-eight emerging economies using data from the World Bank and conclude that the number of refugees in the host countries, the adult literacy rate, and the agricultural value added per worker affect the GNE of the hsot countries.. Governments in developing nations helped by the statistical findings of this empirical investigation to identify relevant issues that must be addresses to promote economic progress (Dao, 2011). Additionally, Fichtner et al. (2015) study of Germany showed that private consumption is the main engine of growth in Germany. The primary cause of this is the wage bill's consistent tendency toward rapid growth. The impact of decreased oil prices on people's purchasing power this year will fade in the upcoming year, but the refugee inflow will also have an increasing impact. This related to the housing, care, and integration of refugees as well as the consumption, which generates the rise in activity in the construction sector. Refugee inflow will help spur construction business, which has been stagnant otherwise. Initially, the refugees are temporarily sheltered in collective facilities, which are modular, lightweight buildings typically constructed by special companies. Therefore, we can say that the impact of the refugees did indirectly affect the gross national expenditure but on the other hand, the refugees had a positive effect on economic Germany, especially in the labour market construction.

Furthermore, Taylor et al. (2016) in 2015, UNHCR took more than 15 million refugees, and these huge numbers grouped in camps in developing countries. The World Food Program provided them with food, cash or assistance. They concluded that the aid provided to refugees, especially cash, increases the total national spending, and therefore this aid is considered as additional foreign money spent in those countries.

The study also found that 5.5% of total income is attributable to refugee families spending within a 10-kilometre radius of the refugees camps.. The impact of refugees is related to the gross national expenditure, and its impact is positive.

Additionally, the number of asylum seekers who arrived in the European Union reached unprecedented levels in 2015 with twice the number of refugees in 2014. As for Altemeyer-Bartscher et al. (2016), in their study in the EU showed that only through increased international cooperation in the asylum policy the current refugee migration problem be effectively manage leading to positive influence on the economy. Economically speaking, it makes sense to divide incoming refugees across all EU nations using a distribution key that accounts for variations in the costs of integration in the various nations. The marginal costs of integrating refugees balanced out by an effective distribution. Ensuring that refugees equitably distributed among EU countries is essential and crucial to minimizing the negative effect on certain countries by increasing the gross national expenditure. The key to dispersing refugees reinforced by compensation payments that divide the expenses of integration among countries to reach a political agreement. The EU Commission's proposed model for assisting refugees, in general, considers pertinent factors. By reallocating funds within the EU budget, the compensation payments for nations that should accept a sizable number of refugees for cost-effectiveness considerations paid for.

Nonetheless, Dadush (2018) study confirms the existence of a negative impact of refugees on the host countries because of the increase in the rates of total national spending and therefore recommends the need to take measures that work to return the refugees to their countries and describes this task as impossible. However, AlShwawra (2021) argued in his study of Syrian refugees in Jordan that local integration provides the refugees with an opportunity to expand their human prospects to make a positive contribution to Jordan's economy and the society of the host country.

Having regard the above, we propose the following hypothesis **H5.a.** The Refugees has negative impact on the level of the Gross National Expenditure of the host country (the refugees reduce the GNE).

# Refugee's Effects on Inflation (as general increase of Consumer Prices). H6.a.

Nietschmann (1979) described the negative effect of the connection between migrants and inflation as local and international individuals are pursuing money in which everything that's money gets scarce." Yet the need to purchase is constant and increasing, and such things led to the increase of demand for goods and products and therefore increase the gap between the local family income and living expenses. Moreover, Nyaoro (2010) showed the result that forced migrants, despite their economic position, tend to share social and economic space and services with residents as well as other types of migrants in the cities. Such things lead to an increase in the prices of services and goods provided within the hosting country due to the increase in demand. Furthermore, Akgündüz et al. (2015) illustrated on the refugee's impact on Türkiye for

the period of 2012 and 2013 indicated that the refugee crisis appears to have caused an increase in food and housing prices. The coefficient for inflation of food prices is particularly influential while the significance of the influence on housing price level gains varies across specifications.

Additionally, Bahcekapili & Cetin (2015) declared in his study of immigrants in Türkiye for the period 2010 to 2014 that immigration did affect negatively the inflation rates of Türkiye after the inflow of immigrants leading to increases in goods and services prices due to the increase of demand in the markets. Del Carpio & Wagner (2015) indicated that the Syrian refugees did affect negatively on inflation and household prices in Türkiye since early 2015 the Turkish state had spent \$6 billion (with a total beyond contributions of \$300 million). Vastly of these aids spent on food, various services, and non-food objects such as medicines, clothing, shelter, and housing-related goods. While Fransen et al. (2017) found out that there is a negative relationship between immigrants and consumption of goods and services, since, in Northern Uganda, returnee households encountered a growth rate of per capita consumption that was particularly higher than equivalent non-returnee households were. In addition, Dadush (2018) indicated that growing countries receiving large numbers of refugees, such as Jordan, Lebanon and Türkiye, show that the engagement of refugees in specific localities can "crowd out" public services and goods due to the increase in demand, which can affect negatively on such services infrastructure and prices.

While, David et al. (2019) noticed that in the case of Syrian refugees in Lebanon, the prevalent drop in exports more than compensated by the arrival of Syrian refugees in the sectors of Agriculture, Energy, Communication and Transport. Hence, this led to the increase in prices of some products and services, despite the international financial aids came along with the receiving of refugees. Moreover, Hartnett (2018) Showed in his study of Syrian refugees in Jordan reported that the Jordanians living outside Amman city (The capital of Jordan) typically associated refugee integration with raised pressure. Services related to education and water, growing prices of main products, rent, social conflict stemming from cultural contrasts and financial and employment losses for Jordanian nationals. Hence, Vural (2020) indicated that forced migration raised inflation and production greatly. In special, housing prices rise extensively with Syrian migration. Nonetheless, Rocha et al. (2022) in his report covering the country of Venezuela from 2005 to 2020, illustrated that migrations and Covid-19 led to an increase in the economic burden on a global stage as well as for Venezuela, since the country's gross domestic product (GDP) growth rate reached 30 per cent in 2020. The unemployment rate went from 7.4 per cent in 2014 to 35 per cent in 2018 because of the total lack of control of price dynamics in the Venezuelan economy. Nonetheless, Khawaldah & Alzboun (2022) showed in their report on Syrian refugees in Jordan that, Jordanians are acutely sensing the influential influences of the Syrian refugee's inrush after the beginning of civil war on their day-to-day lives and refugees' strain on services, natural resources and the labour market, particularly in host societies where the effect is the most elevated.

Therefore, we propose the following hypothesis **H6.a.** The Refugees have a negative impact on the level of Consumer Prices of the host country (increasing the inflation).

# Refugees' Effect on Trade (% of GDP). H7.a.

Gould (1994) presented that the relationship between immigration and trade lately investigated. Utilizing a gravity model and a panel data set of forty-seven U.S. partners locates that trade positively impacted by immigration, with significant effects on exports. He also discovers decreasing returns to migration for the U.S. Since immigration rushes into the U.K. are small in magnitude, we are likely to bypass the impact of decreasing returns to immigration. In addition, Helliwell (1997) discovers trade impacts negatively of migration for international but not for interprovincial trade. Migrants across provincial borders have less impact on forming trade because knowledge about the organizations and markets of their provinces is not new to the host areas. Moreover, if there are declining returns to migration in the immigrant-link impact, the outcome attributed to the considerable migration flows among areas. "Additional migrants may trip over their predecessors when they attempt to make use of any special knowledge they brought with them about conditions back where they were born."

While Head & Ries (1998) pointed out that utilizing Canadian trade data with 136 partners for the period of 1980 to 1992 in Canada, locate that immigration has an influential indirect relation to bilateral trade; with a 10 per cent growth in immigrants directing to a 1 per cent increase in exports and a 3 per cent growth in imports. In addition, Dunlevy & Hutchinson (1999) also find evidence of the pro-trade effect of immigration on U.S. imports in the late 90s and early 2000s centuries. However, Dunlevy & Hutchinson (1999) and later Girma & Yu (2002) showed that migration might also carry on negative implications on the concerned countries.

Additional work performed by Dunlevy & Hutchinson (2001) pushes the hypothesis that immigrants yield beneficial externalities in their host countries to extend foreign trade. Their data studies U.S. exports to 17 European countries at 5-year intervals. Migrant stock impacts found to be positive and influential for trade as a sum but proportionately more significant for certain regional groupings of countries that deliberate the historical pattern of immigration to the US. Additionally, Girma & Yu (2002) with the usage of the augmented gravity model discussed bilateral trade between the UK and 48 trading partners. They discover that immigration from non-Commonwealth countries has a considerable export-enhancing impact. By contrast, immigration from Commonwealth countries seen to have no substantial effect on exports. They suggest that, since social and political parties in Commonwealth countries are parallel to those of the UK given the earlier colonial connections, immigrants from former colonies do not carry information that substantially decreases the transaction cost of bilateral trade, indicating that some negative effect could show Girma & Yu (2002). While, Landau (2004) clarified that a comparison made between two Tanzanian

rural areas, to observe the impact of the arrival of refugees and international relief on the economic practices of the host community in one area of western Tanzania (Kasulu). Changes occurred in the pattern of trade in the five years in which the refugees arrived, and the study attributes a positive effect not to the presence of the refugees themselves, but to the presence of relief organizations or the distribution of cash assistance. Hence, a positive effect on one side, and a negative one for the other. Furthermore, pointed out that conventional neoclassical trade theory forecasts that migration and trade are alternates but the empirical evidence outlined in similar papers implies that complementarities between migration and trade dominate. In any case, the growth in both trade and migration in current decades implies that the traditional theory of trade likely cannot accurately seize the complete relationship between migration and trade. Indeed, White & Tadesse (2010) conclude by searching data on US immigrants and trade with 59 countries for the years 1996-2001, the extent to which refugee immigrants and non-refugee immigrants affect US trade with their countries of origin were compared. The results confirm that the positive impact of immigrants on both US imports and exports to their home country, the impact of refugee immigrants is very little comparing to non-refugee immigrants.

Poot & Strutt (2010) and White & Tadesse (2010) pointed out that there is a large literature that assesses the two-way interaction between international trade and international migration; most indicate that migration raises bilateral trade. The trade facilitation literature clearly defines that the costs of international trade are not only specifies by factors such as geographical span and physical infrastructures but also that there are other sorts of fixed costs. For example the cost of obtaining general skills in trading, certain knowledge of the foreign markets, foreign language capabilities, trust etc. The employment of immigrants may decrease such costs. Immigrants have a relative, if not complete, an advantage in collecting and conveying trustworthy information about foreign markets in which both sectors' systems (formal and informal), language and culture vary wildly from the host country. Such markets can obtain and hold migrants as their home country but can also enclose of course countries that are culturally extremely similar to the migrant's home country. While migrants can decrease the cost of international trade by utilizing their knowledge of the language, customs, and laws to execute business with their homeland or similar countries, they also influence international trade via the consumption (imports) channel negatively (Poot & Strutt, 2010); White & Tadesse, 2010). Nonetheless, Bratti et al. (2014) indicated that because immigrants have selections in favor of the goods of their homeland, their earnings in the host country give them adequate purchasing capability to afford those goods. As well as the existence of foreign-born entrepreneurs may increase the availability of such products.

Ghosh & Enami (2015) study examines the impact of refugees on trade, both exports and imports, between a developing host country and the mother country of these refugees. This performed by studying the largest refugee settlements in the world, to find how the movement of refugees over the decades from Afghanistan

to Pakistan affected mutual trade directly and indirectly. We find that changes in the numbers of Afghan refugees do not cause a change in trade between Afghanistan and Pakistan, but foreign aid to Afghanistan causes trade between the two countries. Consequently, each of the two previous studies confirms that foreign monetary assistance from foreign countries stimulates second trade, directly and indirectly, on exports and imports. Additionally, Steingress (2015) illustrated that Immigrants can increase international trade, through their preference for the products of their home country and reduce the costs of reciprocal trade. Using demographic information for US states for the period from 1970 to 2005, a positive relationship found between the presence of immigrants and trade, with a 10 per cent increase in new immigrants indicating to any state in the United States that imports from the immigrants' home country increased by 1.5 per cent. It considers that the effects of refugees on the trade of host countries are ambiguous and controversial, as it is difficult to define positive or negative. Where the study Taylor et al. (2016) attempted to find the economic effects of refugees on the economies of the host countries within a radius of 10 km consisting of three refugee camps coming from Congo to Rwanda. The study revealed that cash assistance to refugees has significant positive impacts on businesses and families in the host country. The rate of trade between the local economies near those camps increased from the rest of Rwanda from \$49 to \$55. Indeed, Mayda et al. (2017) showed that migrants can boost international trade by shifting preferences toward products from one's native country and reducing bilateral transaction fees. Using demographic information for US states for the period from 2008 to 2013, he found a positive relationship between the presence of refugees and trade, with a 10 per cent increase in new immigrants to any US state raising imports from the immigrants' home country by 1.2 per cent and exports by 0.8 per cent. Furtherly, Mayda et al. (2017) found that refugees resettled in the United States significantly increase exports from the United States relative to their presence in their country of origin. An increase in the standard deviation of the proportion of refugees relative to the host community or local population increases exports to their countries of origin by about 16%. The impact of imports is small, in line with the difficult economic conditions in the countries of origin of the refugees, which often negatively affected by war or poverty and such apply for the Syrian case in hosted countries after the beginning of 2011.

Additionally, Steingress (2018) did the same study in 2015, which was about political refugees, and he found that migrants could increase international trade by shifting preferences towards the goods of their country of origin and by reducing bilateral transaction costs. Using demographic information for US states for the period from 2008 to 2013, he found a positive relationship between the presence of refugees and trade, with a 10 per cent increment in new immigrants to any US state raising imports from the immigrants' home country by 1 per cent and exports by 0.8 per cent. David et al. (2019) noticed that in the case of Syrian refugees in Lebanon, the prevalent drop in exports is more compensate by the arrival of Syrian refugees in the sectors of Agriculture, Energy, Communication and Transport.

Akgündüz et al. (2020) pointed that an export trend and increased diversification of exports detected. This trend supported by an increase in the competitiveness of companies located on the Syrian borders, in addition to a decrease in the cost of those exports, which led to a positive impact in the field of Turkish trade. Refugees became the link between Türkiye on one hand, and the Middle East and North Africa on the other hand, and this link became stronger than the link between Türkiye and the European Union. Eventually, Erdoğan et al. (2021) indicated that within the report issued by (World Refugee & Migration Council Research Report) recommends that the Turkish government should take several steps to improve the integration between refugees and the host community. This report included 3 proposals, the first of them was trade facilitation, which helps to discover ways to export Turkish agricultural products to the European Union on the condition of official employment of Syrian refugees through the creation of sustainable official employment opportunities in agriculture. It can also be in the field of industry, where Syrian refugees used as workers for a factory on the Syrian border to help accomplish production that used for trade afterwards, to reduce the burden on the international community. Therefore, this report links the presence of refugees with trade as a positive impact if the role of refugees activated in work within formal employment.

Overall, we propose the following hypothesis H7.a The Refugee's positively impact the international Trade (as % of GDP) of the host country.

#### Refugee's Effects on Current Account Balance, per cent of GDP. H8.a.

A study in Australia by Taslim (1998) indicated the concern of the public that immigration contributes to the increase in the current account deficit, as it found that refugees use simpler saving methods than the native people of Australia does. Time series data used to investigate the relationship between current accounts and migration. Analysis of these data confirms that the increase in net migration tends to increase the current account deficit. The long-term impact of migration on the current account is not significant, but for the current situation, the impact of refugees considered negative on the amount of the current account. Furthermore, Ratha (2003) Concluded that undocumented migrant labourers from Mexico State received an identification card (matricula) from the Mexican consulate that included a photo and a U.S. address. Instead of making everyone wait 6–8 weeks, the IRS collected back taxes from employees and immediately gave individual taxpayer identification numbers (ITINs). Once their paperwork was processed, the employees who were applying to become legal residents were eligible to collect earned income tax credits, which were worth an average tax refund of roughly \$1,700 annually. The banks accepted the "matricula" and ITIN from immigrants seeking to open bank accounts as forms of identification. Workers who had already obtained legal status could get earned income tax credits right away; others placed their tax returns into their brand-new bank accounts. Moreover, Alawin & Oqaily (2017) study found that an increase in the

current account deficit negatively affects domestic inflation in the long term. This result is because the current account deficit absorbs a large part of the excess in domestic demand, in addition to the need for flexibility in the economy, in the long term, to produce substitutes for imported goods. However, in the short term, it found that the current account deficit has a positive impact on domestic inflation. It turns out that in this period there is not enough flexibility for the Jordanian economy to produce enough goods to replace imports, which leads to inflation. The refugees also considered as labour capable of compensating for production to increase the percentage of exports, which will have a positive effect in the long term on the presence of refugees in Jordan on the current account balance and trade.

Bach et al. (2017) study was in Germany. The initial financial costs of integrating migrants are relatively substantial, but as more and more refugees enter the labour field, welfare expenses will decline and tax revenue will rise. The Institute for Employment Research (IAB) in Nuremberg and (DIW) Berlin jointly investigated the overall economic and fiscal effects of investing in the labour market integration of the refugees who entered Germany in 2015. The German Federal Ministry of Labor and Social Affairs funded the investigation. The findings demonstrate that making investments in the education and linguistic abilities of refugees will yield significant dividends, and help them to increase their current account balance. Additionally, the financial aid provided to the refugees disbursed through banks, thus increasing the balance of the current account. The refugees can also use banks to store their money, as the places they live in are unsafe, especially the camps. One of the problems that refugees faced in disbursing these dues is how to prove their identity. After this problem addressed by the banks, loan facilities were set up that treat the refugee as a citizen with limited income in Rwanda. Moreover, Collins et al. (2018) pointed that with limited access to formal financial services in Jordan, refugees' resort to informal sources of credit by borrowing mainly from family and relatives. As well as friends and neighbours, which indicates the actual need of the refugees. As for the financial need to set up a specific project, most refugees turn towards commercial loans, ranging from 300 Jordanian dinars (420 USD) to 4,000 Jordanian dinars (about 5,600 USD). The required amounts are generally higher than the medium-sized microfinance loan in Jordan, and most of them are willing to pay the interest. The current account balance represented in electronic wallets via phone companies.

Hence, D'albis et al. (2018) viewed in his study that conducted in Germany during the period from 2007 to 2016. The director of the German Institute of Economic Research (DIW), Marcel Fratzscher, contends that despite their initial lower qualifications, promptly integrating refugees into the job market will have favourable long-term implications for the completely German economy. It is also short-sighted to view education merely as an expense rather than a long-term investment that boosts future demand and adds value to businesses. Indicators of progress are already there in the most recent GDP growth figures for 2015. The GDP growth rate for the previous year anticipated to be between 1.2 and 1.4 per cent. The higher

number of 1.7 per cent growth reflects the costs associated with resettling refugees, including the hiring of new educators, social workers, and integration specialists as well as the provision of housing for refugees, additional administrative staff to attend and register those refugees, as well as the required border guards and police officers. Herein lies the chance for Germany to move away from an export-led development model and toward more domestic infrastructure investment. Germany benefits from low-interest rates and cheap oil prices because of its strong economic growth statistics. Additionally, it has a sizeable buffer of a household surplus of €12 billion, as well as the extra funds to invest in the training of refugees. They will pay off in the form of future increased value for the current account balance positively.

While, David et al. (2019) study was in Lebanon and examined the impact of a large-scale exodus of employees from a war-torn economy on the economy of a neighbouring country. Investigate the effects of several crisis components on the labour market, the production system, and macroeconomic indicators using a general equilibrium approach to the Lebanese economy. Findings and prior research indicate that while high-skilled local workers may experience little to no negative consequences, the most vulnerable Lebanese workers may experience a negative impact. The improvement in growth and employment possibilities that result from aid in the form of investment subsidies serves as a reminder of the need to combine humanitarian aid with development aid to accomplish long-term goals. In a situation where refugees viewed as transient, there is a little impact for refugees on the current account balance in the short term.

Nonetheless, Akgündüz et al. (2020) study found that the number of immigrants increased in proportion by 10%, led to an increase in average companies' sales by 4% and witnessed an increase in the number of registered new companies by 5% in the host country. While, AlShwawra (2021) indicated that In February 2016, an assemblage of Syrian donors held in London. In that assemblage, Jordan received USD 1.7 billion in the shape of grants and grant equivalents for its Syrian refugee reaction plan against Jordan's commitment to assure 200,000 job opportunities for Syrians residing in Jordan.

Therefore, we propose the following hypothesis H8.a. The Refugee's positively impact Current Account Balance, as % of GDP, of the host country.

# Refugee's Effects on General Government Gross Debt. H9.a.

Taslim (1998) clarified that Australia's foreign responsibilities have increased rapidly since the 1980s, as total net foreign liabilities increased from 13.5% of GDP in 1979 to 58.4% in 1995-1996. This has led to an increase in Australians' fears and concerns that the national economy will be at risk. Which conceded as a negative effect on the general government's gross debt. Moreover, several studies showed a burden falls on the host countries when there are huge numbers of refugees, this leaves the country in debt until the refugees integrate into the new society and seize employment opportunities to rely on themselves rather than on aid provided by states or organizations.

However, Zamore (2018) study indicates the necessity of cancelling the debts of host governments that agree to include refugees in the economic and social life of their countries. Many of the poorest countries have paid far more to service their foreign debt than they have received in the form of foreign aid. This reverse support not only deprives host governments of the resources they need to integrate refugees into the economic and social life of their countries but also reinforces some of the fundamental asymmetries of the global system that aid the current situation of refugee poverty. In addition to the necessity of amending the tax treaties between the donor countries and the host countries, the host governments lose millions of dollars in revenue due to the laws of those treaties, so the host countries are plunged into debt, and thus the impact of refugees becomes a negative effect in increasing the total debt (Zamore, 2018). Additionally, because of the Syrian crisis and the presence of refugees in Jordan, the public debt in Jordan doubled to \$35.2 billion in 2011.

Nonetheless, D'albis et al. (2018) showed that the situation of refugees in Western Europe studied, and the results showed that the presence of refugees does not necessarily lead to a deterioration in the economic performance or financial balance in the host country, since the public spending of the asylum seekers is more than the net tax from transfer's revenue. When refugees begin to settle in developed countries, they classified as having a generally positive impact on all aspects of the economy of the host countries.

Overall, considering we focus on the case of a developing such as Jordan, we propose the following hypothesis H9.a. The Refugees has a negatively impact on the level the General Government Gross Debt of the host country (decreasing the Debt).

# Hypotheses related the impact of refugees on the labour market of the host country Refugee's Effect on Unemployment. H1.b.

Coppel et al. (2001) illustrated that there is a negative impact that immigration has on the host country's labour market. Immigration may also have a part to perform in decreasing skill deficiencies in particular key sectors of the economy. As for Angrist & Kugler (2003), they indicate that using a panel of European countries, uncovered that immigration barely reduced the employment rate of native-born workers, although this impact is larger in countries with "rigid" institutions, especially in countries where product market competition is restricted. This conclusion suggests that the link between immigration and labour market outcomes of native-born workers more nuanced than just the insight delivered by the static labour demand/labour supply model of the labour market and that it could differ across countries. Moreover, Kugler & Rapoport (2007) confirmed that the migration process affect negatively employment of the hosting country by reducing the number of workers which led to an increasing the unemployment rate. In addition, concerning forced migration, Del Carpio & Wagner (2015) studied a sample of Türkiye for the period 2011-2014. They plead that the inflow of refugees is a supply shock in the informal sector and a

demand shock in the formal sector, an inrush of refugees predicted to displace natives from the informal sector and lowers wages. These authors also encounter average wage declines in the informal sector but fail to uncover any important impact of refugees on average wages in the formal sector but slight impact on informal sector and handcraft jobs is noted. Furthermore, Bahcekapili & Cetin (2015) provided a descriptive analysis of the influence of Syrians spanning the period from 2010 to 2014 on unemployment rates, inflation, foreign trade, and internal migration by calculating the differences in average rates in the years foregoing and following the inflow of Syrian refugees. They indicated that Syrian refugees have increased the unemployment rate and declined the prices in the regions most influenced by the crisis. Moreover, Stave & Hillesund (2015) found that Syrian refugees engage in low-skilled-low-wage jobs in the informal sector with Jordanians and apprise higher unemployment rates after the beginning of the Syrian refugee crisis. Taylor et al. (2016) indicated that some evidence points out that, a large inflow of immigrants leads to an increase in unemployment among the less-skilled workforce and as well as decreases the wages among particular populations.

While, Esen & Binatli (2017) through his analysis of Syrian refuges effect on the Turkish economy for the period of 2004 – 2016 pointed out that The sign of the study coefficient is negative, indicating a positive effect of Syrian refugees on the labour market in lowering unemployment and that migration raises labour supply and reduces employment and wages. Additionally, Organiściak-Krzyszkowska (2017) illustrated the connection between refugees and unemployment as that unemployment evolves as an influential factor aggravating the overall economic situation and, thus, lowering the living means of the concerned population and weakening economic growth. This, in turn, evolves into a push factor boosting the population to search for better living situations, and such a matter implies both the sending and receiving countries of refugees. Fernández-Reino et al. (2018) in their study of immigrants in Spain for the period 2008 to 2014, presented the findings that while most origin individuals do not display significantly lower employment participation than the plurality group, the quality of employment of immigrants in terms of involuntary part-time jobs and over-education is substantially worse, primarily since the crisis. He also pointed out that 45% of female immigrants in the labour sector were engaged in the care and cleaning sectors in 2013, mostly as domestic staffers in the shadow economy and that the unemployment rate increased from 8% in 2007 to 26% by 2013.

