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# Economic Globalization and Unemployment: The Experience of Arab Countries

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## **Abstract**

The present study seeks to examine the impact of international trade policies on unemployment for 10 Arab countries over the period of 1991 to 2014. In addition to various trade policies measurements, the present study takes into consideration various variables that represent macroeconomic distortion policies; a country's economic size; the quality of government institutions; and labor market regulation. Using different proxies for trade policies, the results of the Pooled Mean Group (PMG) shows that trade liberalization policies appear to decrease unemployment rates over time. The finding supports contemporary calls to participate in international trade to facilitate job creation. However, further studies are required to identify the specific channels through which trade policies can affect unemployment in the Arab region.

**Keywords:** Unemployment, Economic Globalization, Trade Policies, Arab Countries





## 1. Introduction

Unemployment is considered to be one of the most serious economic and social problems. The magnitude of unemployment varies between countries and within a country (e.g., rural and urban areas); gender; and over time. However, in the Arab region, increasing unemployment rates constitute one of the key challenges faced by policy makers, particularly in the context of the recent ‘Arab Spring’. According to the World Economic Forum (WEF 2011-2012), the Arab region suffers from long-term unemployment, which ranges between 10 and 25 percent, with some countries having experienced significant increases in unemployment since 2000. Most importantly, unemployment is particularly acute among youth in the Arab region, averaging approximately 25 percent in the Middle East and North Africa (MENA) region and significantly higher than the 17.3 percent in the OECD area (Gligorov et al. 2012). Clearly, creating quality livelihood opportunities for the millions of young people seeking to enter the labour market each year is one of the most pressing challenges facing Arab region today. The challenge is more pronounced when demographic transition is considered, which will likely be faced by the Arab region in the future. In 2011, for example, the child dependency ratio was very high (i.e., 48.7 percent), which implies that the labour force will grow more rapidly than the population dependent upon it in the coming years. The growth of the labour force will subsequently free up resources for investment in economic development and welfare (Galal and Selim 2013; Gligorov et al. 2012).

Recently, the attention of the scholars and UN agencies has shifted to examining whether policies relating to external sectors have effects upon unemployment rates. For instance, the 2013 Human Development Report of the United Nations Development Program (UNDP) states that developing countries that participate in international trade – including trade with other emerging economies – make rapid progress in relation to job creation. Several studies examine whether exposure to international trade creates or destroys jobs. According to Landman (2000), most people are concerned about the present and future effects of globalization in relation to their respective labour markets. Rama (2003) argues that integration with the global market bears the promise of prosperity for developing and transitional economies, but such integration may also adversely affect such economies.

However, it's important to know that the impact of trade policies on unemployment is likely to vary between skilled and unskilled workers; and over time. The notion that trade liberalization increases unemployment in the short run as workers are reallocated from the shrinking to the expanding sectors is widely accepted (Dutt et





al. 2009). However, the effect of trade liberalization on unemployment in the long run is still inconclusive (Felbermayr et al. 2011). Furthermore, while it is widely accepted that trade liberalization policies will decrease unemployment among skilled workers, unemployment among unskilled workers will increase at the same time and render the overall impact of such policies on overall unemployment ambiguous (Moore and Ranjan 2005).

Extant studies examined whether exposure to international trade creates or destroys jobs, which are reviewed below, produce mixed findings. The inconclusive findings suggest the need for further investigation because questions regarding whether trade liberalization policies will increase or reduce unemployment is “primarily an empirical issue”, as suggested by Davidson and Matusz (2004a:25). Nevertheless, no existing empirical study examines such issues, particularly in relation to the recent experiences in the Arab region (i.e., Arab spring). Several studies demonstrate that high unemployment rates are one of main causes of Arab Spring and unemployment rates are likely to increase after such events (Gligorov et al. 2012; Owen 2013; Galal and Selim 2013). The present study does not attempt to test a specific theoretical model, but seeks to determine whether trade liberalization will increase or decrease unemployment; and produce robust evidence concerning the impact of trade policies on unemployment rate for a panel of selected Arab countries. The outcome of the present study may shift the attention of the policy makers in the Arab region, during their dialogues with the World Trade Organization (WTO), regarding the possible effect of the liberalization of trade on labour market performance rather than simply its impact on economic growth. The remainder of the paper is organised as follows. Section 2 outlines the main features of labour markets; the trend of unemployment; and trade policies in Arab countries. Section 3 reviews the theories that link international trade with unemployment. Section 4 deals with the model, data and variables and estimation methods employed in the present study. The results and discussion will be presented in Section 5. Finally, Section 6 presents the conclusion of the present study and provides policy recommendations.

## 2. Unemployment and International Trade Policies in Arab Countries

Jad (2010) states that any study that seeks to analyse the labour market issues in the Arab world should start by acknowledging and incorporating the diversity of socio-economic outcomes within the region. If only aggregate economic





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indicators of Arab countries are considered, the results of such an examination will likely lead to generic and ineffective policy recommendations. The Arab World is far from being a unified entity: gross national income per person varies from almost US\$64,000 per annum in Qatar to US\$281 per annum in Somalia. Despite the significant variations that exist in relation to economic indicators among different Arab countries, the labour markets among Arab countries have common features. Jad (2010) argues that the following issues concerning employment are the principal features of Arab labour markets: (1) Agricultural, social and personal services employ more than 60 percent of Arab workers; (2) The sectoral distribution of employment in the Arab world shows significant gender disparities; (3) The public sector continues to play an important role in the Arab job market; (4) The distribution of employment by major occupation shows prevalence in plant machine operators and assemblers, and skilled agricultural workers; (5) More than 60 percent of Arab workers are employees (work for pay), while employers constitute just above 15 percent of the working population; and (6) The informal sector accounts for more than 10 percent of employment. Meanwhile, Jad (2010) makes the following observations about unemployment in Arab labour markets: (1) Unemployment disproportionately affects women, youth and individuals with higher educational attainment; (2) Women face higher unemployment risk in Arab countries, and they are often excluded from the labour markets; (3) Unemployment particularly affects the youth in the Arab countries; and (4) Youth unemployment is the main source of concern in poor and conflict-stricken Arab countries.

Table 1 show the unemployment rates (measured as percentage of total labour force) in selected Arab countries during the period of 1992 until 2012. The table indicates that, except for Kuwait, all of the Arab economies examined experienced relatively high unemployment rates during the period. Although unemployment rates in some Gulf Cooperation Council (GCC) countries are relatively low, the unofficial estimates suggest that unemployment among young nationals and among university graduates in GCC countries is more than twice that of the total labour force (i.e., more than 35% across GCC countries) (Gligorov et al. 2012). Some of the countries (e.g., Egypt, Sudan and Tunisia) record an increasing trend in the unemployment rate. However, it is important to note that unemployment figures for Arab countries are unreliable, to some extent, due to data mining and manipulation process by certain parties (Belqasem 2013). More importantly, unemployment figures provide only a partial picture of the employment situation in the region, where important shares of the population are underemployed in the informal sector (Gligorov et al. 2012). For instance, between 2000 and 2007,





an average of 67%, 50%, 49% and 45% of total non-agriculture employment existed in the informal economies in Morocco, Lebanon, Yemen and Egypt, respectively (Heintz and Chang 2007). Nevertheless, existing figures concerning unemployment rates provide information regarding the differing unemployment situations between Arab countries within the region, which is useful for assessing issues relating to trade policies.

