The Economic Impact of IMF and World Bank Programs in the Middle East and North Africa: A Case Study of Jordan, Egypt, Morocco and Tunisia, 1983 - 2004

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The Economic Impact of IMF and World Bank Programs in the Middle East and North Africa: A Case Study of Jordan, Egypt, Morocco and Tunisia, 1983 - 2004

Jane R. Harrigan and Hamed El-Said

Abstract

This paper examines whether the economic reforms attached to IMF and World Bank policy-based lending in the Middle East and North Africa have stimulated sustained economic growth. In order to investigate this, we chose four countries to study in depth: Jordan, Egypt, Tunisia and Morocco. These were chosen as they have been put forward by both the IMF and the World Bank as successful reformers who, for prolonged periods, carried out World Bank and IMF guided economic reform programs. We examine the sources of growth during the reform period in these four countries, looking at intensive versus extensive growth, growth in the tradables sector versus the non-tradables sector and growth caused by the reforms versus growth caused by exogenous factors. We discovered that the reform programs in all four countries were associated with spurts of economic growth, but that, apart from Tunisia, this was not sustained, with intensive growth in the tradables sector stimulated by the reform program.

KEYWORDS: IMF, World Bank, stabilization, structural adjustment, Jordan, Morocco, Tunisia, Egypt

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1. Introduction

The IMF and World Bank have singled out Jordan, Egypt, Morocco and Tunisia as successful reformers in the Middle East and North Africa (MENA) region (Pfiefer 1999). All four countries have had prolonged periods of economic reform under the guidance of the IMF and World Bank. One would expect the reform process under the IMF to stabilize the macro economy. This should form the basis upon which successful growth can be generated by the types of reforms advocated by the World Bank such as trade liberalization, financial sector reform, price liberalization and privatization, which are designed to boost export-led growth. We examine both the nature of the reform programs in our four chosen countries as well as the growth impact of the programs. In particular, we ask several questions of growth: Was it sustained? Which sectors was it generated by, the tradable sectors or the non-tradable sectors? Was it extensive growth generated by factor accumulation or intensive growth generated by productivity gains? Was it caused by the reform program or by other exogenous factors? If successful, one would expect that IMF and World Bank programs would generate sustained, intensive growth in the tradables sectors resulting from policy reforms undertaken rather than from exogenous factors. However, for the four countries we analyze, we find that, with the exception of Tunisia, this was not the case. The exception of Tunisia is discussed in greater detail in work done by the authors elsewhere (Harrigan and El-Said 2009a p.105-147). We find that IMF stabilization programs worked well in all cases except Jordan (although in Egypt success was at least partly due to massive debt relief). However, World Bank structural adjustment programs were less successful. Section 3 analyzes the IMF stabilization programs in each country whilst Section 4 analyzes the outcome of World Bank structural adjustment programs in terms of growth effects.

2. The pre-reform period

All four of our case countries experienced similar economic trends in the period immediately preceding their IMF and World Bank reform programs. Their economies grew rapidly in the late 1960s and 1970s and increasingly took on the characteristics of rentier states, with rents taking the form of aid, migrant remittances, oil, gas and phosphate revenues and, in the case of Egypt, Suez Canal revenues. At the same time, the economies were inward looking following Import Substituting Industrialization (ISI) strategies with a strong state presence in the economy. They also had an implicit social contract whereby rentier income was used to pacify the population and buy support for incumbent regimes by an overextended state using subsidies, free health and education, guaranteed jobs in the public sector and rents to favored entrepreneurs derived from the various


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forms of state intervention in the economy such as quantitative import restrictions. The social contract brought rapid improvements in social welfare and declining poverty.

Although both Tunisia and Egypt had pursued socialist policies in periods shortly after independence, by the late 1970s all four economies could be described as ‘mixed economies’ with dirigiste policies whereby there was a degree of liberalization and the encouragement of the private sector alongside state domination and regulation of the economy. The economic growth and welfare improvements brought about by populist redistributive policies and dirigism were not sustained in the 1980s. The collapse of oil prices in the early 1980s resulted in declining rents in the form of migrant remittances and aid from the Gulf States, declining income from oil and phosphate exports, whilst recession in the West also resulted in declining aid from Western nations. Although external factors were important in bringing about the economic crisis of the 1980s (El Ghonemy 1998 p.174-5) this also exposed severe weaknesses in domestic economic policy (Page 1998). Throughout much of the 1970s and early 1980s, the inflow of rentier incomes had given rise to Dutch Disease effects in the form of an appreciated real exchange rate and an increase in the attractiveness of the non-tradables sector such that growth was often accompanied by a widening current account deficit, financed by increasing recourse to foreign debt. High levels of state involvement in the economy had also led to growing inefficiencies, especially in the parastatal sector, whilst government regulation and intervention had distorted the incentive system.