Nonetheless, Holler & Schuster (2020) pointed out that the productivity and skill levels of refugees are considerably lower to common migrants. In addition, he found out that high short-run arrival-related expenditures, low average educational attainment, and only gradually increasing employment rates overcompensate the demographic prospect of the mainly working-age refugee cohort. Additionally, Hartnett (2018) discussed that the impulse to blend Syrian labour has significant implications for other migrant groups in Jordan such as Egyptians. Jordan has historically employed cheaper migrant labour in

manually mandating sectors of the economy disfavoured by Jordanians, such as agriculture or construction in turn to low wages. While David et al. (2019) illustrated that the surge of refugees had a negative impact on unemployment and labour market income, especially for the most inferior features of the Lebanese workforce. Moreover, Hartnett (2018) pointed that higher ratios of Syrians do not associate with negative effects on the pleasantry or household wealth of Jordanian nationals, implying that Syrian labour does not directly contest with the Jordanian labour force. Hence, Vural (2020) also pointed out that the Syrian refugee's inrush to Türkiye after the civil war led to a negative effect on unemployment ratios. Rocha et al. (2022) through analysing Venezuela's economic crisis for the period 2005 to 2020, they found that the unemployment rate increased from 2005 to (12.20 per cent) reaching (13.5 per cent) by 2020 due to the abroad migration of Venezuelans. Nonetheless, AlShwawra (2021) reported that refugees were not authorize to work permits by the Jordanian Ministry of Labor (MOL). Due to poverty, the increased living cost in Jordan, and the demand to find a job, refugees created better references and connections with employers in the host societies in Jordan and assembled their advancement in the informal economy. A report published in 2013 by the International Labour Organization, through International Institute for Labour Studies (2013) reveals that roughly 160,000 Syrians were labouring illegally in Jordan for low wages. AlShwawra (2021) also indicated that In May 2016, based on the International grants that the Jordan government received to provide 200,000 jobs for Syrian refugees residing in Jordan. The Government of Jordan authorized cooperatives to submit work permits on behalf of Syrian refugee staffers in agriculture and facilitated their advancement to do their jobs. Nonetheless, the Khawaldah & Alzboun (2022) study results revealed that the main economic influence of Syrian refugees, especially in the neighbouring governorates of Syria in Jordan was pressure on the Jordan labour market through the competition among locals.

In view of the above, we propose the following hypothesis **H1.b.** The Refugee's positively impact the level of Unemployment of Jordan (increasing the unemployment).

# Refugee Effects on Own-Account Workers. H2.b.

Stave & Hillesund (2015) showed similar signs of competition can be found in the wholesale and retail industry, where 23 per cent of Syrian refugee workers found work outside displacement camps. Consequently, the impact of refugees on business owners is negative, as they compete with them in their fields. Syrians do not have the right to work in Jordan except after obtaining official approvals called work permits that guarantee their rights and guarantee their duties. However, only 10 per cent of these refugees have a work permit, which indicates the existence of refugee work outside contracts and without official approvals. The informal workers suffer from long working hours, low wages, and an absence of rights. Hence, Esen & Binatli (2017) demonstrated that data for the years from 2004 to 2016 utilized for 26 regions

in Türkiye. There are more unemployed people in areas where Syrian refugees are settled. Similar findings indicate that a high concentration of Syrian refugees reduces both official and informal employment. Previous studies that looked at the early years of the Syrian refugee crisis discovered a beneficial impact on formal employment. It's probable that during the early stages of the crisis, when the majority of Syrian refugees were housed in camps, their influence on formal employment was mostly favourable because building and maintaining the camps required a lot of labour. As the number of Syrian refugees grew, it became impossible to accommodate them all in the camps, so some permitted to reside elsewhere. Most refugees initially remained in the towns close to the camps, but over time, a sizable number of refugees travelled west. Their geographic expansion might also have altered the way they affected local labour markets. Their favourable impact on formal employment been offset in later years due to their geographic dispersion and the legislative changes affecting their access to labour markets. Syrian refugees have had a negative impact on employment in the informal economy and unemployment (Esen & Binatli, 2017). Moreover, Barslund et al. (2018) regarding refugee-hosting countries, indicated that the number of refugees recognized between 2014 and 2017 is very small comparing to the overall population. Low-skilled youth are already an economically vulnerable group, and the high competition with refugees can further exacerbate this vulnerability, it fuels negative anti-immigrant sentiment. The labour market in all its sectors related to many refugees is already facing an uncertain job demand due to competition for imports and continuous technological change. Furthermore, Sak et al. (2018) pointed that in 2015; the highest level of forcibly displaced people recorded, exceeding 65 million. It includes 20 refugees who also moved from the host countries forcibly, which made them look for a third country to settle in. Middle and low-income countries contain 65 per cent of the world's refugees; most of them live in urban areas and have to enter the labour market to be able to live a decent life, unlike refugee camps where cash or aid is available through which refugees live their lives without the need to work. The study also confirms that the refugees had an important and significant role in a positive impact on the sustainability of some businesses by financing some small projects, providing support material, etc.

While, Clemens et al. (2018) showed that there are more than 25 million refugees in the world, most of them do not have formal access to the labour market (LMA), and they have no right to work or own a business. Granting a refugee LMA formally has the potential to bring significant benefits to refugees and their hosts, including reduced economic vulnerability, increased income for refugees, improved labour market outcomes, and increase income for the host community. Additionally, Dr Ajluni & Lockhart (2019) concluded that in the period between 2011 and 2016, Syrian refugees made notable entry into the informal labour economy in Jordan. Their assimilation in various sectors accompanied by the prolonged economic downturn that began to take hold in 2010. The wages of informal workers affected, while formal employment enjoyed sustainable growth in wages. The Syrian workers did not nominate any Jordanian

workers to fill any job opportunities when it's available, except in the fields of construction and other services, and these two activities were originally occupied by foreign workers. As well as, Shamsuddin et al. (2021) illustrated that since 2016; the number of Venezuelans in Brazil has rapidly increased as more people left their country due to economic and social turmoil. As of October 2020, about 1.8 million Venezuelans were living as refugees and migrants in Brazil. Although the benefits of immigration for the economy extensively studied in the literature, the effects of forced migration on the labour market and the budget of governments largely studied in industrialized nations. By examining the short-term fiscal effects of Venezuelan refugees and migrants on the state of Roraima, which borders the Republic Bolivarian de Venezuela to the north and serves as the primary entry point for Venezuelan refugees and migrants into Brazil, as well as their effects on the labour market there. The study discovers that the population shock brought on by the influx of forcibly displaced Venezuelans in the short run had no statistically significant impact on the fiscal variables of Roraima. This done using a variety of administrative and survey data as well as a regression discontinuity framework. In terms of the labour market, the study discovers that the population shock resulted in an increase in women's unemployment and a short-term decline in employment for women and low-skilled employees. The impacts on wages vary between industries but are generally favourable for high-skilled male employees. While Shamsuddin et al. (2021) did indicates the necessity for crosscutting policies that focus on the forcibly displaced as well as the most vulnerable host population. Nonetheless, Sarzin (2021) literature highlights that refugee entry into the labour market may negatively affect host populations and hosting potential when they participate in host labour markets, particularly in the long term as refugees adapt to the host country's labour markets, and build their capital. The negative effects of refugees are on the informal workers, less-skilled workers, and women, the same group that suffers from low wages, work or welfare, especially in the short term, while on the other side; those who enjoy the luxury of living are not affected. Finally, Muñoz-Mora et al. (2022) Their article serves two purposes, both of which are driven by a paucity of research about the impact of migration on entrepreneurship in a main nation like Colombia. It begins by looking at how Venezuelan immigration affects regional entrepreneurship in Colombia. Second, by separating the formal and informal sectors, it seeks to clarify this link. The findings imply that while immigration from Venezuela has a good effect on self-employment and own-account workers, it has a negative impact on employers. However, the repercussions worsen as these immigrants proliferate in the unorganized sector. Blanch flower and Oswald. 1998 As unemployment rises, people find it harder to find paid employment and turn to self-employment as a solution, according to the "recession-push, unemployment push, desperation effect, or refugee effect". Considering the above, we propose the following hypothesis **H2.b.** The Refugee's positively impact the number of own-account workers of the host country.

# Refugee Effect on people that are NOT in Labour Force. H3.b.

Among such studies, Del Carpio & Wagner (2015) integrated the newly available data on the allotment of Syrian refugees across Türkiye and the Turkish Labour Force Survey to assess their labour market effect. The study revealed a highly informal labour sector, due to Syrian refugees, and proposed large-scale displacement of local citizens in the informal sector. At the same time, the study also located economic costs in the formal sector and occupational labour markets. Therefore, the study indicated declining earnings opportunities due to the refugee inrush into Türkiye. In a recent study, Akgündüz et al. (2015) analyzed the economic impact of the Syrian refugee crisis on food and non-food prices and the employment sector in Türkiye. The research paper found that due to refugees' inrush, the housing and food prices are especially been affected more than the employment sector, particularly in the various skill groups. The study also discovered that there is not much significant evidence of refugees crowding out citizens in local labour markets.

Another study, Aras & Mencutek (2015) examined the effect of foreign policy directions on immigration and the refugee inrush into Türkiye. The study found substantial evidence of the paradox of foreign policy, mass refugee inrush and related consequences. Akgündüz et al. (2015) studied the influences of the Syrian refugee crisis in Southeastern Türkiye on prices, internal migration and employment rates utilizing difference-in-difference models with fixed effects. They found that the refugee influx has yielded an increase in food and housing prices, and decreased internal migration into the impacted regions, but it did not affect employment. Their justification for the lack of employment impacts rests on the downshift of internal migration as an offsetting aspect. Their analysis encloses only two treatment years, 2012 and 2013, adding another finding, which indicated that the demand of employees and visitors of the refugee camps put upward anxiety on prices.

Bahcekapili & Cetin (2015) apprise that Syrian refugees have raised unemployment and reduced prices in the regions most impacted by the crisis. They use data for 2010 through 2012 for the before period and 2013 and 2014 for the period covering the country of Türkiye. Moreover. Del Carpio & Wagner (2015) find that refugees in Southeastern Anatolia do lower wages in the informal sector, replacing Turkish workers. They also have estimated that every ten Syrian workers replace six or seven Turks in the informal labour market, in particular affecting women and uneducated workers. On the other hand, Del Carpio & Wagner (2015) stated in their report a positive impact of Syrians on the formal labour market and gauged that for every ten Syrian workers in the informal labour market; three or four jobs designed in the formal labour market.

Nonetheless, in similar research that was conducted Razzaz (2017) regarding the same variables but in Jordan, similar outcomes carried forward as the fact that the refugee situation of Syrians does not include the right to work in Jordan. Hence, only about 10 per cent of Syrian workers have acquired formal work

permits, and nearly all Syrian refugees working outside camps do not have work permits and are as such, engaged in the informal economy and outside the bounds of Jordanian labour law. The importance of this fact is, however, more impressive when looking at the current trend in the expanding informal employment sector, which is distinguished by low and decreasing wages, longer working days, poor working states and regulations as well as the lack of proper work contracts. Moreover, Hartnett (2018) showed that the government of Jordan 2016 has prioritized giving formal work permits for Syrian refugees in sectors of agriculture, manufacturing, and construction, which the Jordanians choose to avoid. While AlShwawra (2021) in his study of Syrian Refugees in Jordan illustrated that, a report published in 2013 by the International Labour Organization (ILO) reveals that roughly 160,000 Syrians were labouring illegally in Jordan for low wages.

Considering the above, we propose the following hypothesis H3.b. The Refugees positively impact the number of people that are considered not in Labour Force of the host country.

# Refugee's Effect on Total Underutilized Labour. H4.b.

Dustmann et al. (2005) concluded that immigration had no impact on the general employment results of UK-born workers but did discover negative impacts on the employment of UK-born workers with intermediate education and negative effect on those with A-levels or university degrees. While, Lemos & Portes (2008) analysed the effect of labour immigration of EU-8 workers on claimant unemployment, discovering little evidence of a negative impact. As well as Mattoo et al. (2008) through their study for the United States of America, using census data, this study examines how immigrants are placed in particular occupations in the US labour market. Even after accounting for the age, level of education, and experience of the immigrants, still observed glaring inequalities among highly educated immigrants from other nations. With a few exceptions, educated immigrants from Asia and industrialized nations are less likely to land unskilled jobs than immigrants do from Latin America and Eastern Europe. The factors of the place of origin that affect the standard of human capital, such as spending on tertiary education and the usage of English as a language of instruction, can account for a significant portion of the variation.

Mattoo et al. (2008) also indicated that results show that low abilities, rather than skill underutilization, are the main problem for "underutilized" migrants. Explanation of cross-country variation also heavily relies on the selection impacts of US immigration policy. If the home and host nations collaborate by exchanging information on labour market conditions and working toward the acknowledgement of qualifications, the observed under-placement of educated migrants may be reduce.

Moreover, Manacorda et al (2012) analysed data from 1975-2005 and showed that the major effect of increased immigration in Britain is on the wages of migrants already there. For instance, Dustmann et al. (2013) in their study performed in Britain from 1973 to 1983 found positive impacts for most workers but

negative impacts for the lower paid. Additionally, they also discovered that a 1% increase of migrants leads to a 0.6% decline in wages for workers at the fifth profits percentile, and a 0.5% decrease at the 10th percentile. Furthermore, Wahba (2014) indicated that even before the refugee inflow, economic immigrants in Jordan were on average low-skilled comparable to Jordanians, and many professions in the Jordanian labour market are dedicated to Jordanian citizens alone, especially in the public sector. Economic immigrants are limited to the private sector and largely in informal employment with no job agreement. Due to such labour segmentation, Syrians mostly contend with economic immigrants in the informal sector. This restricts the competition between refugees and Jordanians. However, some negative signs noted due to their acquisition of different handcraft jobs that in some cases no need for work permit to perform.

Additionally, Stave & Hillesund (2015) indicated in his study of refugees in Jordan after the beginning of Syrian civil war in 2011 that about 30 per cent of the Jordanian workers who employed in construction and agriculture lost their jobs concurrently with the crisis in Syria. Moreover, some left working in these industries today, while the corresponding proportions in all other industries are between 0 and 20. The proportion of the total Jordanian male workers employed in the construction industry has declined from 9 to 7 per cent from March 2011 to March 2014, with the main decline observed at the young age group of 15-25. At the same time, the proportion of total Syrian refugee workers in the construction industry has increased significantly, indicating that Syrians may have displaced Jordanians from the industry to some extent. Similar signs of overcrowding found in the wholesale and retail industry, where 23 per cent of Syrian refugee workers outside camps found work. Thus, the impact of refugees will have a negative impact on the rate of unemployment for Jordanian people in the host community. Nickell & Salaheen (2008) study concentrating on wage impacts at the occupational level discovered that, in the inexperienced and semiskilled service sector, a 1 percentage point rise in the share of migrants decreased average wages in that occupation by about 0.2%. Additionally suggests that any adverse wage effects of immigration are likely to be greatest for resident workers who are themselves, migrants. The reason is that new migrants' abilities are more probable to be alternatives for the abilities of migrants already engaged in the United Kingdom labour market than compared to the native-born workforce.

In addition, Zetter & Ruaudel (2016) illustrated that many refugees work in the informal sector, where refugees face multiple challenges regarding the right to work, and the lack of decent work and protection in their workplace. Lack of rights at work may lead to secondary migration when refugees cannot accumulate sufficient capital for self-reliance, which will lead to reverse migration when they supported to return and reintegrate into their country of origin. Hence, Bratsberg et al. (2017) study in Norway looked at how different immigrant groups integrate into the job market. The article gives a thorough analysis of immigrant-native employment and social insurance differentials by admission class, years since arrival using longitudinal administrative data from Norway that encompass labour earnings, and social insurance

claims over 25 years. We find encouraging signs of labour market integration for refugees and family immigrants from low-income source countries during the first few years after admission, but after just 5–10 years, the integration process reverses with widening immigrant-native employment differentials and rising rates of immigrant social insurance dependency. However, the study demonstrates significant heterogeneity within the admission class and highlights the significance of education in the host country for effective labour market integration.

Indeed, Malaeb & Wahba (2018) pointed out that managing the sorting of Syrians and economic immigrants, discovered that economic immigrants were more probable to be pushed into informal employment and worked fewer hours as a result of the inflow of refugees. The inflow of foreign assistance has also been a possible mechanism for forming labour demand among Jordanians. Hence, World Bank (2019) displayed that in 2016, for example, Jordan obtained \$1.65 billion in aid towards the Jordan Response Plan for the Syria Crisis Net Official Aid (ODA) obtained as a share of GNI has increased from 3.6% in 2010, earlier to the Syrian conflict, to 7.3% in 2017. Public policy in government programs can have an impact on the motivations of refugees and give them assistance to reach their ambitions through community organizations. Another study concentrating on London, the province with the most heightened levels of migration over the past few decades also discovered no negative impacts (Fingleton et al., 2020). Additionally, Van Riemsdijk & Axelsson (2021) study conducted in 3 countries, Sweden, Germany and the Netherlands, highlighted that highly skilled or qualified refugees face great challenges, as the available jobs do not match their aspirations, due to the difficulty in recognizing their certificates obtained from the country of origin. Whereas, when refugees supported in their ambitions, recognize for their educational qualifications, and work experience, they can be empowered to achieve their future career aspirations.

Considering the above, we propose the following hypothesis **H4.b.** The Refugees positively impact the level of total underutilized labour of the host country.

# Refugee Effect on Time-Related Unemployment. H5.b.

Becker (1975) indicated in the human capital theory that future earnings might be impacted by working hours in that current working hours are seen as an investment in future earnings. Likewise, tournament and incentive models such as the rat-race model introduced by Landers et al. (1996) used to justify why workers tend to work long hours. Furthermore, Bell & Freeman (2001) studied the connection between earnings distributions and working hours in the U.S. and Germany in which they concluded that, in both countries, workers' decisions concerning their labour supply positively related to earnings inequality in their occupation, but can be different in term of impact in regards to the immigrants case. While Bratti & Staffolani (2007) confirmed Becker's point regarding that future earnings might be impacted by working hours in that current working hours are seen as an investment in future earnings. However, the contribution

of immigrants can lead to negative impact due to their contribution in jobs available mostly in informal sectors and by then affecting wages to local workers.

In addition, Kallis et al. (2013) investigated previous studies on working hours in Europe and discovered that a reduction in working hours was typical in regions in crisis. Noting that as immigration rates around the world persist to be high according to the United Nations (2017) there were 258 million immigrants in 2017, up from 173 million in 2000,) the labour supply findings by immigrants have evolved into an increasingly critical research issue. Wars and ethnic clashes in the Middle East have led to ripples of mass migration into Europe and this flow of foreign workers has formed to shape the European labour market (Kallis et al., 2013).

For instance, Hamermesh & Stancanelli (2015) investigated working hours in the U.S. and four European countries and found that Americans were more probable to work long and irregular hours, such as night shifts, than Europeans were. additionally, Stave & Hillesund (2015) in their research regarding the effects of Syrian refugees on time-related unemployment and labour back in 2015 in Jordan, concluded by utilizing interviews to address this concern they discovered that. Among the randomly chosen workers interviewed for the RSI, outcomes indicate that approximately 5 per cent of Jordanian workers, 15 per cent of Syrian refugees relocated outside the refugee camp, and 11 per cent in Zaatari Camp, are in time-related underemployment. This indicates that they prefer to perform more working hours if such work is available, with a notice that they are still actively seeking to work more hours to cover their basic life needs.

Nonetheless, Fernández-Reino et al. (2018) pointed out that the process of applying for part-time employment has risen during recent years partly as a result of the 2012 labour market reform in Spain. However, concerning the spirit of the new legislation, this increase in the use of part-time arrangements especially among immigrants in Spain has been significantly involuntary, i.e., by immigrant workers who would prefer to work full-time but accepted part-time contracts after being unemployed for some time. Moreover, Hartnett (2018) Clarified that the impulse to blend Syrian labour has significant implications for other migrant groups in Jordan such as Egyptians. Jordan has historically employed cheaper migrant labour in manually mandating sectors of the economy disfavoured by Jordanians, such as agriculture or construction in turn to low wages. Additionally, David et al. (2019) indicated in his study of Syrian refugees in Lebanon after 2011 that there is limited or no negative impacts on high-skilled native workers, but a negative impact on the numerous vulnerable Lebanese workers by which some business owners prefer to replace them with refugee workers for lower wages. In addition, Khawaldah & Alzboun (2022) apprised some positive effects of refugees including delivering the Jordan labour market with highly qualified and low-wage labours that drive the Jordanian market to be more competitive.

Then, we propose the following hypothesis **H5.b.** The Refugee's positively impact the Time-Related Unemployment in the host country.

# Refugees Effect by NEETs (Non-Educated Employed Trained youths). H6.b.

According to Bell & Blanchflower (2011), the NEET rate also relies on factors that not related to youth unemployment, such as the inability of youth to proceed with their education and training at early ages, which can be especially difficult for war refugees to accomplish. Bălan (2015) indicated that the consequences are even more serious in cases of a longer period in NEET status. These include isolation, uncertain and low-wage employment, criminality, failure to build a family, higher risk of marital instability, etc. Hence, Marelli & Signorelli (2015) showed that the notable increase in NEETs during the economic crisis be linked to the increase in unemployment rates. Since there are different factors that affect the contribution of young individuals in the labour market during the crisis. Hence, young individuals are discipline more than the older workers, due to their weak experience in work-related fields, beginner work contracts, regular descending qualifications, and aspects referable to institutional determinants—taxes on labour, unemployment advantages, and minimum wages and labour market policies.

While Quintano et al. (2018) indicated that Italy considered one of the main hosting countries for refugees and migrants, their study of analysing NEETs rates in Italy for the period of 2005 to 2015, indicated that in 2015, Italy showed the most heightened percentage of inactive young individuals, with a significant predominance of women (on the total inactive, 63% were women and the remaining 37% were men). They include more than half of the total NEETs and define a disturbing social phenomenon, as they do not take any measures, staying outside the labour force. Inactive NEETs largely discouraged possible workers (11% of females and 13% of males in 2005; 13% of females and 15% of males in 2015), young individuals with health issues or those who have to assist a family. It is fair to conjecture that some of those who claim to be inactive contended in the underground economy. Another reason is correlated to the condition of being a housewife. Among females, those who refer to as housewives made up 44% of NEETs in 2005 and 32% in 2015.

Hameed et al. (2018) also stated that the vulnerability of refugees related to their experiences prior to migration due to conflict, violence, or persecution, as well as post-migration stressors such as exclusion, unemployment, and discrimination. According to the International Labour Organization, in 2020, there is an increase in the number of young people, with more than one in every five (22.4%) aged 15-24 not in employment, education, or training (NEET). O'Higgins (2019) recognized this problem on a global scale led to the inclusion of the NEET rate as part of the 2030 Plan for Sustainable Development, as an indicator of progress toward reducing the percentage of NEET people in a country.

Olivieri et al. (2020) showed that in the first quarter of 2019, about 470,095 Venezuelans resided in Ecuador, almost 3% of Ecuador's population, which donate to the increase in the unemployment rate and the number of non-workers within the country. In addition, Pluck (2021); Trueba & Pluck (2021) they illustrated that young refugees in Latin America may be orphaned or separated from their families and are

at risk of evolving into 'street children or might be raised in foster care homes which can raise the burden on the host country.

Therefore, we propose the following hypothesis **H6.b.** The Refugees inflows increase the number of Non-Educated Employed Trained youths, NEET, in the host country.

# Refugee Effect on Working Poverty rate. H7.b.

McCarthy & Vernez (1997) indicated in his paper in regards to the immigrant's case in the United State of America for the years 1980 to 1994 that the inflow of 1.4 million immigrants to the states has contributed to affect negatively on wages with a decline of 44% per cent, especially for the high-school dropout of native residents. In addition. Nyaoro (2010) showed the result that forced migrants, despite their economic position, tend to share social and economic space and services with residents as well as other types of migrants in the cities. They also contend for accommodation and jobs with the residents of South Africa. This lead to generating social pressure between migrants and locals.

Furthermore, Nijkamp et al. (2011) pointed out that the previous literature used in his paper did not find evidence, that migration has particularly negative effects on the wages or employment of local citizens. In other terms, the crowding-out hypothesis does not find a precise explanation through reviewing the international empirical literature. Sartorius et al. (2013) indicated that neighboring South African villages nearby, however, exhibit lower levels of indisputable poverty, implying that the spatial location of the refugees only partway explains their disadvantaged circumstances. While Del Carpio & Wagner (2015) presented in his research on the Syrian refugee impact on Turkish labour for the period of 2011 to 2014 that the inflow of refugees also assist positively in creating higher-wage formal jobs in Türkiye, qualifying for the occupational upgrading of Turkish workers. Moderate Turkish wages have arisen primarily as the composition of the employed has altered because of the inrush of refugees. Moreover, Akgündüz et al. (2015) with their study the effects of the Syrian refugee crisis in Southeastern Türkiye on prices, employment rates, and internal migration using difference-in-difference models with fixed effects. They found out that the refugee inrush has led to a rise in food and housing prices.

Taylor et al. (2016) found out in his analysis of the impact of refugees in the case of Rwanda for the year 2015 that the increase in refugee demand leads to a rise in the pressure on the consumer prices index, and that such an increase does affect the households of the hosting country. Nonetheless, Organiściak-Krzyszkowska (2017) concluded that a high rate of unemployment has negative consequences both for individuals and for society as a whole, and ultimately it leads to a deterioration of public finances and the state's economic situation leading to poverty.

In addition, Esen & Binatli (2017) indicated in his study of a Syrian refugee in Türkiye that the refugees did affect negatively on work wages in the informal sector. However, but no significant impact was founded

on the formal sector, and such things are due to the inability of refugees to participate as workers in the formal sector as per the Turkish labour law. While Vural (2020) reported that hosting Syrian refugees in Türkiye after the beginning of crisis assist in increasing the prices of goods and services for locals, putting them in a difficult economic situation in comparison to their wages. Ozkazanc (2021) the study of the poverty of refugees in Türkiye illustrated an issue alongside migration that is synchronised with poverty and participation in the labour force. Pointing out that Türkiye is a middle/lower middle-income country with a high-level of an unemployment rate of (13.3 per cent, in 2019), relieving the poverty of refugees becomes quite difficult. Moreover, Hartnett (2018) study of Syrian refugees in Jordan after the beginning of Syrian civil war in 2011 pointed out that the maturity of Syrian workers bears wages that are much lower than other refugees and workers residing in Jordan. While, AlShwawra (2021) showed that due to poverty, the increased living cost in Jordan, and the demand to find a job, refugees created better references and connections with employers in the host societies in Jordan and assembled their advancement in the informal economy and revealing that roughly 160,000 Syrians were labouring illegally in Jordan for low wages. Nonetheless, Khawaldah & Alzboun (2022) apprised some positive effects of refugees including delivering the Jordan labour market with highly qualified and low-wage labours that drive the Jordanian market to be more competitive.

Therefore, we propose the following hypothesis **H7.b.** The Refugees positively impact the Working Poverty rate of the host country.

# EMPIRICAL APPROACH

# 3. EMPIRICAL APPROACH

# 3.1. Data and database description

# **Empirical Analysis Goal**

Based on the previous literature review we favoured the most pertinent variables to better identify the outcomes of massive refugee inflows on economic and socio-economic indicators in Jordan. Additionally, we study associations and connections with the different migration theoretical approaches. Therefore, we study the impact of refugees on various socio-economic indicators highlighted by the best-known theories and ideational frameworks, each of which has a certain connection with at least one of the variables under consideration.