**Table 1: Unemployment rate (%labour forces), selected Arab countries, 1995-2012**

<b>Countries</b>	<b>1995</b>	<b>2000</b>	<b>2005</b>	<b>2012</b>
<b>Algeria</b>	28.1	29.5	15.3	9.9
<b>Egypt</b>	11.2	8.9	11.5	12.1
<b>Jordan</b>	15.4	13.7	14.8	12.2
<b>Kuwait</b>	1.5	0.8	1.4	2.1
<b>Morocco</b>	16	13.4	11.1	9
<b>Sudan</b>	14.6	15.2	17	18
<b>Syria</b>	17.2	13.4	8.1	n.a
<b>Tunisia</b>	16.2	15.7	12.9	17.6

Source: International Monetary database.

The World Bank database shows that the labour force among Arab countries grows annually by an average of 3 percent compared to 1.7 percent for less developed countries (LDCs) during the period of 1990 to 2010. Two factors contribute to the higher growth in the labour forces of Arab countries: population growth; and the rate of participation of the population in the labour forces. Belqasem (2013) attributes the high growth rate for labour forces in Arab countries to the relatively higher population growth and not to the changes in the population share in the labour force. More importantly, the rapid decline in fertility is expected to result in a change in the age structure and growth of the working-age population (Navtej and Yousef, 2009). For the second component of the labour force (i.e., participation rate), despite the increasing share of males in the total labour force, the labour force participation rate among Arab countries is still lower than the prevailing share in the LDCs by an average of 6 percent during the period of 1990 to 2010. In contrast,



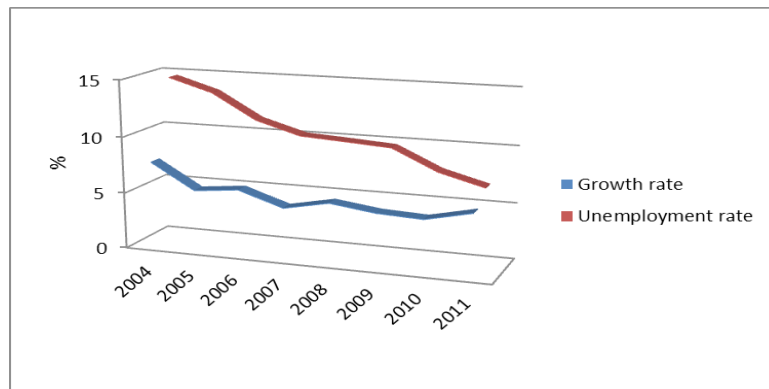


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the share of females in the total labour force demonstrates a declining pattern after 2010. The share of females in the total labour force in Arab countries is only 23 percent compared to 50 percent in developing countries in 2010. With the rapid progress in female education and health, it is likely that the share of females in the labour force will increase to 50 percent in the near future (Belqasem 2013). The demographic transition demonstrated in Arab countries and /or the expected rise in the share of female in the labour force is estimated to impose further challenges in relation to job creation for the unprecedented growth of new entrants into the labour market.

The United Nations Conference on Trade and Development (UNCTAD) (2008) attributes the high unemployment rate in Arab countries to the failure of these countries to achieve sustainable economic growth during the period of 1960 to 1999. The UNCTAD maintains that even in the only country to achieve such sustainable economic growth (i.e., Egypt), such growth is meaningless since it has failed to create jobs and change the inflexibilities in the economy. Figure 1 supports this argument since no systematic relationship between economic growth and unemployment is detected.

**Figure 1: Economic growth (annual) and unemployment in Arab world, 2004-2011.**



Source: World Development Indicator (various years)

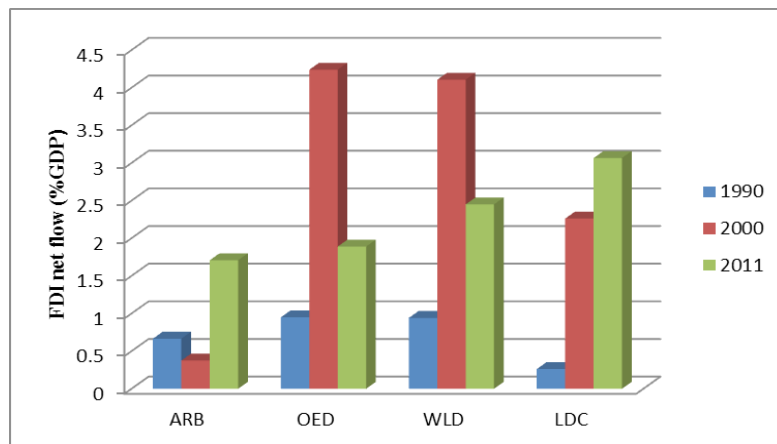
Since international trade is recognised as a factor that can assist countries to minimise the prevailing unemployment rate, the high unemployment rates among Arab countries may reflect, even partly, the ineffectiveness of the international trade sector (UNDP 2013). International trade policies refer to elements affecting





trade, such as exports; imports; foreign direct investment (FDI); tariff and non-tariff barriers; and exchange rates. In regards to the relationship between FDI and employment for instance, the World Economic Forum (2011-2012) claims that FDI created 175,000 direct jobs and approximately 585,000 indirect jobs in 11 surveyed Mediterranean countries in 2010 (including Turkey and Israel, but excluding other Gulf countries). However, the share of the net flow of FDI to gross domestic product (GDP) in the Arab region is one of the lowest in the world. Figure 2 shows that during the last two decades, this share does not exceed 1.5 percent; and the FDI among LDCs (measured as percentage of GDP) in 2011 are twice that of Arab countries.

**Figure 2: Foreign direct investment, net inflows (% of GDP), selected regions, 1990-2011**



Source: UNCTAD (various years)

FDI is typically separated into mergers and acquisitions (M and A); and green field investments. <sup>(1)</sup> Compared to the first component of the FDI, green field projects should have a positive impact on job creation, since the newly created assets require new employees. The World Economic Forum (2011-2012) states that although the share of green field investment in the Middle East and North Africa (MENA)

1 MandA refers to the purchase of existing assets, either through a cross-border merger resulting in two companies becoming a single entity; or through a cross-border acquisition in which foreign investors buy some or all of the shares or assets of a domestic company. Green field investment refers to the creation and development of new assets, such as factories, equipment, and offices.