Tunisia, Morocco and Egypt made limited and largely unsuccessful attempts to cure macro imbalances in the form of current account and fiscal deficits before the launching of their full-blown IMF and World Bank reform programs. The social unrest provoked by these earlier attempts to stabilize the economy, particularly the attempted removal of food subsidies, had a powerful effect on incumbent regimes and helps explain why they were so reluctant under subsequent IMF and World Bank programs to tackle the issue of subsidy removal. Jordan, unlike the other three countries, did not attempt a stabilization program until 1989 and instead followed expansionary policies in the face of crisis between 1983 and 1988.
The four countries embarked upon their IMF- and World Bank-supported economic reform programs at different times. Morocco was the first to commence in 1983, followed by Tunisia in 1986, Jordan in 1989 and Egypt in 1991. However, each displayed similar characteristics when their programs commenced – high levels of unsustainable debt, a shortage of foreign exchange reserves, wide current account and fiscal deficits and undiversified economies. Table 1 presents key macro economic indicators for the four countries in the period directly before their reform programs commenced. The exception was Tunisia who had already achieved a substantial degree of economic diversification under the dirigist policies of the 1970–86 period. This is because, in policies not too dissimilar to the East Asian countries, Tunisian authorities had pursued a strategy of ‘picking winners’, that is, the government would voluntarily pick some activities, develop them and when profitable open them up to the private sector. This was particularly evident in the transformative industries such as textiles, clothing,

### Table 1: Key Economic Indicators at the Start of IMF and World Bank Programs

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<tr>
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</thead>
<tbody>
<tr>
<td>GDP growth rate %</td>
<td>1.08</td>
<td>-13.45</td>
<td>-0.56</td>
<td>-1.4</td>
</tr>
<tr>
<td>Inflation %</td>
<td>19.75</td>
<td>25.7</td>
<td>6.2</td>
<td>6.2</td>
</tr>
<tr>
<td>Current acc balance as % GDP</td>
<td>-9.11</td>
<td>9.32</td>
<td>-6.4</td>
<td>-6.7</td>
</tr>
<tr>
<td>Exports goods and services % GDP</td>
<td>3.33</td>
<td>57.31</td>
<td>21.27</td>
<td>30.18</td>
</tr>
<tr>
<td>Reserves months of imports</td>
<td>4.84</td>
<td>0.33</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Gross domestic savings % GDP</td>
<td>13.19</td>
<td>4.98</td>
<td>16.1</td>
<td>19.48</td>
</tr>
<tr>
<td>Real interest rate</td>
<td>0.50</td>
<td>N/A</td>
<td>-0.30</td>
<td>5.45</td>
</tr>
<tr>
<td>debt service ratio %</td>
<td>18.03</td>
<td>22.77</td>
<td>46.63</td>
<td>31.19</td>
</tr>
<tr>
<td>Fiscal deficit % GDP</td>
<td>2.47</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Source: World Development Indicators Online

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leather, wood and food. As a result, the share of manufactured exports in total exports increased from 15.1 per cent in 1972 to 38 per cent in 1979 and the share of public investment in total investment dropped from 67 per cent in the early 1970s to 57 per cent by the late 1970s (Institut National de la Statistique) with the creation of an industrial bourgeoisie. We argue that this historical performance is one reason why Tunisia’s economic reform program under the IMF and World Bank was more successful than those of our other three countries, that is, much of the hard work had already been accomplished before the Washington multilaterals launched their programs.

3. The stabilization phase of reform

With the exception of Jordan, all of our countries embarked on an extremely successful stabilization program under the IMF, which reduced fiscal and current account deficits and brought down inflation. Both the World Bank and the IMF extensively praised this stabilization success in Tunisia, Egypt and Morocco. All three countries suffered an initial but short contraction in growth under their stabilization program, but growth quickly recovered.

In Egypt the IMF program represented a concerted stabilization effort with four classic pillars 1) establishing external and internal balance, 2) pursuing nominal anchors to achieve disinflation, 3) currency reforms to accelerate exchange stabilisation and 4) structural reforms to remove price distortions. The keystone for establishing the macro fundamentals was fiscal stabilization while an exchange rate anchor accompanied by strict monetary and credit targets was chosen as the nominal anchor rather than the statist approach of wage and price controls. Immediate reforms included removal of interest rate ceilings, liberalizing the exchange rate, and introducing a new sales tax. Although in the first few years fiscal and monetary reforms constituted the core of the program, structural reforms of the real sector, guided by the World Bank, were also seen as an important part of the medium term program. These included reducing the size of the public sector through privatization, removing controls over investment, eliminating most tariffs on imports and generally liberalizing the trade regime. Simultaneously market based pricing was introduced in the manufacturing sector, and other policies included raising energy and transport prices, reducing and targeting consumer subsidies, and generally encouraging private sector activity, including in the important financial sector (Omran 2002, Ash 1993, Youssef 1996).

One of the greatest successes of Egypt’s stabilization program was the abrupt turn-around in the fiscal position. By 1996–7, the overall government deficit declined to 2 per cent of GDP and the government became a net saver. This increase in public sector savings is indicative of the strength of the
stabilization effort. Despite the government’s insistence on gradualism, the bulk of this ‘remarkable adjustment effort’ (IMF 1997 p.8) took place in just one year between fiscal year 1990–1 and 1991–2. The reduction in the fiscal deficit was achieved through a combination of revenue increase, which accounted for 42 per cent of the deficit reduction and expenditure reduction, which accounted for 58 per cent of the improvement. Although the IMF has hailed the Egyptian stabilization program as a great success, much of this success was due to the massive debt relief received by Egypt in return for supporting the Allies in the first Gulf War. The massive inflows also help explain why World Bank conditionality in Egypt was fairly weak, at least until the big privatization efforts of the Ganzouri government, implemented to ensure receipt of another promised tranche of debt relief.