Figure 15 shows a synthesis of the development of the empirical analysis of this doctoral thesis.

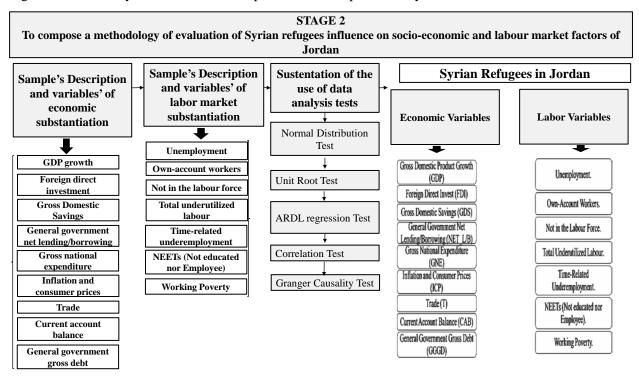


Figure 15. Steps carried out in the empirical analysis. Source: Own elaboration.

# Data analysis description and period

The empirical analysis has two stages. First, we start understanding the overall influence of refugee inflows. Therefore, we test the effects of the number of refugees on the general economic macro-magnitudes of Jordan. Second, we conduct a more specific analysis of the impact of refugees in the Jordan labour market.

Refugee inflows pivoted massive because of the Syrian civil war in 2011. We aim to analyse the data linked to Syrian refugees residing in the host country of Jordan, due to the sharing of borders between Syria and Jordan. The data covers the following periods.

- Years: 2000 -2011 (Before the Syrian Civil war).

- Years: 2012-2021 (After the beginning of Syrian Civil war).

# **Variables and sources:**

The first stage of our empirical focuses on relevant socio-economic indicators addressed in the literature on migration. Then, the second stage of our analysis uses specific indicators related to labour market. "Refugees are people who are recognized as refugees under the 1951 Convention Relating to the Status of Refugees or its 1967 Protocol. People recognized as refugees by the UNHCR statute. They are persons who find themselves outside their country of origin owing to a well-founded fear of persecution on account of their race, religion, nationality, membership of a particular social group or their political opinion" (Hakovirta, 1993, World Bank, 2017, UNHCR, 2021).

In this case, we have focused on the data provided by the World Bank for the flow of refugees and ILOSTAT ILOSTAT (2022); World Bank (2022). According to United Nations High Commissioner for Refugees UNHCR (2021), Jordan is one of the main countries receiving refugees in the Middle East. The World Bank data includes the total number of refugees from different conflicts. These data in Jordan were marginal until the Syrian conflict when refugees from Syrian became massive. We analyse the refugee ratio (as a percentage of the total population of each country). After a period of settlement, refugees receive permission to work. ILOSTAT (2022) includes an estimate of refugees working in the formal and informal sector based on calculations provided by NGOs, UNHCR and refugee camps.

Table (5) shows economic variables and their definitions. They all obtained from the World Bank.

Table 5. Economic variables and their definitions.

Variable	Definition
Gross domestic product growth (GDP)	"Annual percentage growth rate of GDP at market prices based on constant local currency. GDP is the sum of gross value added by all resident producers in the economy plus any product taxes minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or depletion and degradation of natural resources"
Foreign direct investment net inflows (% of GDP). (FDI)	"Foreign direct investment are the net inflows of investment to acquire a lasting management interest (10 per cent or more of voting stock) in an enterprise operating in an economy other than that of the investor."
Gross Domestic Savings (GDS) (% of GDP)	"Gross domestic savings are calculated as GDP less final consumption expenditure (total consumption)) Gross savings represent the difference between disposable income and consumption and replace gross domestic savings"
General government net lending/borrowing (% of GDP) (NETL_B)	Net lending (+) / net borrowing (–) equals "government revenue minus expense, minus net investment in nonfinancial assets. It is also equal to the net result of transactions in financial assets and liabilities."
Gross national expenditure (% of GDP) (GNE)	(Formerly domestic absorption) is "the sum of household final consumption expenditure (formerly private consumption), general government final consumption expenditure (formerly general government consumption), and gross capital formation" (formerly gross domestic investment).
Inflation and consumer prices (annual %) (ICP)	Inflation as measured by the consumer price index and "reflects the annual percentage change in the cost to the average consumer of acquiring a basket of goods and services that may be fixed or changed at specified intervals, such as yearly."
Trade (% GDP) (T)	International Trade is" the sum of exports and imports of goods and services measured as a share of the gross domestic product".
Current account balance, (% of GDP) (CAB)	"Balance of payments accounts are divided into two groups: the current account, which records transactions in goods, services, primary income, and secondary income and the capital and financial account".
General government gross debt (% of GDP) (GGGD)	"The gross amount of government liabilities reduced by the amount of equity and financial derivatives held by the government."

Source: World Bank Open Data (2022)

# Statistical software used in the analysis

The software that used to analyse the collected data of this research is (E-View Version 12) analysis, which is specialised in analysing the data of different time series since our research discusses the Syrian asylum effect on the concerned variables of Jordan between the years 2000 and 2021.

# **Description of the method**

The research methodology based on the comparative analytical method of quantitative data in both stages, which is estimate-using e-views. We start with the descriptive statistics of the data, always for the two periods then we use the Unit Root test, Correlation test, Granger Causality test and ARDL regression.

The results will later allow for contrasting the hypotheses and making some practical recommendations.

# Reasons supporting the use of the methodology

International conflicts in recent years have forced the massive flight of refugees, which is a great challenge for host countries. This leads to a greater need for studies that allow understanding the changes that have occurred in the 21st century and the effects on the economy (Arslan et al., 2014).

In order to achieve the research object, that is, to analyse the effects of the displacement of refugees on the socio-economic factors of Jordan, it is necessary to contrast the working hypotheses previously raised about the relationships between the number of refugees and various economic and labour market factors (see the definition of these variables in tables 5 and 12). Two strategies designed for this:

On the one hand, an analysis of the refugee effects on relevant economic factors of the host country carried out. We focus on one of the largest international conflicts such as the Syrian crisis and on one of the main host countries, Jordan. It is about trying to explain the behaviour of the variable number of refugees based on the information provided by the remaining economic variables highlighted in the specialized literature.

- Gross Domestic Product Growth.
- Foreign direct investment net inflows (% of GDP).
- Gross Domestic Savings (% of GDP).
- General Government Net Lending/Borrowing (% of GDP).
- Gross National Expenditure (% of GDP).
- Inflation and Consumer Prices (annual %).
- Trade (% GDP).
- Current Account Balance (% of GDP).
- General Government Gross Debt (% of GDP).

Likewise, the effects of the massive arrival of refugees on labour market indicators are specifically analysed.

- Unemployment.
- Own-Account Workers.
- Not in the Labour Force.
- Total Underutilized Labour.
- Time-Related Underemployment.
- NEETs (Not educated nor Employee).
- Working Poverty.

Data is analysed from the year 2000 to 2021, studying the situation in the years prior to the conflict, 2011, and the changes that occur afterwards, with the massive arrival of refugees.

For these two strategies, the Unit Root test, ARDL regression, Correlation test, and Granger Causality test techniques used. Given that it was intended to study the relationship between the variables and obtain an explanation of the effects of the number of refugees on the economy and the labour market, these methodologies are adequate as they allow the evaluation of the contribution of each independent variable on the dependent variable (Cohen et al., 2003); Wooldridge, 2010). Therefore, a technique that quantifies the influence of each of the independent variables on the dependent variable number of refugees, informing which ones have prevalence or are more relevant in the task of explaining their variability and/or forecasting their records (Cohen et al., 2003).

Previous studies focused on refugees use similar techniques and E-views analysis systems Said & Dickey (1984); Yiheyis & Woldemariam (2016); Herranz (2017); Atak et al. (2018); Clemens & Hunt (2017); Khan et al. (2019); Betts et al. (2022); Ozyilmaz et al. (2022). Among studies on migration that used a similar approach, please see table (6) below.

Table 6. Previous empirical approaches on migration and economic factors

Research	Authors
Introducing a test for unit roots relying on an auto regression estimate of an autoregressive-moving average model.	Said & Dickey (1984)
Relying on Unit root tests to identify the null hypothesis of a unit root along with the stationary root of an alternative hypothesis through analyses of time series	Herranz (2017)
Focuses on both quantitative and qualitative information gathered from local host communities and refugees in urban and camp-like. With a special emphasis on the Uganda data, where information about host community attitudes and interactions is accessible, using the method of correlation between the interactions between refugees and their hosts.	Betts et al. (2022)
Studying the refugee in Canada and the correlation between measures of new inflow of refugee and the irregular migration process.	Atak et al. (2018)
This paper studied the refugee's impact on 25 advanced hosting countries using the regression analysis.	Ozyilmaz et al. (2022)
Draw findings of the refugee waves impacts on the labour market of hosted countries through the analysis of the spurious correlation between the instrument and the endogenous related variable,	Clemens & Hunt (2019)
Studying remittances' impact on local capital accumulation in a few African nations through Investigate the impact of remittances on investment and domestic savings.	Yiheyis & Woldemariam (2015)
Addressed the impacts of remittance related to migrants on the Economic Growth, using the ARDL Approach analysis.	Khan et al. (2019)

Source: own elaboration.

# A. Empirical analysis of the effects of refugees on Jordan economic variables

#### **Normal Distribution Test:**

# Normal distribution test for economic variables.

First, to identify the distribution of our variables help us to take decisions on the best appropriate statistical approach to test our theoretical hypotheses. Below tables (7, 8) using Normal Distribution test shows the average values, minimum values, and high values. Arithmetic means standard deviation, skewness, kurtosis, and Jarque-Bera to calculate a normal distribution. Hence, we relied on using the probabilities values measurement indicator that represent the normal distribution test as an endogenous variable and the economic factors as exogenous variables for the periods (2000-2011), (2012-2021) and for the country Jordan that are used in this thesis to study the refugee case and its influence on the hosting country' economy.

Table 7. Normal distribution test for economic variables, characteristics (data description) for the years 2000-2011.

2000-2011	GDP	FDI	GDS	NETL_B	GNE	ICP	T	CAB	GGGD
Mean	5.8127	9.8411	23.2628	-5.0416	126.4953	3.8328	125.3859	-4.9333	71.2508
Median	5.5270	9.0215	23.9650	-4.6500	124.6475	3.4280	117.2030	-6.0000	66.8710
Maximum	8.5670	23.5370	32.5950	-1.1000	141.5000	13.9710	146.9130	11.4000	91.1670
Minimum	2.3150	2.4860	12.8390	-9.8000	116.0450	-0.7390	109.2840	-17.5000	52.6910
Std. Dev.	2.2079	6.1771	5.8409	2.5984	7.8312	3.7532	5.1805	8.6116	15.1655
Skewness	-0.1707	0.8044	-0.2994	-0.4878	0.6243	1.6218	0.3712	0.2759	0.2031
Kurtosis	1.6801	2.9656	2.1449	2.3526	2.2798	5.5947	.3525	2.2958	1.3331
Jarque-Bera	0.9293	1.2949	0.5449	0.6855	1.0388	8.6272	1.6327	0.4001	1.4718
Probability*	0.6283	0.5233	0.7614	0.7097	0.5948	0.0133	0.4420	0.8186	0.4790
Sum	69.753	118.0940	279.1540	-60.5000	1517.943	45.9940	1504.631	-59.2000	855.0100
Sum Sq. Dev.	53.6250	419.7274	375.2861	74.2691	674.6168	154.9594	2534.947	815.7667	529.9190
Observations	12	12	12	12	12	12	12	12	12

<sup>\*</sup>If the value of p $\leq$ 0.05 then the null hypothesis will be rejected for normal distribution. If the value of p>0.05 then the null hypothesis is accepted (Ghasemi & Zahediasl, 2012).

Source: own elaboration.

In the previous table (7), the results obtained for the period of (2000-2011) and for Jordan, in which indicates that the null hypothesis states for (Gross Domestic Product, Foreign Direct Investment, Gross Domestic Savings, Net Government Lending/Borrowing, Gross National Expenditure, Trade, Current

Account Balance and General Government Gross Debt) are in follow with a normal distribution, since the p-value of each mentioned variable is greater than the significance level of 0.05.

However, for the variable of (Inflation and Consumer Prices), the data states are not in follow with the normal distribution. Because the p-value was, lower than the significance level of 0.05. Therefore, the decision is to reject the null hypothesis in these cases.

The table (8) show, the results obtained for the period of (2012-2021) and for Jordan, in which indicates that the null hypothesis states for (Foreign Direct Investment, Gross Domestic Savings, Government Net Lending/Borrowing, Gross National Expenditure, Inflation and Consumer Prices, Trade, Current Account Balance and General Government Gross Debit) are in follow with a normal distribution. Since the p-value of each mentioned variable is greater than the significance level of 0.05. Therefore, the decision is to fail to reject the null hypothesis.

However, for the variable of Gross Domestic Product (GDP), the data states are not in follow with the normal distribution. Because the p-value was 0.0018, which is lower than the significance level of 0.05. Therefore, the decision is to reject this null hypothesis.

Table 8. Normal distribution test for economic variables, characteristics (data description) for the years 2012-2021.

2012-2021	GDP	FDI	GDS	NETL_B	GNE	ICP	Т	CAB	GGGD
Mean	1.9549	3.6878	13.2285	-7.5800	119.4797	2.0811	93.5980	-8.8700	76.8220
Median	2.1485	4.0200	14.1820	-8.1500	119.9795	2.1225	89.4425	-9.3500	74.1500
Maximum	3.3840	5.9120	18.7330	-3.6000	124.6130	4.8250	117.8560	-2.1000	91.7090
Minimum	-1.5510	1.6400	7.4180	-14.3000	113.0180	-0.8770	66.0640	-14.9000	69.0520
Std. Dev.	1.3066	1.6813	3.8749	3.2635	3.2117	2.2009	15.5957	3.2792	7.2370
Skewness	-2.0794	-0.0766	-0.2859	-0.5815	-0.4805	-0.0686	0.0370	0.3145	1.2122
Kurtosis	6.5889	1.4206	1.7873	2.8671	2.9878	1.4878	2.3290	3.6970	3.0954
Jarque-Bera	12.5734	1.0491	0.7489	0.5711	0.3848	0.9605	0.1898	0.3673	2.4529
Probability*	0.0018	0.5918	0.6876	0.7515	0.8249	0.6186	0.9094	0.8321	0.2933
Sum	19.5490	36.8780	132.2850	-75.8000	1194.7970	20.8110	935.9800	-88.7000	768.2200
Sum Sq.	15.3659	25.4432	135.1392	95.8560	92.8360	43.5963	2189.0510	96.7810	471.3746
Dev.									
Observations	10	10	10	10	10	10	10	10	10

<sup>\*</sup>If the value of p $\leq$ 0.05 then the null hypothesis will be rejected for normal distribution. If the value of p>0.05 then the null hypothesis is accepted (Ghasemi & Zahediasl, 2012).

Source: Own elaboration.

Overall, using the normal distribution technique is appropriate for our analysis of data.

Considering the above, we use the Unit Root tests to calculate probabilities, when data contain nonstandard and non-normal asymptotic distributions and do not have convenient closed-form expressions, especially related to our longitudinal data: the period of 2000-2011 and 2012-2021 for the country of Jordan.

#### **Unit Root Test:**

#### Unit Root test for economic variables.

When deciding whether to first contrast or regress trending data on predictable variables of time in order to make the data stable, unit root tests can indeed be utilized (Dickey & Fuller, 1979). In addition, economic and financial theory frequently hypothesizes that nonstationary time series variables can have long-run equilibrium connections. However, the economic indicators listed below serve as the exogenous variables utilized to examine the refugees in host county of Jordan. Moreover, the Unit Root test or known as AR or ARMA test based on different models that aims to measure different aspects related to probabilities, time series, URT Hypotheses, and so on. We use the model of  $yt = \alpha t + \phi 1yt - 1 + \varepsilon t$  to calculate the values of probabilities of each variable and their relationship to each other.

In addition, the terms of non-stationary and stationary used here alongside with the time series is defined as "A time series has stationarity if a shift in time doesn't cause a change in the shape of the distribution; unit roots are one cause for non-stationarity". Hence, the probability values serve as the exogenous variables while the economic factors represents the endogenous variables in which if the p-value >0.05, it means nonstationary and therefore accept the null hypothesis, while if  $p \le 0.05$  is consider a stationary and therefore reject the null hypothesis, as displayed in the table (9,10).

Moreover, a calculation of first difference been used as well to identify the series of changes from one period to another using time series of 2000-2011 and 2012-2021. The first difference considered explicit through the model of Yt-Yt-1. In which Yt is the value of time series Y at period t.

Table 9. Unit Root test for economic variables for the years 2000-2011

Variable	Pro	bability	Probability		
Variable	Level	Result	1 <sup>st</sup> difference	Result	
GDP growth	0.6452	None	0.0577	None	
Foreign direct investment.	0.2053	None	0.1520	None	
Gross Domestic Savings.	0.0656	None	0.0845	None	
General government net lending/borrowing	0.9534	None	0.0021	Stationary	
Gross national expenditure	0.0471	Stationary			
Inflation and consumer prices	0.0243	Stationary			
Trade	0.5215	None	0.1743	None	
Current account balance, per cent of GDP	0.4809	None	0.0866	None	
General government gross debt	0.0134	Stationary			

<sup>\*</sup>If the p>0.05 it will be nonstationary and therefore, positive relationship, while if  $p \le 0.05$  it will be stationary, and therefore negative relationship (Herranz, 2017). Source: own elaboration.

Additionally, 1<sup>st</sup> deference refers to "differencing a series that in fact contains a deterministic trend results in a unit root in the moving-average process. Similarly, subtracting a deterministic trend from a series that in fact contains a stochastic trend does not render a stationary series" (Dickey & Fuller, 1979).

Through the previous table (9), because the values of  $p \le 0.05$  so they were stationary values we conclude that the following factors were stationary during the period of 2000-2011.

- Gross national expenditure.
- Inflation and consumer prices.
- General government gross debt.

Because the values of p>0.05 so these following factors were non-stationary during the period of 2000-2011.

- Gross Domestic Product Growth.
- Foreign direct investment.
- Gross Domestic Savings.
- General government net lending/borrowing.
- Trade.
- Current account balance, per cent of GDP.

Additionally, because the values of p $\leq$ 0.05 at the 1<sup>st</sup> difference we conclude that the following factor were stationary during the period of 2000-2011.

• General government net lending/borrowing.

Moreover, because the values of p>0.05 at the 1<sup>st</sup> difference we conclude that the following factors were nonstationary during the period of 2000-2011.

- Gross Domestic Product Growth.
- Foreign Direct Investment.
- Gross Domestic Savings.
- Trade.
- Current account balance, per cent of GDP.

Table 10. Unit Root test for economic variables for the years 2012-2021

Variable	Probability		Probability	
v ariable	Level	Result	1 <sup>st</sup> difference	Result
GDP growth	0.1517	None	0.0055	Stationary
Foreign direct investment	0.7509	None	0.0213	Stationary
Gross Domestic Savings.	0.7765	None	0.0287	Stationary
General government net lending/borrowing	0.1000	None	0.1673	None
Gross national expenditure	0.3043	None	0.0242	Stationary
Inflation and consumer prices	0.0041	Stationary		
Trade	0.4507	None	0.0225	Stationary
Current account balance, per cent of GDP	0.1137	None	0.0579	None
General government gross debt	0.9811	None	0.3352	None

<sup>\*</sup>If the p>0.05 it will be nonstationary and therefore, positive relationship, while if  $p \le 0.05$  it will be stationary, and therefore negative relationship (Herranz, 2017).

Source: own elaboration.

Through the previous table (10), because the values of  $p \le 0.05$  we conclude that the variable Inflation is stationary during the period of 2012-2021.

Because the values of p>0.05 so these following factors were non-stationary, therefore, during the period of 2012-2021.

- Gross Domestic Product Growth.
- Foreign direct investment.
- Gross Domestic Savings.
- General government net lending/borrowing.
- Gross national expenditure.
- Trade.
- Current account balance, per cent of GDP.
- General government gross debt.

Additionally, because the values of p $\leq$ 0.05 at the 1<sup>st</sup> difference we conclude that the following factor were stationary during the period of 2012-2021.

- Gross Domestic Product Growth.
- Foreign direct investment.
- Gross Domestic Savings.
- Gross national expenditure.
- Trade.

Moreover, because the values of p>0.05 at the 1<sup>st</sup> difference we conclude that the following factors were nonstationary during the period of 2012-2021.

- General government net lending/borrowing.
- Current account balance, per cent of GDP.
- General government gross debt.

A stationary series is much easier to predict. If it behaved one way in the past (say with a certain mean and variance), we can assume that it will continue to behave the same way in the future. Well, or that it has a high probability of continuing to behave in the same way.

However, when some of our data series are stationary, and some non-stationary, putting them together through an estimation algorithm will not provide meaningful results. Therefore, in order to deal with this problem, further techniques will be used to complete the analysis of the data in more detail and to obtain greater predictive power.

# ARDL regression analysis test for economic variables for the years 2000-2021

The main advantage of this testing and estimation strategy (ARDL procedure) lies in the fact that this avoids the pre-testing problems associated with standard cointegration analysis (Nkoro & Uko, 2016).

"ARDL" stands for "Autoregressive-Distributed Lag". Regression models of this type have been in use for decades, but in recent times, they shown to provide a very valuable vehicle for testing the presence of long-run relationships between economic time series

Additionally, the Dickey & Fuller (1979) test been used for such an analysis model that tests the null hypothesis, which represent the relationships between exogenous and endogenous variables. Moreover, the model of the null hypothesis is that  $\alpha$ =1 in the following model equation. Null Hypothesis "(H0): alpha=1 alpha is the coefficient of the first lag on Y". Furthermore, since the null hypothesis assumes the presence of a unit root, that is  $\alpha$ =1, the p-value obtained should be less than the significance level (say 0.05) to reject the null hypothesis. Thereby, inferring that the series is stationary. While if the p-value obtained should be more than the significance level (say 0.05) to accept the null hypothesis. Thereby, inferring that the series is nonstationary.

However, since this analysis requires a minimum number of observations, therefore, we had the option to merge the two periods of 2000-2011 and 2012-2021 to become the new period of 2000-2021, and analyse them accordingly in a complete table as indicated below in table (11)

Table 11. ARDL regression analysis test for economic variables for the years 2000-2021

<b>Domestic Product Growth,</b>	GDP	t-Statistic	Probability**
Augmented Dickey-Fuller tes		-4.3583	0.0375
Test critical values:	1% level	-5.5218	•
	5% level	-4.1078	
	10% level	-3.5150	
Foreign Direct Investment,	FDI	t-Statistic	Probability**
Augmented Dickey-Fuller tes	st statistic	-4.1265	0.0213
Test critical values:	1% level	-4.8034	•
	5% level	-3.4033	
	10% level	-2.8418	
Gross Domestic Savings, Gl	DS .	t-Statistic	Probability*
Augmented Dickey-Fuller tes		-3.3796	0.1285
Test critical values:	1% level	-5.8351	•
	5% level	-4.2465	
	10% level	-3.5904	
General Government Net L		t-Statistic	Probability*
Augmented Dickey-Fuller tes		-1.6815	0.0867
Test critical values:	1% level	-2.9372	•
	5% level	-2.0062	
	10% level	-1.5980	
Gross National Expenditure	e ,GNE	t-Statistic	Probability**
Augmented Dickey-Fuller tes	st statistic	-3.6672	0.0031
Test critical values:	1% level	-2.9372	•
	5% level	-2.0062	
	10% level	-1.5980	
Inflation and Consumer Pri	ices, ICP	t-Statistic	Probability**
Augmented Dickey-Fuller tes	st statistic	-4.8171	0.0280
Test critical values:	1% level	-5.8351	•
	5% level	-4.2465	
	10% level	-3.5904	
Trade (T)		t-Statistic	Probability**
Augmented Dickey-Fuller tes	st statistic	-2.8127	0.0114
Test critical values:	1% level	-2.8861	•
	5% level	-1.9958	
	10% level	-1.5990	
<b>Current Account Balance, O</b>		t-Statistic	Probability*
Augmented Dickey-Fuller tes		-2.7057	0.1137
Test critical values:	1% level	-4.5826	
	5% level	-3.3209	
	10% level	-2.8013	
<b>General Government Gross</b>	Debt GGGD	t-Statistic	Probability*
Augmented Dickey-Fuller tes		1.0726	0.9080
Test critical values:	1% level	-2.8861	•
	5% level	-1.9958	
	10% level	-1.5990	

<sup>\*\*</sup>If the  $p \le 0.05$  the factor is stationary, therefore reject the null hypothesis indicating a negative relationship between the exogenous and endogenous variables.

Source: Own elaboration

<sup>\*</sup>If p>0.05 the factor is not stationary, therefore reject the null hypothesis indicating a positive relationship between the exogenous and endogenous variables.

The above-analysed table (14) represent the test of economic variables with the ARDL model by using (Dickey-Fuller) test technique to identify the (p) value of each variable for the periods of 2000-2021. Hence, in reliance on the values of t-test and (p) value, we conclude the following results.

Hence, after using the unit root test mentioned above to identify the nonstationary and stationary relationship of each of economic variables in connection to probabilities, we indicate below correlation test. The objective of this test is to identify the exogenous variable related to economic variables and the endogenous variables of correlation probability is to provide a clear idea of the refugee situation before and after beginning of the civil war occurred in Syria.

#### **Correlation Test:**

#### Correlation test for economic variables

The Correlation between Exogenous Variable related to economic factors and the Endogenous variable representing the refugees in Jordan will describe all the variables in two periods to compare the results before the civil war and after it.

- A) Years: 2000 -2011 (Before the Syrian Civil war).
- B) Years: 2012-2021 (After beginning of Syrian Civil war).

Additionally, the following tables (12, 13) illustrate the economic variables and their probabilities of correlations, for the periods of 2000-2011 and 2012-2021 of Jordan. This analysis assists to understand the values of probabilities in term if it falls between positive or negative correlation criteria based on Pearson correlation coefficient method.

Table 12. Correlations test for economic variables for the years 2000-2011

Variable	Correlation Probability
GDP growth	-0.0361
Foreign direct investment (FDI)	0.4370
Gross Domestic Savings	-0.2066
General government net lending/borrowing	-0.6155
Gross national expenditure	-0.0450
Inflation and consumer prices	0.5165
Trade	0.3073
Current account balance, per cent of GDP	-0.6060
General government gross debt	-0.9381

<sup>\*</sup>If p> 0.05 it will be Positive correlation, and If p $\leq$ 0.05 it will be Negative correlation.