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region is estimated at over 90 percent of FDI over the last five years, a large part of those green field investments are oriented towards the hydrocarbon sector, which is more capital than labour intensive. Even for FDI outside the energy sector, such investment is primarily directed towards non-tradable sectors (Gligorov et al. 2012).

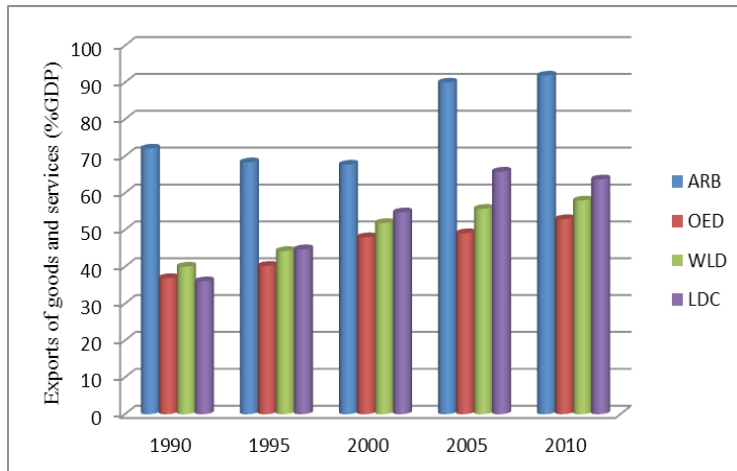
With regard to the structure of trade, according to the world development indicator database, during the period of 1990 to 2007, the average annual growth rate of manufactured exports (measured as the percentage of merchandise exports) is lower than that of manufactured imports (measured as the percentage of merchandise imports) (i.e., -32 percent for exports and -16 percent for imports). At the same time, the manufacturing value added (measured as the percentage of GDP) does not exceed 10 percent (on average) during the last two decades. The annual growth rate of agricultural raw materials exports (measured as the percentage of merchandise exports) during the period of 1991 to 2008 demonstrates a declining pattern equal to -62 percent, while agricultural raw materials imports declined by an average of -52 percent during the same period. These figures imply that the decline in the exports for such type of commodities is greater than the decline in the import of the same products. At the same time, the value added (measured as the percentage of GDP) of agriculture declined from 11 percent in 1990 to 7 percent in 2010. In contrast, value added share of the manufacturing sector (measured as the percentage of GDP) improved slightly from 43 percent in 1990 to 49 percent in 2010. Compared to the other regions summarised in Figure 3, the exports of goods and services among Arab countries are larger than other regions (e.g., Organisation for Economic Co-operation and Development (OECD) and LDCs) and the world generally over the last two decades.

The degree of liberalization in the economies of Arab countries is signalled by the fact that no aggregate data exists concerning the tariffs imposed on international trade among Arab countries. Nevertheless, the aggregate data from the Economic Freedom of the World Database (EFWD) for ten Arab countries (see the countries listed in methodology section, below) on mean tariff (un-weighted mean of tariff rates) show that the Arab countries impose, on average, moderate mean tariffs (i.e., mean equal to 7.2) on international trade. However, the rates of such tariffs vary between countries with minimum rate between 3.3 points (high tariff) and 9.3 points (low tariff rate) during the period of 1991 of 2012.





**Figure 3: Exports of goods and services (% GDP) for certain regions, 1990-2010.**



Source: World Development Indicator (various years)

With respect to the labour market regulation among Arab countries, the data concerning labour market regulation index (see the sub-components of this index in the methodology section, below) from the EFWD for ten Arab countries indicate that Arab countries enjoy relatively flexible labour market regulations. More specifically, Arab countries register, on average, a score of 7 points, which reflect reasonable labour regulation in these countries. However, the degree of regulation varies between the countries with countries such as Bahrain in 2010 registering 9 points compared to 5.3 points for Algeria during the same year. In regards to the impact of labour market regulation on unemployment, the World Economic Forum (2001-2012) recognises that the rigidity of the labour market regulation in the Arab region is one of the main constraints in regards to firm expansion and leads to lower levels of jobs creation. The results of the firm survey conducted by the World Bank (2011b) also confirm that the rigidity of labour market regulation in the Arab region is major obstacle to firm expansion.





### 3. Conceptual Framework

The main theoretical model that clarify the effect of international trade policies on unemployment can be traced back to Ricardian's work on comparative advantage, which is based upon relative technological differences; and Heckscher-Ohlin's work on comparative advantage, which is based upon international differences in relative factor endowments. According to Dutt et al. (2009), trade affects unemployment rate through the above sources of comparative advantage in several different fashions. Based on Ricardian model, trade will increase the marginal productivity of labour in the export sector due to an increase in the domestic relative price of the goods produced by this sector. The model assumes that trade will lead to complete specialisation, in which the marginal productivity of labour in the import-competing sector will experience a decline and fail to survive trade liberalization. However, the marginal product of labour for the overall economy continues to increase due to efficiency, which encourages greater investment and leads to increased job creation and lower unemployment.

Nonetheless, under the Heckscher-Ohlin model in a closed capital-abundant country, the price of capital-intensive goods is relatively lower compared to the rest of the countries. Opening to trade will therefore lead to a relative increase in return for capital in such a country. The relative increase in the return for capital will lead to an increase in the demand for capital compared to labour and decrease the average level of wages while boosting unemployment. In contrast, in a labour abundant country, trade will lead to an increase in the demand for labour, thus increasing wages and resulting in a lower unemployment rate (Dutt et al. 2009)<sup>1</sup>.

Studies concerning the impact of globalization or trade liberalization on unemployment rates that are based upon single or multiple countries produce mixed results. No consensus exists concerning whether an increase in trade will lead to a higher or lower aggregate unemployment rate. According to Hasan et al. (2012), the ambiguousness of the relationship may be due to the methodology; the specific features of the countries that the respective studies examined; or the proxy used to represent the trade liberalization variables. For example, a study by Dutt et al. (2009), using cross-country data, finds fairly strong and robust evidence supporting the Ricardian prediction that unemployment rate and trade openness are negatively related. However, based upon the Heckscher-Ohlin model, the negative

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<sup>1</sup> For more detailed information concerning the theoretical model on trade liberalization and unemployment, see Felbermayr et al. (2008), Dutt et al. (2009) and Hasan et al. (2012).





effect is only true in the case of labour-abundant countries, while positive effects are found among capital-abundant countries. Using panel data analysis, Dutt et al. (2009) find that the effects of trade liberalization on unemployment increase in the short run, but are followed by an unemployment-reducing effect leading to a new steady-state in the long run. Dutt et al. (2009) argue that trade openness that improves aggregate labour productivity will reduce unemployment as it will lead to more job creations and job searches. A similar study by Felbermayr et al. (2011), utilising panel data from 20 OECD countries, finds a negative correlation between unemployment rates and economic openness. The findings of Felbermayr et al. (2011) reaffirm the findings of Matusz (1996), who asserts that trade may improve economy-wide productivity and reduce unemployment rates. The reason is that trade results in a greater division of labour due to the increase in variety among available intermediary activities.

