The Syrian Economy: An Assessment of its Macroeconomic and Financial Development, 1974-1999

Ali A. Bolbol

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Abstract

The paper assesses the performance of the Syrian macroeconomy over the 1974-1999 period. It first looks at the reform policies that were applied to the economy, and then studies the patterns of Syria's economic growth, inflation, credit expansion, production structure and international trade. It also provides an empirical evaluation of Syria's recent attempt at financial liberalization using the model of "financial repression". The main conclusion is that Syria's reform agenda is immense, and should involve real sector reforms in conjunction with the financial reforms being contemplated at present, if the economy were to take full advantage of its diversified economic base and growth potential.

الاقتصاد السوري : تقييم التطورات المالية والاقتصادية الكلية

للفترة 1974 – 1999

علي بلبل

ملخص

تقوم الورقة بتقييم الأداء الاقتصادي السوري للفترة 1974 – 1000 . تنظر الورقة في البداية إلى السياسات الإصلاحية التي طبقت على الاقتصاد، ثم تدرس أنماط النمو في سوريا، والتضخم وتوسيع الائتمان والتركيبة الانتاجية والتجارة الخارجية. كما تغطي الورقة تقييماً أمبيرقياً لأحدث محاولة سورية للتحرير المالي، باستخدام نموذج " الكبح المالي " . إن الاستنتاج الرئيسي هو أن برنامج الاصلاح السوري هائل، ويجب أن يستخدم اصلاحات القطاع الحقيقي بالترافق مع الاصلاحات المالية تحت الدرس في الوقت الحاضر، ذلك إذا أريد للاقتصاد الإفادة بالكامل من قاعدته الاقتصادية المتنوعة وإمكانية النمو.

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Introduction

If one is told of an economy with a diversified economic base and an adult literacy rate of more than 70% and an average life expectancy of close to 70 years, but whose GDP growth rate had averaged an annual rate of 6.5% between 1970-84 and only half of that between 1985-99, one may be tempted to conclude that the economy must be ex-socialist and in transition. It must be remembered that there is an "entry price" to the market economy.[1] However, if one is informed that it is the Syrian economy being referred to here, then one is left puzzled. Syria has never been truly socialist. Private agriculture and private trade and commerce has always existed in the economy, nor has it been on a transitional and structural adjustment path either. So what is going on? And where has all the growth gone?

The aim of this paper is to answer these concerns by tracing the developments in the Syrian economy over the last twenty-five years that lead to a better understanding of its current performance and assess its future prospects. The analysis begins with a review of Syria's main economic features and reform initiatives and proceeds to present an investigation into the economy's macroeconomic developments and its production and trade profile and capabilities. The objective of this paper is to provide an empirical treatment of issues relating to Syria's system of "financial repression".

Syria's Economic Policy Initiatives

The perplexing picture of the Syrian economy just alluded to may be clarified by the analysis of two issues. The first relates to the nature of economic growth in Syria and the second relates to the kind of reform – or lack of it – that was attempted on the Syrian economy.[2]

The diversified structure of the Syrian economy in 1998, when agriculture as a percentage of GDP constituted 29%, industry 26%, and services 45% , masks the fact that the economy has mostly been powered by rent-like resources. Between 1974-84, industrialization in Syria was state-led and import substituting. As importantly, it was partly financed by Arab aid that averaged close to $700 million per year. It was also coupled by a consumption boom driven by rising current public expenditures and labor remittances which averaged $600 million annually during that period. But when financing of the resource gap all but dried up, by 1987, Arab aid came to an end and labor remittances were more than halved.[3] Import substitution barely graduated to the second level so as to generate enough exports and foreign exchange. Growth started to falter and a severe foreign exchange crisis hit the economy. It took a combination of new Arab aid (which Syria received in the amount of $1.5 billion in 1991), favorable oil terms of trade (since Syria became a net exporter of oil in 1987), and the limited expansion of mostly agricultural exports to resume growth in the 1990s. This was however characterized by a slower rate than the 1974-84 period and with a visible slowdown in 1997-99. This is of course a familiar story to any student of the Syrian economy. As will become clearer in the discussions to follow, it implies a relevant and important point, i.e. the diversified structure of the Syrian economy holds the promise for a stronger and sustained growth if a suitable package of economic policies and structural adjustments is designed and implemented. Admittedly however, this is not an easy task. Put

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(1) For an interesting interpretation of the economic experience in transition countries, see Kornai (2000).

(2) An excellent analysis of Syria's political economy is in Kienle (1994) and especially Perthes (1995). For a general discussion, see Economist Intelligence Unit (Various Issues) and for an evaluation of Syria's reform policies in a regional context, see Bolbol (1998).

(3) The dearth of Arab aid resulted from both Syria's stand in support of Iran in the Iran-Iraq war (1980-88) and the fall in oil rents due to much lower oil prices in the early 1980s.

differently, and somewhat bluntly, it has to be a package that goes beyond the aim of just maintaining national security and political stability.

The significance of the point made above may be appreciated by a look at Syria's reform initiatives, which have undergone two phases and have been stop-go measures and not a deliberate reform strategy. The first *infitah* (opening) or reform was undertaken during the boom years of the early 1970s aimed primarily at widening the social base of support to the state: guaranteeing private property; removing restrictions on mercantile imports; and allowing more private enterprise in services and light manufacturing. Aside from political considerations, the first *infitah* came to an end in 1977-78 when the liberal import policies brought a deterioration in the balance of payments.[4] The second *infitah*, however, was more necessary and less timid, having been initiated in response to the crisis of the mid-1980s. It was a combination of austerity and liberalization measures. The first involved across-the-board cuts in public expenditures including consumer subsidies. The second involved the following: (a) liberalization of agricultural prices and removal of restrictions on "large", "mixed" land holdings; (b) devaluation of the official exchange rate from S£3.95 to S£11.22 per US$ and permitting exporters to keep 75% of their foreign exchange earnings and to exchange the rest at the favorable neighboring rate (currently S£47 per dollar);[5] (c) elimination of public sector trading monopolies;[6] and (d) adoption of Investment Law No. 10 aimed at encouraging mostly foreign investment in virtually all aspects of the Syrian economy[7].