In Tunisia, the IMF program focused on stabilizing the macro economy by reducing expenditure to bring down inflation and close the current account deficit (Harrigan and El-Said 2009a p.105-147, IMF 1999, Pfeifer 1999). This was done using fiscal, monetary and exchange rate polices. These policies were largely successful. Inflation, the budget deficit and the current account deficit were all permanently reduced and growth increased. Aiming at stabilizing Tunisia’s external account and at reorienting the role of the state in the economy, the IMF stabilization reform started with the devaluation of the Tunisian Dinar in August 1986. In partnership with the World Bank, the fiscal policy component of the IMF reform package tackled the government budget through three main channels: a tax reform, privatization of non-strategic State Owned Enterprises (SOE), and reduction of public investment and consumer subsidies. In 1987, the government implemented tighter monetary policy. It moved away from direct control of credit and monetary expansion to use instead refinance facilities, with the inclusion of Treasury Bills in 1989. The latter led to a sharp decline in the growth of money supply (Harrigan and El-Said 2009a Figure 11). Non-preferential interest rates were liberalized and interest rate controls removed (World Bank 1995). Monetary policy remained prudent and in line with fiscal policy.

The stabilization program led to a recovery in domestic saving which moved from 15.5 per cent of GDP in 1986 to 22 per cent of GDP in 1992–1993. Overall, the stabilization program in Tunisia was a relative success leading to a significant degree of macro stability, restoration of a sustainable balance of payments and government budget, and no slump in the growth rate (in part thanks to a surge in EU demand for Tunisia’s exports) (Harrigan and El-Said 2009a Table 11). There was an initial decrease in the growth rate between 1987 and 1988, but it quickly recovered by 1989. During that period, the exchange rate remained stable, while inflation dropped from 16 per cent in 1982 to an annual average of 7.1 per cent in 1986–90. The current account deficit also decreased (but with strong fluctuations in between). The latter combined with prudent debt
management led to regular improvement in external debt. The stabilization program in Tunisia has been judged a success by both the IMF and the World Bank:

“Executive Directors commended the authorities for Tunisia’s steady and strong growth performance, achieved in a context of low inflation and external stability. Directors noted that the authorities’ prudent and consistent macroeconomic policy management had been a key factor in achieving this performance.”

(IMF 1999 p.1)

The IMF responded to the Moroccan crisis with a series of seven Standby Loans between 1983 and 1992. In the initial phase of Fund operations, 1983–6, the emphasis was placed on stabilizing the economy through contractionary fiscal and monetary measures and a major devaluation (Harrigan and El-Said 2009a p. 148-181). The Fund insisted on substantial exchange rate devaluation followed by the management of a flexible exchange regime as a way of bringing the current account deficit under control. Interest rates were increased to help mobilize domestic savings and encourage worker remittances. On the demand side, the Fund insisted on much tighter fiscal discipline than previously, with the target deficit set at 7 per cent of GDP compared to 14 per cent in 1982. Measures to reduce expenditures on consumption subsidies were introduced and food subsidies fell with the result that sugar, oil and flour prices went up by 30 per cent, 52 per cent and 87 per cent respectively. Other food subsidies on butter, milk, high-quality flour were fully eliminated. Transfers to parastatals were limited, as was public sector recruitment, and civil service wages were frozen. Tight limits were placed on Treasury domestic and foreign borrowing and targets set for the elimination of government payment arrears while reducing the rate of domestic credit expansion. Public investment was also slashed drastically. On the revenue raising front, the Fund continued to allow the use of trade taxes that, as will be argued, led to a degree of conflict with the World Bank over trade liberalization, and a VAT tax reform was introduced in 1986. The Fund also facilitated the mobilization of external finance and debt rescheduling (Pfeifer 1999).

Economic performance in Morocco between 1983 and 1989 appeared to respond to the stabilization program. The fiscal and current account deficit both fell, with the fiscal deficit cut in half as a share of GDP from 9.7 per cent to 4.5 per cent and the current account in surplus by 2.3 per cent of GDP in 1989. Inflation fell from 10.5 per cent to 2.3 per cent, budgetary transfers and subsidies were reduced, and after two years of stagnation there was a recovery in economic growth which registered an average of 4.9 per cent per annum. Morocco’s fiscal
deficit reduction received substantial praise from the IMF, and the World Bank claimed that the build-up in international reserves and the avoidance of high inflation and recession ‘are truly major achievements, especially when compared with the experience of other highly indebted countries’ (World Bank 1997 p.77).

Only Jordan failed initially to stabilize her economy and instead experienced both a currency and banking crisis (Harrigan and El-Said 2009a p. 75-104). This is because Jordan, unlike the other three countries, did not pursue a classic stabilization program. Instead, both the IMF and World Bank pushed for rapid capital account, exchange regime and financial sector liberalization. The capital account was liberalized and the peg to the US dollar abandoned, and interest rates were fully liberalized. The contrast between Jordan and our other three countries clearly illustrates the need for correct timing and gradualism in any stabilization effort. Jordan’s reforms were both rapid and came at an inappropriate time when confidence in the economy and regime was low (Harrigan and El-Said 2006). Palestinians, who controlled the bulk of the economy’s wealth, felt insecure about their future in Jordan following King Hussein’s severing of ties with the West Bank (Satloff 1990 p.59). Palestinian insecurity in the face of capital account and exchange rate liberalization prompted a run on the dinar and massive capital flight, while financial sector liberalization prompted rash competition amongst banks and the build-up of weak loan portfolios. Within a year the currency had lost around 50 per cent of its value, the banking sector was in turmoil and growth was negative at –13.5 per cent in 1989 (IMF 1991). By contrast, our other three countries pursued gradual stabilization, which did not involved full capital account liberalization.

Despite Tunisia’s, Morocco’s and Egypt’s remarkable success with stabilization in the first part of their reform programs, Morocco and Egypt failed to build upon this with a sustained structural adjustment reform effort on the supply side of the economy. Under the auspices of the World Bank all four of our countries were encouraged to pursue a fairly orthodox supply side reform program designed to boost export-led growth. Reforms consisted of trade liberalization; financial sector liberalization; price liberalization, particularly subsidy removal; privatization; and deregulation of the economy. Some of these reforms overlapped with those advocated by the IMF and some were unique to the World Bank.

