WORKING PAPER

More Stabilisation or Better Allocation: Do Macroeconomic Policies Matter for Employment?[1]

Rym Ayadi[2], Rafik Selim[3], Chahir Zaki[4]

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Abstract

This paper analyses the effect of macroeconomic policies on employment. It contributes to the literature in three ways. First, we examine the effect of macroeconomic policies on employment. To do so, we rely on policy tools, rather than policy outcomes, since the former are less endogenous. In other words, we rely on tariffs to measure trade policy (instead of exports and imports), tax rates to measure fiscal policy (instead of government spending) and lending rate (instead of inflation rate) to measure monetary policy. Second, we distinguish between stabilisation policies and structural characteristics. Whilst the aforementioned policies measure the former, we measure the latter by the quality of economic institutions (time to enforce contracts), human capital (spending on tertiary education) and economic diversification (share of fuel exports). Third, we distinguish between the trend and the cyclical components of employment, to show to what extent policy tools have a stabilisation effect (on the cyclical component) or a better allocation effect (on the trend component). Our main findings show that whilst stabilisation policies can affect the cyclical component (especially exchange rate depreciation, FDI or tariffs), structural variables measured by economic institutions and human capital have a positive impact on the trend component of employment. When both are interacted, our results show that stabilisation policies can have a stronger effect if structural conditions are adequate (in particular, better economic institutions).

JEL classification: E24, F10, F14, J16.

Keywords: Employment, Macro policies, MENA region

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[2] Professor, CASS Business School. Email: rym.ayadi@city.ac.uk

[3] Principal Economist, European Bank for Reconstruction and Development. Email: SelimR@ebrd.com

[4] Associate Professor, Faculty of Economics and Political Science, Cairo University. Email: chahir.zaki@feps.edu.eg

Introduction

Since 2011, social unrest and domestic political uprisings have hit economic growth in several MENA countries, notably Egypt, Iraq, Jordan, Libya, Morocco, Tunisia, Syria and Yemen. In Egypt, Jordan, Morocco and Tunisia, concerns surrounding security and confidence affected the traditional drivers of economic growth – consumption, investment, trade, and tourism. In the other countries, internal armed conflicts and surges in terrorism have destructed economic value and resulted in social disruption. Meanwhile, growth in MENA countries was not only impacted by domestic country-specific unrest and instability, but also by the wider regional conflicts, with spillovers in almost every country. Disruption to trade routes and remittances and the influx of refugees in neighbouring countries have strained public finances, utilities, and infrastructure, and disrupted goods and labour markets, notably in Jordan and Lebanon. Moreover, several countries, including Jordan, Lebanon, Qatar, Mauritania, and Oman, have witnessed negative per capita GDP growth, the result of low economic growth coupled with the influx of refugees and faster population growth. To face these challenges, MENA countries have undertaken two categories of reforms in recent years. On the one hand, most of the reforms implemented were of a stabilisation nature, such as fiscal, exchange rate, monetary, and trade policies. On the other hand, other reforms were aimed at improving the structural characteristics of the economy in the countries where they were undertaken. Yet, despite several internal reforms and structural adjustment programmes, unemployment remains pervasive.

At the theoretical level, there is an increasing debate in economics on whether policy reforms should be based on non-interventionist macroeconomic policies, or on an interventionist role by the governments to balance between different macroeconomic objectives using available policy instruments.

The standard non-interventionist approach focuses mainly on achieving macroeconomic stability (whether internal or external) as an essential objective of macroeconomic policies by defining nominal targets for different macroeconomic variables. This relies on the classical view that if the government achieves price stability, then the market will automatically achieve full employment. Therefore, fiscal targets should govern government budgets, constraints on balance of payments should be removed, and exchange rates must be fully determined by market forces (Islam, 2003; Haq & Zaki, 2015; Weeks, 2015).

International organisations, such as the International Monetary Fund (IMF) and World Bank (WB), often imposed such standard approaches on governments in developing countries suffering from macroeconomic imbalances during the 1980s and 1990s, to help them stabilise their economies. Although these stabilisation programmes were successful in eliminating imbalances and stabilising prices, they marginalised the role of public policy and made it endogenous to growth outcomes, rather than an instrument that affects growth. In addition, the neutrality of public policy induced by this approach makes policies pro-cyclical and limits the policy space needed to maintain other goals (Weeks, 2015). Yet, most of the policies that can stabilise the economy (and hence reduce the output gap - the deviation between growth and its potential level) can neither change the structure of the economy, nor increase its potential level and, hence, have a very limited effect on employment.

Against this background, this paper analyses the effects of macroeconomic policies on employment. It contributes to the literature in three ways. First, we examine the effects of macroeconomic policies on employment. To do so, we rely on policy tools rather than policy outcomes, since the former are less endogenous. In other words, we use tariffs to measure trade policy (instead of exports and imports), tax

rates to measure fiscal policy (instead of government spending) and lending rate to measure monetary policy (instead of inflation rate). Second, we distinguish between stabilisation policies and structural characteristics. Whilst the former are measured by fiscal and monetary policies, the latter are measured by the quality of economic institutions (time to start a business), human capital (spending on tertiary education) and economic diversification (share of fuel exports). Third, we distinguish between the trend and the cyclical components of employment, to show to what extent policy tools have a stabilisation effect (on the cyclical component) or a better allocation effect (on the trend component).

We find that whilst stabilisation policies can affect the cyclical component (especially exchange rate depreciation, FDI or tariffs), structural variables measured by economic institutions and human capital have a positive impact on the trend component of employment. When both are interacted, we show that stabilisation policies have a stronger effect if structural conditions are adequate (in particular better economic institutions).

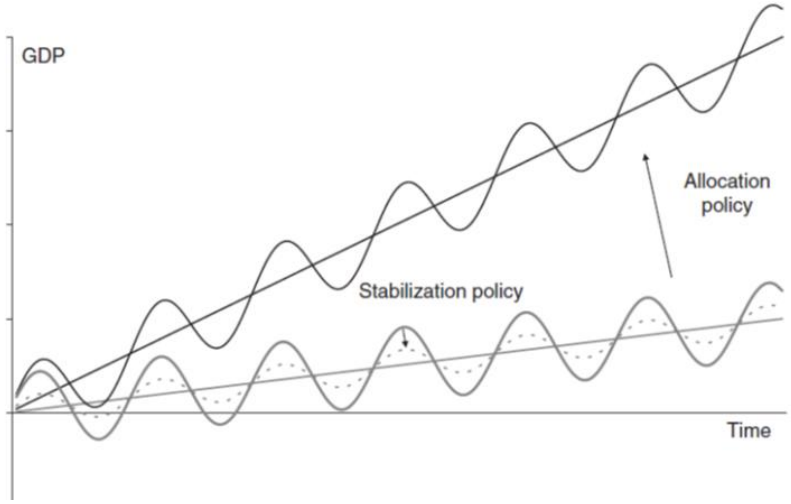
The remainder of the paper is organised, as follows: Section 2 reviews the literature on the nexus between macroeconomic policies and employment. Section 3 presents the main characteristics of the MENA region. Section 4 presents the methodology and the data used. Section 5 is dedicated to the empirical findings. Section 6 concludes and displays some policy recommendations.

Literature Review

Allocation vs. Stabilisation Policies

Figure 1 highlights the difference between stabilisation and allocation (or structural) policies. Stabilisation policies are short-term policies that aim to stabilise the economy (and, hence, reduce the output gap that is the deviation between growth and its potential level) without changing the structure of the economy. The main policies that belong to this category are fiscal, monetary and exchange rate policies. Allocation policies instead aim to increase the potential level of growth and tend to have a significant effect on employment. Thus, it can lead to a shift of the GDP trend, as shown in Figure 1.

Figure 1. Stabilisation vs. Allocation policies



Source: Youssef and Zaki (2019).

The failure of the standard approach to macroeconomic policies in sustaining economic growth, productive employment, and poverty reduction increases the need to redefine macroeconomic objectives, in order to shift their focus from only ensuring macroeconomic stability and eliminating macroeconomic imbalances, to fostering economic growth and enhancing its ability to promote full employment and income distribution. Hence, there is an increasing tendency to shift from the standard approach of macroeconomic policies to a developmental approach that concentrates on short-term counter-cyclical policies along with long-term development goals. Consequently, macroeconomic stability becomes a constraint rather than a primary objective and economic growth, with full and productive employment, becomes the substantial objective (Nayyar, 2011).

Damill, Frenkel, & Maurizio (2011), Weeks (2015), and Chandrasekhar (2016) addressed the impact of the shift in the approach to macroeconomic policies on the linkage between macroeconomic policies and improvements in growth and employment. In assessing the outcomes of two different macroeconomic policy frameworks, Damill, Frenkel, & Maurizio (2011) found that the first policy framework that was based on the aim of price stability through fixing nominal exchange rate led to an appreciation in the real exchange rate, which negatively affected the competitiveness of the manufacturing sector, lowered the employment level, widened inequality and increased poverty. By contrast, the second policy framework that focused on maintaining a stable real exchange rate led to an increasing growth rate that was associated with an increase in the demand elasticity of labour, an increase in job creation, and a reduction in the levels of poverty and inequality.

In addition, Weeks (2015) compared the outcomes of macroeconomic policies conducted in Vietnam and Thailand and found that Vietnam is characterised by a stable quarterly and annual growth rate, unlike Thailand. The author attributed this finding to different macroeconomic policies adopted in both countries. Whilst macroeconomic policies in Vietnam concentrated on counter-cyclical fiscal and monetary policies aimed at facilitating stable growth, creating new jobs and equal distribution of income

and poverty reduction, policies applied in Thailand focussed only on achieving balanced budgets and stable prices. Although the available employment dataset was not adequate to investigate the impact of macroeconomic policies on employment, he pointed out that, for the high output growth rate to be associated with high employment growth rate, three conditions should be satisfied. They are (1) a faster rate of growth of output, (2) a stable rate of economic growth, and (3) a good distribution of output between profits and wages.