A number of observations may be made regarding these reforms. Firstly, they were implemented without the involvement of international institutions, e.g. IMF and the World Bank. This ensured the absence of external interference in Syrian economic affairs but foregoing a source of liquidity and adjustment funds that would have eased their implementation[8]. Secondly, the reforms led to a strengthening of the private sector. By the late 1990s, the private sector came to dominate both agriculture and services and to generate almost 60% of GDP and investment at least up to 1992, although its share in investment dropped to 47% in 1997-99 due to public infrastructure investments in electricity and telecommunications. Despite these achievements, however, the private sector remains for the most part, hostage to the exigencies of public economic priorities and policies (not to mention bureaucratic inefficiency and inertia) and plays a subordinate role in the formulation of such policies. Thirdly, and in counter point, the reforms and their consequent private sector activities seem not to have done enough in increasing Syria's competitiveness and manufacturing capacity since they have mainly unleashed more mercantile trade, provision of

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(4) Political considerations were both internal and external in nature. Internally, the state was threatened by the rise of Islamic opposition in the mid-1970s but which it was able to silence in 1980-81. Externally, the threat came from Syria's isolation after the Egyptian-Israeli rapprochement in 1978 which culminated in the Camp David Accords one year later.

(5) Currently, close to 80% of Syria's exports are evaluated at the neighboring country's rate. There are now at least three government-sanctioned exchange rates, ranging from the officially set rate to the accounting rate (S£3 per dollar) to the neighboring country rate, in addition to the free or parallel market rate fluctuating between SL 50-55 per dollar. No doubt this multiple exchange rate system has had its fair share in discriminating against exports and in denying a productive use and allocation of resources.

(6) Syria still has one of the most restrictive commercial policies in the Arab world. Its maximum tariff is 250%, minimum tariff is 35%, and its weighted average tariff is 12%. Coupled with extensive non-tariff barriers, the preceding tariff structure produces a protection index of 10 (most protective). For more on this point, see the paper by Brown, *et al*. in Sadik (1999).

(7) Investment law No. 10 is currently under revision. The available version offers the standard package which allows Syrian, Arab, and foreign investors to launch private or mixed investments; grants five years' tax holidays; guarantees the right to repatriate capital and profits; and largely exempts investors from import and customs duties.

(8) It also took away a target to blame for the economic hardships that structural adjustments usually produce. It is, however, a sign of the strength of the state that such a program could be implemented without the presence of any mitigating funds.

upper-end services, and expansion of agricultural exports[9]. In this respect, the state of the Syrian economy remains largely tied to the fortunes of rent-like resources outlined in the preceding discussion.[10]

Hence, at the dawn of the 21st century, the Syrian economy is not truly socialist nor private either, not truly in transition, and surely not on very solid foundations. This is why there is an increasing recognition today for the need for a third *infitah* strategy involving deeper and wider reforms[11]. So far, this has affected financial sector reforms, as evidenced by the passing of a law allowing for private banking.[12] As of yet however, no action has been taken on other reform fronts such as: privatization, full convertibility, liberalization of the trade regime, and, as crucially, reform of labor, educational, and industrial policies. It seems, then, that real sector reforms are taking the backseat to financial sector reforms, in the hope that the latter will provide a much-needed jolt to the former.

Macroeconomic Development: Income, Inflation and Domestic Credit

The ephemeral nature of Syrian growth is reflected in the transition from the high-growth 1970s to the low-growth 1980s and then to the recovery of the 1990s, as is shown in the behavior of the rate of growth of GDP (gY) in Table 1. Unfortunately, such transitions did not occur simultaneously with demography, with the result that the rate change of per-capita GDP (gPCY) turned negative during the periods of low growth and was slowed down during the high-growth ones. It is no surprise then that per capita GDP (PCY) in dollar terms declined from a high of $1790 in 1983 to a low of $888 in 1989 and then to recover modestly to $1044 in 1999. What Table 1 does not show is the employment burden that the high population growth figures imply. At least for the coming decade, it is estimated that the labor force will grow by 200,000-250,000 entrants each year (3.7% of the labor force). Finding employment for them is no doubt a daunting challenge even in the best of times. This is because a 3.7% increase in the labor force requires a 9% increase in GDP just to provide employment to the additional labor.[13] Assuming an incremental capital-output ratio of 5, which gives the investment required to generate a given rate of GDP growth, this would entail an investment-to-
GDP ratio of 45%. This is however, an unlikely achievement by most standards, given that this ratio averaged close to 24% only over the 1974-99 period.[14]

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[9] One may argue that a measure of competitiveness is the growth of total factor productivity which measures the growth of output *for given levels of inputs* due to technological progress and other efficiency-enhancing factors. Bisat*, et al.* (1997) found that between 1974-85, annual growth in total factor productivity was 2.6% whereas between 1986-96, it fell to –1%.

[10] In political terms, the aim of the second reform initiative was to enable the state to reproduce itself with the partial co-optation of the private sector. The latter, in turn, was expected to shore up the economy, by taking over some of the shed responsibilities by the state, through its provision of jobs and foreign exchange. At the same time, the state's security and regulatory apparatus made sure that the private sector did not emerge as a strong center of power.

[11] For an outline of such a strategy, see Sukkar (2000).

[12] The main points of the new banking law are: (a) foreign ownership is up to 49%; (b) Syrian government ownership is not more than 25% in some types of banks, while other types could be entirely private; (c) individual ownership is not more than 5% of the capital; and (d) minimum capital is S£1,500 million. The law is silent, however, on how interest rates would be determined, i.e., either by the market or by administrative decree as is currently the case. See MEED (2000).

[13] The numbers are based on the well-known idea of Okun's Law, where a 2.5% increase in GDP is needed to increase employment by 1%.

[14] Historically, Syria's incremental capital-output ratio has been between 5 and 6. It is interesting to note also that over the studied period, the average real wage declined by more than 70% and the distribution of income worsened to the extent that the share of profits in output reached more than 70% by 1998. For more on this issue, see Jazar (2001).

Table 1. Growth of Real GDP (gY), Growth of Population (gP), Growth of Real Per Capita GDP (gPCY) and Nominal Per Capita GDP (PCY)

Year	GY (%)	gP (%)	gPCY (%)	Nominal PCY ($)
1974	22.7	3.36	19.34	590
1975	20.4	3.47	16.93	750
1976	10.7	3.76	6.94	838
1977	–0.8	3.89	–4.69	866
1978	7.9	3.87	4.03	1000
1979	4.5	3.84	0.66	1148
1980	10.6	3.82	6.78	1455
1981	9.6	3.67	5.93	1732
1982	2.5	3.33	–0.83	1744
1983	1.6	3.33	–1.73	1790
1984	–4.4	3.33	–7.73	1773
1985	6.1	3.42	2.68	1654
1986	–4.1	3.31	–7.41	1338
1987	0.6	3.39	–2.79	1137
1988	14.5	3.37	11.13	987
1989	–10.7	3.35	–14.05	888
1990	8.4	3.38	5.02	1147
1991	7.8	3.42	4.38	998
1992	10.6	3.42	7.18	1015
1993	5.2	3.36	1.84	1028
1994	7.7	2.52	5.18	1117
1995	5.8	3.07	2.73	1174
1996	4.5	3.29	1.21	1203
1997	1.3	3.29	–1.99	1100
1998	–1.5	3.29	–4.79	1039
1999	–1.8	3.29	–5.09	1044

Source: AMF, *National Accounts of Arab Countries* (Various Issues)

Table 2 shows the contribution of each expenditure component to gY. The net resource transfers of the 1970s powered both private and public expenditures and gY was held back by the increase in imports that such high expenditures entailed. In contrast, the austerity measures and the "scaling back of the state" in the 1980s left private consumption expenditures and improvements in the trade deficit to account for the low growth in that period. However, in the 1990s, all expenditures contributed to growth, especially investment and its private component.