Source: own elaboration.

Table (11) indicate that different variables had a **positive correlation** with refugees for the period of 2000-2011 and for the country of Jordan, since the probability value p>0.05 and these variables are as follow:

- Foreign direct investment (FDI).
- Inflation and consumer prices.
- Trade.

While in the same table (11), the following variables had a **negative correlation** with refugees for the period of 2000-2011 and for the country of Jordan, since the probability value  $p \le 0.05$ :

- Gross Domestic Product Growth.
- Gross Domestic Savings.
- General government net lending/borrowing.
- Gross national expenditure.
- Current account balance, per cent of GDP.
- General government gross debt.

Moreover, below table (13) represents the same economic variables and their correlation probabilities for the period of 2012-2021.

Table 13. Correlations test for economic variables for the years 2012-2021

Variable	Correlation Probability
GDP growth	-0.2679
Foreign direct investment (FDI)	-0.4857
Gross Domestic Savings	-0.4903
General government net lending/borrowing	0.8011
Gross national expenditure	-0.2998
Inflation and consumer prices	-0.4212
Trade	-0.7294
Current account balance, per cent of GDP	0.6761
General government gross debt	0.5132

<sup>\*</sup>If p> 0.05 it will be Positive correlation, and If  $p \le 0.05$  it will be Negative correlation.

Source: own elaboration.

Table (13) indicate that different variables had a positive correlation with refugees for the period of 2012-2021 and for the country of Jordan, since the probability value p>0.05 and these variables are as follow:

- General government net lending/borrowing.
- Current account balance, per cent of GDP.
- General government gross debt.

While in the same table (13), the following variables had a negative correlation with refugees for the period of 2012-2021 and for the country of Jordan, since the probability value  $p \le 0.05$ :

- Gross Domestic Product Growth.
- Foreign Direct Investment.
- Gross Domestic Savings.
- Gross national expenditure.
- Inflation and consumer prices.
- Trade.

In the years preceding the Syrian crisis, the inflation of consumer prices in Jordan was associated with the number of refugees in Jordan. While after the beginning of Syrian crisis, there were, other variables correlated with the number of Syrian refugees (General government net lending/borrowing, Current account balance, per cent of GDP, General government gross debt). Depending on the value of probability if the p>0.05 the Exogenous Variable and the Endogenous variables will be positively correlated. On the other hand, if the  $p\le0.05$  it will be negatively correlated with the Exogenous Variable and the Endogenous variables.

The fourth type of test we have used below is (Granger Causality Test). This test aims to identify whether one-time series is appropriate in forecasting another as well as determine the null hypothesis of the relationship between two variables (endogenous and exogenous), state the f-value and reject or accept the null hypothesis if the f-statistic was lower or greater than the f-value.

#### **Granger Causality test**

### Granger test for the economic variables for the years 2011-2021

Granger causality is a way to investigate causality between two variables in a time series. It is a test for the null hypothesis to clarify if there is a positive or negative relationship between for the variables related to economic factors and refugee. Such test performed for the country of Jordan and for the period after the beginning of Syrian civil war from 2011 to 2021, to identify the f-statistics and f-value to accept or reject the null hypothesis of probabilities of such variables. With highlight to which Granger test consists of that if F-Statistics value > P value then the Null hypothesis is rejected due to negative relationship between the endogens and exogenous variables, while if F-Statistics value < P value, then the Null hypothesis is (Accepted) due to positive relationship between the endogens and exogenous variables.

However, through Granger test, we have analysed the economic variables and their economic indicators in connection to the number of refugees taking a place in the host country of Jordan and only for the period of 2011-2021. The reason was due to the significant gap between data of Syrian refugee population before and after the beginning of Syrian civil war in 2011, an incapacity to analysis the data prior to year 2011 did exist leading to fail to generate successful results for the concerned period.

- The test resulted that the number of refugees did not affect Growth Domestic (GDP) and therefore accepted the null hypothesis.
- The number of refugees had some effect on Foreign Direct Investment (FDI), leading to reject the Null hypothesis.
- Additionally, the number of refugees had some effect on Gross Domestic Savings (GDS) showing that it rejects the null hypothesis.
- Moreover, the number of refugees had also some effect on General Government Net Lending/Borrowing (NETL\_B) demonstrating the rejection of the null hypothesis.
- While the number of refugees had no effect on Gross National Expenditure (GNE), confirming the acceptance of the null hypothesis.
- As for the number of refugees to Inflation (the general increase on Consumer Prices,ICP) as well as Trade, there were some effects and therefore the test reject the null hypothesis.
- The number of refugees did not affect Current Account Balance (CAB) and General Government Gross Debit (GGGD), and they accepted the null hypothesis.

The test analysis tables is below, which indicates how the economic factors are positively affected by each other and therefore accepted since the P value > Significance level. Correlation rates range between factors from one paragraph to another and according to below table (14) in which that the results we obtained confirm the hypothesis assumed by the study that relates to the economic variables. With mentioning that the impact of the refugees on some factors was clear and conformed to the hypotheses.

Below table 14 shows the test the null hypothesis for the variables related to economic factors for the period of 2011-2021, to identify the f-statistics and f-value to accept or reject the null hypothesis of such variables.

Table 14. Granger test for the economic variables for the years 2011-2021

Null Hypothesis	F-Statistic	Probability
Refugees Accept GDP null hypothesis	0.3167	0.6673
Refugees Reject FDI null hypothesis	0.8335	0.3782
Refugees Reject GDS null hypothesis	1.0225	0.3943
Refugees Reject NETL_B null hypothesis	0.8334	0.0961
Refugees Accept GNE null hypothesis	0.1735	0.7749
Refugees Reject ICP null hypothesis	1.0138	0.4173
Refugees Reject T null hypothesis	0.8372	0.4901
Refugees Accept CAB null hypothesis	0.0033	0.8461
Refugees Accept GGGD null hypothesis	0.2783	0.7436

Source: Own elaboration

Moreover, we discuss below the second type of empirical analysis for the economic factors related to the labour market of Jordan, covering the years between 2000-2011 and 2012-2021 separately.

# B. Empirical analysis of the effects of refugees on Jordan labour market

Below table (15) shows labour market variables and their definitions.

Table 15. Labour market variables and their definitions.

Variable	Definition
Unemployment	The unemployment rate expresses the number of unemployed as a percent of the labour force "Are those individuals without work, seeking work in a recent past period, and currently available for work, including people who have lost their jobs or who have voluntarily left work"
Own-account workers	"Own-account workers are workers who, working on their account or with one or more partners, hold the types of jobs defined as "self-employment jobs" and have not engaged continuously any employees to work for them. Own account workers are a subcategory of "self-employed"".
Not in the labour force	"The rate of persons outside the labour force (neither employed nor unemployed) is expressed as a percentage of the working-age population.
Total underutilized labour	Measures of the extent to which not all available labour force resources fully used in the economy. "Refers to mismatches between labour supply and demand, leading to an unmet need for employment among the population. It includes (a) time-related underemployment, when the working time of persons in employment is insufficient in relation to alternative employment situations in which they are willing and available to engage; (b) unemployment, reflecting an active job search by persons not in employment who are available for this form of work;  (c) Potential labour force, referring to persons not in employment who express an interest in this form of work but for whom existing conditions limit their active job search and/or their availability."
Time-related underemployment	"Refers to all persons in employment who (i) wanted to work additional hours, (ii) had worked less than a specified hours threshold (working time in all jobs), and (iii) were available to work additional hours allowed more work".
NEETs (Not educated nor Employee)	"Is the proportion of young people who are not in education, employment, or training to the population of the corresponding age group: youth (ages 15 to 24); persons ages 15 to 29; or both age groups".
Working Poverty	"The working poverty rate conveys the percentage of employed persons living in poverty in spite of being employed. Poverty is defined using the international poverty line of US\$1.90 per day in purchasing power parity (PPP)"

Source: (ILOSTAT, 2021)

#### **Normal Distribution Test:**

### Normal distribution test for labour market variables.

Below tables (16, 17) using Normal Distribution test shows the average values, minimum values, and high values. Arithmetic means standard deviation, skewness, kurtosis, and Jarque-Bera to calculate a normal distribution. Hence, we relied on using the probabilities values measurement indicator that represent the

normal distribution calculator as an endogenous variable and the labour market factors related as exogenous variables for the periods (2000-2011), (2012-2021) and for the country Jordan that are used in this thesis to study the refugee case and its influence on the hosting country' labour market.

Table 16. Normal distribution test for labour market variables, Characteristics (data description) for the years 2000-2011.

2000-2011	Unemployment	Own_account	NOT- labour force	underutilized	Time underemployment	NEETs	Poverty
Mean	0.1380	0.0848	0.6046	0.2511	0.1612	0.3158	0.0364
Median	0.1385	0.0860	0.6055	0.2470	0.1580	0.3130	0.0310
Maximum	0.1530	0.0880	0.6100	0.2680	0.1760	0.3340	0.0650
Minimum	0.1250	0.0810	0.5980	0.2430	0.1540	0.3040	0.0120
Std. Dev.	0.0096	0.0030	0.0043	0.0090	0.0078	0.0102	0.0191
Skewness	0.0401	-0.2510	-0.2262	1.0651	1.0404	0.7855	0.2497
Kurtosis	1.5108	1.3183	1.5974	2.6652	2.6586	2.4514	1.4483
Jarque-Bera	1.1120	1.5400	1.0860	1.3563	1.2968	0.8076	1.3285
Probability*	0.5734	0.4630	0.5810	0.5075	0.5228	0.6677	0.5146
Sum	1.6570	1.0180	7.2560	1.7580	1.1290	2.2110	0.4370
Sum Sq. Dev.	0.0010	0.0059	0.0002	0.0004	0.0003	0.0006	0.0040
Observations	12	12	12	7	7	7	12

<sup>\*</sup>If the p>0.05 then the null hypothesis is accepted, while if the p $\le$ 0.05 then the null hypothesis will be rejected for normal distribution. (Ghasemi & Zahediasl, 2012).

Source: Own elaboration.

In the previous table (16) the results was obtained for the period of (2000-2011) and for the country of Jordan, in which indicate that all above mentioned null hypothesis states data do follow a normal distribution. Because the p-value of each mentioned variable is greater than the significance level of 0.05.

Table 17. Normal distribution test for labour market variables, Characteristics (data description) for the years 2012-2021.

2012-2021	Unemploy ment	Own_acc ount	NOT- labourforce	underutili zed	Time underemploy ment	NEETs	Poverty
Mean	0.1566	0.0806	0.6064	0.2648	0.1718	0.3577	0.0111
Median	0.1605	0.0825	0.6040	0.2731	0.1796	0.3625	0.0110
Maximum	0.1930	0.0860	0.6220	0.2900	0.1950	0.3810	0.0140
Minimum	0.1190	0.0710	0.5980	0.2380	0.1470	0.3250	0.0090
Std. Dev.	0.0299	0.0052	0.0082	0.0192	0.0178	0.0200	0.0014
Skewness	-0.0877	-0.7301	0.9355	-0.2619	-0.2532	-0.3891	0.5126
Kurtosis	1.3170	2.2372	2.5728	1.4641	1.4569	1.7367	2.7025
Jarque-Bera	1.1929	1.1309	1.5347	1.0972	1.0990	0.9173	0.4748
Probability*	0.5507	0.5680	0.4642	0.5777	0.5772	0.6321	0.7886
Sum	1.5660	0.8060	6.0640	2.6486	1.7180	3.5771	0.1110
Sum Sq. Dev.	0.0080	0.0002	0.0006	0.0033	0.0028	0.0036	1.8973
Observations	10	10	10	10	10	10	10

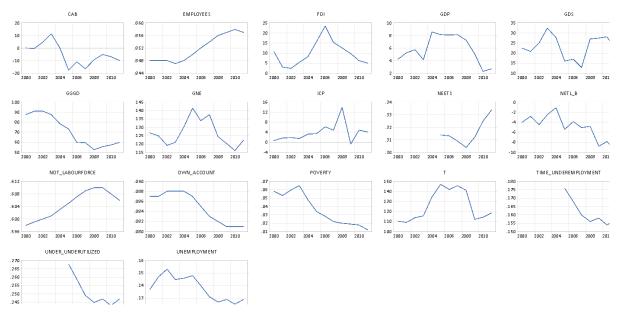
<sup>\*</sup>If the p>0.05 then the null hypothesis is accepted, while if the p $\leq$ 0.05 then the null hypothesis will be rejected for normal distribution. (Ghasemi & Zahediasl, 2012).

Source: Own elaboration.

In the previous table (17) the results was obtained for the period of (2012-2021) and for the country of Jordan, in which indicate that all variables do follow a normal distribution, because the p-value of each mentioned variable is greater than the significance level of 0.05.

Nonetheless, below figures (16, 17) illustrate the probabilities of normal distribution of each variable related to economic and labour market factors for the periods of (2000-2011) and (2012-2021) in representing to the results of each of tables (7, 8, 16, 17).

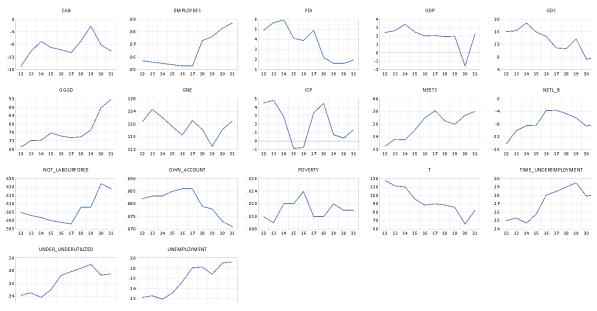
Figure 16. Normal distribution descriptive statistics for economic and labour market variables for the years 2000-2011.



<sup>\*</sup>If the value of p $\leq$ 0.05 then the null hypothesis will be rejected for normal distribution. If the value of p>0.05 then the null hypothesis is accepted (Ghasemi & Zahediasl, 2012).

Source: own elaboration

Figure 17. Normal distribution descriptive statistics for economic and labour market variables for the years 2012-2021.



<sup>\*</sup>If the value of p $\leq$ 0.05 then the null hypothesis will be rejected for normal distribution. If the value of p>0.05 then the null hypothesis is accepted (Ghasemi & Zahediasl, 2012).

Source: own elaboration.

Moreover, another test used below to calculate the probabilities for each variable concerning labour market variables related to the period of 2000-2011 and 2012-2021 for the country of Jordan to understand the analytical data perspective of the effects of such variables on the studied factors in linkage to the refugees' case.

#### **Unit Root Test:**

#### Unit Root test for labour market variables.

The labour market indicators listed below serve as the exogenous variables utilized to examine the refugees in host county of Jordan. Moreover, the Unit Root test or known as AR or ARMA test based on different models that aims to measure different aspects related to probabilities, time series, URT Hypotheses, and so on. We use the model of  $yt = \alpha t + \phi 1yt - 1 + \epsilon t$  to calculate the values of probabilities of each variable and their relationship to each other.

Hence, the probability values serve as the exogenous variables while the labour market factors represents the endogenous variables in which if the p-value >0.05, it means nonstationary and accept the null hypothesis, while if  $p \le 0.05$  it is consider a stationary and therefore reject the null hypothesis, as displayed in the table (18,19).

Moreover, a calculation of first difference been used as well to identify the series of changes from one period to another using time series of 2000-2011 and 2012-2021. The first difference considered explicit through the model of Yt-Yt-1. In which Yt is the value of time series Y at period t.

Table 18. Unit Root test for labour market variables for the years 2000-2011.

Variable	Pro	bability	Probability	
Variable	Level	Result	1 <sup>st</sup> difference	Result
Unemployment	0.7834	None	0.0737	None
Own-account workers	0.5894	None	0.2164	None
Not in labour force	0.1060	None	0.2526	None
Total underutilized labour	0.0577	None	0.6792	None
Time-related underemployment	0.0409	Stationary		
NEETs (Not educated nor Employee)	0.2252	None	0.5497	None
Working Poverty	0.7478	None	0.0353	Stationary

<sup>\*</sup>If the p>0.05 it will be nonstationary and therefore, positive relationship, while if p $\leq$ 0.05 it will be stationary, and therefore negative relationship (Herranz, 2017).

Additionally, 1<sup>st</sup> deference refers to "differencing a series that in fact contains a deterministic trend result in a unit root in the moving-average process. Similarly, subtracting a deterministic trend from a series that in fact contains a stochastic trend does not render a stationary series" (Dickey & Fuller, 1979).

Source: own elaboration.

Through table (18), because the values of  $p \le 0.05$  so they were stationary values we conclude that the following factors were stationary refugees during the period of 2000-2011.

Time-related underemployment.

- Because the values of p>0.05 so these following factors were non-stationaryUnemployment.
- Own-account workers.
- Not in labour force.
- Total underutilized labour.
- NEETs (Not educated nor Employee).

Additionally, because the values of p $\leq$ 0.05 at the 1<sup>st</sup> difference we conclude that the following factor were stationary during the period of 2000-2011.

• Working Poverty.

Moreover, because the values of p>0.05 at the 1<sup>st</sup> difference we conclude that the following factors were non-stationary during the period of 2000-2011.

- Unemployment.
- Own-account workers.
- Not in labour force.
- Total underutilized labour.
- NEETs (Not educated nor Employee).

Table 19 Unit Root test for labour market variables for the years 2012-2021.

Variable	Probability		Probability	
Variable	Level	Result	1 <sup>st</sup> difference	Result
Unemployment	0.8191	None	0.1483	None
Own-account workers	0.9674	None	0.2223	None
Not in labour force	0.8586	None	0.8774	None
Total underutilized labour	0.6135	None	0.2206	None
Time-related underemployment	0.6131	None	0.2344	None
NEETs (Not educated nor Employee)	0.5335	None	0.1602	None
Working Poverty	0.1214	None	0.0289	Stationary

<sup>\*</sup>If the p>0.05 it will be nonstationary and therefore, positive relationship, while if  $p \le 0.05$  it will be stationary, and therefore negative relationship

Source: own elaboration.

Because the values of p>0.05 so these following factors were non-stationary during the period of 2012-2021.

- Unemployment.
- Own-account workers.
- Not in labour force.
- Total underutilized labour.
- Time-related underemployment.
- NEETs (Not educated nor Employee).
- Working Poverty.

Additionally, because the values of p $\leq$ 0.05 at the 1<sup>st</sup> difference we conclude that the following factor were stationary during the period of 2012-2021.

• Working Poverty.

Moreover, because the values of p>0.05 at the 1<sup>st</sup> difference we conclude that the following factors were non-stationary during the period of 2012-2021.

- Unemployment.
- Own-account workers.
- Not in labour force.
- Total underutilized labour.
- Time-related underemployment.
- NEETs (Not educated nor Employee).

Hence, after using, the unit root test mentioned above to identify the nonstationary and stationary relationship of each of economic variables in connection to probabilities, correlation test is follow. The objective of this test is to identify the Exogenous Variable related to labour market variables and the

Endogenous variables of correlation probability is to provide a clear idea of the refugee situation before and after the beginning of civil war occurred in Syria.

# ARDL regression analysis test for the labour market variables for the years 2000-2021.

Since this analysis requires a minimum number of observations, therefore, we had the option to merge the two periods of 2000-2011 and 2012-2021 to become the new period of 2000-2021, and analyse them accordingly in a complete table as indicated below in table (20).

Table 20. ARDL Regression analysis for the Labour market variables for the years 2000-2021.

Unemployment		t-Statistic	Probability**
Augmented Dickey-Fuller to	est statistic	-2.0704	0.0437
Test critical values:	1% level	-2.8861	•
	5% level	-1.9958	
	10% level	-1.5990	
Own Account Workers		t-Statistic	Probability*
Augmented Dickey-Fuller to	est statistic	-1.9109	0.0581
Test critical values:	1% level	-2.8861	
	5% level	-1.9958	
	10% level	-1.5990	
Not_labour force		t-Statistic	Probability*
Augmented Dickey-Fuller to	est statistic	-0.0023	0.9808
Test critical values:	1% level	-5.8351	
	5% level	-4.2465	
	10% level	-3.5904	
Under_utilized		t-Statistic	Probability**
Augmented Dickey-Fuller to	-2.1610	0.0372	
Test critical values:	1% level	-2.8861	
	5% level	-1.9958	
	10% level	-1.5990	
Time_related underemploy	yment	t-Statistic	Probability**
Augmented Dickey-Fuller to	est statistic	-3.4851	0.0042
Test critical values:	1% level	-2.9372	
	5% level	-2.0062	
	10% level	-1.5980	
NEETs		t-Statistic	Probability**
Augmented Dickey-Fuller to	est statistic	-4.5075	0.0482
Test critical values:	1% level	-6.2920	
	5% level	-4.4504	
	10% level	-3.7015	
Working Poverty		t-Statistic	Probability**
Augmented Dickey-Fuller to	est statistic	-2.4911	0.0214
Test critical values:	1% level	-2.9372	
	5% level	-2.0062	
	10% level	-1.5980	

<sup>\*\*</sup>If the  $p \le 0.05$  the factor is stationary, therefore reject the null hypothesis indicating a negative relationship between the exogenous and endogenous variables.

\*If p>0.05 the factor is not stationary, therefore reject the null hypothesis indicating a positive relationship between the exogenous and endogenous variables.

Source: Own elaboration.

The above-analysed table (20) represent the test of labour market variables with the ARDL model by using (Dickey-Fuller) test technique to identify the (p) value of each variable for the periods of 2000-2021.

#### **Correlation Test:**

#### Correlation test for labour market variables.

The Correlation between Exogenous factors related to labour market factors and Endogenous factors representing the refugees in Jordan will describe all the variables in two periods to compare the results before the civil war and after it.

A) Years: 2000 -2011 (Before the Syrian Civil war).

B) Years: 2012-2021 (After the beginning of Syrian Civil war).

Additionally, the following tables (21, 22) illustrate the labour market variables and their probabilities of correlations, for the periods of 2000-2011 and 2012-2021. Such analysis assists to understand the values of probability in term of falling between positive and negative correlation criteria based on Pearson correlation coefficient method.

Table 21. Correlations test for labour market variables for the years 2000-2011.

Variable	Correlation Probability
Unemployment	-0.8334
Own-account workers	-0.8957
Not in labour force	0.8818
Total underutilized labour	-0.7531
Time-related underemployment	-0.7498
NEETs (Not educated nor Employee)	-0.0200
Working Poverty	-0.8927

<sup>\*</sup>If p> 0.05 it will be Positive correlation, and If p $\leq$ 0.05 it will be Negative correlation.

Source: own elaboration.

Table (21) indicate that different variables had a **positive correlation** with refugees for the period of 2000-2011 and for the country of Jordan, since the probability value p>0.05 and these variables are as follow:

• Not in labour force.

While in the same table (21), the following variables had a **negative correlation** with refugees for the period of 2000-2011 and for the country of Jordan, since the probability value  $p \le 0.05$ :

- Unemployment.
- Own-account workers.
- Total underutilized labour.
- Time-related underemployment.
- NEETs (Not educated nor Employee).
- Working Poverty.

Below table (22) represents the same labour market factors and their correlation probabilities for the period of 2012-2021.

Table 22. Correlations test for labour market variables for the years 2012-2021.

Variable	Correlation Probability
Unemployment	0.6394
Own-account workers	-0.2629
Not in labour force	0.2226
Total underutilized labour	0.6537
Time-related underemployment	0.6478
NEETs (Not educated nor Employee)	0.7514
Working Poverty	0.2724

<sup>\*</sup>If p> 0.05 it will be Positive correlation, and If p $\le$ 0.05 it will be Negative correlation.

Source: own elaboration.

Table (22) indicate that different variables had a **positive correlation** with refugees for the period of 2012-2021 and for the country of Jordan, since the probability value p>0.05 and these variables are as follow:

- Unemployment.
- Not in labour force.
- Total underutilized labour.
- Time-related underemployment.
- NEETs (Not educated nor Employee).

Working Poverty.

While in the same table (11), the following variables had a **negative correlation** with refugees for the period of 2012-2021 and for the country of Jordan, since the probability value  $p \le 0.05$ :

Own-account workers.

The next analysis we have used below is the Granger Causality Test.

#### **Granger Causality Test:**

# Granger test for the labour market variables for the years 2011-2021.

Such test performed for the country of Jordan and for the period after the beginning of Syrian civil war from 2011 to 2021, to identify the f-statistics and f-value to accept or reject the null hypothesis of probabilities of such variables. Through Granger test, we have analysed the labour market variables and their indicators in connection to the number of refugees taking a place in the host country of Jordan and only for the period of 2011-2021. The reason was due to the significant gap between data of Syrian refugee population before and after the beginning of Syrian civil war in 2011, an incapacity to analysis the data prior to year 2011 did exist leading to fail to generate successful results for the concerned period.

The test resulted that the number of refugees had some effects on all the labour market variables, such results led to reject the null hypothesis of all concerned variables (Unemployment, Own Account Workers, Not in Labour Force, Total Underutilized Labour, Time Related Underemployment, NEETs, and Working Poverty).

The test analysis tables shown in below table (23), for the null hypothesis regarding factors related to the labour market factors related to Jordan, to identify the f-statistics and f-value to accept or reject the null hypothesis of such variables.

We highlight that these null hypotheses with a probability of p<0.05 are inverted and there will be positive causality between these two variables and therefore accepted since the P value > Significance level. Correlation rates range between factors from one paragraph to another, and according to what the table shows, it can be said that the results we obtained confirm the hypotheses assumed by the study that are related to labour variables. Since the impact of the refugees on some factors was clear and conformed to the hypotheses, while some factors had an unclear effect, and it was not clear until the real data for those values were reviewed and analysed.

Below table 23 shows the test the null hypothesis for the variables related to labour market factors for the period of 2011-2021, to identify the f-statistics and f-value to accept or reject the null hypothesis of such variables.

Table 23. Granger test for the Labour market variables for the years 2011-2021

Null Hypothesis	F-Statistic	Probability
Refugees Reject Unemployment Null Hypothesis	1.4945	0.3545
Refugees Reject Own_Account Null Hypothesis	2.1921	0.2590
Refugees Reject Not_Labourforce Null Hypothesis	6.3957	0.0828
Refugees Reject Under_Underutilized Null Hypothesis	7.3980	0.0692
Refugees Reject Time_Underemployment Null Hypothesis	5.9123	0.0910
Refugees Reject Neets* Null Hypothesis	14.915	0.0276
Refugees Reject Working Poverty Null Hypothesis	4.0073	0.1421

Source: Own elaboration

Moreover, the following final test is (ARDL) Analysis, which used to analyse the dynamic relationships for a certain time-series data in a single equation framework using the socio-economic variables that we have for such analysis for the years 2000-2021, for the case of Jordan.