In this context, a study of the United Nations indicated that, for economic growth to be associated with high levels of employment there must be an increase in the internal and external demand on domestically produced goods. This increase in demand will stimulate capital accumulation and employment in order to respond to the demand. Yet, fiscal and monetary policies alone could not do this and income policies are important to increase the demand, up to the level where all labour surplus is absorbed (United Nations, 2012).

Structural Adjustment Programmes, Growth and Employment

Empirical evidence has proven that countries which adopted IMF stabilisation programmes in economic difficulties, suffered from stagnant economic growth rates, little private investment, high unemployment and rising poverty, although they were able to maintain price stability and curtail internal and external imbalances. For instance, Khan (1990) found that participation in IMF programmes resulted in a decline in growth rates in the short-term, in a sample of 69 developing countries during the period 1973-1988, but the negative effects on growth decreased in the long-run. Dreher (2006) confirmed the same negative relationship, using panel data for 98 countries over the period 1970-2000. In addition, Przeworski & Vreeland (2000), in their study on 135 developing countries, concluded that programme countries witnessed low growth rates as long as they remained under a programme. Once countries left the programme, they grew faster than if they had remained, but not faster than countries that did not adopt these programmes, even when both groups faced similar imbalances.

In addition, Chandrasekhar (2016) discussed the impact of macroeconomic policies on employment in India in the aftermath of the economic restructuring programme post-1991. The results indicated that macroeconomic policies, undertaken by the Finance Ministry and the Reserve Bank of India, led to a reduction in economic growth, a decrease in the sensibility of employment to output change in the formal sector and a higher concentration of employment in the informal sector. The author explained this result by the fact that the undertaken policies gave more priority to price stability, exchange rate management, and increasing globalisation and liberalisation of the economy, rather than sustaining economic growth and creating new jobs.

In their studies considering the impact of structural reforms on growth and employment, Crivelli, Furceri, and Toujas-Bernate (2012) and Bordon (2016) emphasised the important role played by supportive macroeconomic policies in increasing the positive impact of structural reforms on economic growth and employment. Many other studies asserted the importance of active macroeconomic policies in transmitting growth gains in output into high employment levels, in order to avoid the phenomenon of jobless growth. This is because economic growth does not lead automatically to a reduction in unemployment and poverty.

Selim (2006) pointed out that the ability of economic growth to generate new jobs depends on three main features of the nature of the growth process. First, the degree by which the production of the economy expands. Second, the degree by which the expansion of output is concentrated on labour-intensive sectors. Third, the degree by which the terms of trade raise the productivity and growth of labour-intensive sectors.

Arab Spring Countries were all part of an IMF programme – or more – since 2011, such as the Extended Fund Facility (EFF), Stand By Arrangement (SBA) and the Precautionary and Liquidity Line (PLL). Egypt had an EFF in 2016, Jordan had an SBA in 2012 and an EFF in 2016, Morocco had four consecutive PLLs in 2012, 2014, 2016 and 2018 and Tunisia entered into an SBA in 2013 and an EFF in 2016. Egypt's EFF helped restore macroeconomic stability, improve the functioning of the foreign exchange markets, bringing down the budget deficit and government debt and raising growth to create jobs. It also aimed to protect the most vulnerable groups in society during the process of adjustment. Structural reforms that were implemented helped improve the business environment, improve access to land and finance, strengthen competition, improve accountability and transparency of state-owned enterprises, reduce the role of the state and tackle corruption. In Jordan, which received massive refugee inflows since 2010, the programme helped the country make important progress in preserving macroeconomic stability and undertaking significant policy reforms. In Morocco, despite an adverse external environment, the three consecutive 24-month PLL arrangements helped reduce fiscal and external vulnerabilities and implemented important reforms to strengthen policy and institutional frameworks. In Tunisia, the programme achieved measurable progress in implementing regular energy price adjustments to mitigate the impact of the oil price shocks, introducing competitive central bank foreign exchange auctions to support liquidity in the market and in combatting corruption.

Other MENA/Arab countries also were part of IMF programmes in recent years; Iraq had two SBAs in 2010 and 2016, Mauritania had three Extended Credit Facilities (ECF) in 2006, 2010 and 2017 and Yemen had three ECFs in 1997, 2010 and 2014. Syria has not had a programme since the 1960s. Sudan and Somalia have not had a program since the 1980s[5]. Algeria had not had a programme since the 1990s[6]. Other countries, such as Comoros[7] and Djibouti[8] had programmes in the 1990s and 2000s. GCC countries, in addition to Libya, Palestine and Lebanon, never had an IMF programme.

[5] Somalia had a Structural Adjustment Facility (SAF) in 1987 and two Stand-By Arrangements (SBA) in 1987 and 1985. Sudan had three SBAs in 1984, 1983 and 1982.

[6] Algeria had an Extended Fund Facility (EFF) in 1995, an SBA in 1994 and an SBA in 1991.

[7] Comoros had a SAF in 1991 and an Extended Credit Facility (ECF) in 2009.

[8] Djibouti had an SBA in 1996 and two ECFs in 1999 and 2008.

Macroeconomic Policies and Employment

There are four main specific policy areas through which macroeconomic policies can affect economic growth and employment, which are; trade policy, fiscal policy, monetary policy and exchange rate policy.

Trade Policy

The empirical evidence on the relationship between trade and growth and employment has not reached a consensus. Some of the empirical studies that were applied in developed countries support the existence of a positive significant relationship between trade and growth and employment, suggesting the continuation of the globalisation process rather than protectionism for decreasing the unemployment level in these countries (Gozgor, 2014; Arto, et al., 2015). However, Trefler (2004) found that tariff cuts, within the US-Canada Free Trade Agreement of 1989, was associated with a 12-percent employment loss in import-competing industries and 5 percent for manufacturing as a whole, but he found that this employment loss was temporary in nature.

For the developing countries, many studies such as McMillan, Rodrik, and Welch (2002) and Menezes-Filho and Muendler (2011) addressed this relationship and found that trade was associated with a lower level of growth and a higher level of unemployment. They attributed this conclusion to the difficulty facing workers in the transition process, from less productive firms to more productive ones, which led to large numbers of unemployed workers. Yanikkaya (2013) also concluded that higher trade volume was not associated with the creation of new jobs in a sample of developed and developing countries because of the negative response of output to trade openness. On the other hand, many other studies found a positive relationship between trade and improvements in growth and employment. Among these studies are Kien and Heo (2009) in Vietnam; Hasan, Mitra, Ranjan, and Ahsan (2012) in India; Wang (2016) in China; and Awad-Warrad (2018) in some selected Arab countries.

Hoekman & Winters (2005) and Lee (2005) provided a comprehensive review of the multi-country and country studies on the impact of trade policies on the labour market. The first study concluded that trade reform results in a re-allocation of labour within sectors because of the expansion of more productive firms and the contraction of less productive firms, but the net effect differs from one country to another. Lee (2005) asserted the importance of the set of macroeconomic, structural and social policies within each country in affecting this relationship. The study of Christev, Kupets, and Lehmann (2008) confirmed this conclusion, as they found that the flow of jobs in Ukraine depends mainly on distinctive factors within industries rather than on trade itself. Finally, Bhaduri (2005) argued that over-emphasising the role of globalisation and market forces restricts the role of fiscal and monetary policies and drives the economy into economic recession. The study asserted that the role of the State is critical, especially for developing countries because of their relative disadvantage in catching the dynamic gains from trade that overweigh, to a great extent, the static gains from comparative advantage.

Fiscal Policy

The traditional view of fiscal policy gives high priority to fiscal consolidation and balance, by means of fiscal rules for budget deficit and public debt, rather than sustaining growth and employment. However, there is a growing economic literature that focusses the role of counter-cyclical fiscal policies in responding to economic downturns and in smoothing economic growth and creating new job opportunities in both the short and long term. Counter-cyclical fiscal policies allow governments to build up fiscal space during good times and, hence, increase their ability to stimulate the economy in bad times through different fiscal measures, such as government spending, tax cuts, social safety nets and active labour market policies (Parisotto & Ray, 2017).

Many studies have estimated the effect of public spending on output and employment by estimating the output and employment multiplier of public spending. Riera-Crichton, Vegh, and Vuletin (2014) and Caggiano and Nodari (2015) estimated the output multiplier of public spending in industrial countries and the United States respectively and found that the multiplier is greater than one, especially when government spending goes up during bad times. On the other hand, He, Zhang, and Zhang (2009) and Wilson (2012) measured the job multiplier of stimulus packages in China and the United States respectively and their findings suggested that public spending was associated with more job creation in both countries. In their study of the impact of the composition of fiscal balances on job creation in a panel of 32 advanced economies during the global crisis, Escudero & Mourelo (2016) found that a fiscally neutral change in the budget's composition could promote job creation, depending on which expenditure and revenue items are used.

Many other studies highlighted the role of fiscal policies as an automatic stabiliser that guarantees growth and labour market recovery after periods of recession. Fatas and Mihov (2012), in their study on a sample of 23 OECD countries, found that countries with proportional tax revenues to GDP have counter-cyclical budget and stable aggregate demand, whilst countries with less automatic stabilisers depend aggressively on counter-cyclical discretionary fiscal policies to stabilise their economies. Lalive (2007) and Ernst (2015) also analysed the impact of unemployment benefits as an automatic stabiliser in generating jobs. In a sample of advanced economics, Ernst (2015) indicated that spending on unemployment benefits results in employment gains, both in the short and long term. However, Lalive (2007) found that unemployment benefits do not have desirable outcomes in terms of unemployment duration.