Table 2. Contribution to Growth of GDP from Growth Components of Aggregate Demand (Average Annual Percent)

	1970-1979	1980-1989	1990-1999
GDP	9	2.6	4.8
Private Consumption	6.6	2.52	1.6
Public Consumption	2.25	–0.66	0.67
Investment	4.65	–0.42	1.9
Resource Gap	–4.55	1.16	0.63

Source: World Bank, *World Development Indicators* (Various Issues) and author's calculations.

As to inflation, it is standard in the literature to link its behavior to seigniorage, which is the change in the monetary base arising from the Central Bank's purchase of foreign exchange and from its extension of domestic credit to public enterprises, commercial and specialized banks, and the government to finance the latter's budget deficit.[15] Table 3 shows that the seigniorage ratio (seigniorage-to-GDP, SE) tracked rather well the deficit ratio (budget deficit-to-GDP, BD) up until 1985 and the resulting deficit monetization largely explains the inflationary movements (IN) during that period. During the austerity and retrenchment years of 1987-92, BD started to fall and SE stayed mainly above it, thus showing that the Central Bank was engaged in credit expansion to the specialized banks in addition to deficit monetization. However, in 1993 and onwards, BD began to rise above SE, an indication that budget deficits started to be non-monetized and that most of the seigniorage represented credit extensions to the specialized banks. Hence, given the limited seigniorage activity and the debt-financing of deficits after 1986, most of the inflationary movements began to be determined by exchange rate depreciations as may be seen by the changes in the weighted exchange rate in Table 3.

[15] The relation that links inflation to seigniorage may be derived as follows. Let seigniorage be dM/P, the real change in the monetary base M. From the quantity theory equation, MV = PQ (where Q is GDP and V is velocity of circulation), and given V and Q, dM.V = dP.Q. Dividing by P, and rearranging terms, dP/P = V/Q. dM/P, which links inflation dP/P to seigniorage dM/P.

Table 3. Budget Deficit Ratio (BD), Seigniorage Ratio (SE), Inflation (IN), and Change in Exchange Rate (gE), in Percent

Year	BD	SE	IN[1]	gE[2]
1974	7.84	6.26	14.66	0
1975	7.45	4.06	16.27	0
1976	9.35	5.18	11	4.1
1977	10.73	5.84	11.9	1.89
1978	8.97	7.45	5	0
1979	0.77	3.67	4.9	0
1980	9.7	7.78	18.9	0
1981	6.31	2.05	18.4	7.51
1982	9.68	12.28	22.3	0.47
1983	9.76	9.34	6.3	0.47
1984	16.92	13.99	9.2	0.46
1985	17.39	18.52	17.2	14.48
1986	11.54	4.23	36.1	43.67
1987	3.98	4.57	59.4	44.17
1988	2.14	–1.93	34.6	63.74
1989	1.66	6.43	11.4	19.37
1990	–0.7	8.31	19.3	–2.67
1991	0.59	2.62	9	29.05
1992	1.1	6.34	11	13.4
1993	5.52	4.67	13.2	6.36
1994	7.06	2.58	15.3	10.27
1995	6.35	1.35	7.6	3.65
1996	4.37	1.81	8.8	14.28
1997	3.33	1.28	2.2	14.28
1998	4.3	1.27	–0.54	9.78
1999	4.18	1.82	–2.63	–0.89

[1] Changes in consumer price index.
[2] The exchange rate is the weighted average of the prevailing multiple exchange rates. Increasingly this is becoming equal to the neighboring country rate. The exchange rate is defined as Syrian Pounds per dollar, so positive gE are equivalent to depreciations.
Source: AMF, *Arab Countries: Economic Indicators* (Various Issues).

It is interesting to gauge the above analysis in terms of the composition of total domestic credit. In confirmation with Table 3, Table 4 shows that domestic credit to the government (DCG) took the lion's share of total domestic credit and peaked at 73.92 in 1985, but fell later on to reach below 7% in 1997-99. What is interesting is that public enterprises took over most of the domestic credit released by the government such that their share rose from 18.8% in 1985 to 86.63 in 1999, against an increase in the share of the private sector from 7.68% to 29.46% during the same period.[(16)] It also seems that most of the seigniorage activities of the Central Bank from 1985 onwards, were primarily directed towards the specialized banks and were funneled by the latter as loans to public enterprises. In 1999, the loans by the Central Bank to the specialized banks reached a total of S£164,991 million (constituting 38% of its total loans), whereas the latter's loans to public enterprises totaled

[(16)] This happened against a background of general decline in the importance of domestic credit in the formal economy, since the ratio of domestic credit to GDP decreased from a high of 70% in the late 1980s to a low of 26% in 1999. For more on the analysis of credit distribution, see Al-Abrash (2000).

S£179,711 million (constituting 70% of their total loans).[17] It is no wonder then, that public enterprises are gobbling a lot of resources and acting as the economic "black hole" in the country.[18]

Table 4. Domestic Credit to Government (DCG), to Private Sector (DCPS), and to Public Enterprises (DCPE), as Percent of Total Domestic Credit

Year	DCG	DCPS	DCPE
1974	39.56	11.15	49.29
1975	26.54	11.42	62.04
1976	35.46	9.34	55.2
1977	34.77	9.19	56.04
1978	47.62	8.86	43.52
1979	42.13	11.49	46.38
1980	44.76	9.46	45.78
1981	38.41	8.52	53.07
1982	50.13	8.8	41.07
1983	53.26	9.75	36.99
1984	64.09	9.01	26.9
1985	73.92	7.68	18.4
1986	72.63	7.82	19.55
1987	70.79	8.42	20.79
1988	54.76	9.19	36.05
1989	50.79	11.51	37.75
1990	50.04	12.61	37.35
1991	39.02	16.45	44.53
1992	34.5	18.59	46.91
1993	24.2	16.73	59.07
1994	26.0	22.65	51.35
1995	21.73	24.64	53.63
1996	13.46	27.2	59.34
1997	7.06	28.87	64.07
1998	2.88	30.79	66.33
1999	–16.09	29.46	86.63

Source: AMF, *Money and Credit in Arab Countries* (Various Issues)

[17] According to publications by the Central Bank of Syria, loans to public enterprises by the Central Bank do not change at a cumulative total of S£106 million.