In Morocco, there were elements of conflict between the IMF’s demand side program aimed at reducing fiscal and current account imbalances by curbing demand and the World Bank’s supply side program aimed at generating increased economic efficiency and export led growth (Harrigan and El-Said 2009a p.146-181, World Bank 1997, World Bank 2006 p.83-4). Fiscal deficit reduction under the IMF took precedence over the World Bank’s attempt to reduce tariffs to stimulate export led growth via trade liberalization (World Bank 1990, Hamdouch
1990, Karshenas 1994). Tariff reduction stalled because of the negative effect loss of tariff revenue had on the government budget. Likewise, the Bank’s desire for a competitive devaluation in Morocco to stimulate exports was blocked by the Fund who believed the exchange rate was at its equilibrium level. Finally, in Morocco the Bank’s desire in later years to pursue a more activist industrial strategy by picking winners and offering tax breaks and other incentives was opposed by the IMF due to the effect it would have on fiscal performance. In Egypt, the success of the stabilization program actually undermined elements of the structural adjustment program. Stabilization, including a stable exchange rate, along with a degree of capital account opening, led to a surge in capital inflows between 1992 and 1997 following renewed confidence in the economy. This capital inflow caused real exchange rate appreciation, which undermined the country’s export performance.

In all four countries, the successful stabilization came at the cost of a sharp decline in public sector investment (Pfeifer 1999). In Egypt, the stabilization program with tight fiscal and monetary policy led to a sharp decline in public sector investment (Harrigan and El-Said 2009a p.36-74). Public investment in non-financial state enterprises fell from 4 per cent in GDP in 1991 to 1.5 per cent between 1992 and 1994. In Morocco, public sector investment fell from 13 per cent of GDP in 1982 to 4 per cent in 1986, the lowest level since 1970. In Jordan, the burden of fiscal austerity also fell on public sector investment, which fell to 6 per cent of GDP by 1999. In Tunisia, much of the fiscal adjustment was achieved by government expenditure cuts, which fell heavily on investment, especially loans and capital investment in state owned enterprises. One of us has shown elsewhere in our work (Mosley, Harrigan and Toye 1995 volume I) that IMF stabilization programs tend to have a large adverse effect on public sector investment, which undermines the Bank’s attempt to stimulate the supply side of the economy with price incentives for export-led growth. This is particularly true in low and lower middle-income countries, such as our country sample, where public sector investment can have a crowding in effect on private sector investment and is an important stimulus to growth.

The decline in public sector investment that was experienced in all four countries in the initial stage of stabilization meant that the programs had the ‘priciest and state minimalist’ characteristics identified by Lipton (1987). This had particularly negative effects in the agricultural sector of Morocco and Jordan where pricism concentrated on removing input subsidies and adjusting upwards some producer prices whilst failing to boost public sector investment in the sector in a manner necessary for poor farmers to respond to the new incentive structure. Agricultural subsidy removal was driven as much by fiscal considerations as by efficiency considerations.
In short, we can conclude that in all of our countries, the IMF has placed excessive emphasis on fiscal deficit reduction as a way of curing the current account gap, rather than increasing output for this purpose as the Bank had desired. This has forced the Bank to conclude that stabilization under the IMF is necessary but not sufficient to generate growth:

“Maintaining overall macroeconomic equilibrium is a clear priority, but equilibrium alone will not provide sufficient push to drive the economy to its full growth potential.”
(World Bank 2005 p.7)

4. The sources of growth

Although we have argued that stabilization has dominated over structural reform, all four of our countries have experienced phases of growth during their reform periods. Morocco experienced growth at an annual average of 4.91 per cent from 1986–91 and 4.72 per cent from 2000–2004, Jordan experienced a growth rate of 8.6 per cent from 1992–95 and 5.61 per cent from 2000–2004, Egypt’s growth was 4.91 per cent from 1997–2001 and Tunisia’s growth was 5.14 per cent from 1996–2004. Tables 2-5 put these growth rates into context by showing period growth rates for each country during the period covered by this paper i.e. 1983-2004. A closer analysis of the sources of growth during the reform periods casts doubt on the sustainability of growth performance, and the extent to which it was due to the economic reform program.

Table 2: Period Growth Rates Jordan

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<tbody>
<tr>
<td>3.69</td>
<td>-3.55</td>
<td>8.62</td>
<td>2.95</td>
<td>5.61</td>
</tr>
</tbody>
</table>

Source: World Development Indicators Online

Table 3: Period Growth Rates Morocco

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<tbody>
<tr>
<td>3.37</td>
<td>4.91</td>
<td>2.12</td>
<td>4.72</td>
</tr>
</tbody>
</table>

Source: World Development Indicators Online
Table 4: Period Growth Rates Egypt

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<tr>
<td></td>
<td>5.15</td>
<td>3.67</td>
<td>4.91</td>
<td>3.23</td>
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</table>

Source: World Development Indicators Online

Table 5: Period Growth Rates Tunisia

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<tbody>
<tr>
<td></td>
<td>5.36</td>
<td>3.45</td>
<td>5.14</td>
<td></td>
</tr>
</tbody>
</table>

Source: World Development Indicators Online

4a. Extensive versus intensive growth

One would expect growth generated by successful World Bank structural adjustment programs to take the form of productivity gains since structural reforms such as trade liberalization, removing price distortions and privatization are designed to make the economy more efficient. However, with the exception of Tunisia, growth in most cases was extensive (due to factor accumulation), rather than intensive (due to productivity gains).