Public spending on infrastructure is also found to have a positive impact on output and employment. Chatani and Ernst (2011) found that a fiscal stimulus package in general and public investment in infrastructure in particular, had a positive impact on mitigating economic downturn and boosting employment in Indonesia. İlkkaracan, Kim, and Kaya (2015) also estimated the employment effects of infrastructure and social investments in Turkey and found that both kinds of investments are associated with more job creation. However, the effect of social expenditure largely exceeds that of infrastructure investment. The positive effect of social spending is also supported by Ding (2014) who analysed the relationship between welfare expenditure and unemployment in a panel of 34 OECD countries from 1980 to 2010 and found that income support policies, pension benefits and public expenditure on health services are the most significant policies in reducing unemployment.

The assessment of the impact of active labour market policies (ALMP) on employment has gained great interest from many empirical studies. Betcherman, Olivas, and Dar (2004) reviewed the results of previous empirical studies on this impact in both developed and developing countries. They found that employment services, training for the unemployed, public works and self-employment assistance are

amongst labour market policies that have a strong positive impact on employment, whilst wage subsidies are usually associated with high deadweight costs and no employment effect. In a pooled cross country and time-series analysis based on 31 advanced countries, Escudero (2015) also concluded that ALMPs, at the aggregate level, had favourable effects on labour market outcomes, not only in reducing unemployment but also in increasing employment and participation. However, many other studies did not find any support for the effects of the ALMPs on employment (Crépon & van den Berg, 2016; McKenzie, 2017).

Monetary Policy

The mainstream thought of the fundamental role of monetary policy is to maintain price stability through different means of inflation targeting, which help anchor individual and firm expectations, as well as increasing the credibility of monetary policy (Frenkel, 2006; Parisotto & Ray, 2017). Many studies have investigated the impact of inflation-targeted monetary policies on economic growth and employment and found mixed results. Divino (2009) examined the extent to which inflation targeting affects unemployment, economic growth and the output gap, in a sample of developing and emerging countries. The results highlight the possible role of inflation targeting in reducing unemployment and narrowing the output gap in these countries.

On the contrary, Epstein (2007a), Epstein (2007b), Epstein and Yeldan (2008), Anwar & Islam (2011), and Mishra, Montiel, and Spilimbergo (2012) failed to support the common expectation that monetary policies, based on inflation targeting, would ultimately lead to higher employment and sustained growth in developed and developing countries. They agreed that setting the inflation target too low could impose opportunity costs, in terms of foregone growth and employment. Some studies attributed this finding to the fact that restrictive monetary policies, in the form of inflation targeting, may result in very high interest rates, large amounts of capital inflows, an appreciation of real exchange rate and, hence, negative impacts on the country's terms of trade and its economic growth and employment (Frenkel, 2006; Rodrik, 2008; Epstein & Yeldan, 2008). On the other hand, Mishra, Montiel, and Spilimbergo (2012) asserted that the inability of monetary policy to boost growth and employment in low-income countries could be attributed to weak transition mechanisms of the monetary policy, such as low financial development, weak elasticity of investment to interest rate, etc. This is due to a weak institutional framework that increases the cost of bank lending to private firms and induces banks to maintain chronically high excess reserves and to allocate funds improperly.

In a review of the successful shift in the role of Central Banks and monetary policy towards promoting growth and employment in Argentina and Bangladesh, Epstein (2013) showed that the role of the Central Banks extended beyond stabilising the economy. The Central Bank in Bangladesh became responsible for providing subsidised credit (with low interest rates and longer maturities) for a wider range of households, individuals, small and medium-sized enterprises, the promotion of agricultural lending, helping to develop agricultural assets for landless farmers, as well as improving women's access to financial facilities and credit (Muqtada, 2015). In addition, many developmental initiatives were introduced by the Central Bank in Argentina, most importantly its engagement in medium and long-term lending for productive investment and the extension of the geographical coverage of banking services (del Pont, 2013).

In addition, Arias (2015) analysed recent developments in the role of the Central Bank of Ecuador towards achieving more financial inclusion that are: (1) providing better access of individuals and small enterprises to capital, (2) enhancing the security of users' savings, (3) reducing transaction costs, and (4)

facilitating access to finance via mobile devices and mobile banking. The study argued that the effect of these developments is promising, in terms of enhancing economic growth and job creation.

Exchange Rate Policy

Exchange rates can affect employment through three main channels. The first is the competitiveness channel that occurs when the competitive exchange rate changes the relative prices of both exports and imports and leads to an increase in net exports and, consequently, in the demand on locally produced goods, which motivates expansion in both output and employment. The second is the development channel that occurs when the increase in output and employment, resulting from a competitive exchange rate, incentivises firms to invest in tradable activities that accelerate productivity growth and lead to higher growth rates of both output and employment. The third is the labour intensity channel that occurs when the competitive exchange rate leads to a change in the relative prices of both capital and labour, especially for countries where most capital goods are imported from abroad. The relative change in factory prices drives firms to substitute labour with imported capital, consequently leading to an increase in the employment level in both tradable and non-tradable sectors (Frenkel, 2006; Ngandu, 2008).

As mentioned above, the traditional view of the macroeconomic policy places higher priority on monetary stability and market liberalisation and, accordingly, advocates free floating exchange rate regimes, in which the value of the currency is totally determined by market forces. However, several studies pointed out that free floating exchange rates lead to highly volatile and highly pro-cyclical exchange rate behaviour especially, due to sudden and large speculative capital flows moving in and out of a country under liberalised capital markets, which exerts adverse effects on investment, employment and growth (Frenkel, 2006; Frenkel & Taylor, 2009; Weeks, 2015; Parisotto & Ray, 2017).

The impact of real exchange rate volatility on economic growth and employment drew the attention of many researchers. Belke and Setzer (2003) examined this effect in Central and Eastern-European countries and found that volatility, vis-à-vis the euro, significantly lowers employment growth. Employing a panel of 691 private firms in Turkey during the period from 1983–2005, Demir (2010) indicated that exchange rate volatility has a significantly adverse effect on employment growth on manufacturing firms; a one standard deviation increase in real exchange rate volatility reduces employment growth in the range of 1.4–2.1 percentage points. Also, Hua (2007) estimated the possible adverse effects resulting from a real appreciation in the value of the currency in China and found that real appreciation reduces employment because of switching factors from workers to imported inputs, harming a country's competitiveness and decreasing its exports and exerting pressure on efficiency improvement (Hua, 2007). On the other hand, Zeng, Yuxue, Shisong, and Yumei (2011), Rapetti (2012), and Guzman, Ocampo, and Stiglitz (2018) found evidence that a depreciation in the value of the local currency exerts positive effects on both output and employment. They asserted the importance of having a stable and competitive real exchange rate in making exchange rate policy pro-employment.

Consequently, many studies highlighted the importance of the intervention in the foreign exchange market, in order to keep real exchange rate stable and competitive. For example, Sarno and Taylor (2001) found that official intervention could be effective, especially when it is publicly announced and concerted. In addition, Adler & Mora (2011) pointed out that interventions slow the pace of appreciation, but the effects decrease rapidly with the degree of capital account openness. At the same time, interventions are more effective in the context of already 'overvalued' exchange rates.

On the other hand, some studies indicate that the effect of exchange rate volatility differs between developed and developing countries. Berthou and di Mauro (2015) found strong evidence that the responsiveness of exports, as well as output and employment, to a change in real exchange rate varies according to firms' productivity, with a higher response found for the less productive firms, whilst a lower response is found for the more productive firms. Rapetti (2012) argued that Berthou and di Mauro's finding could not be generalised in the case of developed and developing countries, meaning that the effect of exchange rate volatility is greater in developing countries than in developed ones. Parisotto and Ray (2017) also support the same conclusion in their study of a large sample of developing and developed countries. However, using a panel framework covering 46 countries over the period 1996–2012, Ahmed, Appendino, and Ruta (2017) found evidence that the elasticity of real manufacturing exports to the real effective exchange rate tends to decrease over time, with countries' integration in the global value chain.

Against this background, this paper contributes to the literature by distinguishing between the effects of stabilisation policies and structural characteristics on employment.

Overview of the MENA region

Labour Market Challenges

According to the World Development Indicators dataset, MENA has the highest unemployment rate amongst females (18.3 percent), almost double the level of the second highest region (Latin America and the Caribbean, 9.9 percent). The rate is particularly high in Syria (41.3 percent), Oman (31.5 percent), and the West Bank and Gaza (31 percent). The region also has the highest male unemployment rate of 8.5 percent. The West Bank and Gaza has the highest male unemployment rate in the world (27 percent) as well as the highest total unemployment rate (27.9 percent)[9].

The problem is more pronounced amongst the young. The region has the highest unemployment rates for young females (42.1 percent); a problem most witnessed in Oman and Syria, with unemployment rates for young women exceeding 84 percent, but also Libya, Jordan, Saudi Arabia, and the West Bank and Gaza. MENA also has the highest unemployment rates for young males (24.4 percent), notably in the West Bank and Gaza, Oman, Libya, Tunisia, and Jordan. Tunisia and the West Bank and Gaza have the highest unemployment rates for graduates with advanced education in the world (48 and 42 percent respectively), and the rate is high in Yemen, Saudi Arabia, Iran, and Egypt (30-32 percent). Finally, labour force participation, notably amongst women, is the lowest in the world.

Yet, on the structural side, some GCC countries (Saudi Arabia, Bahrain, Qatar, and UAE) have undertaken labour market reforms in recent years and encourage job creation in the private sector, notably for locals. Short-term labour market regulations have been implemented in most North African countries and Iraq.

[9] These figures are average over the period 2000-2017.