[18] This is not to deny the social and political role that public enterprises play in providing livelihoods and in maintaining social peace. In an interesting paper, Dalila (2000) argues that the problems plaguing the public sector are the product of misguided government policies ranging from distorted pricing of inputs and output to low replacement investment (only 2%) to futile attempts of strengthening the private sector at the expense of public enterprises.

The Real Sector: Production Structure, Trade, and Terms of Trade

As indicated earlier, Syria's economy is a cross between a diversified and a rentier one. A look at developments in its sectoral output distribution makes this point clear. Table 5 reveals the growth rates and GDP shares of each of the agriculture, industry, and service sector. On the average, the industrial sector grew the slowest, except in the 1990s due to the strength of the oil industry, and its share in GDP still does not account for more than 25%. Except for draught years when it registered negative growth, agriculture, otherwise saw considerable growth such that its share in GDP rose from 20% to about 28% during the 1979-99 period. As to services, it witnessed its best growth years during the boom years of the 1970s and the second-reform period of the early 1990s. However, its share has been in overall decline from a high of 57% to a low of 44% during the recorded period.

Table 5. Agriculture (gA), Industry (gI), Services (gS), Contribution to GDP Growth; and Share of Agriculture (SA), Industry (SI), and Services (SS) in GDP; in Percent

Year	gA	SA	gI	SI	gS
1974	13.9	20.21	3.8	26.14	4.9
1975	1.6	17.89	4.2	24.79	14.6
1976	5.6	19.33	2.9	25.96	2.2
1977	–4	18.34	–0.9	25.37	4.1
1978	6.2	20.95	0.7	26.06	1
1979	–4.5	17.45	0.6	27.89	8.4
1980	10.3	20.2	1.2	23.3	–0.9
1981	1	19.4	0.3	25.5	8.4
1982	–0.9	20.1	1.2	23.2	2.2
1983	–0.1	21.3	0.9	22.5	0.8
1984	–2.4	19.7	–1.6	22.6	–0.4
1985	1.6	21	4.1	21.9	0.4
1986	1.7	23.8	–2.3	22.3	–3.6
1987	–4.1	25.4	0.9	19.4	3.9
1988	8.2	30.4	5.2	20.1	1.2
1989	–8.8	23.7	3.6	23.7	–5.5
1990	4.8	28.6	4	23.9	–0.4
1991	0.8	30.3	4.9	22.1	2.2
1992	6.9	31.2	2.2	17.9	1.5
1993	0.2	29.1	1.5	18	3.5
1994	1.5	27.5	0.7	18.3	5.5
1995	1	28.2	2.5	18.1	2.3
1996	4	27.7	3.4	25.6	–2.9
1997	–0.8	25.8	3.4	28.5	–1.3
1998	2.6	29.2	–3	26	–1
1999	–4.2	23.95	5.2	30.29	–2.8

Source: AMF, *National Account of Arab Countries* (Various Issues); World Bank, *World Development Indicators* (Various Issues); and author's calculations.

Beyond these descriptive statistics, and more fundamentally, two important observations about the structure of the Syrian economy may be discerned.

Firstly, the economic structure exhibited "Dutch Disease" syndromes since the overvalued exchange rate of the 1974-85 period increased the share of the service sector at the expense of the industrial sector. Alternatively, it reduced the relative production of tradeables (exports and import-competing goods) by making the net exports-to-GDP ratio (NX) more negative, as may be seen in Table 6.[19] However, although the exchange rate depreciations of the later years did produce a reversal in the share of the service sector and a smaller negative NX, it was agricultural tradeables that mostly expanded and not manufacturing. This is because the rise in the industry's share was largely due to increasing oil production and exports.

Secondly, despite its diversified base, Syria's economy reveals a lop-sided structural transformation. Instead of manufacturing and then services increasing their shares in GDP and in employment at the expense of agriculture, Syria's growth over the last two decades has increased agriculture's share in both GDP and employment, as is shown in Tables 5 and 7. This is fine in a region that has a hard time meeting its agricultural needs – the Arab world's ratio of agricultural imports to agricultural value added is 56% against Syria's 13% – but it does call for a deeper structural transformation through the expansion and upgrading of manufacturing.

Table 6. Barter Terms of Trade (TOT) and Income Terms of Trade (ITOT), with 1980 = 100; and Net Exports-to-GDP Ratio (NX), in Percent

Year	TOT	1TOT	NX
1974	63	67	–9.6
1975	62	74	–12.49
1976	66	85	–14.65
1977	67	77	–22.29
1978	59	68	–16.22
1979	71	90	–17.04
1980	100	100	–17.2
1981	112	103	–17.4
1982	109	102	–11
1983	103	101	–13.4
1984	103	99	–11.6
1985	100	88	–13.4
1986	68	72	–10.9
1987	73	68	–13.2
1988	66	65	–9.2
1989	73	139	0
1990	84	173	0.3
1991	79	138	–7.7
1992	77	133	–11.7
1993	69	163	–13
1994	56	123	–12.3
1995	58	199	–6.9
1996	59	199	–6.3
1997	60	226	–1.4
1998	56	213	–0.4
1999	55	183	0.23

Source: UNCTAD, *Handbook of International Trade and Development Statistics* (Various Issues)

[19] The reduction in the output of the tradable sector arises because the high or over-valued exchange rate reduces the price in domestic currency terms of both exports and imports; for a survey of "Dutch Disease" issues, see Corden (1984).

Table 7. Sectoral Distribution of Employment, in Percent

Sector	Year			
	1970	1981	1991	1995
Agriculture	51	26	28.2	28.6
Mining and Manufacturing	13.5	17.7	14.3	16.2
Building and Construction	7.3	17.5	10.4	12.6
Transport and Communication	4.2	6.8	5.1	5.2
Trade	9.5	9.5	11.6	13.8
Finance, Insurance and Real Estate	0.6	0.9	0.7	1.5
Community and Personal Services	13.8	21.4	29.2	22.2

Source: Government of Syria, *Statistical Abstract* (Various Issues).