We conducted our own production function analysis for Jordan to see whether the reform period had been accompanied by improvements in productivity. Firstly, it is clear from Figure 1 that Jordan’s reform period was not associated with improved labor productivity – there was a significant improvement in labor productivity in the 1976–80 phase, stagnation in 1981–7, dramatic decline in the economic crisis period 1988–92 and a stubborn persistence of low productivity in the post-1992 period. It is difficult to know whether low labor productivity is related to the IMF and World Bank reform program or not, but it is quite clear that the reform program has not been able to reverse the declining trend which took place in the crisis and shock period of 1988–92.
In addition, we estimate a production function for Jordan using annual data from 1976 to 2003. We estimate four equations, which are given as Models 1-4 below. Variable definitions and sources are also given below. A summary of the results for the four models is given in Table 6 below.

Model specifications:

(1) \( \text{yt} = b_0 + b_1 \text{dlnKt} + b_2 \text{dlnLt} \) (see column 1 in table below)
(2) \( \text{yt} = b_0 + b_1 \text{dlnKt} + b_2 \text{dlnLt} + b_3 \text{d92} \) (see column 2 below)
(3) \( \text{yt} = b_0 + b_1 \text{dlnKt} + b_2 \text{dlnLt} + b_3 \text{d92}\text{dlnLt} \) (see column 3 below)
(4) \( \text{yt} = b_0 + b_1 \text{dlnKt} + b_2 \text{dlnLt} + b_3 \text{d92}\text{dlnKt} \) (see column 4 below)

Variable definitions and data source:
The data was taken from World Development Indicators online database in 2004 and is annually recorded from 1976 to 2003. Variables in the equations (apart from d92) are constructed using the following three data series:

1. Gross fixed capital formation (% of GDP)
2. Labor force, total
3. GDP (constant 1995 US$)

\( \text{yt}=\text{dln (GDP)}*100, \text{ i.e. GDP growth} \)
\( \text{dlnLt}=\text{dln (Labor force)}*100, \text{ i.e. Labor growth} \)
\( \text{dlnKt}=\text{Gross fixed capital formation (% of GDP), i.e. Capital growth} \)
\( \text{d92} – \text{a time dummy variable (0, for years 1976-1991; 1, years 1992 - 2003)} \)
\( \text{d92}\text{dlnLt} – \text{interaction term between time dummy and labour growth} \)
\( \text{d92}\text{dlnKt} – \text{interaction term between time dummy and capital growth} \)

We look at whether the post-1992 reform program caused a structural change to the Jordan economy. A dummy variable is added into the regression, which takes the value of 0 before 1992 and 1 thereafter. The results are presented in column 3, Table 6 (model 2). As can be seen, the coefficient on the dummy variable d92 is not statistically significant.
We also investigate whether elasticities to capital and labor are different in the periods before and after reform. This is done by intruding an interaction term of d92 with DlnLt and DlnKt. The results are reported in columns 4 and 5, Table 6 (models 3 and 4). The interaction terms are both statistically insignificant. Both results in columns 3 and 4 indicate that there is no structural break in the Jordanian economy. In other words, the reform program did not generate any significant change in labor productivity despite the numerous structural reforms undertaken.
Table 6: Regression Results on Growth of Labor Productivity: Jordan

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>Dependent Variable: $\Delta \ln y_t$</th>
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<tbody>
<tr>
<td></td>
<td>Model 1</td>
</tr>
<tr>
<td>C</td>
<td>-0.0255</td>
</tr>
<tr>
<td></td>
<td>(0.0539)</td>
</tr>
<tr>
<td>$\Delta \ln L_t$</td>
<td>-1.5001</td>
</tr>
<tr>
<td></td>
<td>(0.5123)**</td>
</tr>
<tr>
<td>$\Delta \ln K_t$</td>
<td>0.0036</td>
</tr>
<tr>
<td></td>
<td>(0.0016)**</td>
</tr>
<tr>
<td>D92</td>
<td>0.0035</td>
</tr>
<tr>
<td></td>
<td>(0.026)</td>
</tr>
<tr>
<td>$\Delta \ln L_t*d92$</td>
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<td>$\Delta \ln K_t*d92$</td>
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<td></td>
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<tr>
<td>Adjusted $R^2$</td>
<td>0.3754</td>
</tr>
</tbody>
</table>

Notes: Standard Errors are in bracket. *** and ** indicate significant at the 1% and 5% level respectively.

Because all dummy variables and interaction terms with dummy variables are statistically insignificant, the total factor productivity (TFP) growth is obtained as the residual from Model 1. The TFP growth series are presented in Figure 2. TFP growth was very volatile before 1992 and much smoother afterwards. However, there is not much difference between the averages for the two periods, which are not significantly different from zero. In other words, long-run TFP growth is non-existent both for the entire period as a whole and for the two sub-periods. Clearly, therefore, the post-1992 reform period was not associated with the type of intensive growth we would expect from a reform program designed to successfully increase economic efficiency and TFP. To sum up, despite 15 years of economic reform and liberalization designed to enhance efficiency and productivity, there is no evidence that the productivity of labor or total factor productivity has increased in Jordan since the reform.
Our analysis of the sources of growth in Jordan is supported by two studies that were carried out by the World Bank in 1994 and 2001, which found that:

“most of the economic growth in the 1990s could be accounted for by the expansion of capital (both physical and human) and the labor force. This implied that total factor productivity (TFP) … had hardly increased. In fact, the evidence for the second half of the 1990s pointed to unchanged TFP, which called into question the competitiveness of the Jordanian economy”.
(quoted in IMF 2004 p.18).