Macroeconomic policies and outcomes

Upward trends in public debt and lower oil prices have led oil-exporting countries to implement gradual fiscal consolidation through expenditure rationalisation and revenue mobilisation. In some GCC countries (Saudi Arabia, UAE), but also in Egypt and Tunisia, value added tax was introduced or extended and is expected to be enacted in other GCC countries. On the expenditure side, energy and food subsidy reforms were initiated in almost every MENA country in recent years, with a move towards more social spending and transfers, to support fiscal adjustment and ease the burden of reforms on the most vulnerable, notably in Egypt, Jordan, and Morocco. Budget elaboration reforms have also advanced in Morocco.

In recent years, many countries, such as the GCC, Jordan and Lebanon, remained under a pegged exchange rate regime. Meanwhile, Egypt and Morocco have moved towards more or complete liberalisation and to an inflation-targeting regime. The currencies of Tunisia, Algeria, Mauritania, Yemen, Syria, and Sudan experienced nominal devaluations and depreciations, whether gradual or abrupt. To support the currency peg or to rein in inflation, monetary policy tightened in oil exporting countries, as well as in Egypt, Jordan and Tunisia, whilst implementing pro-cyclical monetary policy. Overall, the monetary policy framework remained broadly unchanged, with the exception of countries that moved to a more flexible exchange rate and to inflation targeting.

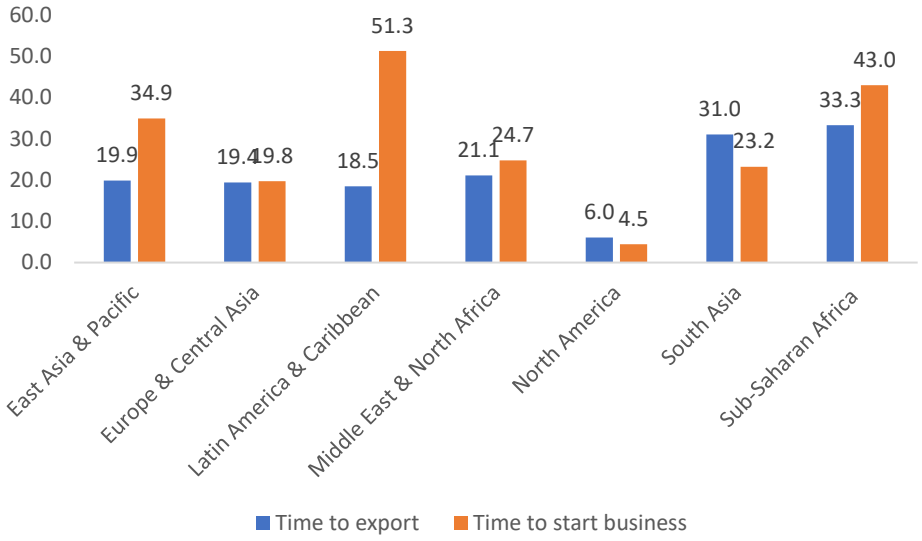
Despite the reduction in trade barriers in some countries, trade openness has declined, as measured by the total volume of trade to GDP, from 80.8% in 2010 to 75.6% in 2016, mainly due to regional unrest, conflict and low oil prices that decreased from 107 USD to 57.1 USD over the same period. Meanwhile, some countries, notably Morocco, Jordan and Tunisia, have undertaken efforts to diversify their export destinations and products, and to reduce import dependence, notably in energy.

Structural Problems

Poor Economic Institutions

According to the World Bank's Doing Business Reports, MENA is one of the most difficult regions for doing business, and is characteriszed by a difficult business environment. MENA ranks 115th on average, behind Europe and Central Asia (53rd), East Asia and Pacific (93rd), Latin America and the Caribbean (110th), and only ahead of Sub Saharan Africa, which ranks 142nd. Figure 1 shows that developing regions are still lagging behind in terms of the business environment, especially for starting a business or clearing exports. While MENA is better than Latin America, East Asia and Pacific and Sub-Saharan Africa in terms of the required time to start a business, it is lagging behind in terms of the time it takes to export. On a positive note, it is worth noting that laws and regulations to promote public private partnerships (PPPs), improve the business environment and to regulate bankruptcy have been passed in Egypt, Lebanon, Tunisia, Morocco and Jordan.

Figure 1: Economic Institutions by Region



Source: Constructed by the authors, using the World Development Indicators.

Note: These figures are averages for the period 1980-2017.

Time is measured by the number of days.

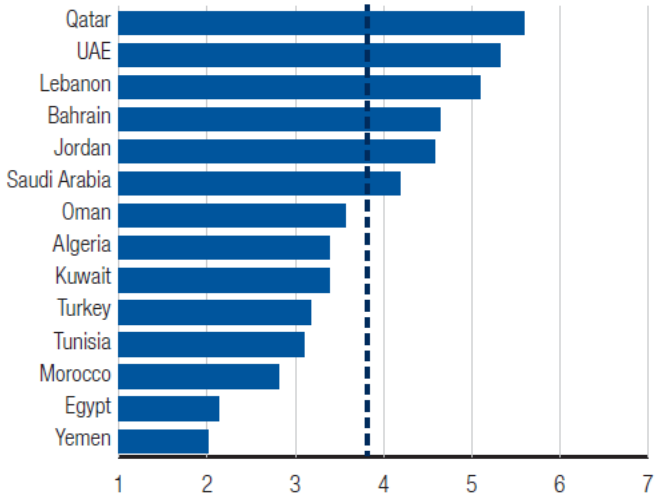
As a consequence of the poor quality of institutions, MENA mainly specialises in traditional sectors that are neither sensitive to institutions or contracts (Karam and Zaki, 2018). The Herfindahl-Hirschman index, published by the United Nations Conference on Trade and Development (UNCTAD), which measures market concentration, points to the high concentration in MENA countries of both exports and production, notably in oil exporting countries. However, even in oil importing countries, trade is often highly concentrated with a few counterparts, such as the European Union for Maghreb countries, in neighbouring countries and the Gulf Cooperation Council for Eastern Mediterranean countries. Production is often concentrated in certain sectors, even when there is no comparative advantage, such as some agricultural products that are not conducive with the weather conditions in certain countries. The concentration of production in low productivity sectors and low value-added industries, and low productivity gains over time, further exacerbate the adverse effects of this lack of diversification.

Education, Skills Mismatch and Labour Market Rigidity

The MENA region is characterised by an important skills mismatch in the labour market. In fact, it refers not only to skill shortages or gaps, but also to qualifications, knowledge and skills exceeding job requirements (World Economic Forum, 2017). Most of the MENA countries have a low quality of education,

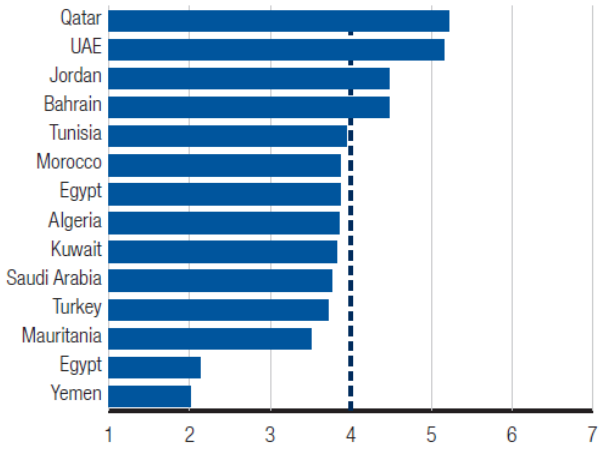
since most of them are below the world average (Figure 2) leading to serious problems in finding skilled employees (Figure 3). Skills mismatch contributes to high unemployment rates (see Figure 4), especially among the young, women (Figures 5 and 6), and graduates; raises pressures for public employment; and hinders private sector development, which is necessary to drive growth. Two factors have driven most graduates into the public sector. First, the private sector failed to create enough graduate-level jobs to meet the requirements of the highly literate labour force that exists in many MENA countries. Second, there is a mismatch between graduates' skills and the needs of the labour market, both in terms of quality and technical focus. This is a problem for both the private sector, which ends up employing inadequately educated labour in low-skilled and low-paid activities – construction, trade, manufacturing, and tourism – and for the public sector, given the mounting fiscal pressures.

Figure 2: Quality of MENA's education systems, 2017



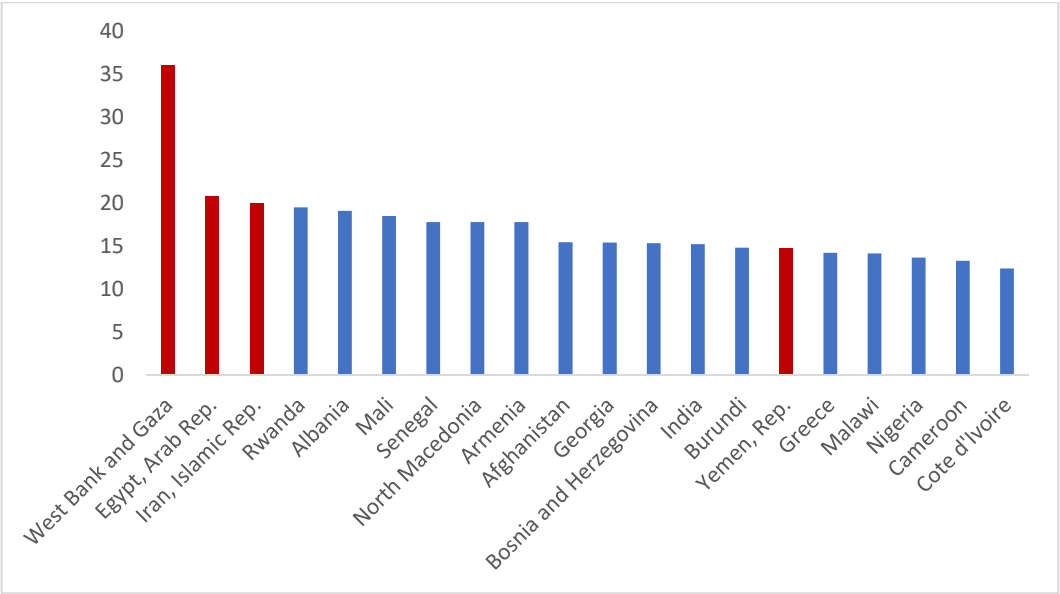
Source: World Economic Forum (2017)
Note: Quality rating, 1–7 (best).