To elaborate on the notions of the sectoral distribution of production and its Dutch Disease effects, Table 8 presents the share of commodity exports to total exports. It may be seen that food and agricultural exports increased steadily from 1987 onwards. On the other hand, other manufactures followed a much bumpier ride, manufactures being the main concern here, since Syria does not really have a comparative advantage in chemicals and machinery. Generally, there was an improvement in textile and clothing exports. However, the overall movements in other manufactures reflect mostly the automatic opposite changes that occur to its percentage share in response to changes in the share of fuel arising from fluctuations in the price of oil. It should also be noted that the high share of other manufactures in the late 1980s reflects an increase in exports as a partial barter payment of debt to the ex-Soviet Union.[(20)]

Moreover, the emphasis on other manufactures reflects the fact that Syria's nurturing of a future comparative advantage lies there. Comparative advantage is defined as the ratio of a country's share of world exports in a given good to the country's share of world exports in all goods, and indicates that if this ratio is greater than 1, then the country has a comparative advantage in and is a net exporter of the given good. Currently, Syria's revealed comparative advantage in commodity exports are: food, 1.35; agriculture raw material, 2.44; fuel, 7.97; metals, 0.48; chemicals, 0.02; machinery, 0; and other manufactures, 0.32 (AMF, *Foreign Trade of the Arab Countries*, various issues). However, besides a competitive exchange rate, reaping a future comparative advantage in other manufactures requires an increase in labor productivity - something that the Syrian manufacturing sector sorely needs given that its unit labor cost is currently a high 0.43 (relative to the unit labor cost of comparable and would-be competing countries: 0.31 for Egypt, 0.27 for Malaysia, 0.29 for Mexico, and 0.22 for Poland [AMF, Foreign trade of the Arab Countries, various issues]i). It

[(20)] For more on Syria's export performance, see Khadour (2000).

is appropriate, then, that real sector reforms aimed at enhancing investment efficiency and labor productivity, should assume on their own, a notable urgency.

Table 8. Share of Commodity Exports in Total Exports, in Percent

Year	Food	Raw Materials	Fuel	Chemicals	Machinery	Other Manufactures
1974	5.7	31	54.9	0.5	0.7	7.1
1975	4.9	16.9	70.2	0.2	1	6.5
1976	6	19.2	64.7	0.2	1.9	8
1977	5.4	24.6	60.6	0.2	2.5	6.6
1978	6.6	21.5	62.8	0.15	2.1	6.7
1979	4.6	15.7	72.1	0.2	1.35	5.6
1980	4.2	10.35	78.9	0.15	1	5.4
1981	3.2	9.2	79	0.2	1	7.3
1982	7.6	7.8	74.7	1.1	0.55	8.25
1983	4.6	11.4	68.8	1.5	1.1	12.5
1984	5.8	17.8	63	3.6	0.9	8.75
1985	2.7	11	74	3	0.9	8.2
1986	6.7	14.1	42.1	12.3	0.65	24.15
1987	3.85	13	51.8	10.75	0.5	20.1
1988	8.2	8.7	43.9	12.9	0.4	25.8
1989	11.5	5.3	39.15	11.8	0.5	31.6
1990	13.6	5.5	45.2	12.8	0.25	22.6
1991	13.15	6.9	53.4	0.1	0.2	26.2
1992	13.15	7.8	69.6	0.25	0.1	9.1
1993	14.6	7.2	66.7	0.2	0.35	11
1994	16.2	7.6	56.25	0.45	0.6	18.8
1995	11.9	7.35	62.5	0.6	0.8	16.8
1996	15.5	5.9	68	0.25	0.15	10
1997	18.15	8.5	63.5	0.5	0.15	9.2
1998	19.7	12.7	55.5	1.6	0.25	10.2
1999	16	6.8	67.15	0.9	0.25	8.95

Source: AMF, *Foreign Trade of Arab Countries* (Various Issues).

Lastly, given this merchandise export performance, what is its purchasing power? This may be measured by the income terms of trade (ITOT), given in Table 6, which is equal to the barter terms of trade TOT times the volume of exports and gives the capacity to import financed by exports.[21] Between 1970-80, ITOT increased by 6.5% annually whereas actual imports increased by 13.9%, and the difference was financed by net resource transfers during that period. However, between 1980-88, ITOT decreased by 3.5% whereas actual (recorded) imports declined by 11.5%. Interestingly, the difference was accounted for by the notorious, widespread smuggling prevailing at that time. As to the 1988-99 period, ITOT increased by 10.2% and the corresponding increase in actual imports was a close 8.1%,[22] which helps explain the smaller negative NXs during the period. Again, the point, is that although an improvement in Syria's export capacity is observed, it is one tilted in favor of resource-based exports.

The Financial Sector: Savings, Interest Rates and Liberalization

Syria has a mono-and one tier-financial system consisting of the Central Bank and seven state-owned specialized banks and other non-bank financial institutions. These comprise the Commercial Bank of Syria, Agricultural Cooperative Bank, Popular Savings Bank, Real Estate Bank, Industrial Bank, General Syrian Insurance Agency, and General Postal Savings Establishment. There are no money and capital markets. Interest rates are administratively set and they averaged close to 6% before 1981 and 10% thereafter. Thus, this resulted in negative real interest rates throughout the entire period (except for the late 1990s) as is usually the case with interest rate ceilings in the presence of rapid inflation. The specific details of the financial system are not delved into as the focus of this paper is on the impact of the financial system and its liberalization on savings, investment, and growth. This will be accomplished within the framework of the Mckinnon -Shaw model since Syria seems to represent a typical case of "financial repression".[23]

The Following figure presents a simple illustration of the model. Savings (S) is a positive function of the real interest rate (r), whereas investment (I) is a negative function of r and its actual level is limited or "repressed' to I_o, the amount of savings forthcoming at the fixed or administered real interest rate r_o. Hence, non-price rationing of investible funds must occur, which typically takes the form of quality of collateral, name, political pressure and priorities, and covert benefits to bank officials. More importantly, interest rate ceilings such as r_o, distort the economy in several ways: (a) produce a bias in favor of present consumption; (b) encourage projects that are relatively capital intensive; and (c) select investments with low-yielding returns by entrepreneurs who would not be able to borrow at the market-clearing interest rates.[24] Thus, relaxing the financial constraint by increasing interest rate ceilings to r_1 will increase savings and investment and by weeding out all low-yielding and grandiose investments, increase the average *efficiency* of investment. As a result, the level of income will rise and in the process, will shift the savings function to S (Y_1). In addition, the