#### **Results**

Regarding the influence of refugees on Jordan's economic indicators the test shows that during the period of 2000-2011 and for the economic variables that GDP, Foreign Direct Investment, Gross Domestic Savings, General Government Net Lending/Borrowing, Gross National Expenditure, Trade, Current Account Balance and General Government Gross Debit follow a normal distribution. While, for the variable of Inflation (the general increase of Consumer Prices), the data states are not in follow with the normal distribution at the same period. Moreover, Normal distribution for the period 2012-2021 for economic

variables indicated that Foreign Direct Investment, Gross Domestic Savings, General Government Net Lending/Borrowing, Gross National Expenditure, Inflation and Consumer Prices, Trade, Current Account Balance and General Government Gross Debit follow a normal distribution. However, for the variable of (GDP), the data states are not in follow with the normal distribution. Additionally, summarizing the same for normal distribution test for labour market variables for the period of 2000-2011 and for 2012-2021, it has been resulted that all null hypothesis states data do follow a normal distribution.

The next step, the unit root test for economic variables for the period of 2000-2011, showed that Gross national expenditure, Inflation and General government gross debt were stationary. Furthermore, General Government Net Lending\Borrowing was stationary at 1<sup>st</sup> difference probability. While the following factors were non-stationary: Gross domestic product growth, Foreign direct investment, Gross Domestic Savings, General government net lending/borrowing, Trade and Current account balance, per cent of GDP. Also, at 1<sup>st</sup> difference probability test except showed for General government net lending/borrowing was non-stationary, for the same period.

In addition, for the period of 2012-2021 covering economic variables, the analysed data of unit root test concluded that Inflation was stationary. While we confirmed non- stationary the following factors: General government net lending/borrowing, Current account balance, per cent of GDP, General government gross debt and Trade.). As for the 1<sup>st</sup> difference results within the unit root test, Gross Domestic Product, Foreign Direct Investment, Gross Domestic Savings and Gross national expenditure were stationary, while General government net lending/borrowing and Current account balance, per cent of GDP were non-stationary. Nonetheless, regarding unit root test for variables related to labour market. For the period 2000-2011 there was stationary:time-related underemployment, and non-stationary:Unemployment, Own-account workers, Not in labour force, Total underutilized labour and NEETs (Not educated nor Employee). Additionally, at 1<sup>st</sup> difference and probability, Working Poverty was stationary and non-stationary: Unemployment, Own-account workers, Not I n labour force, Total underutilized labour and NEETs (Not educated nor Employee). Finally, for the period of 2011-2021 the labour market variables were non-stationary. As for the 1<sup>st</sup> difference analysis, the same did apply for the years 2000-2011.

Because our data are stationary and some non-stationary, therefore, to avoid the pre-testing problems associated with standard cointegration analysis, we use the test ARDL regression.

Next results related for correlation test, this test showed for the economic variables during the period 2000-2011 that there was negative correlation between refugees and (Gross Domestic Product, Gross Domestic Savings, General Government Net Lending/Borrowing, Gross National Expenditure, Current Account Balance, per cent of GDP and General Government Gross Debt). Additionally, a positive relationship between refugees and (Foreign Direct Investment, Inflation and consumer prices and Trade). While for the

period 2012-2021, the test concludes that, there was a negative relationship between refugees and (Gross Domestic Product, Foreign Direct Investment, Gross Domestic Savings, Gross National Expenditure, Inflation and Consumer Prices and Trade). Moreover, a positive relationship between refugee and (General Government Net Lending/Borrowing, Current Account Balance, per cent of GDP and General Government Gross Debt) indicated. On the other hand, correlation test for labour market variables and for the period 2000-2011 conclude that (Unemployment, Own-account workers, Total underutilized labour, Time-related underemployment, NEETs (Not educated nor Employee) and Working Poverty) had a negative relationship with refugees. While (Not in labour force) had a positive relationship. As for the period 2012-2021, (Own-account workers) had only a negative relationship with refugees, while the rest of labour market variables (Unemployment, Not in labour force, Total underutilized labour, Time-related underemployment, NEETs (Not educated nor Employee) and Working Poverty) had a positive relationship with refugees.

Finally, we performed the Granger Causality test for the economic variables and for the period of 2011-2021. The test is useful to clarify if there is a positive or negative relationship between for the variables, so we can confirm or reject our theoretical hypotheses. In order to clarify and summarize our results, we show them in table 24.

Firstly, we show the effects of the number of refugees on the macro-magnitudes of Jordan. Secondly, we focus on the impact of refugees in the Jordan labour market.

**Table 24. Summary of findings** 

Impact of Refugees on Economic factors			
Hypothesis			
H1.a. The Refugee's positively impact the level of GDP of the host country.	Rejected		
H2.a. The Refugees have a negative impact on the foreign direct investment of the host country			
H3.a. The Refugees have a negative impact on the Gross Domestic Savings of the host country.	Accepted		
H4.a. The Refugee's positively impact the General Government Net Lending / Net Borrowing of the host country.			
H5.a. The Refugee's negatively impact the Gross National Expenditure of the host country.	Rejected		
H6.a. The Refugees have a negative impact on the level of Consumer Prices of the host country (increasing the inflation)	Accepted		
H7.a The Refugee's positively impact the international Trade (as % of GDP) of the host country.	Accepted		
H8.a. The Refugee's positively impact Current Account Balance, as % of GDP, of the host country.	Rejected		
H9.a. The Refugee's negatively impact the General Government Gross Debt of the host country.	Rejected		
H1.b. The Refugee's positively impact the level of Unemployment of Jordan (increasing the unemployment).	Accepted		
H2.b. The Refugee's positively impact the number of own-account workers of the host country.	Accepted		
H3.b. The Refugees positively impact the number of people that are considered not in Labour Force of the host country.	Accepted		
H4.b. The Refugees positively impact the level of total underutilized labour of the host country.	Accepted		
H5.b. The Refugee's positively impact the Time-Related Unemployment in the host country.	Accepted		
H6.b. The Refugees inflows increase the Non-Educated Employed Trained youths, NEET, in the host country.			
H7.b. The Refugees positively impact the Working Poverty rate of the host country.	Accepted		

In reference to the previous results outcomes and table (24), the results of the economic and labour market variables showed a variant of results in light of each test, in which indicates that the relationships between exogenous and endogenous variables can be different depend on the performed test.

Firstly, we start describing the relationship between refugees and economic and labour market variables for the country of Jordan. The following results explanations based on the data obtained from (ILO, World Bank and UNHCR) and illustrated in previous sections, as well as the results of each test used in the empirical analysis. Altogether, assist us to provide more clear outputs regarding the results of each economic and labour market variables and their relationship to the refugee's indicator.

### 3.2. Findings and Discussion

After reviewing various relevant theories on international migration and various theoretical approaches related to forced migration, several theoretical hypotheses put forward in an attempt to explain the economic and labour market impacts of refugee arrivals. With this purpose, based on the literature review several relevant variables selected to analyse the impact of the number of refugees on relevant indicators of the Jordanian economy and labour market.

The empirical analysis carried out in which various techniques such as Normal Distribution, Unit Root, Correlation test, Granger's test and ARDL test used.

Thus, below analysis of findings and discussion of our dissertation, that identifies the negative or positive impact of refugees on each of our hypotheses with respect to other previous pieces of literature.

# The impact of refugees on Economic Factors of Jordan (H.a)

# H1.a Refugees inflows affect Gross Domestic Product.

Our results reject the hypothesis H1.a. "The refugees positively impact the GDP in the host country", Jordan".

Initially, because of significant international conflict, the number of refugees increases dramatically, therefore the capacity of the host country overstretched in the short run.

As Ravenstein (1885) addressed in his laws of migration and the intervening opportunities theory pointed out, migrants often travel a short distance. In this case, refugees from Syria have few resources and options, so they hosted by nearby countries, such as Jordan. The pre-conflict influx of refugees into Jordan was practically residual but was manageable for the country due to the massive inflow of refugee as well as the financial aids received from international communities as a support for Jordan' economy to sustain the capacity of holding refugees within its borders. Over time, refugees enter the labour market and gradually adapt to their new environment. In this sense, our results add evidence to previous studies such as McCarthy

& Vernez (1997), Akgündüz et al. (2015) that pointed up refugees do not affect positively the hosting country's GDP in the long term.

Additionally, Baloch et al. (2017) refugee inflow carries significant economic implications for the host country based on the hosted countries' economic status. Also, Holler & Schuster (2020) address several and diverse costs: the requirement of basic needs and shelter, integration measures that affect hosting countries' economies. Our analysis adds empirical evidence to these researches for a developing country. Jordan's economic situation and resources were already limited. Therefore, hosting refugees is a great effort for a developing country, even with the support international aid (that tends to reduce in the last years). In this sense, our results add evidence to the dual labour market theory, world systems theory, and the world society approach. Such approaches highlight combination of different factors at macro-level as determinants the long-term economic situation.

### H2.a. Refugees affect Foreign Direct Investment (FDI).

Our results show evidence to confirm our hypothesis H2.a. "The Refugees have a negative impact on the foreign direct investment of the host country"

The world systems migration theory addressed that conflicts increasingly have an international impact, not only affecting the country where the problem occurs, but also affecting other countries in their efforts to host or provide international aid and investment. In addition, the migration network theory points up that refugees and their families spread the impact of capital inflows or outflows (Massey et al., 1993, van Meeteren & Pereira, 2018, de Haas, 2021).

Also, our results add empirical evidence to previous studies that address the association between migration and FDI. In our case, for the case of forced migration in the developing countries. In this sense, Sassen-Koob (1984) exhibited that immigrants impact negatively on FDI by decreasing export production (and, subsequently, the investment for such production) and import due to the insufficient growth in demand for products and services to obscure their needs and inquiries in hosting countries. Later, Kugler & Rapoport (2007) indicated that immigrants negatively dissemble FDI by lowering the skills percentage of countries' home residents. Moreover, Sanderson & Kentor (2009) illustrated that immigrants carry an indirect impact on FDI. Additionally, Federici & Giannetti (2010), Javorcik et al. (2011) Nijkamp et al. (2011) Burchardi et al. (2016) Khan et al. (2019) Comolli (2019) and Mihi-Ramirez (2020) pointed out that immigrants could affect inversely the FDI of hosting countries through decreasing international trade, lower skilled population ratios, and increased pressure on budgets

### H3.a. Syrian refugees and Gross Domestic Savings (GDS).

Our results confirmed our hypothesis H3.a. is accepted. "The Refugees have a negative impact on the Gross Domestic Savings of the host country". Previous research works pointed to both positive and negative effects of immigration on gross domestic savings. For instance, studies such as Carroll et al. (1998) and later Gatina (2014) indicated a negative relationship between immigrants and households and saving ratios, but in the case of developed host countries, Swaleheen (2008) and later Dadush (2018) highlighted positive effects.

However, in line with our results, for the case of developing host countries Khawaldah & Alzboun (2022) pointed up showed significant costs, such as delivering education, health, water, electricity, items and goods, and other sorts of services to refugeesDomestic savings are very important, especially for developing countries, as they contribute to increased investment, enable the financing of business at lower cost, and hence an increase in economic growth, which immigrants contribute significantly to such role (Buch et al., 2006; Bach et al., 2017).

The greatest savings constraints affect firms investing in modern production lines, machinery and technology, which are important for reducing production costs, increasing productivity and improving competitiveness, however, hosting immigrants, can support the investment development and creating more opportunities for production within the hosted countries (Bach et al., 2017).

Lending is also the main mechanism by which savings transformed into investment. The lack of lending to enterprises is a major constraint to the development of these countries. In developing countries, the central bank and commercial banks have to adjust to the implementation of policies and the legal and regulatory framework governing banking activities, however, hosted countries of immigrants affect the saving generated, especially in times of international economic slowdown. (Ribaj & Mexhuani, 2021).

In most developing countries, investment resources come largely from abroad, especially foreign direct investment and debt. However, the high dependence of developing countries on external sources limits their independence and they may face coercive policies for misuse of their resources. Their economic recession also aggravated by debt. Similarly, many developing countries run large deficits in their current and trade accounts, financed by foreign grants and loans. Even a small change in external capital flows can trigger a domestic economic recession (Ribaj & Mexhuani, 2021). The accumulation of domestic savings would therefore help to reduce vulnerability arising from dependence on external financing and provide a sustainable long-term financing base for investment in developing countries.

However, since the end of the 2008 global crisis, aid trends to developing countries are declining and do not match current needs. Therefore, host countries such as Jordan need a continuous increasing volume of financial resources at the lowest cost to boost their economic development (Mayda et al., 2022).

### H4.a Refugee and General Government Net Lending/ Net Borrowing (NET\_L/B)

Our results confirmed our hypothesis H4.a. The Refugees positively impact the General Government Net Lending / Net Borrowing of the host country. In other words, the increase in the number of refugees increases the need for external funding. Previous studies such as Swedish National Debt Office (2015), Zamore (2018) and AlShwawra (2021) confirmed that host countries borrowing ratios increased due to receiving immigrants. Swedish National Debt Office (2015) showed the increase of costs concerning needs, goods, and services of refugees for the Swedish government and how they retained to apply for international loans to clad these expenses, however, such aids assisted to maintain supporting immigrants residing within hosted country, which implied that immigrant has positively affected the government's lending\borrowing ratios. Zamore (2018) also concluded an indirect impact caused by immigrants in the case of the USA as a one of main financial aid supporter for hosted countries. Additionally, the Swedish National Debt Office in 2022, in the case of the Ukraine war in 2021\2022, addressed the Ukrainian refugees influence positively to hosting countries' debt ratios in countries such as Poland and Sweden in short term. AlShwawra (2021) pointed out that Jordan, after the beginning of Syrian civil war in 2011, commenced receiving refugees in significant amounts in order to pursue new international loans and donations to cover the cost of hosting the refugees and support it economic growth.

The cycle of external indebtedness of a developing country is well known. Generally, its domestic savings rate is low, and it must therefore rely on foreign savings in order to increase its investment. What generates is a transfer of resources from more developed countries to developing countries. This additional capital should allow, over time, the reverse operation, i.e. the repayment of the debt. However, this sequence requires three conditions: that the financial resources raised abroad invested productively; that the growth of international trade maintained; and that the rate of growth of the developing country is higher than the average interest on the loans received (Galor & Zeira, 1993; Dadush, 2018).

International aid and remittances can alleviate debt problems, and support the hosted countries to maintain it economic stability and further development (Ribaj & Mexhuani, 2021).

According to neoclassical theory, the key to growth lies in the savings rate (exogenous to the model): higher savings rates correspond to richer countries. Work that is more modern points out that the accumulation of physical and human capital, together with the efficiency of investment, are key to development (Cesaratto, 1999).

However, the circumstances of developing countries differ from those of developed countries, and therefore the solutions are not necessarily the same. In a developing country, the savings rate is low and income levels are lower. In addition, the massive influx of refugee's means increased costs for the host country (Swedish National Debt Office, 2015). Priority therefore are given to finding the path that best suits the specific

situation of each country, and that allows for self-sustaining growth, reducing reliance on external funding over time (Ozyilmaz et al., 2022).

It is always possible to increase savings by reducing consumption, however, in societies where large parts of the population live at subsistence level. Therefore, such possibility is minimal. For this reason, it is usual for these countries to look for savings abroad, sometimes through international organisations, and other times through private channels (investments and loans) (Zamore, 2018).

Hence, in case of Jordan economy, it showed that the immigrants slighty support the economic growth, especially after 2011, although in the long run, this was not enough due to the problems Jordan faces in an international context of economic slowdown. In this context, a developing country is usually a recipient of foreign capital, capital that could returned as its income increases. If the growth process is unleashed and sustained, foreign debt should not pose serious problems. However, if the take-off is not self-sustaining, foreign debt will be a difficult constraint to overcome (Mayda et al., 2022).

### H5.a. Refugee and Gross National Expenditure (GNE).

Our results reject our hypothesis H5.a. The Refugees has a negative impact on the Gross National Expenditure of the host country. Ekberg (1999) found that immigrants' effect on GNE in a developed country such as Sweden was slightly positive. In addition, Lee (2013) addressed that immigrants in the USA can positively and negatively impact (GNE) based on their states of residency within the USA. Our results complement literature for the case of a developing country and forced migration.

Moreover, Altemeyer-Bartscher et al. (2016) for the case of refugees in European countries, concluded that only when the migration is effectively managed, they still the hosting countries GNE is more or less under control. According to these authors, if the distribution of immigrants divided equally in each hosting country, a decrease in burden on each hosted country will occur, leading to a positive enhancement for the (GNE) for each concerned country.

In developing countries, low productivity and incomes lead to a level of consumption far below the average seen in the developed world, and achieving middle-class status remains a difficult aspiration. Rather, the immediate concern for the populations of developing countries is to move out of poverty and its associated deprivations and to achieve a status entailing a higher and more secure standard of living, enabling them to access better healthcare and education, and to provide for the well-being of their families (Kapsos & Bourmpoula,2013). This stresses significant differences between developing countries and the developed world. Concerning this, our results add evidence for the case of a developing country like Jordan, where resources are limited. Thus, in the refugee issue, differences between host countries need consideration.

AlShwawra (2021) argued for the need to augment the international financial support sent to Jordan to bolster the capability of hosting refugees process, since financial aid assists refugees in covering their needs, thus, enhancing Jordan's (GNE) ratio.

## H6.a. Refugee affect Inflation (as general increase of Consumer Prices (ICP).

Our results confirmed the hypothesis H6.a. The Refugees have a negative impact on the level of Consumer Prices of the host country (increasing the inflation). These results add evidence for the case of forced migration in developing countries to previous research works such as Nietschmann (1979), Nyaoro (2010), Akgündüz et al. (2015) and Fransen et al. (2017) who pointed out that immigrants had a negative influence on inflation and consumer price ratios through the increasing demand for services and goods fed by the hosting countries. Additionally, our results are in line with Bahcekapili & Cetin (2015), Akgündüz et al. (2015), and Del Carpio & Wagner (2015), who found the same negative effects in the case Syrian refugees in Türkiye. Moreover, Dadush (2018) confirmed that in the matter of Jordan, Lebanon and Türkiye hosting Syrian refugees, there was a negative impact on the inflation rate and consumer prices. Later, Rocha (2021) also found that there was a negative relationship between inflation and economic immigrants. Khawaldah & Alzboun (2022) also found a negative impact of Syrian refugees on Jordan's inflation ratios.

According to Ribaj & Mexhuani (2021). International capital inflows, in the way of international aid and remittances could lead to more savings in developing countries, and ultimately "leads to less consumption, which could also result in a larger amount of capital investment and finally a higher rate of economic growth". In that regard, Jordan should aim to provide an open climate for encouraging the accumulation of savings because they bring a higher level of financial capital. Additionally, Ribaj & Mexhuani (2021) pointed up that financial capital is an important contributor to GDP growth as it increases opportunities for investing in production and innovation in a country by providing an additional income stream for society. The lack of macroeconomic stability is a situation that all developing countries have experienced, at least once, and entails enduring high rates of inflation. Inflation is a handicap for development that compresses productive capacity because it prevents proper economic planning: it dampens expectations; it channels all efforts into ways to protect against itself; and it always benefits the richest and hurts the poorest, favouring the concentration of wealth.

Bahcekapili & Cetin (2015), Akgündüz et al. (2015), Del Carpio & Wagner (2015), illustrated that a fundamental price in an economy is the exchange rate, as it determines the relative price level of the country. In developing countries, the currency is often not convertible, and therefore its exchange rate does not occur in organised markets but depends on administrative decisions. In many cases, the exchange rate kept overvalued for long periods in order to moderate inflation and create a false sense of stability. The consequences of this are also well known. The external deficit widens because of the loss of

competitiveness; many companies can no longer compete and disappear; the foreign exchange reserve rapidly depleted; and in case it decided to use multiple exchange rates, in order to stimulate exports and penalise imports, the overall income damaged by the worsening of the terms of trade. Therefore, the fight against inflation cannot base on maintaining an unreal exchange rate, as this leads to the decline of the economy.

#### H7.a. Refugee effect on Trade (T).

Our results confirm our hypothesis H7.a. The Refugees positively impact the international Trade (as % of GDP) of the host country. Our results are in line with Gould (1994), who addressed the positive impact of immigrants on international trade. Moreover, our results add evidence to the case of forced migration to previous studies such as Head & Ries (1998), Dunlevy & Hutchinson (1999), Girma & Yu (2002), Landau (2004), White & Tadesse (2010), Poot & Strutt (2010), Bratti et al. (2014), Mayda et al. (2017), Steingress (2018) and David et al. (2019). These works showed that international immigrants helped in enhancing trade process for hosted countries through increasing demands on good and services as well as their contribution to the informal sectors (Industrial\Services) using their skills to enrich the development and production of products which mirror positively on import and export.

Head & Ries (1998) and Dunlevy & Hutchinson (1999) pointed out that immigration has an influential indirect relation to bilateral trade. Consequently, international assistance from foreign countries stimulated indirectly exports and imports. Similarly, Taylor et al. (2016) found that cash assistance to Congo' refugees in Rwanda had some significant impacts on businesses and families in the host country. In this case, the rate of trade between the local economies near those camps increased from the rest of Rwanda from \$49 to \$55.

Additionally, refugees could imply shifting preferences toward products from one's native country and increase bilateral transaction fees, stimulating the international trade Mayda et al. (2017) and Steingress (2018).

In line with the migration network theory, Erdoğan et al. (2021), found that refugees became the link between Türkiye on one hand, and the Middle East and North Africa on the other hand, and this link became stronger than the link between Türkiye and the European Union, so refugees encourage trade in this region. In addition, the migration theory of circular cumulative causality points out that these changes occur gradually. So, once migration becomes operational, the whole process tends to perpetuate itself (King, 2012).

Under the Heckscher-Ohlin model, international trade is sort of complement to migration. Migration flows from poorer countries to richer countries can be regard as a direct result of international trade between countries and the opposite outcomes for poor hosted countries cases (Taylor, 1986).

### H8a. Refugee and Current Account Balance, per cent of GDP (CAB).

Based on uur results the hypothesis H8.a. was rejected. The Refugee's positively impact Current Account Balance, as % of GDP, of the host country. These results are in line with Ratha (2003), who found that immigrants in the USA had no negative influence on the current account balance. In our case, supplement this study for the forced migration and in the case of developing countries. Additionally, previous researches show positive and negative evidences of the impact migration on Current Account Balance. Taslim (1998) demonstrated in the study of immigrants in Australia that immigrants tend to save more than natives do, resulting a no significant impact concerning this variable. Alawin & Oqaily (2017) illustrated that immigrants might influence current account balance in the long term. However, evidence of positive impact in the short run identified. David et al. (2019), in the study of Syrian refugees in Lebanon, demonstrated that there is some positive relationship and negative relationship between the refugee's impact on the current account balance of Lebanon.

#### H9a. Refugee and General Government Gross Debt (GGGD).

Our results reject our hypothesis H9.a. The Refugees has negative impact on the level the General Government Gross Debt of the host country (decreasing the Debt). These results are in line with literature that shows how the burden falls on the host countries when there are huge numbers of refugees. It leaves the country in debt until the refugees integrate into the new society and seize employment opportunities to rely on themselves rather than on aid provided by states or organizations (Taslim, 1998; Zmore, 2018) In that sense, the network migration and the migration systems theory point up that migration exerts certain impact on economic, institutional, social and cultural characteristics of receiving and sending "ends" (de Haas, 2008). These theories help to understand the persistence of migration flows over the time. An initial or more massive migration in the first place, and later, the persistence of imbalances or conflicts, plus migrants' networks, contribute to the migration process's continuation. In this case, Massey et al. (1993) addressed that the only policies that really work in a long term are the families' reunifications, as this is the beginning of mitigating the problems at source.

### The impact of refugees on Labour Market of Jordan (H.b)

#### H1.b. Refugees and Unemployment.

Our results confirm the hypothesis H1.b. The Refugee positively impact the level of Unemployment of Jordan (increasing the unemployment). Previous studies showed that immigrants have a negative impact on the unemployment ratio in hosting countries Coppel et al. (2001), Kugler & Rapoport (2007), Stave & Hillesund (2015), Bahcekapili & Cetin 2015), Fernández-Reino (2018). Nevertheless, there are also works

showing that immigrants indirectly influence the unemployment in host countries Angrist & Kugler (2003); Del Carpio &Wagner (2015). In the case of forced migration. Stave & Hillesund (2015) described certaincompetition between Syrian refugees and locals in the labour market compite with

Additionally, Hartnett (2018) demonstrated an indirect impact of Syrian refugees on Jordan's labour market. Hence, , Esen & Binatli (2017) showed an increase of informal workers in Jordan, especially after the beginning of civil war in Syria Their geographic expansion might also have altered the way they affected local labour markets

## **H2.b.** Refugees and Own-Account Workers.

Our results confirm our hypothesis H2.b. The Refugees positively impact the number of own-account workers of the host country. The results add evidence for the case of forced migration in a developing host country to previous studies such as Barslund et al. (2018), Sak et al. (2018), Clemens et al. (2018), Dr Ajluni & Lockhart (2019), Muñoz-Mora et al. (2022), among others. These works pointed up that immigrants cause an increasing of import and export in hosted countries due to the growth of demand for goods and services, which led to the raising of new businesses that strived to, cover such inquiries. The firms need the immigrant's skills, the knowledge of the product and of the exporting country, the language, and cultures as a validating tool of business development. However, as the capacity of the industry is limited in the developing countries, the informal sector is more widespread, more agile with fewer bureaucratic hurdles, and generally has lower barriers to entry and higher wage levels than in the formal sector. Therefore, there is a higher number of refugees in the informal sector, as employees or own-account workers. In fact, in many cases the informal sector and self-employment is the only way out for refugees. Additionally, Ajluni & Lockhart (2019) in their study of Syrian refugees in Jordan showed that the refugee inflow to Jordan after the civil war in 2011 has positively affected the development of some informal industries functional in Jordan's labour market through their concentration in constructions and infrastructure jobs, ushering to increase own-account workers in concerned industrial occupations. Muñoz-Mora et al. (2022) displayed that immigration from Venezuela had a positive impact on self-employment and own-account workers.