In contrast, Helpman and Itskhoki (2007) argue that low trade barriers can lead to an increase in unemployment because reductions in trade barriers improves the profitability of exporting firms, thus leading to expansion of the trading sector. If the trade sector is characterised by labour market friction, unemployment will increase when a mismatch in skill requirements exists and leave unskilled workers unemployed. Janiak (2007) also demonstrates that higher trade exposure is associated with a higher level of equilibrium in unemployment. The reason is that job destruction, resulting from the exit of small low-productivity firms, exceeds job creation among large high-productivity firms because larger firms will extract higher rents by limiting the level of job creation. Sener (2001) and Moore and Ranjan (2005) argue that trade liberalization leads to an increase in the unemployment of unskilled workers, although the studies are theoretically ambiguous regarding aggregate unemployment. Sener (2001) argues that trade liberalization increases the profitability of innovation activity by raising the profit margin of the exporting firms. Consequently, more firms will engage in research and development, resulting in an increase in the demand for skilled labour (Sener 2001). On the other hand, a high frequency of innovations increases the turnover rate of unskilled workers by speeding up the creative destruction process and increasing the frictional unemployment rate of unskilled workers. Hence, the effects of trade liberalization on aggregate unemployment rates are ambiguous. For similar reasons, Moore and Ranjan (2005) argue that aggregate unemployment is likely to decrease in a skilled-labour abundant country and increase in an unskilled-labour abundant country.





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Following the criticism of the cross-country analyses, many recent empirical studies relate trade policy to unemployment following the examination of individual countries, including Attanasio et al. (2004); Menezes and Muendler (2007); Porto (2008); and Hasan et al. (2012). The aforementioned studies focus on the experiences of Columbia, Brazil, Argentina and India, respectively. Attanasio et al. (2004) examine trade liberalization in Colombia and discover that the probability of unemployment increases after liberalization. The increase is driven by non-trading sectors, which include wholesale and retail trade, rather than trading sectors, such as manufacturing. Menezes and Muendler (2007) find that trade liberalization in Brazil during the 1990s led to the displacement of formally employed workers from largely protected industries, whilst the comparative advantage industries, which consist mainly of exporters firms, did not fully absorb the displaced workers. The findings demonstrate that formally employed workers move primarily to the informal sector or self-employment, whilst others lose their jobs and are unemployed. A similar study by Porto (2008) in Argentina, which focuses on how world agricultural trade liberalization affects unemployment and wages, finds that the increase in the price of Argentine agro-manufactured exports led to a decrease in unemployment, but positively affected wages.

The lack of extent studies addressing unemployment issues in general or in relation to international trade policies in the Arab region is one of the principal motives for conducting the present study. The most recent study to link unemployment and international trade policies is that of Belqasem (2013), who examines the impact of trade openness and other explanatory variables on unemployment in 7 Arab countries during the period of 2000 to 2009. The study finds that trade openness; population density and labour market regulation flexibility lead to a decrease in unemployment rates. Moreover, the relatively high unemployment rate in Arab countries and the absence of studies examining the role of international trade policies on unemployment provides further motivation to conduct the present study. In addition to that, the contradictory results in the previous studies also constitute extra motive to address this issues.





## 4. Model, Data and Estimation Method

### The model

Following Felbermayr et al. (2011), the following model is estimated:

$$U_{it} = \alpha + \beta_1 TR_{it} + \beta_2 GDP_{it} + \beta_3 POP_{it} + \beta_4 LMR_{it} + \beta_5 VGDP_{it} + \beta_6 Bure_{it} + \beta_7 INF_{it} + \varepsilon_{it} \quad (1)$$

where  $U_{it}$  is the unemployment rate of country;  $i$  at year  $t$ ,  $\alpha$  is a constant; and  $TR$  represents various trade policies measurement comprising tax on international trade, mean tariff rate, stock of FDI, FDI net inflows and openness.  $GDP$  is gross domestic product (PPP constant 2005 international \$);  $POP$  is population between 15-64 years;  $LMR$  represents the labour market regulation index;  $VGDP$  represents the volatility of the GDP;  $Bure$  is bureaucracy quality;  $INF$  represents the inflation rate (changes in CPI); and  $\varepsilon_{it}$  is the error term.

To measure the effects on unemployment, the approach of Dutt et al. (2009) and Felbermayr et al. (2011) is followed. Unemployment rate (percentage of total labour force) is used as the conventional indicator for unemployment. Many underlying reasons exist for the negative relationship between the trade liberalization and unemployment. One of the key reasons is the lack of appropriate policy concerning business environments, which may lead to high costs for entrepreneurs. In relation to trade policies, several theoretical models explain that trade policies may affect unemployment rates through labour market regulation mechanisms (e.g., Moore and Ranjan 2005; Boulhol 2008). For instance, the rigidity of the labour market regulation in regards to minimum wage laws, for example, will likely lead to an increase in labour costs and, hence, the prices of goods in the host country. Meanwhile, tariff reductions will cause imported goods to become relatively cheaper in host countries, which will lead to an increase in the unemployment rate in host countries.

Juan et al. (2004) argue that every country in the world recognises a complex system of laws and institutions intended to protect the interests of workers and to help ensure a minimum standard of living for their respective populations. Such laws and institutions include employment laws; collective or industrial relations laws .....etc. Extant studies examining the relationships between labour market regulations and unemployment are inconclusive. It is widely accepted that rigidity within labour market regulations will boost unemployment in the formal sector, but,





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in contrast, will reduce unemployment in the informal sector, which subsequently leads to inconsistent effects on overall unemployment (Richard et al. 2005; Dutt et al. 2009; Felbermayr et al. 2011). For the labour market institution in the present study, the labour market regulation index from the EFWD is utilised (Gwartney et al. 2014). The index consists of six sub indicators that measure the influence of hiring regulations and minimum wages; hiring and firing regulations; centralised collective bargaining; working hour regulation; mandated cost of worker dismissal; and conscription. The index is calculated to measure the extent to which these infringements exist. The indicators are normalised to range from 0 to 10, with a high score representing high economic freedom and less regulation (flexible labour market regulation). The aggregate index is calculated as the arithmetic mean of the ratings of its six sub indicators.<sup>(1)</sup>

Since unemployment is seen as a principal source of political instability (Therese and Thierry 2013), political instability and/or its effects on economic growth may be responsible from the spread of unemployment (Alberto et al. 1996; Alberto 2012; Fosu 2001; Campante and Chor 2012). Several strands of literature emphasise the impact of the political economy of government management and political processes on numerous aspects of economic performance, including budget deficits, investment decisions and unemployment. Political instability due to political fragmentation, for instance, tends to reduce the chance of a current government to implement beneficial reforms, the effects of which will be realised in the future. In the context of Arab countries, as previously mentioned, one of the main features of the labour market in the Arab countries is that the majority of the population is employed in the public sector, which is administered by the government. Consequently, the stability of the government (the administrator of the public sector) constitutes one of the main determinants in maintaining and/or increasing the number of the people working in this sector. The institutional strength and quality of the bureaucracy are other shock absorbers that tend to minimise the revision of policies following changes in government. To capture the effects of political instability, the present study employs an indicator for bureaucracy quality from the International Country Risk Guide Group (ICRG) database. The ICRG provides a high score (4 points) to countries where the bureaucracy has the strength and expertise to govern without drastic changes in policies or interruptions in government services.