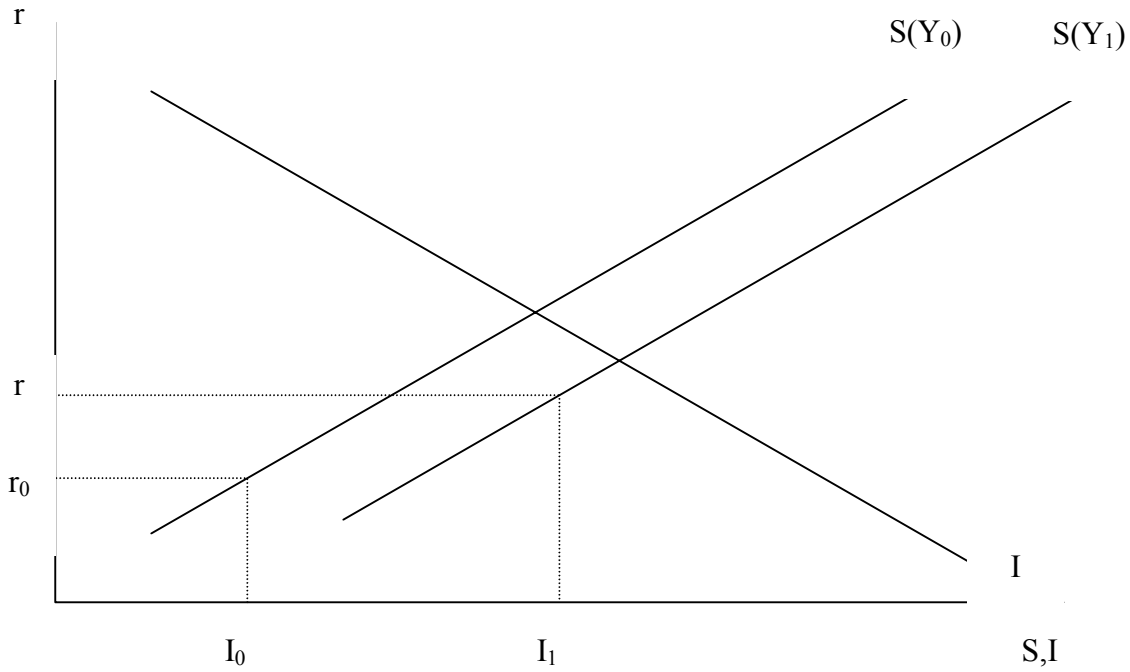
[21] The barter terms of trade gives the units of imports that one unit of exports can "buy", so the product of the barter terms of trade and the volume of export gives the total imports that exports can finance.

[22] Levin and Raut (1997) estimate that for every 10% increase in annual exports, GDP increases by 1.5% due to relaxed import restraints and efficiency effects. Only the East Asians economies have maintained export growth rates in excess of 12% since the early 1970s.

[23] The classic work is in Mckinnon (1973) and Shaw (1973). For a comprehensive survey of Syria's financial sector, see Bisat (2001).

[24] The strongest critique to the Mckinnon-Shaw thesis came from Stiglitz (1994) who argues that higher interest rates cause adverse selection and distress by insolvent agents, whereas lower interest rates increase firm equity, and, if coupled with allocative targeting of credit to exporters or high-tech firms, can lead to positive spillovers and high social rates of return.

expanded financial intermediation between savers and investors increases the *incentive* to save and invest. It also raises the average efficiency of investment due to the intermediaries' expertise in maturity intermediation and their ability to lower cost to participants because of scale economies, risk diversification, and information gathering and dissemination.[25]



Financial Repression Model

In applying the model to the Syrian context, its impact on investment efficiency and then on savings and investment is studied. As to investment efficiency, this is measured by the growth rate of total factor productivity (gTFP) which is a catch-all measure indicating the change in output for *given* inputs of capital and labor. The gTFP is calculated as the residual from a regression of the growth accounting equation over the studied period 1974-99.[26] The resulting gTFP is regressed on the following independent variables: (a) r, the real interest rates on deposits no less than one year for which the nominal rate was fixed at 5.75% for 1974-81 and at 9% for 1982-1999; (b) DL/Y, the ratio of liquidity (money and quasi-money-to-GDP as a measure of financial intermediation; (c) DCPS, domestic credit to the private sector as an indicator of the quality of investment since private sector investments are usually subject to more rigorous evaluation by bank officials; (d) gTOT, change in the terms of terms of trade; and (e) D, dummy variable equal to 1 for years of bad agricultural harvests due to draught conditions, and 0 otherwise. Both gTOT and D are included to isolate the effects of these "external" factors on gTFP.

The OLS results are reported in Table 9 and reveal the following. Liberalizing the financial restraint by increasing r seems to have no significant effect on gTFP. This is most

[25] King and Levine (1993b) also argue from an endogenous growth perspective, that financial institutions can enhance innovation by evaluating, managing, and funding entrepreneurial activity.

[26] The growth accounting equation that is estimated as:

$gY = a.\, gL + MPK.\, I/Y$

where a is the share of labor in output, gL is the growth rate of labor force, and MPK is the marginal productivity of capital. The resulting residual produces an annual gTFP of 0.7%. Using a different variant of the growth accounting equation (see footnote 9), Bisat, *et. al* (1997) calculate that between 1974-85, annual gTFP was 2.6% whereas between 1986-96, it declined to –1%.

likely due to the fact that a high r will result in lower investments as well as a concentration on risky projects, counter to the Mckinnon-Shaw hypothesis. The interesting effect is that of the DL/Y which is significantly negative. This is because domestic liquidity in Syria is comprised mostly of *outside money*, since currency constitutes more than 50% of domestic liquidity (and more than 20% of GDP, both high by the standards of most countries), as maybe seen in Table 10.[27] Hence, liquidity in Syria does not arise from inside money through deposit creation. This is due to factors that have to do with archaic banking structures and operations, lack of a banking culture, and unstable macroeconomic developments. The resulting outside monetization denies the economy the efficiency effects associated with intermediation.[28] Domestic credit to the private sector does not seem to be helping either since its effect is not significant. This is partly due to the fact that DCPS still represents a small fraction of total domestic credit. Most of the domestic credit to the private sector comes from informal sources and neighboring banks and this is also partly because close to 75% of this credit is invested in trade-related services. Finally, both D and gTOT carry the expected and significant signs. As to the effects of the explanatory variables on gPCY, they are largely similar to those on gTFP. This is not surprising since for given capital-labor ratios, changes in per-capita (or labor) output mirror changes in TFP.[29].

Table 9. Dependent Variables Growth Rate of Total Factor Prouctivity (gTFP) and Growth Rate of Per-Capita GDP (gPCY)[1]

Independent Variables	gTFP	gPCY
R	–0.0182	–0.0952
	(–1.347)	(–0.631)
DL/Y	–0.0333**	–0.2648**
	(–2.033)	(–2.375)
DCPS	–0.0102	0.0952
	(–0.462)	(–0.631)
gTOT	0.0105***	0.0822**
	(1.844)	(2.131)
D	–1.1966*	–9.3619*
	(–3.619)	(–4.167)
Adj R^2	0.51	0.59
F-test: P- value	0.0011	0.0002
N	26	26

[1]Figures in brackets are t-statistics.