Figure 3: Ease of finding skilled employees in MENA, 2017



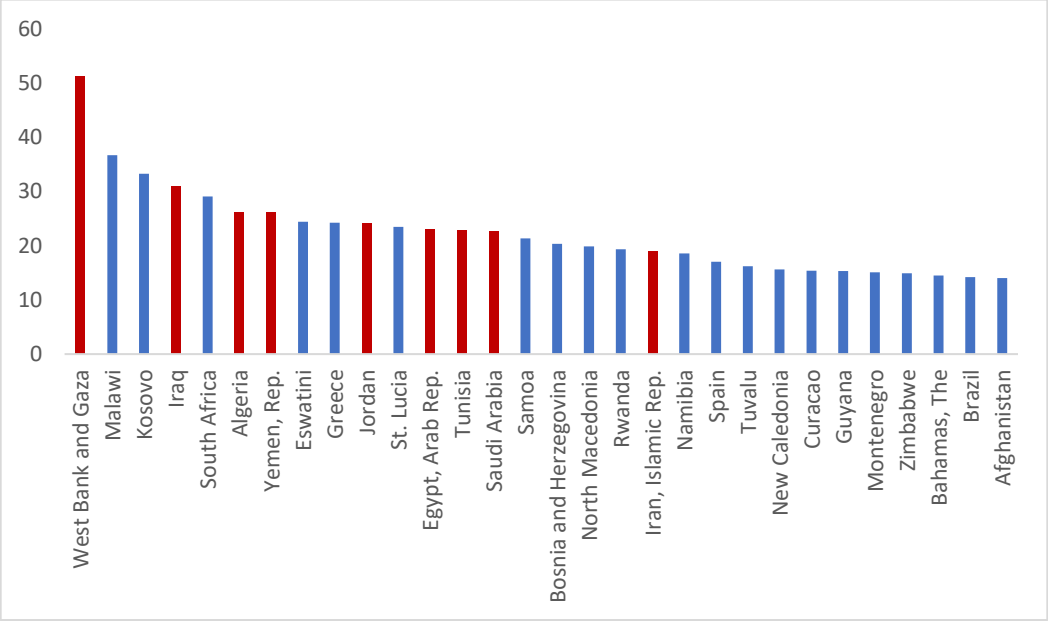
Source: World Economic Forum (2017)
Note: Quality rating, 1–7 (best).

Figure 4. Unemployment with advanced education (%) - Highest 20 countries



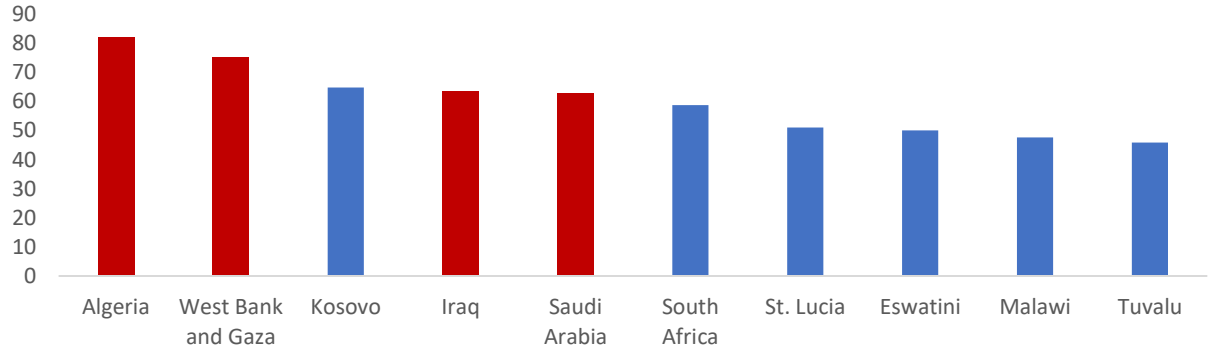
Source: World Development Indicators.
Note: Latest available data for each country during the period 2014-2018.

Figure 5: Female Unemployment (%) -Top 30 countries



Source: World Development Indicators.
Note: Latest available data for each country during the period 2014-2018.

Figure 6: Unemployment among young females (%) - (Top 10 countries)



Source: World Development Indicators.
Note: Latest available data for each country during the period 2014-2018.

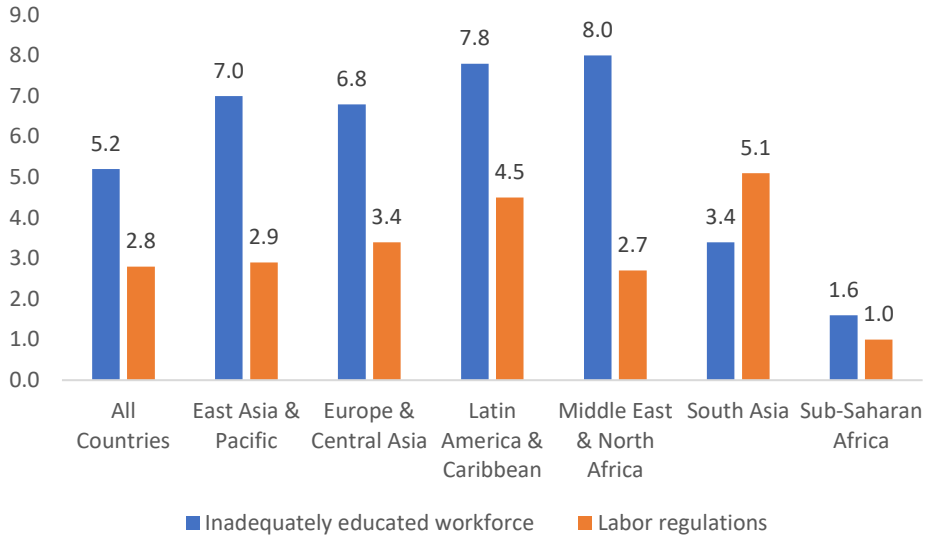
Various characteristics of the MENA economies contribute to the skills mismatch. First, there is, in many countries, an oversupply of university graduates, who are highly skilled, but often lack basic competencies. This is partially due to the poor quality of primary and secondary education and to significantly outdated curricula at higher educational institutions and business schools, which do not match the needs of modern labour markets.

Second, vocational training lacks the societal acceptance that it enjoys in other regions of the world and only poorly performing students in schools who have failed to progress otherwise take this route, whilst higher performing students have no appetite to participate in such training. As a result, programmes often have unfilled spaces, creating a shortage of trained labour with relevant skills for employers and international investors. In Tunisia for example, in 2018, unfilled vacancies made up 7.3 percent of the positions in the food and beverages manufacturing sector; 9 percent in ICT services; 11.9 percent in textiles and clothing manufacturing; 16 percent in professional, scientific, and technical services; and 24.3 percent in commerce, according to the European Bank for Reconstruction and Development (EBRD, 2018).

Third, highly educated graduates, unable to find an adequate job domestically, often immigrate to other countries within or outside MENA, resulting in a brain drain. Fourth, North African countries (Egypt, Libya, Algeria, Tunisia and Morocco) are transit countries for Sub-Saharan migrants, most of which are unregistered and at a heightened risk of discrimination, in terms of working conditions as well as labour exploitation. Labour-intensive activities, including construction, manufacturing, agribusiness and primary agriculture, often employ migrant workers informally and through subcontractors. A similar situation occurs with refugees displaced within MENA.

The enterprises surveyed in the WB-EIB-EBRD MENA Enterprise Surveys repeatedly identify an inadequately trained workforce as a major business constraint (see Figure 7). Graduates from both university and vocational training programmes fail to meet private sector employer needs around transferrable and technical skills. At the same time, there is a low demand for high-skilled workers graduating from universities, because private sector firms remain primarily active in low-productivity and low-competitiveness sectors, whilst labour markets remain rigid. A large proportion of productive resources are concentrated in relatively unproductive small-scale activities, decreasing the number and quality of jobs created. As a result, the private sector has a low capacity for driving skills demand and absorbing the number of university graduates entering the work force annually. This is also due to the slow pace of job creation in the formal economy and sticky wages. Furthermore, inadequate recruitment practices limit the private sector's ability to identify and retain talent with the most appropriate skills. This gives rise to a significant loss of human capital potential for MENA economies, limits inclusion and contributes to a vast misallocation of resources. The presence of informality and the lack of support for SMEs further exacerbate the problem. Informal businesses and employment are prominent and hinder a smooth match between the supply and demand of skills. Low-quality jobs and high unemployment have been met with explicit policies to increase employment within the public sector, especially after 2011, whilst employment in SOEs crowds out private sector employment.