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1 For an overview of the theoretical background that links international trade with labour market regulation, see Potrafke 2013.





The summary measure of trade openness typically used in empirical works is calculated as nominal imports plus exports relative to nominal GDP; and generally referred to as (trade) openness. The openness measure has the advantage of reflecting the actual exposure of an economy to international trade and is easily measurable. With respect to the trade policies, according to Dutt et al. (2009), finding a single measure of trade protection that summarises such a multiplicity of instruments is a task economists have long struggled with. Since it is impossible to capture and summarise the wide variety of trade policy instruments used, tax on international trade and mean tariff rates from the EFWD are used as instruments to assess the degree of the liberalization and/ or protection of a country's economy. The mean tariff rate is one of the sub-components of the tax on international trade index, which is based upon the un-weighted mean of tariff rates; and ranges between 0 and 10. As the mean tariff rate increases, countries are assigned a lower rating. The rating will lean towards zero as the mean tariff rate approaches 50 percent. The tax on international trade includes information on three elements: revenue from trade taxes (measured as the percentage of trade sector); mean tariff rate; and standard deviation of tariff rates. Likewise, as for mean tariff rate, the corresponding index of the tax on international trade will decrease for countries that impose higher taxes on international trade (import or export).<sup>(1)</sup>

One of the most important components of the international trade sector is FDI, which is generally recognised to play an important role in the economic development of a country. In addition to providing fresh sources of capital in the context of scarce resources, FDI improves the development and internationalisation of domestic firms through linkages; and generates business and market opportunities for domestic investors. FDI can also create spillover effects and productivity gains through technology and knowledge transfers; imitation; skills development; and mobility of human resources (Beloumi 2014; Sahoo et al. 2014). The World Economic Forum (2011-2012) stresses the importance of FDI for Arab countries in relation to job creation. The present study uses FDI net flow and FDI inward stock<sup>(2)</sup> to examine the impact of FDI on unemployment rate.

A measure for output volatility is included to control for the effects of recessions and expansions; booms and bursts; and financial crises in the Arab countries.

1 The main reason for relying on such tariff measurements or assessments instead of actual data on tariffs from, for instance, the World Bank database is the unavailability of such data.

2 Both FDI net flow and FDI inward stock are measured as a percentage of GDP. For the definition of the variables, see the UNCTAD database.





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Numerous studies demonstrate the negative impact of output volatility on economic development in general; and identify the various channels through which output volatility can affect the development process. Such channels include lower investment in human capital (Krebs et al. 2010); and a reduction in the flow of investment that depends upon the expected return and risk rate and resulting in investment biases towards returns in the short run (i.e., speculative motives) (Serven 1997; 1998; 2003). Thus, the reduction in one of the main sources for labour demand and low quality of supplied labour forces will affect the performance of the labour market. In the present study, the approach of Gary and Valerie (1995) and Dutt et al. (2009) are followed and the output volatility is measured as the standard deviation of the annual growth rate of GDP per capita for each of the countries in the sample during the period of 1991 to 2012. Moreover, the approach of Dutt et al. (2009) and Felbermayr et al. (2011) are followed; and working-age population (ages 15–64 years) and real GDP are used to control for the size of the economy. For macroeconomic policies, the approach of Dutt et al. (2009) is followed and an inflation variable is used as the proxy to assess the performance of a given country in relation to economic management. Furthermore, the examination of the impact of the Washington Consensus<sup>(1)</sup>, implemented by most Arab countries, which focuses primarily upon the stabilisation of general prices and unemployment rates, is also of interest in the present study. For inflation, the study uses the annual changes in a consumer prices index (CPI) as the conventional measure of the inflation rate for a given country.

### Data

The data concerning the variables are gathered from various sources. Data are obtained from the World Development Indicators concerning population; real GDP; openness; and inflation rate. Meanwhile, data are obtained from UNCTAD concerning FDI net flow and stock of FDI inward. Data are obtained from the EFWD concerning the labour market regulation index; tax on international trade; and mean tariff rates (Gwartney and Lawson 2014). Data concerning bureaucracy quality indicators are obtained from the International Country Risk Guide database. The sample covers the period of 1991 to 2014 in ten Arab countries (i.e., Algeria, Bahrain, Egypt, Jordan, Kuwait, Morocco, Oman, Syrian, Tunisia and United Arab Emirates). As previously mentioned, the heterogeneity among the economic structures of Arab countries makes the selection of homogenous

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<sup>1</sup> The Washington Consensus advocates free trade; floating exchange rates; free markets; and macroeconomic stability.





countries very difficult (see Al-Abas 2013; Alkoz 2013). However, in the present study, the selection of countries is based upon two criteria: whether the particular country is member in the WTO, which is expected to influence the implementation of the trade policies in this country; and whether data representing trade policies is available and sufficient. Whilst the majority of the Arab countries are WTO members, data concerning trade policies is very limited. The aforementioned countries, with the exception of Algeria, are members of WTO; and data concerning trade policies are relatively available.<sup>(1)</sup> Even for the Arab countries examined, a few missing data for some variables are estimated using straight-line interpolation and/or extrapolation methods.

### Estimation method

Recent literature concerning employing the dynamic panel estimation method with relatively large time series (T) compared to cross sections (N) suggests the use of mean group (MG), dynamic fixed effect (DFE) and pooled mean group (PMG) estimation methods (Pesaran and Smith 1995). In accordance with the MG estimation method, the coefficients relating to the variables are first calculated separately for each group (N). Then, the average of the coefficients is presented for all groups. The MG estimation method allows the intercept, short run coefficient and the error variance to vary between the groups (Pesaran and Smith 1995). In accordance with the DFE estimation method, panel data is treated as one group (pool) by assuming the groups are homogenous. Consequently, the long and short run coefficients are constrained to be equal across the groups under the DFE estimation method. Nevertheless, if the groups are heterogonous in reality, then the DFE estimation method will yield inconsistent estimators. Pesaran et al. (1999) suggest utilising the PMG approach, which combines both the MG and the DFE. The PMG estimation method allows the intercept, short run coefficient and the error variance to vary between the groups similar to the MG estimation method, but long run coefficients are constrained to be equal across the groups similar to the DFE estimation method. The basic concept of the MG, PMG and DFE methods, after assuming the existence of autoregressive distributed lag (ARDL), takes the following form:

$$y_{it} = \sum_{j=1}^p \delta_{ij} y_{i,t-j} + \sum_{j=0}^q \gamma_{ij} X_{i,t-j} + u_i + \epsilon_{it} \quad (2)$$