*Significant at 1% .

**Significant at 5%.

***Significant at 10%.

(27) Syria's DL/Y, CC/DL, and CC/Y figures compare unfavorably with the average for developing countries. For the latter, DL/Y is at least 20% less and CC/DL and CC/Y 40% less.

(28) The excessive monetization outside of the banking system also makes it harder to predict the stock of money for proper economic-decision making. For more on these issues, see Durgham (2000).

(29) On a cross-sectional basis, the bulk of the evidence seems to favor the Mckinnon–Shaw thesis. Fry (1981) and Lanyi and Saracoglu (1983) find that a 1% increase in the real deposit rate towards its free-market equilibrium level increased GDP growth by 0.5%. On the other hand, the World Bank (1989) finds that countries with positive real interest rates had lower incremental capital-output ratios. However, Fry (1997) and De Gregorio and Guidotti (1995) argue that the relationship between real interest rates and growth could follow an inverted U-shape pattern, i.e. increasingly higher real interest rates start to lower growth rather than increasing it. Lastly, King and Levine (1993a) and Levine, *et. al* (2000) show that both DL/Y and DCPS are positively associated with gTFP and gPCY.

Table 10. Ratio of Currency-to-GDP (CC/Y), Domestic Liquidity-to-GDP (DL/Y), and Currency-to-Domestic Liquidity (CC/DL), in Percent

Year	CC/Y	DL/Y	CC/DL
1974	21.4	37.6	56.91
1975	19.04	36.6	52
1976	21.1	37.67	56.02
1977	24.92	44.15	56.47
1978	25.85	46.76	55.3
1979	25.2	45.55	55.31
1980	26.17	46.86	55.85
1981	21.35	42.32	50.45
1982	25.22	48.71	51.76
1983	27.96	57.55	48.6
1984	33.38	70.04	47.66
1985	35.52	76.29	46.55
1986	36.28	71.16	50.98
1987	32.77	62.13	52.74
1988	28.04	52.06	53.86
1989	28.7	55.7	51.52
1990	28.4	55.7	51
1991	29.67	53.5	55.45
1992	28.95	53.38	54.23
1993	30.48	60.17	50.65
1994	26.67	55	48.5
1995	25.18	53.03	47.48
1996	22.18	47.91	46.3
1997	21.43	47.83	44.8
1998	22.62	49.13	46.04
1999	22.18	52.58	42.18

Source: AMF, *Money and Credit in Arab Countries* (Various Issues).

Regarding savings, the Mckinnon-Shaw hypothesis argues that investment will be given or "solved" by the level of available savings which in turn, is determined by the exogenously set r and other explanatory variables. The savings function is estimated as follows:

$$S/Y = f\ (r, PCY, DL/Y, FS/Y, gY)$$

where S/Y is domestic savings-to-GDP ratio. The inclusion of PCY reflects Keynes' savings (or consumption) hypothesis and it is modeled as (1/PCY) to indicate the parabolic relation which it could have with S/Y.[30] The variable FS/Y is foreign savings and it denotes whether FS/Y is a substitute or not to domestic savings. As to gY, the rate of growth of GDP, it captures the capacity to save *a la* the life-cycle hypothesis. With rising GDP, each successive age group will be aiming for a higher level of consumption in retirement and, as a result, the savings of the active households will exceed the dissaving of the currently-retired households with a lower level of lifetime consumption.

Table 11 records the estimated OLS results. It may be observed that relaxing the financial constraint by increasing r will increase savings. Therefore, at least this implication of financial liberalization *a la* the Mckinnon -Shaw model is satisfied. The effect of PCY on S/Y is not significant. This is because the instability in per capita income which arises from fluctuations in oil prices, agricultural harvests, and development aid, have clouded economic agents' distinction between transitory and permanent changes in income and have made it harder for them to establish a steady savings pattern.[31] As to DL/Y, it is not significant for the aforementioned reasons identified. The FS/Y is significant with the expected sign, showing that foreign savings, through mostly net resource transfers, relax liquidity or borrowing constraints for the domestic economy and in the process, leads to less savings.[32]

The effect of gY on S/Y is not significant and this result offers an interesting interpretation. To better understand this, gY is split to the sum of gP, the rate of population growth, and gPCY, the rate of per-capita GDP growth.[33] In Syria, the high population growth rates have produced an unbalanced population structure with a dependency ratio of 0.8 (against developing countries' average of 0.6). This has resulted in the excess of extra consumption demands by the growing child-dependency ratio over the increase in savings that comes about as a result of the rise in the ratio of active to retired households as population growth persists. Hence, the negative and significant effect of gP on S/Y and coupled with the insignificant result for gPCY, it explains why gY is insignificant as well. In other words, the instability in income sources combined with high population growth rates, make it even harder for income per person to have a steady positive relation with savings.

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(30) For more on this way of modeling PCY, see Hussein and Thirlwall (1999).

(31) In a cross-section sample, Ul-Haque, *et. al* (1999) find that introducing such dynamic behaviors to the savings function, also makes PCY an insignificant factor.

(32) In the context of the Arab countries, Jbili, *et. al* (1997) studied the effects of financial liberalization on savings in Algeria, Morocco, and Tunisia. Over the entire 1970-96 period, none of the financial variables utilized came significant in each of the three countries. However, in the reform period of 1988-96, both the real interest rate and DL/Y came significant with the expected signs in Morocco and Tunisia only. Also, in a cross-section sample , Loayza, *et. al* (2000) observe the effect of DL/Y on savings to be insignificant, but the effect of the real interest rate to be negative thus indicating the dominance of the wealth effect over the substitution effect.

(33) In other words, the splitting of gY means that GDP growth will be the sum of output growth arising from an increase in the active population due to population growth and the growth of output per person.

Table 11. Dependent Variable Domestic Savings-to-GDP Ratio (S/Y)[1]

Independent Variables	(1)	(2)
R	0.1559**	0.1395**
	(2.316)	(2.179)
1/PCY	2557.09	−1621.25
	(0.348)	(−0.223)
DL/Y	−0.1149	−0.1695**
	(−1.255)	(−1.862)
FS/Y	−0.3062***	−0.2343
	(−1.79)	(−1.415)
GY	−0.0376	
	(−0.322)	
GP		−5.8398***
		(−1.889)
GPCY		−0.0846
		(−0.75)
Adj R^2	0.44	0.5
F-test: P- value	0.004	0.0024
N	26	26

[1]Figures in brackets are t-statistics.