Figure 7: Percentage of Firms Identifying Labour as the Biggest Obstacle - 2013



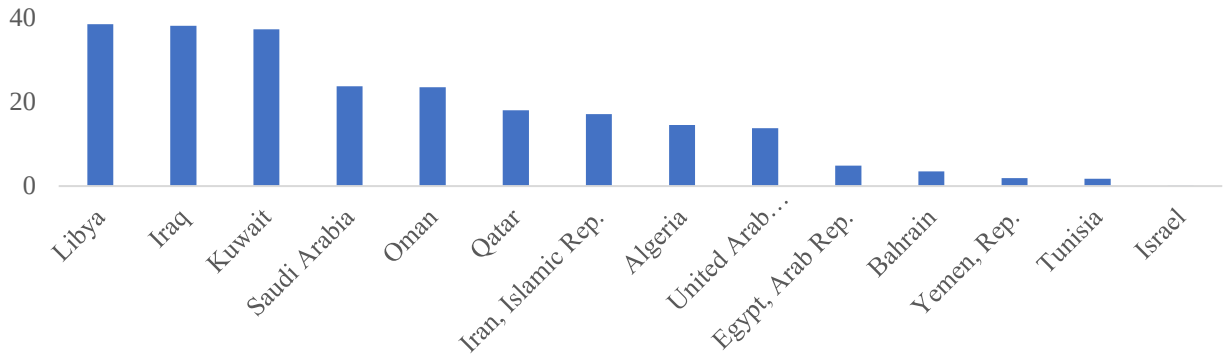
Source: Constructed by the authors using the World Bank Enterprise Surveys.

Oil Dependency and Specialisation in Traditional Sectors

In MENA oil-exporting countries, but also in other countries, the economy is largely dependent on oil and primary products (see Figure 8) and this is demonstrated in a wide variety of aspects. Revenues from oil and primary products production and exports constitute the majority of government fiscal revenues. Oil revenues enable these countries to provide public services and infrastructure, generous subsidies, budgetary support in times of crises and fiscal space to pursue state-led economic diversification strategies. Energy produced from fuel and fuel-operated plants and generators is the main source of electricity sustaining households and industries. A large proportion of the labour force is employed in the oil-related sectors – extraction, refineries etc. – or in primary sectors, such as agriculture and mining, notably through public employment. This is in addition to the concentration of exports and production in oil and the traditional sectors of agriculture, mining and quarrying, and oil. Oil and gas rents accounted for over one fifth of GDP in the MENA oil-exporting countries in 2017. In 2017, 56 percent of MENA's population lived in MENA's oil exporting countries (see Figure 9). These countries have been able to accumulate official reserves, maintain relatively low external debt and remain important donors to other developing countries. Life expectancy in the GCC increased by almost 10 years, to 74 years since 1980, whilst literacy rates increased by 20 percentage points to over 80 percent. The combined nominal GDP of all MENA oil-exporting countries reached 73 percent of MENA GDP in 2017; including 46 percent in the six GCC countries (see Figure 10).

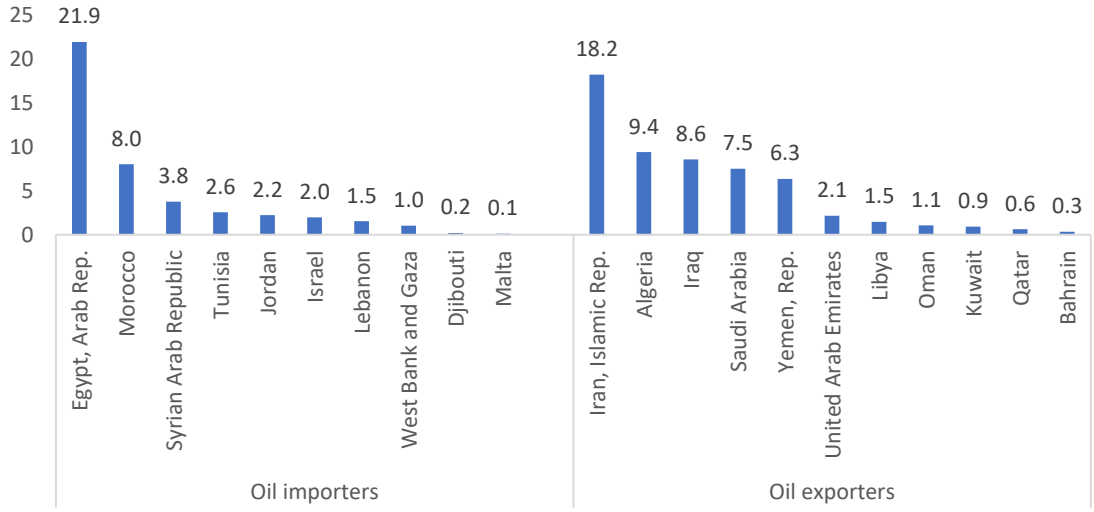
A consequence of the high concentration of exports and production is that fiscal revenues become highly dependent on revenues from primary resources and, hence, are volatile. This is the case in the GCC and other oil exporters, but also in agriculture-dependent countries, such as Morocco, Tunisia and Jordan. At the same time, high tax evasion and narrow tax bases negatively affect tax revenues. On the other hand, high public sector employment, which has often been used as a means of social appeasement, and consecutive wage hikes in the public sector, notably in Tunisia, Egypt, Jordan and the GCC, have led to an oversized and hypertrophic public sector and a large public sector wage bill. Combined with subsidies in kind and in cash, the volatility in non-tax revenues, low tax compliance and the high spending on wages lead to high fiscal deficits that, over a sustained period, result in high public debt to GDP ratios. This is particularly evident in Lebanon, Egypt, Jordan, Iraq and Yemen.

Figure 8: Oil and Natural Gas Rents (% of GDP) - 2017



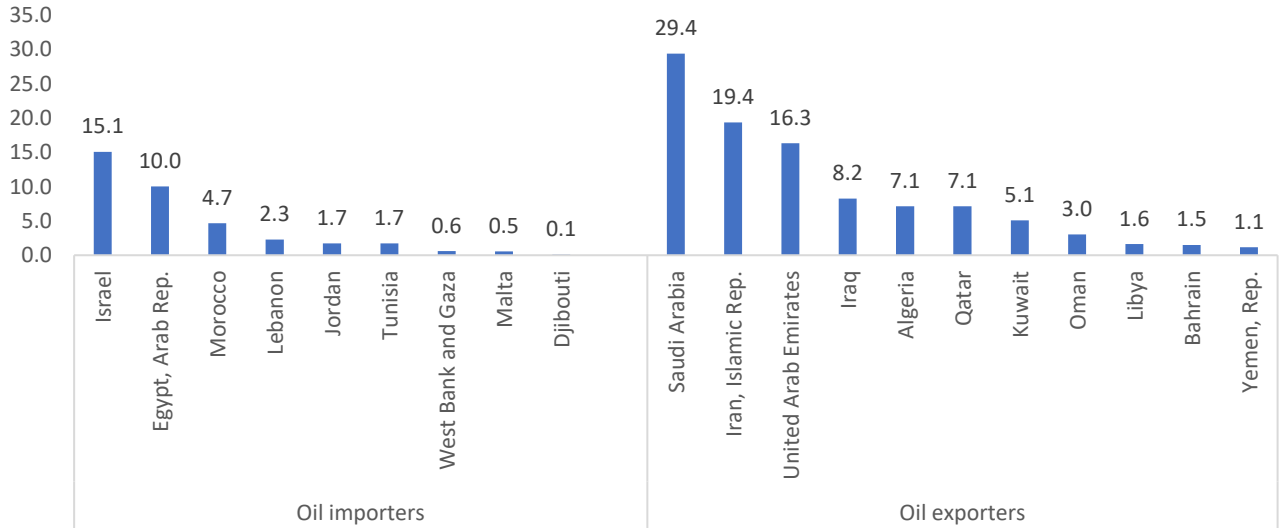
Source: World Development Indicators.

Figure 9: Population (% of MENA population) - 2018



Source: World Development Indicators.

Figure 10: Nominal GDP in $ (% of MENA) - 2017



Source: World Development Indicators.

Meanwhile, the dependence on oil and traditional sectors is not limited to the producers and exporters of these products; the impact extends, through spillovers and secondary channels, to the rest of the region, including non-oil exporters. Whilst the oil sector was the primary vehicle for revenue and wealth creation for the oil exporters, the spillover effects to other countries in the region and beyond have been significant. MENA non-oil exporters benefitted through supplying labour to the oil-rich MENA economies, which then send remittances regularly, supporting consumption, real estate and the banking sectors in their home countries, as well as financing the twin deficits of the current and the fiscal accounts, both directly and indirectly, through banks' refinancing for the government. Moreover, these countries have benefitted from large investments and aid coming from the oil-exporting countries.

Dependence on oil and concentration in traditional sectors pose risks to growth sustainability. On one hand, they result in volatility – for example in the case of Morocco's growth that alternates between 1 and 4 percent per annum, on average, based on weather conditions – environmental effects result from the over-use of fuel and fuel-generated energy, institutional weaknesses and corruption, political instability and conflict, and Dutch disease. The latter is pertinent, not only in oil-exporting countries, but also in oil-importing countries receiving large remittances and finance, for instance from the GCC. This is because workers prefer not to seek employment in their home countries, when there is hope of finding a high-paying job in oil-dependent countries, resulting in wages increases for some occupations in their home countries. On the other hand, more structurally and in the long-term, oil dependency results in the presence of a mismatch between the availability and usage of the countries' endowments and the uncertainty beyond the existing reserves of oil.

Data and Methodology

In order to test the effect of different macroeconomic policies on employment, we proceed in two steps.

First, we decompose our employment variables into two components using the Christiano-Fitzgerald filter. The latter separates a time series into trend and cyclical components. Whilst the trend component *Ln(Emp tr)* shows the evolution of structural labour, the cyclical one *Ln(Emp cyc.)* measures the short-term deviation of employment from its stationary level.