Developing economies typically have large numbers of own-account workers producing goods and services where labour regulations often do not apply and where formal employment contracts are scarce (Agénor et al., 2004). In this context, job insecurity is widespread, wages are volatile, and workers receive very few benefits from their employers (Yerrabati, 2022). These conditions lead to self-employment and the segmentation of the labour market. Own-account workers are mainly in the "low-wage" sector and do not have full access to jobs in the "high-wage" sector (what segmentation theories call the "second sector"). This could partly explain the existence of labour market barriers and clarify why poverty is prevalent.

Moreover, this labour market segmentation would imply persistent income differentials for similar workers (Stoikov, 1972); Agénor et al., 2004). One of the models that best explain labour market segmentation in developing countries is by Harris & Todaro (1970), who analysed long-lasting rural-urban migration (despite high unemployment in urban areas) because of persistent differential income.

Self-employment, thus, offers an alternative to the entry barriers in more conventional wage employment in developing countries (Raheim, 1997; Yerrabati, 2022).

Likewise, being an own-account worker somehow allows one to cope with the lack of social insurance protection and has a low entry cost (Raheim, 1997).

Besides, there are all kinds of barriers that make wage employment inaccessible, such as for refugees, so self-employment can provide them economic independence and flexibility, as well as an option to earn a living income (often the only choice), which the labour market may not provide (Raheim, 1997).

Refugee status does not usually allow access to the formal labour market and therefore we would expect they subsist for the first few years on development assistance programmes, and over time, as the chances of return diminish, they move into informal sectors of activity. Their only option is to take up self-employment, usually in low-productivity activities and in very precarious conditions.

In the face of the growing global problem of increasing job insecurity, developed and developing countries have different perceptions of the problem and therefore do not apply the same solutions. Self-employment is an important means of subsistence in situations of precariousness, often as the only option, as in the case of refugee migrants who, after several years, finally manage to regularise their situation in the host country. Nonetheless, the precariousness associated in this case with own-account workers differs from the perception of entrepreneurship in developed countries. Because of the influx of refugees, the increase in the number of own-account workers in developing countries has a limited effect on improving the quality of employment, as they are mostly workers with very low incomes, below the poverty line and, as previous research points out, in conditions of precariousness and temporariness.

#### **H3.b.** Refugees and NOT in Labour Force.

Our results confirm our hypothesis H3.b. The Refugees positively impact the number of people that are considered not in Labour Force of the host country.

In this sense, we add empirical evidence to Akgündüz et al. (2015). Aras & Mencütek (2015) addressed a positive impact of refugees in labour market of Türkiye. AlShwawra (2021) conclude that only 160,000 work permits granted to refugees in Jordan until 2021, such number does not exceed the percentage of 10% of total Syrian refugees residing in Jordan nowadays, and, consequently, the informal labour is high, as is usual in developing countries.

In developed countries, formal/regulated productive activities prevail, where workers pay taxes and have rights such as holidays, compensation for working extra time, severance pay, etc.

According to neoclassical models, in this context, the lower the wages, the lower the unemployment rate (or in alternative: employment would be an inverse function of wages, (Jarmolowicz & Knapińska, 2011). Hence, the implementation of social protection subsidies and a minimum wage might lead to a higher level of unemployment and a transfer of unskilled workers into the informal labour market, with wages that are more precarious and working conditions (Raheim, 1997).

However, theories pointing out to labour market segmentation, i.e., the idea of limited access to certain labour market sectors, show that the mobility of the labour force is actually low and restricted (Jarmolowicz & Knapińska, 2011). Among these theories are the dual labour market theory and the internal-external labour market theory. Similarly, both theories establish two main sectors. The primary sector, which includes stable well-paid jobs, and the secondary sector, which includes lower-prestige jobs. Access to the primary sector is limited, and the secondary sector includes immigrants, young workers and other collectives who been pushed into it (Stoikov, 1972).

Likewise, according to the human capital theory, the division of the labour market made based on universal and specific skills of the labour force (Jarmolowicz & Knapińska, 2011) added that employees with general skills more often get jobs that do not require specialisation and that related to the execution of simple tasks. However, if workers had specific skills, they could get more prestigious, stable and better-paid jobs.

In addition, according to the monopsony theory, firms with certain market power can influence the minimum wage level. These firms control the retail price of products and can set wage levels according to these market prices, which are much lower than in other sectors. Thus, low labour mobility allows these firms to ensure a high number of workers with low wages, as is often the case in agriculture in developing countries.

#### H4.b. Refugee and Total Underutilized Labour.

Our results confirm our hypothesis H4.b. The Refugees positively impact the level of total underutilized labour of the host country. In this sense, Mattoo et al. (2008) pointed out inequalities among highly educated immigrants from other nations. In this sense, Mattoo et al. (2008) also indicated that results show that low abilities, rather than skill underutilization, are the main problem for "underutilized" migrants Similarly, Zetter & Ruaudel (2016) showed that immigrants could have indirect impact due to their contribution in informal sector and acceptance of lower wages than the locals could. In fact, many professions in the Jordanian labour market are dedicated to Jordanian citizens alone, especially in the public sector (Wahba, 2014). Furthermore, the most of refugees in Jordan keep as unskilled workers, and they increased in sectors

such as construction and retail (Zetter & Ruaudel, 2016). According to Malaeb & Wahba (2018) immigrants were more probable to be pushed into informal employment and worked fewer hours.

### **H5.b.** Refugee and Time-Related Unemployment.

Our results confirm our hypothesis H5.b. The Refugee's positively impact the Time-Related Unemployment in the host country. These results add evidence to previous research work such as Becker (1975), Landers et al. (1996), Bell & Freeman (2001), and Bratti & Staffolani (2007). They all concluded in their different studies on labour market that worker' decisions regarding their labour supply related indirectly to earnings imbalance in their vocation, as well as indirect impact for the relationship between immigrants and time-related unemployment. Moreover, Hamermesh & Stancanelli (2015) indicated that immigrants lean to work extra hours in hosted country to boost their wages, leaving some negative impacts on local workers. Additionally, Stave & Hillesund (2015) and later David et al. (2019), for the case of Syrian refugees in Jordan and Lebanon, presented that both people are working overtime to improve their income, noting that Syrian refugees are willing to work in informal sectors and in handcrafts job for lower wages than the locals could.

### **H6.b.** Refugees and NEETs (Non-Educated Employed Trained youths).

Our results confirm our hypothesis H6.b. The Refugees inflows increase the number of Non-Educated Employed Trained youths, NEET, in the host country.

Bell & Blanchflower (2011) found a direct relationship between immigrants and NEETS, specifically from an educational standpoint. Later works by OECD (2007), Bălan (2015), and Marelli & Signorelli (2015) showed that immigrants linked negatively to NEETS through rising unemployment and lower wages. Additionally, Hameed et al. (2018), Pluck (2021) and Trueba & Pluck (2021) showed that there is a slight negative impact of immigrants and NEETS due to the boost in unemployment ratios and the erosion of educational infrastructure in poor countries, driving youth unemployment and absence of education or training to perform a professional job.

# H7.b. Refugees and Working Poverty.

Our results confirm our hypothesis H7.b. The Refugees positively impact the Working Poverty rate of the host country. Our results help to confirm that there are notable differences between developed and developing economies in the labour market, and, therefore, the methodologies used to study immigration in developed host countries need to be adapted accordingly.

In this context, achieving middle-class living standards is one of the main aspirations of most households and individuals in the developing world. However, in these countries, low productivity and incomes lead to a level of consumption far below the average seen in the developed world, and achieving middle-class status remains a difficult aspiration (Ciccone & Hall, 1996). Despite the consensus that policies in developed countries focusing on reducing unemployment are important for poverty reduction, it is still not clear how to reduce poverty in developing countries, in which in some country' cases, immigrants can increase poverty ratio due to their acquisitions of some jobs available in informal sectors. Hence, in developing countries, social protection systems are often inefficient, and, in practice, the working poor have to rely on themselves and their families. Furthermore, the use of unemployment statistics in the design of anti-poverty policies usually ignores people in precarious employment (Majid, 2001).

Rather, the immediate concern for the populations of developing countries is to move out of poverty and its associated deprivations and to achieve a status entailing a higher and more secure standard of living, enabling them to access better healthcare and education, and to provide for the well-being of their families. At the same time adding some pressure on host countries (Kapsos & Bourmpoula, 2013).

In relation to this observation, we should remember that access to quality healthcare, finance and education is essential in any country to lift the population above poverty levels and maintain the level of development achieved. It also enables workers to engage in higher-productivity activities, which ultimately leads to economic growth if planned properly by hosting countries.

# Conclusions

### 4. CONCLUSIONS

This section presents the conclusions of this research work. To do so, we will analyse the main contributions obtained from the theoretical review and from the empirical work on the impact of refugees in the host country Jordan. This is in line with the objectives we set out at the beginning of this research. In addition, we synthesise the possible implications obtained in this doctoral thesis, and finally, we show the limitations of this work and the future lines of research.

Firstly, with reference to the theoretical framework, our first objective was to undertake an in-depth analysis of the existing literature to date on forced migration and its effects on the economy and labour market of the host country. To this end, a theoretical review carried out, which included as a starting point a systematic review of research on migration, refugees, and their effects. In addition, the main concepts of the research topic, definitions and relevant trends studied.

Furthermore, the most relevant contributions of theories and theoretical approaches related to forced migration and its effects were analysed, such as Ravenstein Observation Theory, Labour Market Theory, World System Theory, Migration Network Theory, Neoclassical Theory, among others.

The literature highlights relevant factors for the study of the impact of refugees on the economy and labour market of the host countries that we used in our empirical analysis of the Syrian refugees' impact on Jordan, for the periods of 2000-2011 (before the Syrian Civil war in 2011) and 2012-2021 (after the beginning of Syrian civil war).

Therefore, we can conclude that the first research objective achieved.

On the other hand, although there are numerous studies on traditional migration (Massey et al., 1993); Kumpikaite & Zickute, 2012), when migration is due to force majeure (wars, persecution, natural disasters, etc.), there are important differences with an economic or more traditional migration that must be taken into consideration. Especially due to the progressive increase in the number of refugees, with a growing international impact (UNHCR, 2020). In this context, the traditional reasons justifying migration have lost their relevance. As a result, it has become increasingly difficult to explain contemporary international migration flows in neoclassical terms, as it would now no longer be sufficient to explain differences between countries as the sole cause justifying migration processes (Kurekova, 2011).

Therefore, in accordance with the objectives of the research and the hypotheses set out, this study has carried out the analysis of the impact of refugees in the hosting country, the research highlights the economic and labour market factors and consider the situation before and after the international conflict, i.e., the period of 2000-2011 and 2012-2021.

The analysis focuses on the arrival of Syrian refugees, who show exceptional post-conflict growth, and on the effects on various economic and labour market indicators in the host country. In this case, the main host countries are located in the neighbouring countries of the Middle East (UNHCR, 2020).

Collecting reliable data for international comparisons is a common problem in migration studies, but in the case of refugee studies, it is a particularly complex task. Refugee flows depend on the evolution of the conflict, and the situation in each host country is very uneven. For this reason, and due to the availability of data over a long period for the selected factors, Jordan chosen as the study sample.

Jordan aspires to eventually become a developed country, but its economic situation makes it more prone to the effects of a massive influx of refugees. This issue is also important, as many studies that focus on traditional migration, or even specifically on forced migration, look at developed host countries, which logically have a different situation, greater resources and tools, and therefore a different perception of the problem and also different solutions. For instance, in developed countries, the middle class predominates, and the poverty line often coincides with unemployment. Meanwhile, in a developing country, it is often the case that a large part of the population lives below the poverty line, informal work predominates, and social protection systems are under-resourced and therefore often do not reach a large part of the population. All data being collected and elaborated by the same international institutions in order to enable their study and comparison, mainly the World Bank and the World Labour Organisation.

The empirical approaches fibs in the forms of testing which involves several statistics analysis to enhance the accuracy and authenticity of the results. First, the data for Jordan have been tested for stationarity, whether they follow a normal distribution, correlations between variables, unit root test, Granger causality test and ARDL test for each variable. Second, these tests and measurements help to reveal the impact of refugees on economic and labour market factors in the host country, Jordan, in line with the second objective of this research.

Thus, in accordance with objective 2 and 3 of the thesis, and in line with the indicators highlighted by the literature, 9 hypotheses were put forward to measure the impact of refugees on the economy (called H.a), and 7 to measure the impact of refugees on Jordan labour market (called H.b). The findings for these hypotheses can be summarised as follows:

Hypothesis H1.a. The results confirm that refugees do not lead to GDP growth in the host country. When the number of refugees increased exponentially, logically outstripping the resources and capacity of the host country. The laws of migration postulated by Ravenstein (1885) are still valid. Refugees, with few resources and few options, forced to flee to nearby countries.

Our research adds empirical evidence to previous work such as Akgündüz et al. (2015), Baloch et al. (2017) Holler & Schuster (2020). Akgündüz et al. (2015) pointed up refugees do not affect positively the hosting country's GDP in the long term. Obviously, the process of adaptation takes time, requires a great deal of effort and international funds (that tends to reduce in the last years), but as the dual labour market theory, world systems theory, and the world society approach indicate, the combination of various economic aggregates and an effective management will determinate the long-term economic situation.

H2.a. The results confirmed our hypothesis H2.a. The refugees have a negative impact on the foreign direct investment of the host country. Also, our results add empirical evidence to previous studies that studied the association between migration and FDI. In our case, for the case of forced migration in the developing countries (Sassen-Koob, 1984; Kugler & Rapoport, 2007; Sanderson & Kentor, 2009; Federici & Giannetti, 2010; Javorcik et al., 2011). In any case, it highlights the fact that migration and the FDI flows evolve over time. Refugee arrivals have always existed, but the conflicts that provoke them have an increasingly global impact, which has led to a dramatic increase in the number of refugees. Until recently, migration studies have focused on traditional migration, and therefore, so far, there is insufficient evidence to understand the implications of the massive arrival of refugees. Thus, the purpose of this doctoral thesis is to try to fill this gap, paying attention to a problem that is having serious international repercussions in different parts of the world, with direct or indirect implications for all kinds of countries.

H3.a. The results confirm The Refugee's Refugees have an negative impact on the Gross Domestic Savings of the host country. National savings are very important to undertake the investments that each country needs. Their contraction, therefore, affects the development of the industrial sector, and may imply a higher level of debt and greater international dependence. Since the Great Recession, international aid flows are shrinking and financial conditions are tougher, especially for developing countries, making these economies more vulnerable. However, hosting countries are still dealing with hugh costs and the integration of refugees. The solution could bein sustainable domestic development, but this is a very difficult task for a resource-poor country that has to cope with increased spending, such as Jordan.

In line with hypothesis H3.a, the results confirmed that refugees positively impact the General Government Borrowing of the host country. In other words, the increase in the number of refugees increases the need for external funding. This is the hypothesis H4a. Since the increase in the number of refugees leads to increases the need for external financing. The host countries have to deal with higher costs as consequence of refugees, as previous studies confirmed (Swedish National Debt Office, 2015; Zamore, 2018; AlShwawra, 2021). As neoclassical theory suggests, if the growth of the economy allows the debt to repaid, all well be in control. In developing countries, however, this is not always possible, which is why developing countries are often highly dependent on external financing.

Hypothesis H5.a. posited that refugees have a negative impact on the level of Gross National Expenditure in the host country. The results reject this hypothesis, i.e. that the level of national expenditure is not reduced by the arrival of refugees. This result complements the findings of Ekberg (1999), but in our case, as far as forced migration is concerned. Developing countries show significant differences compared to the developed world. In Jordan, national expenditure is allocated to cover basic needs, especially for refugees: access to basic health care and education. In addition, to cover the basic needs of families. However, resources and social protection are limited. This is why international aid is a priority.

H6.a. The results confirms that refugees have a negatively impact on the level of Consumer Prices of the host country (increasing the inflation). Our results add evidence for the case of forced migration in developing countries to previous research works such as Nietschmann (1979), Nyaoro (2010), Akgündüz et al. (2015), and Fransen et al. (2017). A higher number of refugees imply increasing demand for services and goods supplied by the hosting countries, which in return lead to increase of prices. The international aid and remittances could lead to more savings in developing countries, reducing partially consumption. However, it is well known that inflation is a handicap for development.

The results confirm our hypothesis H7.a. The Refugees positively impact the international trade (as % of GDP) of the host country. The results add evidence to the case of forced migration to previous studies such as Head & Ries (1998), Dunlevy & Hutchinson (1999), Girma & Yu (2002), Landau (2004), White & Tadesse (2010), Poot & Strutt (2010), Bratti et al. (2014), Mayda et al. (2017), Steingress (2018) and David et al. (2019). Refugees demand new products from their native countries. However, such process requires strong economy to fulfil these favours new trade agreements and tariff, encouraging the international trade (Mayda et al., 2017; Steingress, 2018).

In addition, other authors showed an indirect association. Refugees favour trade process for hosted countries through increasing demands on good and services as well as their contribution to the informal sectors using their skills to enrich the development of products (Ghosh & Enami, 2015; Taylor et al., 2016).

In line with the migration network theory, refugees become the link between host and home countries, and this link turn stronger is growing as the number of refugees increases (Erdoğan et al., 2021).

The migration theory of circular cumulative causality points out that arrival in the host country occurs gradually, and so do changes in trade.

Under the Heckscher-Ohlin model, international trade and migration could be complement. The arrival of refugees is to nearby countries Ravenstein (1885) where trade relations already exist.

The results reject this hypothesis: the positive impact of refugees on the host country's current account balance. Previous work has found no evidence that immigrants have a negative impact on the current account balance of developed countries (Ratha, 2003). In other cases, however, a positive relationship was found between immigration and the current account balance (Taslim, 1998), or a negative one (Alawin & Oqaily, 2017). Therefore, more research is needed, as there is little work examining the effects of forced migration on the current account balance.

The results rejected H9.a. Refugees have a positive impact on the level of the host country's general government gross debt (decreasing debt). As pointed out by Massey et al. (1993), the only policies that really work in the long run in relation to refugees are family reunifications, as this is the beginning of mitigating problems at source.

The empirical analysis has two stages. First, we start assessing the influence of refugees on economic indicators. Second, we conduct a more specific analysis of the impact of refugees in the labour market of the host country, which is objective 3 of this thesis.

H1.b. The results confirm the hypothesis H1.b. The Refugee's positively impact the level of unemployment of Jordan (increasing the unemployment). Our results add empirical evidence to previous works such as Coppel et al., 2001; Kugler & Rapoport, 2007; Stave & Hillesund, 2015; Bahcekapili & Cetin, 2015; Fernández-Reino, 2018).

H2b. The results confirm the refugee's positively impact the number of own-account workers of the host country. The existence of entry barriers and job insecurity in the labour market of developing countries lead to the informal sector, and self-employment is the only way out for refugees. This is an important difference with developed countries, where immigrants hired for their talent or their knowledge of the home market. Migration studies in developing countries should more often consider differences in economic status and imbalances between countries, as in many cases, developing countries have a large share of the population living below the poverty line, and significant barriers to entry into the labour market. Therefore, in addition to indicators of the quantity of employment, it is necessary to increase the use of indicators on the quality of employment, such as those developed by the World Labour Organisation, which are included in this study.

Unlike in developed countries, self-employment in developing countries is not necessarily a form of growth or a genuine career path, but a means of subsistence in situations of precarious employment, lack of social protection and high barriers to labour market entry. As Harris & Todaro (1970) indicated that the persistence of these problems that leads to labour market segmentation in developing countries, i.e., a limited access to certain labour market sectors. Therefore, more studies are necessary to research on the relationship between refugees and the level of own-account workers of the host country.

The results also confirm our hypothesis H3.b. The refugees positively impact the number of people that are considered not in labour force of the host country (neets). Our results are in line with previous literatures on refugees resided in developing countries such as Akgündüz et al. (2015) and Aras & Mencütek (2015). Since the number of labour permits is around 10% of refugees in Jordan until 2021 (AlShwawra, 2021) that corroborates the informal sector labour market barriers and the prevalence of the informal sector and labour market segmentation. Likewise, the results are in line with the human capital theory. tThe division of the labour market was based on universal and specific skills of the labour force. Local workers use to have specific skills, they could get more prestigious, stable, and better-paid jobs, but refugees use to have lower skills, so they get jobs that do not require specialisation and that are related to the execution of simple tasks.

In this regard, the dual labour market theory and the internal-external labour market theory draw attention to implementing measures to facilitate labour mobility to the formal sector might lead to a higher level of employment and, subsequently, higher incomes by taxes (Saget, 2001).

The results confirm our hypothesis H4.b. The refugees positively impact the level of total underutilized labour of the host country. It consists of measures the extent to which not all available labour force resources fully used in the economy. Our findings are in line with previous studies on immigration in developed countries (Mattoo et al., 2008; Zetter & Ruaudel, 2016; Malaeb & Wahba, 2018). This highlights inequalities in the host labour market among highly educated immigrants from other nations and the refugees.

The results confirm our hypothesis H5.b. The Refugee's positively impact the Time-Related Unemployment in the host country. The results add evidence to previous research work such as Becker (1975), Landers et.al. (1996), Bell & Freeman (2001), and Bratti & Staffolani (2007). The time-related unemployment occurs when the working hours of an employed person are insufficient since the person would already be willing and available to undertake more. Refugees are at disposition working overtime to improve their incomes. If the formal sector does not offer this possibility, the way out would be the informal sector and handcraft jobs, with no regulation of working hours, at the expense of worse working conditions.

The results confirm the H6.b. The refugees increase the number of Non-Educated Employed Trained youths, NEET, in the host country. Thus, it adds evidence to previous studies such as OECD (2007), Bell & Blanchflower (2011), Hameed et al. (2018), Pluck (2021) and Trueba & Pluck (2021).

Since the number of NEETs affects the knowledge of the real impact of policies on the level of employment, further research is needed to identify and evaluate the employment policies implemented in developing countries that have hosted refugees, including the effect of the NEET population. In developed countries, the NEETs largely correspond to the youth population, but in this case, the profile is broadened to include refugees.

Finally, the results show evidence to confirm our hypothesis H7.b. The refugees positively impact the working poverty rate of the host country. These results serve to confirm the existence of significant labour market differences between developed and developing economies, and the methodologies used to study immigration in developed host countries should be adapted appropriately.

In developing countries, achieving middle-class status, which is common in the developed world, remains a difficult goal. The immediate concern here, in fact, would be to lift themselves out of poverty and to be able to access basic health care and education, in order to improve the well-being of families.

Employment and social protection policies in developed countries focus on reducing the level of unemployment in order to reduce poverty, however, the informal sector is prevalent in developing countries, so statistics on unemployment levels may leave out a large part of the population. In addition, in developing

countries, social protection systems triggered by unemployment in the formal sector. In the end, in practice, the working poor in developing countries have to rely on themselves and their families.

Another important aspect is that anti-poverty policies often ignore people in precarious employment. Precarious conditions are common in developing countries, but it is also true that precariousness, i.e., the gig economy, is on the rise in developed countries.

In view of the above, an evolution in the design of policies to fight poverty recommended, shifting the paradigm from quantity of employment indicators to more specific on the quality of employment, such as those developed by ILOSTAT and used in this thesis. In addition, measures that enable access to quality health, financial and educational care are important to lift the population above poverty levels and maintain the level of development achieved. It also enables workers to engage in higher productivity activities, which ultimately leads to economic growth.

#### Limitations and future research

So far, none of the migration theories can explain migration processes in their full scope, as each of them refers to very specific aspects or applies in different areas of study. Therefore, one limitation is that one has to deal with a multitude of disaggregated analyses when analysing international migration. Therefore, the selection of indicators is also a complex task.

Each research has time and spatial limits. This research was limited to the State of Jordan and the period 2000 - 2021. Migration data is always difficult to collect, which in the case of international refugees, is even more challenging. This research used the most trusted databases of the World Bank, ILOSTAT and UNHCR. However, there is a lack of detailed data from countries in the Middle East region that have also received refugees, which has meant a complex collection of information, and finally we could analyse the host country of Jordan, with a more complete data for a large sample of years on the variables under study. Nevertheless, scholars could complete this research exploring data from other host countries in Middle East region to find new evidence for the hypotheses put forward in this thesis, especially since for some variables there is still no clear consensus in the literature.

Another issue that considered a limitation is that most studies focus on traditional economic migration, but, as this thesis points out, migration evolves over time, and includes the study of different forms of migration. The progressive increase in conflicts with a greater international impact has meant that the literature on forced migration has grown dramatically in recent years. It is not always possible to apply the same approach or solutions as the traditional migration literature, as forced migration has important differences. For instance, there is a large body of research on the determinants of economic migration, but in the case of refugees, some people cannot decide whether to migrate. Therefore, other aspects are important here, especially those related to the consequences of forced displacement. Therefore, in this research, it decided

to start by conducting a systematic analysis of the literature on forced migration in order to understand the main issues of study in this field.

In addition, many studies focus on migration to developed countries, with notice that their findings are not always applicable to developing countries, as their conditions and capacities are very different. In this regard, it helped to examine studies focusing on the level of development. The literature specific to developing countries provided insight into the functioning of macro magnitudes in these countries.

In light of our results, and considering the prevalence of informal sector in developing countries, further studies and analysis should performed to understand how refugees adapt in the informal labour market of the hosting countries.

Finally, conflicts perceived as a temporary, sometimes short-term problem. However, the reality is that refugee flows are neither constant nor short-term. They cannot be because conflicts, such as in Syria, are very difficult to resolve, or in many cases are not resolved at all. Moreover, it often takes years to return to safety in the country of origin, and although humanitarian aid is available, a political solution is required, which eventually ceases to be a priority, which is why more studies on the evolution of the long-term effects of conflicts needed.

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## INTRODUCCIÓN

#### 1.1 Antecedentes de la investigación

El aumento radical de la migración forzada se produjo a partir de 2010 debido en gran medida al conflicto sirio, y, desafortunadamente, se suceden nuevos conflictos similares, tales como la llamada crisis de Sudán del Sur, el conflicto en Ucrania, los conflictos en el África subsahariana, el flujo de refugiados "rohingya" in Bangladesh, la salida de venezolanos en América Latina y el Caribe, la crisis en Yemen y Libia.

La guerra civil siria iniciada en 2011 ha provocado el asilo de sirios en diferentes países del mundo en busca de refugio y evitando la muerte. Este asilo ha tenido un impacto importante en los países en desarrollo vecinos de acogida, tal es el caso de Jordania y sus industrias durante los últimos años.

Casi 1,7 millones de personas han huido de Siria a países vecinos como Jordania desde que comenzó el conflicto en 2011. Muchos sirios ya habían sufrido varias crisis antes de huir del país, lo que finalmente les obligó a abandonar sus posesiones y dinero para encontrar seguridad en las naciones vecinas (UNHCR, 2020).