We did not conduct production function analysis for our other three countries, but other independent research casts light on the relationship between structural adjustment and productivity growth. Research has shown that Morocco’s recent growth is not due to productivity gains but rather to factor accumulation, with capital contributing more than labor while a growth accounting model shows that productivity growth, as measured by total factor productivity growth, has not contributed to growth in the expansionary period of 1998–2004 (World Bank 2006 p.12). In Egypt, the study by Abdellatif (2003) using production function analysis showed that there was no recorded total factor productivity growth in the manufacturing sector during the reform period. In addition, growth in Egypt during the stabilization period of 1991 to 1996 was
largely due to the uptake of excess capacity whilst growth from 1997–2001 was largely due to capital accumulation.

Tunisia is an exception in our four countries in that the production function analysis of Nabli et al (2004) shows productivity improvement during the reform period. The period 1986–92 witnessed total factor productivity growth at an annual average of 1.8 per cent (ibid) whilst labor productivity grew on average by 2.1 per cent in the 1986–2004 period (See Figure 3).

![Figure 3 Labor Productivity Tunisia](image)

Source: Harrigan and El-Said 2009a, Figure 11, p. 129

The above analysis suggests that with the exception of Tunisia, the spurts of growth our four economies experienced during their reform period were not due to productivity growth but rather took the form of extensive growth due to factor accumulation rather than being of an intensive nature.

4b. Tradables versus non-tradables growth

Another feature of some of the growth periods in our four economies was the fact that growth was driven by domestic demand and concentrated in the non-tradable sectors rather than being export-led, as one would expect from a successful World Bank structural adjustment program. This was particularly true for Jordan and Egypt (Harrigan and El-Said 2009a). The 8.6 per cent growth spurt in Jordan between 1992–5 was prompted by returnee labor from the Gulf along with their savings as a result of Jordan’s initial stance in the first Gulf War (Ibid p.74-104, Harrigan and El-Said 2006). The growth this stimulated was largely in the non-
tradable sectors especially in construction and real estate. Indeed, the injection of returnee savings along with large aid inflows after Jordan changed alliance towards the Allies in 1992 created Dutch Disease effects with a boom in the non-tradable sectors. By contrast, growth since 2004 in Jordan has been partly in the non-tradable sector but also in the export sector. The latter, however, has been concentrated in the enclave export processing zones known as the Qualified Industrial Zones (QIZs).

In Egypt, the respectable growth of 5.35 per cent from 1997–2001 was mainly driven by domestic demand and not exports (Harrigan and El-Said 2009a p.36-74). In fact, during the 1990s Egypt became a more closed economy in terms of exports as a share of GDP, which fell from around 28 per cent in 1990–1 to 17 per cent in 1990–2000 while the share of manufactured exports to GDP also fell (Refaat 1999). The implication of this is that the growth experienced in Egypt was largely concentrated in the non-tradable sectors with the service sector the largest contributor to growth in the 1990s and the 1995–2000 period has been referred to as a construction boom (World Bank 2001 p.2). As in Jordan, the inflow of capital, in this case portfolio flows and aid caused upward pressure on the real exchange rate and Dutch Disease effects. According to the World Bank, a decomposition of economic growth in the second half of the 1990s indicates that some three quarters of this growth was a consequence of growth in domestic demand (World Bank 2001 p.17).

In contrast to Egypt and Jordan, both Morocco and Tunisia experienced periods of strong export-led growth during their reform program. Morocco’s 1985–90 growth period was stimulated by trade liberalization and competitive exchange rate depreciation which resulted in growth of manufactured exports, with the share of merchandise exports (fertiliser, phosphoric acid, textiles, clothing, and footwear, as well as tourism) increasing from 16 per cent in 1980 to almost 40 per cent in 1990. Agricultural growth was also strong in the second half of the 1980s partly due to good weather and partly due to the effects of the reform effort (Harrigan and El-Said 2009a p. 148-181). However, this growth was not sustained into the 1990s. Real exchange rate appreciation, reversal of trade liberalization and poor weather led to a 2.47 per cent annual average growth rate during the 1990s – one of the lowest in the MENA region. More recently, since 1998, Morocco has experienced another moderate growth period. The main driver of this was tourism, which became the principal foreign currency earner in 2005 followed by migrant remittances. Agriculture also did well due to favorable weather. There was little growth however in manufactured exports, although service sector exports grew rapidly.

Of all of our countries, Tunisia has experienced the most success with export led growth and export diversification. The structural transformation of the Tunisian economy away from reliance on oil, gas and phosphates has been truly
remarkable. Between the mid 1980s and 2004, Tunisia sustained an annual average growth rate of 4.5 per cent, much of it led by the export sector, becoming one of the fastest growing economies in the MENA region during this period (Harrigan and El-Said 2009a p. 105-147). By 2006, only 25 per cent of export revenues came from primary resources whilst 27 per cent came from textile and clothing, 18 per cent from electrical and mechanical goods and 17 per cent from tourism (ibid).

4c. The effects of reform versus exogenous factors

In addition to the sources of growth between extensive and intensive and tradables versus non-tradables, we also look at the sources of growth in our four countries in terms of growth generated by reform versus growth generated by favorable external factors. We find in a number of cases that the latter had an important role to play in certain periods of growth.