The second step consists of regressing employment on different measures of macroeconomic policies and structural characteristics. The measures of stabilisation policies include lending rate *Ln(lend)* as a measure of monetary policy, official exchange rate *Ln(ER)* measuring the exchange rate policy, *FDI* the share of FDI to GDP measuring FDI impact and tariffs *Ln(Tar)* measuring trade policy. As per structural characteristics, we measure economic institutions by the time to enforce contracts *Ln(Time),* human capital by the share of spending on tertiary education in total spending *Ter.Educ.* and economic diversification by

the share of fuel exports in merchandise exports *Fuel*[10]. The following econometric model has been estimated using panel techniques[11]:

$$Y_{it} = \beta_0 + \beta_1 \, Ln(lend_{it}) + \beta_2 \, FDI_{it} + \beta_3 \, Ln(ER_{it}) + \beta_4 \, Ln(Tar_{it})$$

$$+ \beta_5 \, Ln(Time_{it}) + \beta_6 \, Ln(Ter.Educ_{it}) + \beta_7 \, Ln(Fuel_{it}) + \zeta_{it} \qquad (1)$$

where *Y* is measured by the trend and cyclical components of employment, *i* represents country, *t* year and ζ is the discrepancy term. We also run a set of regressions where we interact both stabilisation policies with structural characteristics, in order to see how the former can have a stronger effect if structural characteristics are adequate.

This model is estimated using annual data (1980-2017) for a large set of countries (all countries available in the World Development Indicators dataset). All the variables come from this dataset available on the World Bank's website and have been log-linearised in order to reduce the heterogeneity of the data and to obtain elasticities. Moreover, it is worth noting that, since there are a lot of missing values, we end-up with an unbalanced panel. All the regressions were run using fixed effects[12].

Empirical Findings

As mentioned before, the objective of this paper is to show how the effect of stabilisation policies differs from that of allocation policies (that are more structural). Table 1 presents the effect of both, on the two components of employment: cyclical and trend. First, regarding stabilisation policies, whilst the effect of monetary policy measured by the lending interest rate is insignificant for the cyclical component, it is positive though slightly significant for the trend component. This shows how the shift in monetary policy, with the adoption of inflation targeting policies, focused more on price stability and gives less attention to growth and job creation (Epstein (2007a), Epstein (2007b), Epstein and Yeldan (2008), Anwar & Islam (2011), and Mishra, Montiel, and Spilimbergo (2012)). This is chiefly attributed to three main reasons. First, most of these studies argued that setting inflation targets too low (below the optimal level) could impose opportunity costs, in terms of foregone growth and employment. Second, in developing countries, transmission channels of monetary policy are weak and do not affect growth and employment because of poorly functioning banking/financing sectors or poor regulations. Third, in developed countries, monetary policy with very low interest rates has exhausted all its tools and the only way to enhance growth and employment is via fiscal policy (Borio and Hofmann, 2017).

Second, whilst the effect of exchange rate policy[13] is negative and significant for the cyclical component, it is not significant for the trend component. This might be chiefly explained by the

[10] See Appendix 1 for the list of countries, Appendix 2 for the variables' definition and Appendix 3 for descriptive statistics.

[11] Tax rate was not included as a measure of fiscal policy since this variable has a lot of missing values.

[12] Hausman test was used in order to choose between consistent and efficient estimators

[13] Nominal exchange rate is defined as the number of units per 1 USD.

overshooting hypothesis, where exchange rate overshoots in the short-term, then its value tends to increase in the longer term. Such a finding corroborates that of growth from Frenkel & Taylor (2009), Weeks (2015) and Parisotto & Ray (2017) who argued that a highly volatile exchange rate, due to sudden and large speculative capital flows moving in and out of a country under liberalised capital markets, exerts adverse effects on investment, employment and growth. This is why this variable confirms our hypothesis, according to which stabilisation policies are more likely to affect the cyclical component without having a significant effect on the trend component.

Third, regarding trade policy, our results are rather interesting. Whilst tariffs have a positive effect on cyclical employment, they have a negative impact on the employment trend. In fact, protectionist measures can protect some industries, increase employment and reduce the deviation from the potential level of employment in the short-term. Yet, tariffs over a longer perspective introduce significant distortions to the market and exert a significantly negative effect on the trend of employment. This is in line with the traditional theory of international trade, where the negative effect of tariffs (due to loss of efficiency and less demand) is greater than the positive effect (due to customs duties and a greater producers' surplus).

Fourth, our findings for FDI are also in line with previous ones. Whilst they are positive and statistically significant for cyclical employment, they are not for the trend component, especially if FDI is channelled to traditional sectors that are capital intensive and have a limited value-added. However, it is worth noting that interaction between different macroeconomic policies is more likely to affect initial growth. Indeed, Andersen and Gruen (1995) argued that five features can affect growth and employment: a low and predictable inflation rate; a suitable real interest rate; a stable and sustainable fiscal policy; a competitive and foreseeable real exchange rate; and a viable balance of payments.

As per structural characteristics that measure allocation policies, three remarks are worth mentioning. First, the diversification of the economy, measured by the share of fuel exports in merchandise, is insignificant. This is surprising, since this sector is capital intensive and is incapable of generating jobs in the economy. Second, deficient economic institutions have a negative effect on both the cyclical and trend components of employment. Indeed, as highlighted by Acemoglu (2005), economic institutions include factors governing the structure of incentives in society (to invest, accumulate factors, make transactions etc.), the structure of property rights, entry barriers and set of contract types for business offered in contract law. All these variables affect economic performance, growth and, hence, job creation. Third, investing in human capital tends to be insignificant for cyclical employment and positive and significant for the trend component. This finding is intuitive since, similar to any type of investment, it can be costly in the short-term but rewarding in the long-term. Indeed, investing in human capital (measured by expenditure on tertiary education) takes time to improve employment and, as a result, cannot stabilise employment in the short-term but increase it in the long-term. These results are in line with Sachs and Warner (1995) who argue that the main factors that can lead to the convergence of poorer countries are trade and the quality of institutions, measured by the protection of private property rights.

Finally, when we interact stabilisation policies with structural characteristics (see Table 2 and 3), we found mixed results. First, stabilisation policies can have a stronger effect if they are accompanied by efficient economic institutions. This result holds true for both trade policy and exchange rate policy. By contrast, the interaction with our human capital variable is insignificant, as Table 2 shows. The trend of employment (presented in Table 3) is still affected chiefly by structural characteristics (time to enforce

contracts and expenditure on tertiary education) without being affected by any interaction with stabilisation policies.

In a nutshell, whilst stabilisation policies can affect the cyclical component (especially exchange rate depreciation, FDI or tariffs), structural variables measured by economic institutions (time to enforce contracts) and human capital (measured by public expenditure on tertiary education) have a positive impact on the trend component of employment. When both are interacted, stabilisation policies can have a stronger effect if structural conditions are adequate (in particular, better economic institutions).

Table 1: Empirical Results

		Ln(Emp. Cyc.)	Ln(Emp. Trend)
Stabilisation	Ln(Lend. Rate)	0.0631	0.00684*
		(0.0550)	(0.00406)
	Ln(Exchange Rate)	-0.175***	-0.00316
		(0.0662)	(0.00489)
	Ln(Tariff)	0.107**	-0.00809**
		(0.0475)	(0.00351)
	FDI/GDP	0.0109***	-0.000194
		(0.00246)	(0.000182)
Structural	Ln(Time Bus.)	-0.105***	-0.00420**
		(0.0258)	(0.00190)
	Fuel Exp.	-0.00290	-9.17e-06
		(0.00228)	(0.000169)
	Exp. Ter. Educ.	0.00226	0.000892***
		(0.00367)	(0.000271)
	Constant	2.270***	4.159***
		(0.306)	(0.0226)
	Observations	518	518
	R-squared	0.103	0.073
	Number of countries	94	94

Notes: (i.) Standard errors in parentheses.
(ii.) *** p<0.01, ** p<0.05, * p<0.1.

Table 2: Interaction between Policies and Cyclical Component of Employment

		Ln (Emp. Cyc.)	Ln (Emp. Cyc.)	Ln(Emp. Cyc.)	Ln (Emp. Cyc.)	Ln (Emp. Cyc.)	Ln (Emp. Cyc.)
Stabilisation	Ln(Lend. Rate)	0.0528	0.0604	0.0680	0.0557	0.0629	0.0571
		(0.0550)	(0.0547)	(0.0561)	(0.0556)	(0.0550)	(0.0558)
	Ln(Exchange Rate)	-0.183***	-0.236***	-0.180***	-0.169**	-0.175***	-0.269***
		(0.0661)	(0.0706)	(0.0671)	(0.0666)	(0.0663)	(0.0729)
	Ln(Tariff)	0.251***	0.112**	0.108**	0.106**	0.128*	0.317***
		(0.0853)	(0.0473)	(0.0476)	(0.0475)	(0.0750)	(0.108)
	FDI/GDP	-0.00561	-0.202***	-0.112***	-0.102***	-0.104***	-0.134*
		(0.0551)	(0.0481)	(0.0303)	(0.0259)	(0.0258)	(0.0716)
Structural	Ln(Time Bus.)	0.0105***	0.0117***	0.00760	0.00318	0.0110***	-0.00997
		(0.00246)	(0.00247)	(0.00776)	(0.00886)	(0.00247)	(0.0160)
	Fuel Exp.	-0.00324	-0.00259	-0.00284	-0.00300	-0.00286	-0.00276
		(0.00228)	(0.00227)	(0.00229)	(0.00229)	(0.00229)	(0.00228)
	Exp. Ter. Educ.	0.00185	0.00317	0.00227	0.000602	0.00486	0.00509
		(0.00366)	(0.00367)	(0.00368)	(0.00410)	(0.00803)	(0.00838)

Interaction	Ln(Tariff)*Time	-0.0541**					-0.0629**
		(0.0266)					(0.0269)
	Ln(ER)*Time		0.0224**				0.0280***
			(0.00938)				(0.00985)
	FDI/GDP*Time			0.00118			0.00434
				(0.00260)			(0.00305)
	FDI/GDP*Educ				0.000441		0.000518
					(0.000484)		(0.000556)
	Ln(Tariff)*Educ					-0.00136	-0.00215
						(0.00375)	(0.00374)
	Constant	2.084***	2.508***	2.294***	2.291***	2.226***	2.389***
		(0.318)	(0.320)	(0.310)	(0.307)	(0.329)	(0.368)
	Observations	518	518	518	518	518	518
	R-squared	0.111	0.115	0.103	0.104	0.103	0.132
	Number of countries	94	94	94	94	94	94

Notes: (i.) Standard errors in parentheses.
(ii.) *** p<0.01, ** p<0.05, * p<0.1.