El impacto de los refugiados es una cuestión compleja. No es sólo el evidente impacto en la economía, no cabe duda de que los refugiados sirios supusieron un enorme reto para las políticas jordanas, un país con un presupuesto humilde y capacidades limitadas. A diferencia de países desarrollados con sólidas estructuras financieras, educativas y sanitarias, Jordania ha tenido que hacer frente a un gran reto con unos recursos escasos, por un lado, ayudando a los refugiados por motivos humanitarios, pero por otro, teniendo que hacer frente a la situación económica en declive, tanto a nivel internacional como a nivel interno.

De acuerdo con Cohen et al. (1996) y King (2002, 2012), la migración puede contemplarse mediante tipologías dicotómicas: migración interna frente a migración internacional; migración por primera vez frente a la continuación de la migración pro segunda o sucesivas vueltas; migración temporal frente a migración permanente; migración regular frente a migración irregular; migración voluntaria frente a migración forzada, entre otras.

Staniewicz (2009) observó que la distinción entre el movimiento de refugiados y la migración económica voluntaria es bastante sutil. Los refugiados suelen llegar de naciones en las que hay conflictos políticos. Este tipo de conflictos tienen el potencial de deteriorar la economía nacional, hasta el punto de que la gente empieza a preocuparse más por ella que por la política, de forma que los factores políticos y económicos están estrechamente entrelazados.

Coppel et al. (2001) identificaron cuatro consecuencias principales de los cambios demográficos internacionales. En primer lugar, está la influencia que la inmigración tiene en el mercado laboral del país de acogida. Aunque normalmente se estudian las posibles repercusiones negativas que la inmigración puede tener en los niveles salariales y de empleo de los autóctonos, la inmigración también puede ayudar en la reducción de las carencias de mano de obra cualificada en determinados sectores clave de la economía. En

segundo lugar, se espera que la inmigración afecte a la situación presupuestaria de los países receptores en lo que respecta a la cantidad que reciben los recién llegados a través de los planes de sanidad, bienestar y educación, y es poco probable que equilibre el aumento de los ingresos fiscales procedentes de los nuevos trabajadores. En tercer lugar, ha demostrado que la inmigración puede ser la clave del reto demográfico al que se enfrentan muchos países de la OCDE. Por último, la inmigración puede tener un importante impacto económico en un país concreto.

La Convención de la Organización para la Unidad Africana (OUA) de 1969 definió al refugiado como toda persona obligada a huir de su país "a causa de una agresión exterior, de una ocupación, de una dominación extranjera o de acontecimientos que perturben gravemente el orden público en una parte o en la totalidad de su país o de su país de origen o de nacionalidad", además de la definición del Art. 1(2) de la Convención sobre el Estatuto de los Refugiados de 1951. "También se consideran refugiados las personas que huyen de su país porque su vida, seguridad o libertad han sido amenazadas por la violencia generalizada, la agresión extranjera, los conflictos internos, las violaciones masivas de los derechos humanos u otras circunstancias que hayan perturbado gravemente el orden público", según la Declaración de Cartagena emitida en 1984 y por el Alto Comisionado de las Naciones Unidas para los Refugiados (UNHCR, 2017).

Ante el colosal sufrimiento humano y los formidables costes de las crisis provocados por desplazamientos forzados, académicos, organizaciones humanitarias y diplomáticos comenzaron a investigar formas de prevención ya en la década de 1930. Le dieron un impulso renovado en la década de 1990, cuando el Alto Comisionado de las Naciones Unidas para los Refugiados (ACNUR, UNHCR) puso a prueba un marco de "protección preventiva" que ilustra la supresión de los factores causantes de las salidas en lugar de la erección de obstáculos que dejan preservadas las causas pero dificultan enormemente la partida. Las precauciones incluían el refuerzo de las capacidades nacionales de defensa, la promoción, los sistemas de alerta temprana, la supervisión de los derechos humanos y la resolución de conflictos. Sin embargo, el éxito ha seguido siendo esquivo las "causas básicas" del desplazamiento forzado han sido durante mucho tiempo el centro de atención de la literatura preventiva. En ella se hace una distinción entre factores próximos (la escalada de violencia, la persecución, las amenazas y las amenazas percibidas, el colapso de los medios de subsistencia y las nuevas oportunidades en otras zonas). Causas estructurales o subyacentes (como la mala gobernanza, la pobreza, el bajo nivel de desarrollo institucional, la desigualdad, los abusos de los derechos humanos, la exclusión política, la degradación medioambiental y la fragmentación social), y condiciones propicias (disponibilidad de transporte, recursos financieros, nivel de educación, redes, marcos legislativos y control de fronteras). Con este marco, el principal objetivo de los agentes del desarrollo era promover la buena gobernanza, la prosperidad compartida y un amplio programa de reducción de la pobreza (UNHCR, 2017). Esto ayudará a prevenir los conflictos, la violencia y la persecución (Sassen-Koob, 1984; Kugler & Rapoport, 2007; Banco Mundial, 2017; Comolli, 2019).

Fichtner et al. (2015) establecieron que los conflictos violentos suelen ser el resultado de desigualdades horizontales dentro de una nación o entre grupos. Ejemplos de esto serían los conflictos por el origen étnico, la lengua, la religión, la raza y la zona. Cuando los desequilibrios horizontales se superponen, las situaciones políticas se vuelven más peligrosas. Por ello, es necesario un estudio caso por caso de este tipo. Por lo general, debe considerar dos formas diferentes en que la emigración forzosa afecta al desarrollo del país de origen. El desplazamiento forzoso es una consecuencia de la fragilidad, pero también puede contribuir a ella. Dado que tiene un impacto negativo desproporcionado en determinados grupos, puede cambiar la estructura social de una comunidad o dejar un vacío de liderazgo considerable (World Bank, 2017).

Para la nación de origen, el desplazamiento forzado puede tener importantes costes directos y de oportunidad, en particular debido a la pérdida de capital y recursos humanos. Depende sobre todo de quién se marcha y quién se queda, así como de si los desplazados forzosos deciden reubicarse dentro de la nación o abandonarla para siempre. Cuando son desplazamientos forzosos, la prestación de servicios y la capacidad institucional pueden verse afectadas. Entre los desplazados hay muchos empleados estatales. Las remesas, por otro lado, pueden apoyar la capacidad de recuperación de la población restante. En la República Centroafricana, los minoristas musulmanes que gestionaban la mayoría de las actividades comerciales y de transporte se vieron desplazados por la fuerza, lo que provocó un descenso de las importaciones de otras naciones y un aumento del precio y la escasez de artículos de primera necesidad (Coppel et al. 2001, Kugler & Rapoport, 2007, Stave & Hillesund, 2015).

Algunos países de acogida crean una rama separada del gobierno, con frecuencia un ministerio o un comisionado para asuntos de refugiados o desplazados internos, para gestionar los asuntos relacionados con los refugiados. Normalmente, estas autoridades se encargan de la coordinación con los ministerios e instituciones sectoriales y actúan como punto de contacto para las negociaciones con los agentes humanitarios. En ocasiones, también ofrecen asistencia directa a los desplazados. Con frecuencia, crean estructuras administrativas considerables, que suelen contar con el apoyo parcial de organizaciones humanitarias, para llevar a cabo dichas actividades (World Bank, 2017).

En este sentido, Aras & Mencutek (2015) explicaron que la regulación de cada país determina si una persona es inmigrante o refugiado de forma individual. Según cada regulación, si una persona cumple las condiciones para ser inmigrante, tendrá derecho a refugio temporal mientras espera a reasentarse en naciones seguras de terceros países.

Bahcekapili & Cetin (2015) expusieron que las personas que se ven obligadas a huir de su propio país con la esperanza de encontrar un lugar más seguro son inmigrantes. Mientras que Akgündüz et al. (2018) indicaron la existencia de un término adicional al tratar a los refugiados, que es el de solicitantes de asilo, que se aplica a aquellos refugiados que cumplen ciertas condiciones, y por lo tanto tienen derecho a solicitar asilo en un tercer país.

Muchas veces, tanto el sistema político como el económico pueden derrumbarse al mismo tiempo (como ocurrió con Albania después de 1990, por ejemplo) (King & Gëdeshi, 2020).

Sin embargo, el apoyo de ACNUR (*UNHCR*) se ha ampliado con éxito para atender in situ a las personas que huyen de los conflictos y los trastornos. La persecución, la inseguridad, la malnutrición y duras circunstancias son características esperables de estas situaciones. Las razones para huir son a veces ambiguas o contradictorias. Sin embargo, con la ayuda de la comunidad internacional, la Oficina del Alto Comisionado de las Naciones Unidas para los Refugiados (ACNUR, UNHCR) reanudó en 1991 el desarrollo de estrategias innovadoras para la crisis de los refugiados y la búsqueda de soluciones duraderas. ACNUR desarrolló una estrategia futurista en 1991, año de su 40 aniversario, centrada en la preparación para la tragedia, la prevención y la búsqueda de respuestas a todo el problema de los refugiados, desde el éxodo y el socorro hasta el retorno y la reintegración (UNHCR 2017).

En general, la literatura muestra que el desplazamiento, especialmente en lugares con escaso acceso a los servicios y pocas posibilidades económicas, puede empeorar la desigualdad y la probabilidad de violencia. Sin embargo, las estrategias eficaces de mitigación del desplazamiento y las iniciativas de desarrollo tanto para las personas que han sido reubicadas por la fuerza como para las comunidades de acogida pueden promover la cohesión social. Numerosos estudios demuestran que las políticas progresistas que ofrecen a los refugiados y desplazados internos la posibilidad de desplazarse, acceder a los servicios sociales y poseer propiedades pueden fomentar la integración social y económica sin provocar reacciones negativas (World Bank, 2022).

## 1.2. Justificación de la investigación

La literatura es profusa en estudios sobre la migración económica tradicional y sus determinantes. Sin embargo, nuevas formas de migración están adquiriendo relevancia. En este sentido, los conflictos armados y las catástrofes naturales están teniendo un impacto cada vez mayor que trasciende las fronteras y cuyas consecuencias son cada vez más prolongadas en el tiempo, dando lugar a migraciones forzadas cada vez más masivas. En consecuencia, ya no bastaría con explicar las diferencias entre países o las motivaciones de la migración para explicar los procesos migratorios. Existe una importante carencia de estudios sobre los efectos de la migración forzosa en los países de acogida. Por lo tanto, para llenar este vacío, formulamos hipótesis sobre los efectos socioeconómicos más relevantes de la afluencia de refugiados, obtenidas a partir de diferentes enfoques teóricos.

A través de las fronteras se lleva produciendo una migración mixta, que incluye a refugiados que huyen de la persecución y la guerra, a las víctimas de la trata, pero también a quienes sencillamente buscan mejores perspectivas. En cualquier caso, el desplazamiento forzoso es un fenómeno cada vez más frecuente al que se presta más atención en los últimos años (Hakovirta, 1993; ACNUR, 2020).

Schmeidl y Jenkins (1998) hicieron una breve definición de los refugiados como "inmigrantes forzados" que dejan atrás sus hogares, posesiones, seres queridos y amigos cercanos, así como los lugares donde pueden haber vivido durante generaciones.

ACNUR (UNHCR, 2019) ha confirmado que el número total de refugiados en todo el mundo supera los 50 millones por primera vez después de la Segunda Guerra Mundial, principalmente debido a la guerra civil siria. Debido a la crisis siria, la guerra civil siria se ha convertido en la preocupación más significativa de las cuestiones humanitarias de nuestro tiempo, sin embargo, el mundo sigue siendo inadecuado para satisfacer las necesidades y consultas de los refugiados sirios y los países que los acogen. El problema de la migración forzada siria se considera uno de los más importantes a los que se enfrentan los países del mundo, ya sean desarrollados o en vías de desarrollo (Stave & Hillesund, 2015).

Además, se considera una crisis que tiene implicaciones internacionales más amplias, ya que los conflictos siguen produciéndose en cualquier momento y en cualquier lugar. Para países como Jordania, supuso un gran reto para los sectores político y económico, dado que se trata de un país con un presupuesto modesto y capacidades limitadas. Jordania se ha enfrentado a un gran reto con unos recursos muy limitados, por un lado, apoyando a los refugiados por razones humanitarias y, por otro, teniendo que hacer frente a una situación económica en declive en su mercado. En este sentido, las decisiones de desplazamiento de los refugiados, solicitantes de asilo, son totalmente incontroladas por la población, aunque tales traslados de población implican importantes consecuencias sociales (Lee, 1966).

Esta es una diferencia importante con respecto a las investigaciones sobre otros tipos de migrantes. Los emigrantes tradicionales podrían considerarse agentes que pueden tomar decisiones sobre cuándo marcharse y adónde ir, aunque estas decisiones estén a veces extremadamente limitadas.

Hakovirta (1993) nos mostró que, básicamente, aunque el desplazamiento forzoso es un problema individual, también afecta de diversas maneras a la economía, la sociedad y las relaciones internacionales, ya que está vinculado a cuestiones humanitarias y éticas, de seguridad nacional y desarrollo, e incluso medioambientales y de recursos naturales.

Mientras que VanWey (2000) aclaró que los enfoques para el estudio de la migración forzada, como nuestra investigación, deben basarse en esta distinción, ya que los migrantes involuntarios (refugiados) tienen diferentes necesidades que la población residente, expatriados e inmigrantes económicos, que afectan a la organización de los mercados de trabajo, a la satisfacción de las necesidades educativas y sanitarias, o a la provisión de servicios básicos (electricidad, agua, recogida de basuras, etc.), entre otros aspectos de la gestión pública del lugar de destino.

La migración a gran escala puede provocar cambios en la población y crear nuevos desequilibrios regionales. La fragilidad y el desplazamiento forzado pueden retroalimentarse mutuamente, creando un círculo vicioso del que puede resultar difícil salir (Nijkamp et al., 2011).

En 2013, el Programa de las Naciones Unidas para el Desarrollo (PNUD) mostró que las tasas de gasto corriente del gobierno de los países de acogida aumentaron significativamente en los servicios públicos que incluyen la administración pública, la defensa y los sectores del agua, la educación y la salud. El sector de la administración y la defensa se ha visto más influido que otros sectores por el aumento de la demanda de los refugiados de servicios municipales locales. Por lo tanto, se observa un aumento de la carga financiera de estos municipios para hacer frente a los nuevos gastos corrientes causados por la nueva demanda, como los servicios de saneamiento, recogida y eliminación de basuras, control de plagas y mantenimiento de carreteras. Además, la afluencia siria provocó el empleo de más personal en el sector, representado por los militares y la Dirección General de Seguridad y Defensa Civil (Naciones Unidas, 2013).

Dado que los flujos migratorios han crecido rápidamente en las últimas décadas, los responsables políticos han prestado cada vez más atención a las cuestiones relacionadas con la migración internacional. Las políticas migratorias y la integración de los inmigrantes se han convertido en temas primordiales del debate político en muchos países. Además, existe un creciente interés por la influencia que la migración ha tenido en los países de origen (Naciones Unidas, 2013).

Por lo tanto, la comprensión de la cuestión de los refugiados masivos adquiere un significado especial en el contexto de los retos políticos y demográficos a los que cualquier país podría enfrentarse en los próximos años.

## 1.3. Objeto de la investigación

El objeto de investigación de esta tesis es el impacto de los refugiados sirios en Jordania. Estos efectos se analizan en el contexto del mercado laboral y otros indicadores económicos.

## 1.4. Propósito de la investigación

Dado que la migración forzosa tiene importantes repercusiones en los países de acogida y que el fenómeno de los refugiados no deja de crecer y puede producirse en cualquier momento y lugar, el objetivo podría formularse del siguiente modo: Explorar el impacto del desplazamiento de los refugiados sobre los factores socioeconómicos más relevantes en Jordania.

## 1.5. Objetivos de la investigación

Basándonos en el interés de nuestro estudio, elaboramos una lista de los principales objetivos de esta disertación:

- 1. Identificar los efectos socioeconómicos más relevantes de la migración forzada internacional de acuerdo con el análisis ordenado y sistemático de diferentes enfoques teóricos de la migración.
- 2. Desarrollar una metodología de evaluación del impacto socioeconómico de la migración forzada internacional para el país en desarrollo de acogida, como es el caso de Jordania.
- 3. Estudiar el impacto de los flujos de refugiados en el mercado laboral de Jordania.

# 1.6. Metodología de la investigación

La investigación utiliza los siguientes métodos:

- 1. Análisis sistemático y comparativo de la literatura científica en el campo de la migración internacional y el desplazamiento forzado. De hecho, las variables fueron seleccionadas en base a diferentes enfoques teóricos de la migración.
- 2. Análisis e interpretación estadística de los datos: La tesis utiliza el test de Distribución Normal, el test de Raíz Unitaria, el test de Correlaciones, el test ARDL y el test de Causalidad de Granger para investigar el impacto de la migración forzada en el país de acogida en un conjunto de variables económicas y del mercado de trabajo. Esto nos permite identificar los efectos de diferentes efectos económicos y del mercado laboral.

Los resultados permitirán posteriormente contrastar las hipótesis y formular recomendaciones prácticas.

## 1.7. Relevancia de la investigación

#### Novedad científica y relevancia teórica de la investigación doctoral

Este trabajo presenta un análisis en profundidad de la literatura existente hasta la fecha sobre migración internacional y el desplazamiento de refugiados. En este sentido, se ha realizado una evaluación ordenada y sistemática de la literatura. En esta tesis se realizó un análisis bibliométrico y un análisis de redes (ARS) para esclarecer el estado del arte de la migración forzada y sus efectos en los países de acogida. Además, utilizamos el análisis de redes (una metodología extendida utilizada por científicos de distintos campos científicos para medir las conexiones y la difusión del conocimiento sobre nuestro tema de investigación. Además, se analizan los enfoques teóricos más relevantes que tratan el tema de la migración forzada, como las leyes de inmigración y la teoría de la observación de (Ravenstein, 1885). La teoría push-pull (Lee, 1966). La teoría de las oportunidades de intervención (Stouffer, 1960). La teoría del modelo de sistemas (Bertalanffy, 1968). La teoría del mercado laboral dual (Stoikov, 1972). La teoría del trabajo eficiente (Wojtyna, 2000). La teoría del capital humano (Becker, 1975). La teoría de los sistemas mundiales (Leiss, 1977; de Haas, 2010). El enfoque de la sociedad mundial (Leighninger, 1977). La teoría del mercado laboral (Cain, 1976). La teoría de las redes de migración (Massey et al., 1993) y la teoría neoclásica de (Galor & Zeira, 1993).

A partir de la revisión de estas teorías y marcos conceptuales, se recopilaron los indicadores socioeconómicos pertinentes para el análisis empírico. Por lo tanto, faltan estudios que midan el impacto de la afluencia masiva de refugiados utilizando indicadores socioeconómicos relevantes desde diferentes perspectivas teóricas. En este sentido, esta disertación incluye:

## <u>Indicadores económicos:</u>

- Crecimiento del Producto Interior Bruto (PIB): Teoría económica neoclásica, Teoría Push-pull, Teoría de las oportunidades de intervención, Teoría de los modelos de sistemas, Teoría de los sistemas sociales.

- Inversión extranjera directa (IED): Teoría de la migración en red, Teoría de los sistemas de migración, Teoría de los sistemas mundiales, Teoría de las oportunidades de intervención.
- Ahorro Interior Bruto (PIB): Teoría del capital humano, Teoría de la nueva economía de la migración laboral, Teoría de la privación relativa.
- Capacidad/necesidad de financiación de las administraciones públicas (NET L/B).
- Gasto Nacional Bruto (GNE).
- Inflación y precios al consumo (ICP).
- Comercio (T).
- Balanza por cuenta corriente (BCC).
- Deuda bruta de las administraciones públicas (GGGD).

## <u>Indicadores del mercado laboral:</u>

- Desempleo.
- Trabajadores por cuenta propia.
- Población no activa.
- Subempleo total.
- Subempleo relacionado con el tiempo.
- NEET (Sin estudios ni empleo).
- Pobreza de los trabajadores.

Esta tesis mide los efectos en el país de acogida de una de las mayores crisis humanitarias internacionales, que ha provocado un éxodo masivo de refugiados hacia países de acogida en vías de desarrollo. Los resultados se refieren a un amplio periodo, que incluye toda la década de 2000, por lo que aportan una valiosa experiencia que puede aplicarse a situaciones similares, que desgraciadamente siguen produciéndose.

Los resultados también ponen de relieve la existencia de diferentes percepciones del problema entre los países desarrollados y los países en desarrollo. Incluso en las economías más fuertes, la afluencia masiva de refugiados tiene un impacto muy severo y supone un gran reto para los países de acogida.

En este sentido, la migración tradicional es de los países más pobres a los más ricos, por lo que a menudo se estudia la llegada de refugiados a los países desarrollados. Sin embargo, las diferencias entre países hacen que algunas de las conclusiones no sean aplicables a los países en desarrollo. En los países en desarrollo hay un alto nivel de empleo, pero una gran proporción de trabajadores se encuentra por debajo del umbral de pobreza. Los sistemas de protección no disponen de los recursos necesarios para funcionar adecuadamente. Predomina el sector informal y los recursos financieros son limitados, por lo que a menudo dependen de la financiación internacional.

Además, desde un punto de vista econométrico, esta tesis identifica los principales efectos económicos en el país de acogida, así como en el mercado laboral, y destaca la importancia de la calidad de los indicadores del mercado laboral.

#### Importancia práctica de la investigación doctoral

Esta tesis pone de relieve el mayor alcance de los conflictos internacionales y el gran aumento del desplazamiento de refugiados en la época contemporánea. La "primavera árabe" en los países de Túnez, Egipto, Libia y Yemen llevó a la inspiración de grandes protestas en Siria contra el gobierno que acabó en un gran conflicto bélico con graves efectos nacionales e internacionales (Stave & Hillesund, 2015).

Debido a la crisis siria, la guerra civil siria se ha convertido en la mayor preocupación humanitaria de nuestro tiempo, aunque el mundo sigue siendo incapaz de satisfacer las necesidades e inquietudes de los refugiados sirios y de los países que los acogen. Debido a la guerra civil siria, el problema de la migración forzada siria se considera uno de los más importantes a los que se enfrentan los países del mundo, ya sean desarrollados o en vías de desarrollo (Stave & Hillesund, 2015).

Además, los países en desarrollo como Jordania tienen recursos limitados para hacer frente a cambios de tal magnitud, lo que tiene importantes consecuencias en su crecimiento económico, por lo que esta crisis de refugiados humanitarios ejerce una fuerte presión sobre todos los sectores de la sociedad jordana, especialmente sobre el económico.

Por lo tanto, debido a la importancia de este tema para todos los países desarrollados y en desarrollo, esta investigación ayuda a comprender y dar más visibilidad sobre cómo un país en desarrollo como Jordania lidia con el asilo sirio a partir de 2011, y cuáles son sus desafíos de crecimiento económico. Además, los investigadores recomiendan estudiar los flujos migratorios a lo largo del tiempo (Leung y Cohen, 2011; Kurekova, 2011).

Presumiblemente mostraría el impacto de la migración en el país de acogida y proporcionaría resultados más generales. De ahí el uso de datos relativamente nuevos, que abarcan el periodo comprendido entre 2000 y 2021, uno de los periodos de observación más completos sobre la evolución del desplazamiento de refugiados. El estudio de los indicadores económicos y de la situación del mercado laboral, antes y después del inicio del conflicto, podría considerarse innovador, ya que permite comprender mejor el alcance y la evolución de la situación. Además, el conocimiento sobre el efecto de la migración forzada internacional se vuelve crucial en un momento de incertidumbre económica y nuevos conflictos, porque contribuye a una mejor toma de conciencia del alcance del problema (Castagnone, 2011).

Según de Haas (2011), los flujos migratorios son multifacéticos, modelados y tienen naturaleza dinámica, en este sentido, la tesis aclara el creciente fenómeno de la migración forzada y realiza una revisión exhaustiva de las teorías y enfoques teóricos específicos sobre el desplazamiento de los refugiados. Además, los conflictos internacionales crecen y afectan a países de todo el mundo. Por lo tanto, las

conclusiones de esta investigación pueden ser contribuciones relevantes a la gestión de nuevos conflictos para los países de acogida.

Además, la importancia de esta investigación radica en que aborda una de las cuestiones internacionales más importantes con implicaciones significativas no sólo para los propios refugiados, sino también para el país de acogida, Jordania, y para la comunidad internacional en su conjunto. Además, también es importante destacar su énfasis en el aspecto económico y del mercado laboral de los estudios relacionados con estas implicaciones. Además del intento de actualizar la visión tradicional de la mayoría de los estudios que analizan y discuten este tema, intentaremos proporcionar un marco global que analice los efectos y repercusiones generales, tanto negativos como positivos, de los refugiados.

Portes & Böröcz (1989) destacaron especialmente la naturaleza dinámica y evolutiva de los procesos migratorios y sus consecuencias para las investigaciones científicas, que resultan estar expuestas al riesgo de que el aparato teórico utilizado para aprehender dicho proceso migratorio quede rezagado con respecto a su evolución real (por ejemplo, la reciente migración de solicitantes de asilo). Esto no hace sino acentuar la necesidad de los métodos econométricos más sofisticados para analizar los procesos migratorios (Castagnone, 2011). Esta tesis da cabida a la complejidad que supone la acogida de los refugiados sirios para los países de acogida.

Dickey & Fuller (1979), Akgündüz et al. (2015) y Aras & Mencutek (2015) abordaron que los efectos socioeconómicos de la migración forzada en los países de origen son difíciles de cuantificar. Los retos metodológicos son importantes y no se ha realizado ninguna investigación sistemática sobre este tema. Siempre hay una carencia relevante de fuentes primarias de datos para un examen empírico de la situación mundial de los refugiados. Sin embargo, la combinación de varias fuentes nos permite el estudio de los cambios en el mercado laboral del país de acogida y la evolución de los refugiados a lo largo del tiempo. En este sentido, utilizamos los datos más recientes de la Agencia de Naciones Unidas para los Refugiados y la Organización Internacional del Trabajo junto con los indicadores del Banco Mundial (ACNUR, 2020; Banco Mundial 2022).