**Significant at 5%.

***Significant at 10%.

Conclusion: Summary and Policy Implications

To a large extent, the diversified Syrian economy represents a case of arrested development held back by a hesitant private sector, a dormant public sector, and a set of incomplete and sometimes incoherent policy reforms. The economy found itself in the (un) lucky situation of rising rent-like resources from oil exports in the late 1980s after Arab aid and labor remittances dried up or declined, which weakened both the urgency of reforms and the resolution of reformers. Also, Syria's diversified economic base is not without its problems. Its industrial sector is distorted by the presence of oil, which dominates most of its value added and most of all, exports. The real sector, then, has remained maladjusted, lacking in the right economic and institutional incentives to enable the productive private sector and manufacturing industry to redirect the growth process towards a more intensive and "balanced" growth path. It has also remained bogged down by public enterprises that consume a lot of expensive resources but produce little "private" returns. The financial sector seems to be increasingly dissociated from the real sector since currency constitutes more than 50% of liquidity; domestic credit is less than 30% of GDP; and only 4% of the population has deposits with the available banks.

Whether Syria follows the Chinese or the Turkish model in its political economy, its reform agenda is immense.[34] It requires a strong political will that places economics at least on par with politics and neutralizes the forces opposing reform. Otherwise, economic reform will dither as shown by the delay in the implementation of the new banking law.[35] It can start by concentrating on the following issues, which neither claim to be original nor should they be considered separately:

- Increasing and improving manufacturing industry in low-and medium-skills products. This should involve an active and committed participation by the private sector, and should be encouraged by a set of proper incentives ranging from reasonable and convertible exchange rates to lower trade barriers on imports to a general ease of costly restrictions on doing business and conducting transactions. In this respect, it also means that the private sector has to be capable of shouldering the new responsibility. On the one hand, it should be able to seize opportunities opened up by less regulation and interference in its economic freedom. And on the other hand, it should be willing to "pay" for the adjustment costs that come from less protection and rent seeking.[36]

  Given the small size of the Syrian market, the above should also be complemented with judicious free trade arrangements e.g. the EU, WTO, and Arab world. Needless to say, what this requires is a new export culture that emphasizes product quality and

[34] China is mentioned as an economic model for its gradual reforms; and Turkey, as a political model since real power is in the hands of the military through a National Security Council. See Perthes (2001).

[35] Among the reasons behind the delay in the reform process under new president Bashar Asad, one may perhaps mention the following: (a) the influence of the "old guard" in keeping a lid on economic reform so that it would not jeopardize their prerogatives and allow for the emergence of competing centers of power, (b) the temporary increase in rent due to higher oil prices and favorable oil and trade agreements with sanction-plagued Iraq, and (c) the halt in the peace process and the rise of the *Intifada* (not to mention the events of September 11, 2001) and their resulting political tension in the region.

[36] The private sector produces close to 55% of manufacturing value added and is mainly involved in textiles, food, leather, paper, and chemicals, and along with the mixed sector, employs about 75% of the industrial labor force. Its international trade performance has not been up to par, constituting 70% of imports and 60% of non-oil exports (and declining), with exports covering close to one third of imports only. Even its response to Investment Law No. 10 has been timid, generating close to 200 enterprises and employing about 1000 workers only. Part of the reason though, is that the law mistakenly identifies investment to be determined solely by taxes, not the overall soundness of the economic environment. For more on the private sector between competition and protection, see Abedelnour (2000).

sophisticated marketing and is willing to venture and learn from competition in tough markets. Free trade arrangements are also important as a source of attracting efficiency-seeking foreign direct investment (FDI) that can use Syria as an export platform especially to the wider regional market.[37] FDI, in turn, if it involves firms whose average technological capability is above that of domestic firms, can improve the technical base and standards of the economy through technology and managerial spillovers.[38]

- Reforming the financial sector by allowing private and foreign banks is a critical first step. The presence of these banks and the competition they generate, can improve the quality of banking services and in the process, invite all the floating "outside" money into the banking system. This should solidify the position of the banking system and allow it to play its efficiency-enhancing role. It should also give the private sector more and easier access to credit that can fund properly-assessed investments, instead of relying on the costly and the disorganized nature of the curb and informal credit markets. And it is in this light that the new banking law allowing for private and foreign banks was introduced. But there is no doubt that the viability of the existing system, given its huge outstanding loans to public enterprises, depends on the fortunes and fate of these enterprises whose future role in the economy needs to be urgently addressed.

  Also, financial reform should of course include the requisite supervision and regulation of banks and, perhaps at a later stage, an independent Central Bank and the indirect use of monetary instruments. However, it is wise to keep in mind in this context that higher interest rates may not have an impact on efficiency *a la* the Mckinnon-Shaw hypothesis.

- In the end, it is all about increasing per-capita GDP, which is highly correlated with increases in labor productivity. The latter is determined by increases in TFP and in the capital-labor ratio, i.e. by making labor utilize more physical capital (quantity) and better skills and technology (quality). Steady increases in per-capita income produce permanent increases in savings and also ease the demographic transition, thus reinforcing the positive impact on savings. Almost all of the evidence points to a causality from income to savings i.e., savings increase as a result of growth, which in turn results from determinants other than savings.[39] Thus, financial liberalization of higher interest rates, albeit increases savings, can not be expected to have a permanent impact on growth.

  The emphasis, then, should be on policies that enhance growth, not savings. For instance, if FDI – foreign savings – reduces domestic savings but increases growth, then it should be encouraged. Policies that enhance growth are the ones that should enhance labor productivity such as: (a) An educational system that graduates students with skills not just with diplomas; (b) An industrial policy that does not encourage investments that are excessively capital-intensive but provides incentives for firms to better appreciate and ultimately reproduce their capital equipment and technology imports; (c) A legal superstructure and an institutional infrastructure that ensure proper governance practices; and above all, (d) An environment of openness that unleashes people's curiosity and allows them to innovate new ideas and new ways of doing things.

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[37] This is not to mention Syria's expatriate financial capital of $50 billion and the human capital and talent among its expatriate labor of 2 million.

[38] Syria does not receive much FDI. Its stock of FDI inflows-to-GDP is only 8% against a developing countries' average of 16%. For more on FDI in the Arab countries, see Sadik and Bolbol (2001).

[39] The evidence also shows that although higher savings produce a temporary increase in growth, savings itself remain higher after growth slows down. This is due to hysteresis effects arising from habit formation or irreversible changes in the financial system. For an elegant statement of the evidence, see Rodrik (1998).

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