Jordan’s two growth spurts in 1992–5 and 2000–4 were partly stimulated by inflows of returnee migrants and Iraqi migrants and their savings as well as by large geopolitically motivated inflows of foreign aid (Harrigan and El-Said 2009a and 2006). Morocco’s boom in the latter half of the 1980s was also partly the result of high levels of aid inflows, extensive debt rescheduling, good weather producing a 17 per cent growth rate in agriculture in 1985–6, low oil import prices and a decline in the value of the dollar. The Bank’s failure to pick up on the fact that much of Morocco’s success in the latter part of the 1980s was due to external factors as well as a successful stabilization program resulted in the onset of complacency on the part of the Bank.

A massive debt forgiveness program in the first part of the 1990s as well as huge influxes of aid (Roads 1997) boosted Egypt’s reform efforts. This helped shore up the balance of payments and foreign reserves. The reserve build-up enabled Egypt to stabilize her economy without a currency or financial sector crisis. Without the debt forgiveness package and aid inflows Egypt would have needed much tighter fiscal and monetary policy, which would have been likely to induce deep recession. In addition, unlike Mexico and some of the East Asian countries, Egypt’s healthy level of reserves enabled her to protect her pegged exchange rate and the healthy ratio of reserves to private speculative capital inflows enabled her to weather any change in investor confidence without a currency crisis.

5. The Tunisian exception

Economic success in Tunisia can be seen from the healthy rate of GDP growth averaging 5.14 per cent between 1996-2004 (See Table 5) and by the near
continuous growth in labor productivity from 1965-2004 (See Figure 3). However, even in Tunisia it can be argued that reform under the IMF and World Bank did not appear to be the major factor explaining the economic success. In work elsewhere (Harrigan and El-Said 2009a pp.131-134) we estimated an endogenous growth model from 1971 to 2003 and found that the dummies representing the reform program did not seem to be significant. Rather than structural reform alone being the main driver of the Tunisian performance, a complex interplay of political, historical and economic factors help explain the Tunisian success. These factors include the fact that structural transformation had started and become embedded long before the IMF and World Bank reform programs were launched, the fact that Tunisia can be characterized as a strong developmental state with characteristics similar to the developmental states of East Asia (Chang 2003, Wade 1990), the fact that the reform program was implemented gradually, and the fact that development often took the form of state-led development in contrast to the IMF and World Bank model of market liberalization.

Indeed, the strongest policy lessons of our four country comparative study emerge when we compare Tunisia to our other three countries. The strong Tunisian state and bureaucracy continued to intervene in the economy to direct the reform effort. Not unlike the East Asian economies, the state had an active industrial policy, which involved picking and cultivating winning industries and then selling them off to the private sector. This was subsequently facilitated by the EU Mise à Niveau program (Murphy 2006) which offered a comprehensive set of incentives to cultivate specific manufacturing and service activities to ready them for the increasing competition under the EU-Tunisia Association Agreement and the ending of the Multi-Fibre Agreement. This involved upgrading managerial and organizational structure, innovation, training, technology distribution, marketing, research and development, and improved infrastructure. The cultivation of a modern industrial base both before and during the IMF and World Bank reform programs is a major reason for the Tunisian success. In addition, Tunisia continued to display elements of state-led development. The centralized state interacted with the private sector and intervened within the economic structure to promote development. The Tunisian state has planned the development of the economy from the start, using its control over society and the economy together with the promotion of the private sector to reach its developmental (and political) objectives. For example, despite a degree of financial sector liberalization, preferential interest rates were used to direct investment to the agricultural sector during the IMF and World Bank reform period, interest rates were not truly liberalized and the government continued to dominate the banking sector. Nabli et al (2005) have shown that the financial sector displays a strong export bias with credit allocation being directed in favor
of tradable activities especially those that the government has identified as having a comparative advantage. This strategic picking of winners is very different from IMF and World Bank policies, which normally advocate a trade neutral regime.

Another strand of Tunisia’s industrial policy was to retain price controls over key inputs such as public utilities, cement, water, electricity, port fees, cereal based products and chemicals. Likewise, when subsidy removal and poor weather adversely affected the agricultural sector, reforms were reversed and incentives offered to the sector. Strategic sectors of the economy were also protected from the limited privatization program and overall privatization has not greatly affected the government’s control over the production of goods and services. Another distinct feature of the Tunisian economy is the fact that there is still a relatively high level of protection for domestic industry. Despite a degree of trade liberalization under the World Bank and IMF program, Tunisia remains a fairly heavily protected economy in terms of policy indicators such as tariff levels compared to other middle income economies such as Mauritius and other MENA countries such as Jordan, Egypt and Algeria (although Morocco has similarly high tariffs). Yet despite this Tunisia is one of the region’s most open economies in terms of outcome indicators such as the ratio of exports and imports to GDP. This suggests that orthodox policies, such as tariff reduction may not be the most effective way of achieving openness in terms of outcomes such as exports and imports as a ratio of GDP. The Bank itself appears to be accepting such a position, at least in terms of its work in Tunisia and Morocco. In the latter, the Bank has pointed to empirical work, which shows that growth accelerations are only weakly related to major economic reforms (Hausmann, Pritchett and Rodrik 2004) and are much more responsive to specific interventions that relax the binding constraints to growth. In this context, the Bank has started to advocate a more interventionist state led approach in Morocco (World Bank 2006) not dissimilar to that pursued throughout by Tunisia. Drawing on the experience of the East Asian economies and Chile the Bank has argued in the context of Morocco:

“These and other cases amply demonstrate the importance of fundamental, especially macroeconomic stability and a broadly market orientated set of policies. They also demonstrate their limits. In each case, active intervention was needed from the state to promote exports and encourage savings and investment. Product diversification was rarely a purely market-driven process in these experiences. Rather it was almost always stimulated and supported by well defined strategies and public policies of public-private collaboration”.