1 Algeria, Lebanon, Libya, Iraq, Sudan and Yemen were classified as negotiating accession until 2007.





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where  $y$  is dependent variable;  $p$  and  $q$  are lag length;  $i$  is the number of groups (i.e.  $i = 1, 2, \dots, 8$ );  $t$  is the time period (i.e.  $t=1, 2, \dots, 24$ );  $X$  is a  $k - 1$  vector of explanatory variables;  $\gamma$  is the  $k-1$  coefficient vector;  $\delta$  are scalars; and  $u$  is the group-specific effect. If all variables in 1 are assumed to be  $I(1)/ I(0)$  and cointegrated,  $u$  is implied to be  $I(0)$  for all groups. The existence of cointegration relationships between the variables implies that the short run dynamic of the variables in the system is influenced by deviations from the long run equilibrium relationship. The short run dynamic relationship can be represented in the following error correction model:

$$\Delta y_{it} = \varphi_i (y_{i,t-1} - \theta_i X_{it}) + \sum_{j=1}^{p-1} \delta_{ij}^* \Delta y_{i,t-1} + \sum_{j=0}^{q-1} \gamma_{ij}^* \Delta X_{i,t-1} + u_i + \epsilon_{it} \quad (3)$$

Where

$$\varphi_i = - \left( 1 - \sum_{j=1}^p \delta_{ij} \right), \theta_i = \frac{\sum_{j=0}^q \gamma_{ij}}{1 - \sum_{k=1}^p \delta_{ik}}, \delta_{ij}^* = - \sum_{h=j+1}^p \delta_{ih} \quad j = 1, 2, \dots, p - 1, \text{ and } \gamma_{ij}^* = \sum_{h=j+1}^q \gamma_{ih} \quad j = 1, 2, \dots, q - 1.$$

The coefficient  $\varphi_i \varphi_i$  is the error-correcting speed of adjustment term. If the value of  $\varphi_i \varphi_i$  is equal to zero, this implies the absence of a long run relationship between the variables. Therefore, coefficient  $\varphi_i \varphi_i$  must be negative, less than one and statistically significant to ensure the existence of cointegration relationship between the variables (Banerjee et al. 1998; Martínez-Zarzoso and Moranco 2004; Loayza and Ranciere 2006; Asteriou 2009; Mosayeb and Mohammad 2009). It is important to note that the outcome of the results depends upon, and is sensitive to, the selection of optimum lag length. Additionally, one important feature of the MG, PMG and DFE methods is that it is possible to impose different lags to different variables in the model and avoid collinearity problems between the variables (Martinez-Zarzoso and Bengochea-Morancho 2004; Blackburne and Frank 2007; Asteriou 2009; Bangake and Eggoh 2012). Following the standard procedures, the optimum lag length that minimises AIC is selected.

Loayza and Ranciere (2006) argue that among the three methods of estimations, the PMG estimator yields the most consistent and efficient estimator because it allows the coefficients to be equal in the long run when countries are homogeneous and differ in the short run when countries are heterogeneous. Additionally, the PMG estimator is able to control for country-specific characteristics (i.e., unobserved characteristics) resulting due to differences in unemployment (e.g., geographic





location, customs and traditions). In reality, the long-run coefficients are equal across countries, where estimation by PMG will yield consistent and efficient results. Nonetheless, the MG estimates only yield consistent results. In contrast, if the long-run coefficients are not equal across countries, then the PMG estimates will be inconsistent; however, the MG estimator will still provide a consistent estimate on the average of long-run coefficients across countries. Estimation by PMG will yield consistent and efficient results if the long-run coefficients are equal across countries. However, estimation by MG will yield consistent results without efficiency. In practice, the validity of long-run homogeneity restrictions is usually tested by using the Hausman and likelihood ratio tests to compare the long-run coefficients between the PMG and MG estimates.

Nevertheless, the consistency and efficiency of the PMG estimates depend upon the following conditions. The first is the absence of endogeneity or correlation between the regression residuals and the explanatory variables. The second condition refers to the existence of long-run relationships between the variables. The present study seeks to fulfil the above requirements by imposing different lag lengths on the explanatory variables to avoid serial correlation between the residuals and explanatory variables, but the selected lags must reflect minimum value of the Akaike Information Criteria (AIC). For the second condition, the existence of long run relationship is tested though the error correction term (ECT-1). If the value appears negative, less than one and statistically significant, then the value indicates the existence of long run relationships between the variables and vice versa (Banerjee et al.1998; Loayza and Ranciere 2006).

## 5. Results and Discussions

Before the main findings are presented, it is necessary to identify the order of integration between the variables by conducting panel unit root tests. In the present study, two types of panel unit root tests are employed: the unit root test of Im et al. (2003), which is commonly known as the IPS; and the unit root test employed by Lin et al. (2002), which is generally known as the LLC. The results of the tests are presented in Table 2. The results show that the order of integration between the variables is mixed (i.e.,  $I(0)$  and  $I(1)$ ). More specifically, the variables for FDI net inflows, mean tariff, inflation, output volatility, population and labour market regulation index are  $I(0)$ , while the rest of the variables are  $I(1)$ . After examining the order of the integration between the variables, the next step is to examine the long and short run relationships.



**Table 2: panel unit root tests**

Variables	LLC		IPS	
	At Level	At first difference	At Level	At first difference
<i>Opens(X+M)/GDP</i>	-1.43 [0.10]	***-5.62 [0.000]	-0.68 [0.25]	***-7.49 [0.000]
<i>FDI stock</i>	1.01 [0.84]	-5.70*** [0.000]	3.05 [0.99]	-6.88*** [0.000]
<i>FDI net inflows</i>	-3.77*** [0.000]		-3.65*** [0.000]	
<i>Mean tariff</i>	-1.83** [0.032]		-2.12** [0.012]	
<i>Tax on international trade</i>	-1.23 [0.11]	-6.73*** [0.000]	-1.36 [0.14]	-8.30*** [0.000]
Unemployment rate	1.95 [0.95]	***-3.25 [0.000]	0.84 [0.80]	***-5.76 [0.000]
GDP	3.52 [0.99]	***-4.22 [0.000]	6.34 [1.00]	***-4.50 [0.000]
Inflation	-3.68*** [0.004]		-2.93*** [0.002]	
<i>Output volatility</i>	***-7.45 [0.000]		***-6.47 [0.000]	
<i>Population</i>	-6.84*** [0.000]		-7.25*** [0.000]	
<i>Labour market regulation index</i>	-3.61*** [0.000]		-3.56*** [0.000]	
<i>Bureaucracy Quality</i>	1.37 [0.91]	-3.56*** (0.000)	1.22 [0.95]	-3.25*** [0.000]

*Notes: Figures between brackets represent the probability value. \*\* and \*\*\* denote significance at the 5% and 1% levels, respectively.*



Equation 1 is estimated using MG, DFE and PMG. However, in Table 3, and in order to save space, only the PMG results are reported since the joint Hausman and likelihood ratio tests suggest that the estimation performed by the PMG estimation method yields consistent and efficient results.<sup>(1)</sup> The finding implies that restrictions on the long run coefficient to be equal across countries and the short run to vary between these countries is valid. The efficiency of the PMG over MG in the present study is expected because, as suggested by Loayza and Ranciere (2006), MG estimates are sensitive to the outlier countries in small samples, such as the present study. However, the PMG estimation method is likely to produce efficient estimators.