#### 1.8 Estructura de la tesis

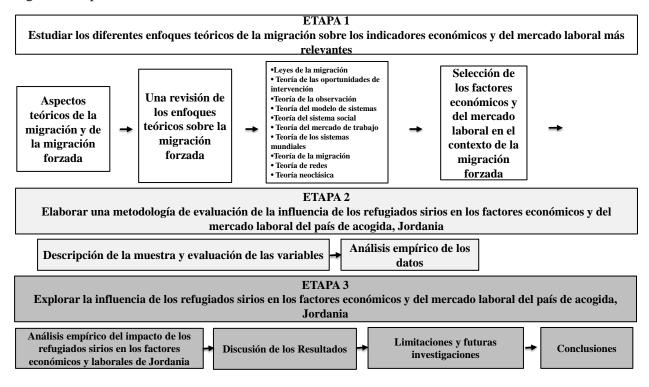
De acuerdo con los objetivos planteados y nuestro objeto de investigación, la estructura de esta tesis es la siguiente: 1) introducción, 2) marco teórico, 3) análisis empírico, 4) discusión 5) conclusiones del trabajo de investigación.

La primera sección incluye el primer capítulo introductorio. A continuación, el marco teórico presenta el problema de los refugiados y explica la gravedad de la crisis de los refugiados sirios y sus efectos en los países de acogida. Además, presenta las definiciones y conceptos utilizados en este trabajo de investigación. Por último, esta sección discute diferentes teorías relacionadas con el tema de investigación y, basándose en ellas, propone las hipótesis teóricas.

A continuación, la sección 3 lleva a cabo el análisis empírico. Para ello, en primer lugar se describen los datos. También se explica la metodología, se evalúan empíricamente las hipótesis y se discuten los resultados obtenidos en los distintos análisis realizados.

Finalmente, en el apartado 4 se presentan las conclusiones, limitaciones y posibles líneas de investigación futuras derivadas de este trabajo de investigación, de acuerdo con los resultados obtenidos y la comprobación de hipótesis realizada. Además, en la Figura 1 se muestra un esquema que resume las distintas fases del desarrollo de la tesis doctoral.

Figura 1. Etapas en la elaboración de la tesis doctoral.



## CONCLUSIONES

En este apartado se presentan las conclusiones de este trabajo de investigación. Para ello, analizaremos las principales aportaciones obtenidas de la revisión teórica y del trabajo empírico sobre el impacto de los refugiados en el país de acogida, Jordania. Todo ello en consonancia con los objetivos que nos marcamos al inicio de esta investigación. Además, sintetizamos las posibles implicaciones obtenidas en esta tesis doctoral y, por último, mostramos las limitaciones de este trabajo y las futuras líneas de investigación.

En primer lugar, en referencia al marco teórico, nuestro primer objetivo fue realizar un análisis en profundidad de la literatura existente hasta la fecha sobre la migración forzada y sus efectos en la economía y el mercado laboral del país de acogida. Para ello, se llevó a cabo una revisión teórica que incluyó como

punto de partida una revisión sistemática de la investigación sobre la migración, los refugiados y sus efectos. Además, se estudiaron los principales conceptos del tema de investigación, definiciones y tendencias relevantes.

Asimismo, se analizaron los aportes más relevantes de las teorías y enfoques teóricos relacionados con la migración forzada y sus efectos, tales como la Teoría de la Observación de Ravenstein, la Teoría del Mercado de Trabajo, la Teoría del Sistema Mundial, la Teoría de Redes Migratorias, la Teoría Neoclásica, entre otras.

La literatura destaca factores relevantes para el estudio del impacto de los refugiados en la economía y el mercado laboral de los países de acogida que utilizamos en nuestro análisis empírico del impacto de los refugiados sirios en Jordania, para los períodos 2000-2011 (antes de la guerra civil siria en 2011) y 2012-2021 (después del inicio de la guerra civil siria).

Por lo tanto, podemos concluir que se ha alcanzado el primer objetivo de la investigación.

Por otro lado, aunque existen numerosos estudios sobre la migración tradicional (Massey et al., 1993); Kumpikaite & Zickute, 2012), cuando la migración se debe a causas de fuerza mayor (guerras, persecuciones, desastres naturales, etc.), existen importantes diferencias con una migración de carácter económica o más tradicional que deben tenerse en cuenta. Especialmente debido al progresivo aumento del número de refugiados, con un creciente impacto internacional (UNHCR, 2020). En este contexto, las razones tradicionales que justifican la migración han perdido su relevancia. En consecuencia, cada vez resulta más difícil explicar los flujos migratorios internacionales contemporáneos en términos neoclásicos, pues ahora ya no sería suficiente explicar las diferencias entre países como única causa que justifica los procesos migratorios (Kurekova, 2011).

Por lo tanto, de acuerdo con los objetivos de la investigación y las hipótesis planteadas, este estudio ha llevado a cabo el análisis del impacto de los refugiados en el país de acogida, la investigación destaca los factores económicos y del mercado de trabajo y considera la situación antes y después del conflicto internacional, es decir, el período 2000-2011 y 2012- 2021.

El análisis se centra en la llegada de refugiados sirios, que muestran un crecimiento excepcional tras el conflicto, y en los efectos sobre diversos indicadores económicos y del mercado laboral en el país de acogida. En este caso, los principales países de acogida se encuentran en los países vecinos de Oriente Medio (UNHCR, 2020).

Recopilar datos fiables para realizar comparaciones internacionales es un problema habitual en los estudios sobre migración, pero en el caso de los estudios sobre refugiados es una tarea especialmente compleja. Los flujos de refugiados dependen de la evolución del conflicto, y la situación en cada país de acogida es muy desigual. Por este motivo, y debido a la disponibilidad de datos durante un largo periodo para los factores seleccionados, se ha elegido Jordania como muestra del estudio.

Jordania aspira a convertirse con el tiempo en un país desarrollado, pero su situación económica lo hace más propenso a los efectos de la llegada masiva de refugiados. Esta cuestión también es importante, ya que muchos estudios que se centran en la migración tradicional, o incluso específicamente en la migración forzada, analizan países de acogida desarrollados, que lógicamente tienen una situación diferente, mayores recursos y herramientas, y, por tanto, una percepción diferente del problema y también distintas soluciones. Por ejemplo, en los países desarrollados predomina la clase media y el umbral de pobreza suele coincidir con el desempleo. Mientras que, en un país en vías de desarrollo, suele ocurrir que gran parte de la población vive por debajo del umbral de la pobreza, predomina el trabajo informal y los sistemas de protección social carecen de recursos suficientes, por lo que a menudo no llegan a gran parte de la población.

Todos los datos son recogidos y elaborados por las mismas instituciones internacionales para permitir su estudio y comparación, principalmente el Banco Mundial y la Organización Mundial del Trabajo.

Los enfoques empíricos se basan en diversas comprobaciones, que implican varios análisis estadísticos para mejorar la precisión y la autenticidad de los resultados. En primer lugar, indicar que se ha comprobado la estacionariedad de los datos de Jordania, si siguen una distribución normal, se han estudiado las correlaciones entre variables, se ha realizado la prueba de la raíz unitaria, la prueba de causalidad de Granger y la prueba ARDL para cada variable. En segundo lugar, decir que estas comprobaciones y mediciones ayudan a revelar el impacto de los refugiados en los factores económicos y del mercado laboral del país anfitrión, Jordania, en consonancia con el segundo objetivo de esta investigación.

Así, de acuerdo con los objetivos 2 y 3 de la tesis, y en consonancia con los indicadores destacados por la literatura, se plantearon 9 hipótesis para medir el impacto de los refugiados en la economía (denominadas H.a), y 7 para medir el impacto de los refugiados en el mercado laboral de Jordania (denominadas H.b). Las conclusiones de estas hipótesis pueden resumirse como sigue:

Hipótesis H1.a. Los resultados confirman que los refugiados no provocan un crecimiento del PIB en el país de acogida. Cuando el número de refugiados aumenta exponencialmente, superando lógicamente los recursos y la capacidad del país de acogida. Las leyes de la migración postuladas por Ravenstein (1885) siguen siendo válidas. Los refugiados, con escasos recursos y pocas opciones, se ven obligados a huir a países cercanos.

Nuestra investigación añade pruebas empíricas a trabajos anteriores como los de Akgündüz et al. (2015), Baloch et al. (2017) Holler & Schuster (2020). Akgündüz et al. (2015) señalaban que los refugiados no afectan positivamente al PIB del país de acogida a largo plazo. Obviamente, el proceso de adaptación lleva tiempo, requiere mucho esfuerzo y fondos internacionales (que tienden a reducirse en los últimos años), pero como indican la teoría dual del mercado de trabajo, la teoría de los sistemas mundiales y el enfoque de la sociedad mundial, la combinación de varios agregados económicos y una gestión eficaz determinarán la situación económica a largo plazo.

H2.a. Los resultados confirmaron la hipótesis H2.a. Los refugiados tienen un impacto negativo en la inversión extranjera directa del país de acogida. Así, nuestros resultados añaden evidencia empírica a los estudios anteriores que analizaron la asociación entre migración e IED. En nuestro caso, para el caso de la migración forzada en los países en desarrollo (Sassen-Koob, 1984; Kugler & Rapoport, 2007; Sanderson & Kentor, 2009; Federici & Giannetti, 2010; Javorcik et al., 2011). En cualquier caso, se pone de relieve el hecho de que la migración y los flujos de IED evolucionan con el tiempo. Las llegadas de refugiados siempre han existido, pero los conflictos que las provocan tienen un impacto cada vez más global, lo que ha dado lugar a un aumento espectacular del número de refugiados. Hasta hace poco, los estudios sobre migración se han centrado en la migración tradicional, por lo que, hasta ahora, no existen evidencias suficientes para comprender las implicaciones de la llegada masiva de refugiados. Por ello, el objetivo de esta tesis doctoral es tratar de llenar este vacío, prestando atención a un problema que está teniendo graves repercusiones internacionales en diferentes partes del mundo, con implicaciones directas o indirectas para todo tipo de países.

H3.a. Los resultados confirman que los Refugiados tienen un impacto negativo en el Ahorro Interior Bruto del país de acogida. El ahorro nacional es muy importante para acometer las inversiones que cada país necesita. Su contracción, por tanto, afecta al desarrollo del sector industrial, y puede implicar un mayor nivel de endeudamiento y una mayor dependencia internacional. Desde la Gran Recesión, los flujos de ayuda internacional se están reduciendo y las condiciones financieras son más duras, especialmente para los países en desarrollo, lo que hace que estas economías sean más vulnerables. Sin embargo, los países de acogida siguen haciendo frente a los elevados costes y a la integración de los refugiados. La solución podría estar en el desarrollo nacional sostenible, pero se trata de una tarea muy difícil para un país con pocos recursos que tiene que hacer frente a un aumento del gasto, como Jordania.

En línea con la hipótesis H3.a, los resultados confirmaron que los refugiados repercuten positivamente en la necesidad de tener que pedir prestado que tienen las Administraciones Públicas del país de acogida. En otras palabras, el aumento del número de refugiados incrementa la necesidad de financiación externa. Esta es la hipótesis H4a. Dado que el aumento del número de refugiados aumenta la necesidad de financiación exterior. Los países de acogida tienen que hacer frente a costes más elevados como consecuencia de los refugiados, tal como confirman estudios anteriores (Oficina Nacional Sueca de la Deuda, 2015; Zamore, 2018; AlShwawra, 2021). Como sugiere la teoría neoclásica, si el crecimiento de la economía permite pagar la deuda, todo estará bajo control. En los países en desarrollo, sin embargo, esto no siempre es posible, razón por la cual los países en desarrollo suelen depender en gran medida de la financiación externa.

La hipótesis H5.a. planteaba que los refugiados tienen un impacto negativo en el nivel de Gasto Nacional Bruto del país de acogida. Los resultados rechazan esta hipótesis, es decir, que el nivel de gasto nacional no se reduce con la llegada de refugiados. Este resultado complementa los resultados de Ekberg (1999),

pero en nuestro caso, en lo que se refiere a la migración forzosa. Los países en desarrollo presentan diferencias significativas en comparación con el mundo desarrollado. En Jordania, el gasto nacional se destina a cubrir las necesidades básicas, especialmente en el caso de los refugiados: el acceso a la asistencia sanitaria básica y a la educación. Además, para cubrir las necesidades básicas de las familias. Sin embargo, los recursos y la protección social son limitados. Por ello, la ayuda internacional es prioritaria.

H6.a.Los resultados confirman que los refugiados tienen un impacto negativo en el nivel de los precios de los bienes de consumo del país de acogida (aumentando la inflación). Nuestros resultados añaden evidencia para el caso de la migración forzada en países en desarrollo a trabajos de investigación previos como Nietschmann (1979), Nyaoro (2010), Akgündüz et al. (2015), y Fransen et al. (2017). Un mayor número de refugiados implica una mayor demanda de servicios y bienes suministrados por los países de acogida, lo que a su vez conduce a un aumento de los precios. La ayuda internacional y las remesas podrían conducir a un mayor ahorro en los países en desarrollo, reduciendo parcialmente el consumo. Sin embargo, es conocido que la inflación es siempre un obstáculo para el desarrollo.

Los resultados confirman nuestra hipótesis H7.a. Los refugiados impactan positivamente en el comercio internacional (como % del PIB) del país de acogida. Los resultados añaden evidencia para el caso de la migración forzada a estudios previos como Head & Ries (1998), Dunlevy & Hutchinson (1999), Girma & Yu (2002), Landau (2004), White & Tadesse (2010), Poot & Strutt (2010), Bratti et al. (2014), Mayda et al. (2017), Steingress (2018) y David et al. (2019). Los refugiados demandan nuevos productos de sus países de origen. Sin embargo, dicho proceso requiere de una economía fuerte para cumplirse esto favorece nuevos acuerdos comerciales y arancelarios, fomentando el comercio internacional (Mayda et al., 2017; Steingress, 2018).

Además, otros autores mostraron una asociación indirecta. Los refugiados favorecen el proceso comercial de los países de acogida a través del aumento de la demanda de bienes y servicios, así como su contribución a los sectores informales utilizando sus habilidades para enriquecer el desarrollo de productos (Ghosh y Enami, 2015; Taylor et al., 2016).

En consonancia con la teoría de las redes de migración, los refugiados se convierten en el vínculo entre los países de acogida y de origen, y este vínculo se fortalece a medida que aumenta el número de refugiados (Erdoğan et al., 2021).

La teoría migratoria de la causalidad circular acumulativa señala que la llegada al país de acogida se produce de forma gradual, al igual que los cambios en el comercio.

Según el modelo de Heckscher-Ohlin, el comercio internacional y la migración podrían complementarse. La llegada de refugiados se produce a países cercanos Ravenstein (1885) donde ya existen relaciones comerciales.

H8.a.Los resultados rechazan esta hipótesis: El impacto positivo de los refugiados en la balanza por cuenta corriente del país de acogida. Trabajos anteriores no han encontrado evidencias de que los inmigrantes tengan un impacto negativo en la balanza de los países desarrollados (Ratha, 2003). Aunque en otros casos, se encontró una relación positiva entre la inmigración y la balanza por cuenta corriente (Taslim, 1998), o negativa (Alawin & Oqaily, 2017). Por lo tanto, se necesita más investigación, ya que hay pocos trabajos que examinen los efectos de la migración forzosa en la balanza por cuenta corriente.

Los resultados rechazaron la hipótesis H9.a. Los refugiados tienen un impacto positivo en el nivel de la deuda bruta del gobierno general del país de acogida (disminuyendo la deuda). Como señalaron Massey et al. (1993), las únicas políticas que realmente funcionan a largo plazo en relación con los refugiados son las reunificaciones familiares, ya que es el comienzo de la mitigación de los problemas en su origen.

El análisis empírico consta de dos etapas. En primer lugar, comenzamos evaluando la influencia de los refugiados en los indicadores económicos. En segundo lugar, realizamos un análisis más específico del impacto de los refugiados en el mercado laboral del país anfitrión, que es el objetivo 3 de esta tesis.

Los resultados confirman la hipótesis H1.b. Los refugiados influyen positivamente en el nivel de desempleo de Jordania (aumentando el paro). Nuestros resultados añaden evidencia empírica a trabajos previos tales como Coppel et al., 2001; Kugler & Rapoport, 2007; Stave & Hillesund, 2015; Bahcekapili & Cetin, 2015; Fernández-Reino, 2018).

H2b. Los resultados confirman que los refugiados tienen un impacto positivo en el número de trabajadores por cuenta propia del país anfitrión. La existencia de barreras y la inseguridad laboral en el mercado de trabajo de los países en desarrollo conducen al sector informal, donde el autoempleo es la única salida para los refugiados. Esta es una diferencia importante con los países desarrollados, donde los inmigrantes son contratados por su talento o su conocimiento del mercado de origen. Los estudios sobre la migración en los países en desarrollo deberían tener más en cuenta las diferencias de estatus económico y los desequilibrios entre países, ya que, en muchos casos, los países en desarrollo tienen una gran parte de la población que vive por debajo del umbral de la pobreza y barreras importantes para acceder al mercado laboral. Por lo tanto, además de los indicadores de la cantidad de empleo, es necesario aumentar el uso de indicadores sobre la calidad del empleo, como los desarrollados por la Organización Mundial del Trabajo, que se incluyen en este estudio.

A diferencia de lo que ocurre en los países desarrollados, el trabajo por cuenta propia en los países en desarrollo no es necesariamente una forma de crecimiento o una auténtica carrera profesional, sino un medio de subsistencia en situaciones de precariedad laboral, falta de protección social y elevadas barreras de acceso al mercado de trabajo. Como indicaron Harris y Todaro (1970), la persistencia de estos problemas conduce a la segmentación del mercado laboral en los países en desarrollo, es decir, a un acceso limitado a

determinados sectores del mercado laboral. Por lo tanto, son necesarios más estudios para investigar la relación entre los refugiados y el nivel de trabajadores por cuenta propia del país de acogida.

Los resultados también confirman nuestra hipótesis H3.b. Los refugiados impactan positivamente en el número de personas que se considera que no forman parte de la población activa del país de acogida ("ninis"). Nuestros resultados están en línea con la literatura previa sobre refugiados residentes en países en vías de desarrollo como Akgündüz et al. (2015) y Aras & Mencütek (2015). Dado que el número de permisos de trabajo es de alrededor del 10% de los refugiados en Jordania hasta 2021 (AlShwawra, 2021) que corrobora las barreras del mercado de trabajo del sector informal y la prevalencia del sector informal y la segmentación del mercado de trabajo. Asimismo, los resultados concuerdan con la teoría del capital humano. La división del mercado laboral se basó en las cualificaciones universales y específicas de la mano de obra. Los trabajadores locales solían tener cualificaciones específicas, por lo que podían conseguir empleos más prestigiosos, estables y mejor pagados, pero los refugiados solían tener menos cualificaciones, por lo que conseguían empleos que no requerían especialización y que estaban relacionados con la ejecución de tareas sencillas.

A este respecto, la teoría del mercado laboral dual y la teoría del mercado laboral interno-externo llaman la atención sobre el hecho de que la aplicación de medidas para facilitar la movilidad laboral hacia el sector formal podría dar lugar a un mayor nivel de empleo y, posteriormente, a mayores ingresos por impuestos (Saget, 2001).

Los resultados confirman nuestra hipótesis H4.b. Los refugiados influyen positivamente en el nivel de mano de obra subutilizada total del país de acogida, que mide hasta qué punto no se utilizan plenamente en la economía todos los recursos de mano de obra disponibles. Nuestras conclusiones coinciden con estudios anteriores sobre la inmigración en los países desarrollados (Mattoo et al., 2008; Zetter & Ruaudel, 2016; Malaeb & Wahba, 2018). Esto pone de manifiesto las desigualdades en el mercado laboral de acogida entre los inmigrantes con un alto nivel educativo procedentes de otras naciones y los refugiados.

Los resultados confirman nuestra hipótesis H5.b.: Los refugiados influyen positivamente en el desempleo relacionado con el tiempo en el país de acogida. Los resultados añaden evidencia a trabajos de investigación anteriores como Becker (1975), Landers et.al. (1996), Bell & Freeman (2001), y Bratti & Staffolani (2007). El desempleo relacionado con el tiempo se produce cuando las horas de trabajo de una persona empleada son insuficientes, puesto que la persona ya estaría dispuesta y disponible para realizar más. Los refugiados están a disposición de trabajar horas extraordinarias para mejorar sus ingresos. Si el sector formal no ofrece esta posibilidad, la salida sería el sector informal y los trabajos artesanales, sin regulación de la jornada laboral, a costa de peores condiciones de trabajo.

Los resultados confirman la H6.b. La afluencia masiva de refugiados aumenta el número de jóvenes sin estudios ni trabajo, NEET ("ninis"), en el país de acogida. Así, se añade evidencia a estudios previos como OCDE (2007), Bell & Blanchflower (2011), Hameed et al. (2018), Pluck (2021) y Trueba & Pluck (2021). Dado que el número de "ninis" afecta al conocimiento del impacto real de las políticas sobre el nivel de empleo, es necesario profundizar en la investigación identificando y evaluando las políticas de empleo implantadas en los países en desarrollo que han acogido refugiados, incluyendo el efecto de la población "Nini". En países desarrollados, los ninis se corresponden en gran medida con la población joven, pero en este caso, el perfil se amplía con los refugiados.

Finalmente, los resultados muestran evidencias que confirman nuestra hipótesis H7.b. Los refugiados impactan positivamente en la tasa de pobreza laboral del país de acogida. Estos resultados sirven para confirmar la existencia de diferencias significativas en el mercado laboral entre las economías desarrolladas y en vías de desarrollo, y las metodologías utilizadas para estudiar la inmigración en los países desarrollados de acogida deberían adaptarse adecuadamente.

En los países en desarrollo, alcanzar el estatus de clase media, algo habitual en el mundo desarrollado, sigue siendo un objetivo difícil. La preocupación inmediata aquí, de hecho, sería salir de la pobreza y poder acceder a la atención sanitaria básica y a la educación, con el fin de mejorar el bienestar de las familias.

Las políticas de empleo y protección social de los países desarrollados se centran en reducir el nivel de desempleo para reducir la pobreza; sin embargo, en los países en desarrollo predomina el sector informal, por lo que las estadísticas sobre los niveles de desempleo pueden dejar fuera a una gran parte de la población. Además, en los países en desarrollo, los sistemas de protección social se activan por el desempleo en el sector formal. Al final, en la práctica, los trabajadores pobres de los países en desarrollo tienen que depender de sí mismos y de sus familias.

Otro aspecto importante es que las políticas de lucha contra la pobreza suelen ignorar a las personas con empleos precarios. Las condiciones precarias son habituales en los países en desarrollo, pero también es cierto que la precariedad, es decir, la economía "gig", va en aumento en los países desarrollados.

En vista de lo anterior, se recomienda una evolución en el diseño de las políticas de lucha contra la pobreza, cambiando el paradigma de los indicadores de cantidad de empleo a otros más específicos sobre la calidad del empleo, como los desarrollados por ILOSTAT y utilizados en esta tesis. Además, las medidas que permiten el acceso a una atención sanitaria, financiera y educativa de calidad son importantes para elevar a la población por encima de los niveles de pobreza y mantener el nivel de desarrollo alcanzado. También permite a los trabajadores dedicarse a actividades de mayor productividad, lo que en última instancia conduce al crecimiento económico.

## **Limitaciones y futuras investigaciones**

Hasta ahora, ninguna de las teorías de la migración puede explicar los procesos migratorios en toda su amplitud, ya que cada una de ellas se refiere a aspectos muy concretos o se aplica en ámbitos de estudio diferentes. Por lo tanto, una de las limitaciones es que hay que enfrentarse a multitud de análisis desagregados a la hora de analizar la migración internacional. Por ello, la selección de indicadores también es una tarea compleja.

Cada investigación tiene límites temporales y espaciales. Esta investigación se limitó al Estado de Jordania y para el periodo 2000- 2021. Los datos sobre migración son siempre difíciles de recopilar, y en el caso de los refugiados internacionales, aún más. Esta investigación utilizó las bases de datos más fiables del Banco Mundial, ILOSTAT y ACNUR. Sin embargo, faltan datos detallados de los países de la región de Oriente Medio que también han acogido a refugiados, lo que ha supuesto una compleja recopilación de información, así que finalmente pudimos analizar el país de acogida, Jordania, con datos más completos para una amplia muestra de años sobre las variables objeto de estudio.

No obstante, los investigadores podrían ampliar esta investigación explorando datos de otros países de acogida en Oriente Medio para encontrar nuevas evidencias a las hipótesis planteadas en esta tesis, especialmente porque para algunas variables aún no existe un consenso claro en la literatura.

Otra cuestión que se considera una limitación es que la mayoría de los estudios se centran en la migración económica tradicional, pero, como señala esta tesis, la migración evoluciona con el tiempo e incluye el estudio de diferentes formas de migración. El progresivo aumento de los conflictos con mayor repercusión internacional ha hecho que la literatura sobre migraciones forzadas haya crecido de forma espectacular en los últimos años. No siempre es posible aplicar el mismo enfoque o las mismas soluciones que en la literatura tradicional sobre migración, ya que la migración forzada presenta importantes diferencias. Por ejemplo, existe un gran número de investigaciones sobre los factores determinantes de la migración económica, pero en el caso de los refugiados, algunas personas no pueden decidir si emigran o no. Por lo tanto, aquí son importantes otros aspectos, especialmente los relacionados con las consecuencias del desplazamiento forzoso. Por lo tanto, en esta investigación se decidió comenzar realizando un análisis sistemático de la literatura sobre migración forzada para comprender los principales temas de estudio en este campo.

Además, muchos estudios se centran en la migración a países desarrollados, advirtiendo que sus conclusiones no siempre son aplicables a los países en desarrollo, ya que sus condiciones y capacidades son muy diferentes. A este respecto, resultó útil examinar los estudios centrados en el nivel de desarrollo. La literatura específica de los países en vías de desarrollo permitió conocer el funcionamiento de las macromagnitudes en estos países.

A la luz de nuestros resultados, y teniendo en cuenta la prevalencia del sector informal en los países en desarrollo, deberían realizarse más estudios y análisis para comprender cómo se adaptan los refugiados en el mercado laboral informal de los países de acogida.

Por último, los conflictos se perciben como un problema temporal, a veces a corto plazo. Sin embargo, la realidad es que los flujos de refugiados no son ni constantes ni a corto plazo. No pueden serlo porque los conflictos, como el de Siria, son muy difíciles de resolver o, en muchos casos, no se resuelven. Además, a menudo se tarda años en volver a la seguridad del país de origen y, aunque se disponga de ayuda humanitaria, se requiere una solución política, que con el tiempo deja de ser prioritaria, por lo que se necesitan más estudios sobre la evolución de los efectos a largo plazo de los conflictos.