(World Bank 2006 p. 75)
The recent Bank move to the new Development Policy Loans (DPLs) in the MENA region (World Bank 2010) which have a focus on institutional and micro level factors also indicates that the Bank is coming round to the view that there is no high and rapid payoff to general policies such as trade liberalization and privatization, and that behind the border reforms, which relax specific constraints are also needed. However, as we have seen from the Moroccan case study, this remains an area of tension between the IMF and the Bank with the former arguing against activist state policies, which are fiscally expensive.

6. Stabilization versus structural adjustment

The above analysis forces us to confront the question of why IMF programs have been relatively successful in our MENA countries whilst structural adjustment supply side policies under the auspices of the World Bank have been much less successful. One possible answer is that IMF policies, which focus on the demand side of the economy, are relatively easy and quick to implement while policies of the Bank aimed at boosting efficiency and supply are much harder medium-term policies. When initially turning to the Bank and the Fund for help, all four of our countries were in a state of extreme economic distress, especially in terms of debt servicing. Governments knew that they had little choice but to quickly implement the harsh IMF demand side policies if they were to be able to access increased finance and benefit from debt rescheduling. Once this had been done and fiscal and current account deficits brought under control, debt rescheduled and foreign reserves replenished there was little incentive to progress to World Bank supply side reforms such as full-scale trade liberalization, privatization, and financial sector reform.

In addition, as the economies recovered from their crisis and confidence was renewed the Bank lost leverage. This was most evident in Egypt where, from the outset, Bank leverage was weak due to the fact that Bank funds were tiny compared to the massive inflow of aid from the US (Harrigan and El-Said 2009a Figure 4, World Bank 2000). In addition, the recovery of confidence under stabilization brought a large influx of foreign finance and investment so lessening the need for relatively expensive IBRD funds from the Bank. Likewise, in Morocco, the economic recovery brought with it a sharp decline in Bank leverage over policy reform. Initially Bank leverage was high, with Bank inflows accounting for 20 per cent of all net external financial flows into the country and 40 per cent of these Bank funds devoted to adjustment loans. As a result of this and the strong initial position of the Bank due to the large number of studies it had carried out with the government prior to the program, the pace of structural reform was fairly rapid in the initial years. However, by the end of the 1980s the effectiveness of Bank dialogue and leverage had declined in Morocco. This was
partly due to Bank complacency but also due to the fact that the economic recovery brought with it other sources of funds including high levels of aid from the EU and France and more recently large inflows of FDI, migrant remittances and Gulf funds such that the Bank now accounts for only a small fraction of net inflows. The renewed confidence in the economy also meant that Morocco could access private finance at cheaper rates such that the spread between the cost of private funds and the cost of IBRD funds narrowed considerably. Also in Morocco as in other MENA countries, the Bank was to some extent the victim of its own success in that privatization boosted inflows to governments’ budgets and so reduced the need for Bank funds. The one area in Morocco where the Bank retained leverage was over the significant financial sector reforms of 1990-91.

Low levels of Bank leverage not only help to explain the lackluster pace of structural reform, especially in Egypt, but also explains why in both Egypt and Morocco the Bank has recast itself as a ‘knowledge Bank’ providing a lot of analytic and advisory work in response to government requests with no finance attached. The lack of Bank leverage and the disappointing pace of structural reform in all four countries also explain why in Egypt and Morocco the Bank has shifted to a new lending modality, namely, Development Policy Loans (DPLs). Such loans are more flexible than the old Structural and Sectoral Adjustment Loans (SALs and SECALs) and aim to support reforms initiated by the government rather than trying to use conditionality to enforce reform upon reluctant governments. This fits well with empirical work (Killick 1998) which suggests that conditionality is a ‘toothless tiger’ in the face of resistant governments. DPLs also focus more on institutional and micro level constraints, such as ‘behind the border’ constraints rather than pushing for rapid and full-scale trade liberalization or privatization.

7. Conclusion

We have argued that unorthodox policies explain the Tunisian success and that periods of growth in our other three countries were often extensive growth located in the non-tradeable sector and partly stimulated by external factors rather than the reform process. However, we do not wish to deny that many of the reforms introduced by both the IMF and the World Bank in our four countries have had positive effects. Certainly, reform was needed when each economy lurched into economic crisis during the 1980s. However, these reforms have not succeeded in generating self-sustaining growth of the type needed to solve pressing socio-economic problems. All four of our economies, including Tunisia, which is generally regarded as a success story in the MENA region, still face difficult challenges ahead. The greatest challenge is to absorb an ever-growing labor force in order to bring down unemployment. In most cases, this will require a sustained
growth rate of over 7 per cent per annum (World Bank 2003) – a performance not even achieved by Tunisia so far. In order to generate such high levels of growth there is a need to mobilize domestic savings and private investment. Even in Tunisia, while the macro fundamentals are right, the country continues to suffer from low levels of private investment, which is currently only 13.5 per cent of GDP (these low levels of investment may be partly due to Ben Ali’s kleptocracy, which has hampered the investment effort). Unless unemployment is brought down, especially the very high levels of youth unemployment, our four economies are likely to experience growing social unrest. We explore the issue of social and political unrest in more detail in our book Economic Liberalisation, Social Capital and Islamic Welfare Provision (Harrigan and El-Said 2009b).

References


Institut National de la Statistique. INS (various years). Statistical Yearbook, Government of Tunisia.