Table 3 demonstrates the long run and short run effects of certain international trade policies on unemployment rate. In all specifications, the adjustment coefficient (ECT-1) has a favourable sign and magnitude; and is statistically significant at the 1 percent level. The result indicates the existence of a long run relationship between the variables. Following Pesaran and Pesaran (1997), the existence of a long run relationship implies that all explanatory variables are long run forcing variables for unemployment rate. The interpretation of the ECT-1 coefficient is that if unemployment rate deviates from its long run equilibrium path because of certain shocks this year, all of the selected explanatory variables will interact together and correct, on average, between 48-71 percent of this disequilibrium in the next year.

In regards to the variables representing tariffs, the results show that, over time, both tariff measurements have the expected sign (i.e., negative). The mean tariff variable appears statistically significant at the 1% level. The result implies that, in the long run, the liberalization of trade in the form of tariff reduction will result in lower unemployment rates in the Arab countries examined. More specifically, a reduction in the mean tariff by 1 percent will reduce unemployment rate, on average, by 0.72 percent in the long run. The finding is consistent with the findings of the Dutt et al. (2009), Felbermayr et al. (2011), while simultaneously contradicting the conclusions of Attanasio et al. (2004), Helpman and Itskhoki (2007) and Hasan et al. (2012).

1 The MG and DFE results are not reported here, but are available upon request.



**Table 3: the PMG for all countries- dependant variable unemployment rate**

<i>Explanatory variables</i>	<i>The long run coefficient</i>				
	<i>ARDL</i> (2,2,1,2,1,2,2)	<i>ARDL</i> (2,1,1,2,1,2,2)	<i>ARDL</i> (2,2,1,2,1,2,1)	<i>ARDL</i> (2,1,1,2,1,2,2)	<i>ARDL</i> (2,2,1,2,1,1,2)
<i>Opens(X+M)/GDP</i>					-0.22 [0.21]
<i>FDI stock</i>				-0.006 [0.011]	
<i>FDI net inflows</i>			0.03** [0.01]		
<i>Mean tariff</i>		-0.72*** [0.10]			
<i>Tax on international trade</i>	-0.001 [0.003]				
<i>Labour market regulation index</i>	-0.95*** [0.17]	-0.35*** [0.10]	-1.30*** [0.19]	-1.05*** [0.19]	-1.33** [0.16]
<i>GDP</i>	9.45e-12 [1.21e-11]	-3.98e-12 [4.89e-12]	1.01e-12 [1.26e-11]	6.82e-11 [1.43e-11]	4.64e-13 [1.52e-11]
<i>Population</i>	-0.06 [0.05]	0.07** [0.03]	0.004 [0.05]	-0.04 [0.05]	-0.08 [0.04]
<i>Output volatility</i>	43.50*** [8.60]	41.35*** [2.95]	44.15*** [7.57]	39.61*** [8.15]	49.28*** [7.08]



<i>inflation rate</i>	0.81*** [0.18]	-0.03 [0.03]	0.98*** [0.17]	0.84*** [0.17]	1.23** [0.16]
<i>Bureaucracy Quality</i>	-0.14 [0.43]	0.29** [0.13]	0.62 [0.44]	0.12 [0.57]	0.31 [0.41]
<b>Short run analysis</b>					
$ECT_{-1}$	-0.56*** [0.12]	-0.71*** [0.15]	-0.48*** [0.13]	-0.55*** [0.13]	-0.50*** [0.13]
$\Delta Opens(X+M)/$ $GDP$					0.22 [0.21]
$\Delta FDI Stock$				-0.30 [0.19]	
$\Delta FDI net flow$			-0.55 [0.38]		
$\Delta Mean tariff$		0.98 [1.01]			
$\Delta Tax on$ <i>international</i> <i>trade</i>	0.07 [0.13]				
$\Delta Labour market$ <i>regulation index</i>	-0.60 [1.23]	-0.82 [1.10]	-0.11 [1.88]	-0.43 [1.36]	-0.79 [1.44]
$\Delta GDP$	-3.82e-11 [7.39e- 11]	-1.46e-10 [1.22e- 10]	-9.49e-11 [8.11e- 11]	3.55e-11 [8.51e- 11]	2.83e-11 [8.09e- 11]
$\Delta Population$	0.81 [0.10]	0.71 [1.03]	0.44 [0.70]	0.17 [1.38]	0.02 [0.97]
$\Delta Output$ <i>volatility</i>	-7.92 [6.56]	-5.95 [4.02]	-9.35 [8.53]	-6.70 [5.25]	-9.48 [6.18]



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<i>Δ inflation rate</i>	-0.14 [0.31]	-0.21 [0.23]	-0.47* [0.26]	-1.06*** [0.39]	-0.41* [0.24]
<i>ΔBureaucracy Quality</i>	-1.86 [1.46]	-1.47 [1.20]	-0.20 [1.19]	0.44 [2.70]	-1.24 [1.22]
<i>Constant</i>	6.66*** [1.76]	7.81*** [1.51]	3.65*** [1.22]	6.50*** [1.78]	5.07*** [1.68]
<i>Log Likelihood</i>	-168.66	-146.01	-156.40	-171.19	-167.19
<i>Number of observations</i>	164	164	160	164	164
<i>Notes: The value in brackets denotes the standard error. ** and *** indicate significance at the 5% and 1% levels, respectively.</i>					

In the context of the Arab countries examined, the results are also consistent with the findings of Belqasem (2013), but the results of the present study indicate a long run impact by trade policies on unemployment. The results seem to support the UNDP 2013 call for developing countries to participation in international trade to facilitate rapid progress in relation to job creation. However, it is difficult to attribute the positive impact of trade liberalization on unemployment found in the present study to a specific factor(s) for two reasons. Firstly, the dependent variable is general unemployment rate (i.e., unemployment is not classified by skill or sector). However, as mentioned previously, the impact of such trade policies on overall employment level is ambiguous because trade liberalization tends to lead to increased unemployment among unskilled workers, although the studies are theoretically ambiguous regarding aggregate unemployment (Sener 2001; Moore and Ranjan 2005). Secondly, the above results reflect the long run impact of trade policies on overall employment, which is also ambiguous. The ambiguity arises due to the fact that it is widely accepted that trade liberalization increases unemployment in the short run as workers are reallocated from shrinking to expanding sectors (Felbermayr et al. 2011; Dutt et al. 2009). However, the effect of trade liberalization on unemployment in the long run is still inconclusive (Felbermayr et al. 2011). One possible justification for the findings of the present study may be attributed to improvements in education (i.e., skills) that are generally observed within the populations of most Arab countries, particularly within the



portion of the population that is employed. Data concerning education attainment and average years of schooling for the population over 15 years from Barro and Lee (2010) not only show that the level of education is high, but is growing at a remarkable rate. Education is likely to be reflected by an improvement in the skills of the labour forces in the long run, thus facilitating the absorption of workers in the trading sector.