Table 3: Interaction between Policies and Trend of Employment

		Ln(Emp. Trend)	Ln(Emp. Trend)	Ln(Emp. Trend)	Ln(Emp. Trend)	Ln(Emp. Trend)	Ln(Emp. Trend)
Stabilisation	Ln(Lend. Rate)	0.00704*	0.00678*	0.00562	0.00547	0.00682*	0.00539
		(0.00408)	(0.00406)	(0.00413)	(0.00408)	(0.00406)	(0.00416)
	Ln(Exchange Rate)	-0.00300	-0.00463	-0.00203	-0.00202	-0.00309	-0.00199
		(0.00490)	(0.00524)	(0.00494)	(0.00489)	(0.00489)	(0.00543)
	Ln(Tariff)	-0.0109*	-0.00797**	-0.00836**	-0.00825**	-0.00438	-0.00722
		(0.00633)	(0.00351)	(0.00351)	(0.00349)	(0.00553)	(0.00806)
	FDI/GDP	-0.000186	-0.000176	0.000632	-0.00164**	-0.000187	-0.00120
		(0.000183)	(0.000183)	(0.000571)	(0.000650)	(0.000182)	(0.00119)
Structural	Ln(Time Bus.)	-0.00613	-0.00658*	-0.00242	-0.00370*	-0.00418**	-0.00535
		(0.00408)	(0.00357)	(0.00223)	(0.00191)	(0.00190)	(0.00533)
	Fuel Exp.	-2.58e-06	-1.58e-06	-2.27e-05	-2.84e-05	-1.76e-06	-1.62e-05
		(0.000169)	(0.000169)	(0.000169)	(0.000168)	(0.000169)	(0.000170)
	Exp. Ter. Educ.	0.000900***	0.000914***	0.000890***	0.000581*	0.00135**	0.00104*
		(0.000272)	(0.000273)	(0.000271)	(0.000301)	(0.000593)	(0.000624)

Interaction	Ln(Tariff)*Time	0.00105					0.000858
		(0.00198)					(0.00201)
	Ln(ER)*Time		0.000547				0.000133
			(0.000697)				(0.000734)
	FDI/GDP*Time			-0.000292			-8.80e-05
				(0.000191)			(0.000227)
	FDI/GDP*Educ				8.25e-05**		7.24e-05*
					(3.55e-05)		(4.14e-05)
	Ln(Tariff)*Educ					-0.000240	-0.000216
						(0.000276)	(0.000278)
	Constant	4.163***	4.165***	4.153***	4.163***	4.151***	4.158***
		(0.0236)	(0.0238)	(0.0228)	(0.0225)	(0.0243)	(0.0274)
	Observations	518	518	518	518	518	518
	R-squared	0.073	0.074	0.078	0.085	0.074	0.087
	Number of countries	94	94	94	94	94	94

Notes: (i.) Standard errors in parentheses.
(ii.) *** p<0.01, ** p<0.05, * p<0.1.

Conclusion and Policy Implications

First, we examine the effect of macroeconomic policies on employment. To do so, we rely on policy tools, rather than policy outcomes, since the former are less endogenous. In other words, we rely on tariffs to measure trade policy (instead of exports and imports), tax rates to measure fiscal policy (instead of government spending) and lending rate (instead of inflation rate) to measure monetary policy. Second, we distinguish between stabilisation policies and structural characteristics. Whilst the aforementioned policies measure the former, we measure the latter by the quality of economic institutions (time to enforce contracts), human capital (spending on tertiary education) and economic diversification (share of fuel exports). Third, we distinguish between the trend and the cyclical components of employment, to show to what extent policy tools have a stabilisation effect (on the cyclical component) or a better allocation effect (on the trend component).

Our main findings show that whilst stabilisation policies can affect the cyclical component (especially exchange rate depreciation, FDI or tariffs), structural variables measured by economic institutions (time to enforce contracts) and human capital (measured by public expenditure on tertiary education) have a positive impact on the trend component of employment. When both are interacted, our results show that stabilisation policies can have a stronger effect if structural conditions are adequate (in particular better economic institutions). Moreover, stabilisation policies and structural policies should be complementary (not substitutes).

At the policy level, this paper highlights the importance of directly addressing the structural problems (in terms of economic institutions and human capital) of the economy, in order to create more jobs. Indeed, stabilisation policies implemented internally, or in the context of structural adjustment programmes, are not sufficient to resolve employment challenges in emerging economies, especially the MENA region. Hence, whilst stabilisation policies are necessary, they are not sufficient to boost employment. Moreover, as highlighted by our findings, stabilisation policies can exert a higher positive impact on employment when they are complemented by structural reforms.

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Annex 1: List of countries

AFG	COL	GUY	MCO	PSE	UKR
AGO	COM	HKG	MDA	PYF	URY
ALB	CPV	HND	MDG	QAT	USA
AND	CRI	HRV	MDV	ROU	UZB
ARE	CUB	HTI	MEX	RUS	VCT
ARG	CUW	HUN	MHL	RWA	VEN
ARM	CYM	IDN	MKD	SAU	VGB
ASM	CYP	IMN	MLI	SDN	VIR
ATG	CZE	IND	MLT	SEN	VNM
AUS	DEU	IRL	MMR	SGP	VUT
AUT	DJI	IRN	MNE	SLB	WSM
AZE	DMA	IRQ	MNG	SLE	XKX
BDI	DNK	ISL	MNP	SLV	YEM
BEL	DOM	ISR	MOZ	SMR	ZAF
BEN	DZA	ITA	MRT	SOM	ZMB
BFA	ECU	JAM	MUS	SRB	ZWE
BGD	EGY	JOR	MWI	SSD	
BGR	ERI	JPN	MYS	STP	
BHR	ESP	KAZ	NAM	SUR	
BHS	EST	KEN	NCL	SVK	
BIH	ETH	KGZ	NER	SVN	
BLR	FIN	KHM	NGA	SWE	
BLZ	FJI	KIR	NIC	SWZ	

BMU	FRA	KNA	NLD	SXM	
BOL	FRO	KOR	NOR	SYC	
BRA	FSM	KWT	NPL	SYR	
BRB	GAB	LAO	NRU	TCA	
BRN	GBR	LBN	NZL	TCD	
BTN	GEO	LBR	OMN	TGO	
BWA	GHA	LBY	PAK	THA	
CAF	GIB	LCA	PAN	TJK	
CAN	GIN	LIE	PER	TKM	
CHE	GMB	LKA	PHL	TLS	
CHI	GNB	LSO	PLW	TON	
CHL	GNQ	LTU	PNG	TTO	
CHN	GRC	LUX	POL	TUN	
CIV	GRD	LVA	PRI	TUR	
CMR	GRL	MAC	PRK	TUV	
COD	GTM	MAF	PRT	TZA	
COG	GUM	MAR	PRY	UGA	

Appendix 2: Variables definition and sources

Variable	Definition	Years	Source
Y	Level of employment	1980-2017	World Development Indicators
Ln(lend$_{it}$)	Lending interest rate (%)	1980-2017	World Development Indicators
Ln(Tax$_{it}$)	Profit tax (% of commercial profits)	1980-2017	World Development Indicators
Ln(ER$_{it}$)	Official exchange rate (LCU per US$, period average)	1980-2017	World Development Indicators
Ln(Tar$_{it}$)	Tariff rate, applied, simple mean, manufactured products (%)	1980-2017	World Development Indicators
FDI$_{it}$	Share of FDI to GDP, net inflow (%)	1980-2017	World Development Indicators
Fuel$_{it}$	Share of fuel exports in merchandise trade (%)	1980-2017	World Development Indicators
Educ. Tert. Exp$_{it}$	Share of education on tertiary education to total expenditure (%)	1980-2017	World Development Indicators
Ln(Time$_{it}$)	Time required to enforce a contract (days)	1980-2017	World Development Indicators

Source: Constructed by the authors.

Appendix 3: Descriptive statistics

Variable	Obs.	Mean	St. Dev.	Min.	Max.
Y cyc	5048	1.69	0.26	-2.53	2.41
Y trend	5049	4.12	0.19	3.55	4.54
Ln(lend)	3931	2.61	0.6	0.41	8.47
Ln(ER)	6622	2.37	3.51	-25.4	22.63
Ln(Tar)	3055	1.78	0.9	-2.3	4.69
Ln(Time)	2578	3.12	0.9	0.41	6.55
FDI	6231	4.16	14.06	-82.89	466.56
Fuel	4796	16.12	27.2	0	100
Educ. Tert. Exp	2658	19.85	8.36	0	68.14

Source: Constructed by the authors.

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The Euro-Mediterranean Network for Economic Studies (EMNES) is a network of partner and associate research institutions and think tanks working on the Mediterranean region. EMNES aims to provide a renewed vision for socio-economic development in the Mediterranean region, mainly focusing on employment creation, social inclusion, and sustainable development.

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