In regards to the impact of FDI on unemployment, the results show that, over time, FDI stock has a positive, but statistically insignificant impact on unemployment. Meanwhile, FDI net inflow has a marginal and negative impact on unemployment. As previously mentioned, it is unlikely that FDI flows to Arab countries will assist in resolving issues relating to unemployment rates since FDI flows are oriented towards the hydrocarbons sector, which is more capital, than labour, intensive. The findings suggest that the Arab countries examined should encourage more FDI inflows to the manufacturing and the agriculture sector, which employ more workers in the production process.

The most notable finding relates to the long run influence of labour market regulation on the unemployment rates, which turns out to be more important than trade policies. The results demonstrate that flexible regulation of the labour market in the Arab countries examined is expected to considerably reduce unemployment rates. This finding is consistent with the studies of Amin (2009), Horst (2009) and Felbermayr et al. (2011), who conclude that stricter regulation in the labour market will generally increase unemployment. The results are also consistent with the findings of Belqasem (2013), who detects the significant and positive impact of flexible labour market regulation in a sample of Arab countries. However, since the present study employs an index containing more than five components relating to labour market regulations, it is not clear which of the components exerts more influence over unemployment. Notwithstanding this fact, Arab countries should improve all of the components utilised in the index in order to decrease unemployment rates. However, while the rigidity of labour market regulation will lead to an increase in unemployment in the formal sector, its impact on the informal sector is still not clear, which requires further investigation.

Another remarkable finding relates to the long run negative impact of macroeconomic distortion policies, such as volatility of the output and inflation, on unemployment rates. The results show that, on average, an increase in the standard deviation of per capita GDP growth by one percent will increase the unemployment rate, on average, by 6.0 percent. The findings of the present study are similar to





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those of Dutt et al. (2009), who examine the impacts of international trade on unemployment for a sample of developing countries. Such findings imply that controlling the main sources of output volatility (e.g., oil and food price shocks) is an important tool for reducing unemployment rates within Arab countries.

Although, the coefficient of the inflation variable has an unexpected sign in the long run, which contradicts the hypothesis of a negative correlation suggested by Phillips (1985), the expected sign is detected in the short run. The results of the long run and short run effects of inflation on unemployment are consistent with the commentary of Solow and Samuelson (1960) regarding Philip's curve, which suggests that a stable and negative relationship between unemployment and inflation exists only in the short run; and when inflation is expected to remain unchanged. However, in the long run, the negative relationship only exists if inflation and unemployment change at the same rate. Mahmood et al. (2011) examines the relationship between inflation and unemployment for Pakistan, India, Bangladesh and Sri Lanka using a simple regression method and detects different results between the four countries. In the case of Bangladesh, a negative relationship is found to exist between inflation and unemployment, but the relationship is found to be positive in the case of Pakistan. Meanwhile, in the cases of India and Sri Lanka, no relationship between inflation and unemployment is detected. In another study by Beyer and Farmer (2007), a positive slope for the Philip's curve is found to exist in the long run for the United States during the period between 1959 and 1999.

## 6. Conclusion:

The present study examines the impact of international trade policies on unemployment for 10 Arab countries over the period of 1991 to 2014. In addition to the trade policy measurements, variables are controlled for that represent macroeconomic distortion; a country's economic size; the quality of the institutions; and labour market regulations.

The results of the PMG, which uses several proxies for trade policies, show that reducing tariffs on trade will decrease unemployment rates over time. In contrast, due to the nature of the FDI inflow to Arab countries, unemployment rates are expected to rise marginally with the flow of FDI in the long run.

In general, the present study appears to support the call for trade liberalization in Arab countries since such countries will benefit from such action in the form of reduced unemployment in the long run. Furthermore, to maintain lower rates





of unemployment in the long run, Arab countries should implement proper macroeconomic policies to minimise inflation rate and promote economic growth. More importantly, since labour market regulation has been shown to be a key contributor in resolving unemployment problems, the continuation of labour market reform policies is necessary. In addition, political reform and expansion of economic freedom constitute key factors to grantee lower unemployment over time.

Naturally, these conclusions are only preliminary. More work, using alternative data, additional years and variables, alternative specifications, and, ultimately, data for more countries as well, is clearly needed. More specifically, the preliminary nature of these findings is emphasized in terms of the fact that the study period covers only 10 countries. In addition, alternative specifications involving additional variables (including different control variables) could yield broader, if not better and more compelling, insights. In addition, further studies are required to identify the type of labour market regulation required in unemployment reduction strategies. More studies are needed to determine the impact of international trade policies on unemployment, either in a specific sector or a group (e.g., youth; skilled and unskilled workers; and gender) since unemployment rates among Arab countries are relatively high among the youth, skilled and women. Moreover, future studies should addresses the issue of whether trade policies related to a particular sector or product (e.g., agriculture, raw materials and manufacturing) affect unemployment rates differently.





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## العولمة الاقتصادية والبطالة: تجربة الدول العربية

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### ملخص البحث

تهدف هذه الدراسة إلى التعرف على تأثير سياسات التجارة الخارجية على البطالة لعينة من 10 دول عربية للمدة من 1991 إلى 2014. بالإضافة إلى المتغيرات التي تعكس السياسات المتعلقة بالتجارة الخارجية، وضعت الدراسة في الاعتبار تأثير التشوهات الاقتصادية، الحجم الاقتصادي، المؤسسية ونظم وقوانين سوق العمل في تلك الدول على معدلات البطالة. باستخدام مؤشرات مختلفة تعكس السياسات التجارية لتلك الدول، وأدت إشارات نتائج الدراسة إلى أن اتباع سياسات أكثر انفتاحاً في مجال التجارة الخارجية من شأنه أن ينعكس في انخفاض معدلات البطالة في الأجل الطويل لتلك الدول. ونتائج الدراسة متسقة مع بعض الأصوات في الدول النامية المنادية بضرورة المشاركة بفاعلية أكثر في التجارة الخارجية من أجل خفض معدلات البطالة. وبسبب تعدد القنوات التي يمكن للسياسات المتعلقة بالتجارة الخارجية أن تؤثر في البطالة، يجب وجود مزيد من الدراسات في هذا الإطار.

**الكلمات الدالة:** البطالة، العولمة الاقتصادية، السياسات التجارية، الدول العربية.

