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[13] IMF members accepting the obligations of Article VIII undertake to refrain from imposing restrictions on the making of payments and transfers for current international transactions, and from engaging in discriminatory currency arrangements or multiple currency practices, except with IMF approval. By accepting the obligations of Article VIII, Egypt gives assurance to the international community that it will pursue economic policies that will make it unnecessary to impose restrictions on the making of payments and transfers for current international transactions, and will contribute to a multilateral payments system free of restrictions.

[14] Source IMF IFS database, series code 469.1D.DZF.

[15] Amina Ghanem, Abdelmonem Lotfy and Doaa Hamdy (2007) "Overview of the Egyptian Economy and Business Environment," ministry of Finance, Technical Paper.

[16] Under flexible Exchange Rate regime, various combinations of changes in government expenditure and changes in global interest rate much match the monetary discipline to produce certain macroeconomic outcome.

[17] Economic Reform and Structural Adjustment Program .

[18] The data sources are the UNCTAD data up to 2003, which conforms both to the STIC, and the CAPMAS data for the latest two years 2004-2005 as compiled and tabulated by the Ministry of Economy and Foreign Trade Quarterly Report, May 2006. All years are Calendar Year January-December periods.

[19] See: Halvorsen and Palmquist (1980), pp. 474-475 and Kennedy (1981), p. 801.

[20] The purpose and scope of the present paper do not accommodate focusing on this issue. It is deep enough to require a special separate study .

[21] It is not uncommon to find contracts of exports denominated in dollars both in the case of goods and services, e.g. Suez Canal fees

Footnotes:

[1] Referring to domestic and foreign price indices.

[2] Most often- without loss of generality- elements of the Θ vector can be assumed constant, especially in the short-run.

[3] For more details on these regimes, see IMF "De Facto Classification of Exchange Rate Regimes and Monetary Policy Framework," Data as of December 31, 2005, available online at <http://www.imf.org/external/np/mfd/cr/2005/eng/1205.htm#table>

[4] Our analysis will be carried out through sub periods characterized by major economic &/ political events.

[5] Averages of yearly figures, Table (A), Appendix

[6] Namely: Agricultural. Raw materials, Chemical products, Fuels, Machinery & Transport equipment, Manufactured goods and Oars & metals.

[7] Source: UNCTAD Statistical Yearbook, Online database accessed, April, 2007.

[8] It should be noted that the present geographic distributions are not mutually exclusive.

For example, some countries are included both in the "Industrial Countries" group and the "European Union Group".

[9] Measuring Imports' coverage ; calculated from figures of the values of X, M, NX, shown in last column of table (C) in the Appendix.

[10] IMF 2005 De Facto Classification of Exchange Rate Regimes and Monetary Policy Framework.

[11] Formally launched on December 23, 2005.

[12] IMF 2005 Article IV Consultation with the Arab Republic of Egypt, 2005.

Exchange Rate liberalization under the umbrella of Economic Reform since 1991. Indeed, Exchange Rate liberalization did exert some (but actually cannot alone) change in the previously prescribed trends underlying the long run performance of Egypt's exports and foreign trade.

- To support these deductions by coherent quantitative findings, we have subjected the 1991- 2005 data to econometric analysis: Egypt started from an administered Exchange Rate, which was both unrealistic and distorting the incentives.

Several devaluations were implemented under conventional or crawling peg Exchange Rate regimes. In the 1990's, the relative stability was not export enhancing because of the smallness of the relative magnitude of the devaluation and the existence of multiple Exchange Rates. The recent relative stability (around 5.7) accompanies a slight improvement in export performance; however, this cannot be reasonably gauged without a longer frame of time.

Trying to see beyond the results at hand, we are tempted to ask:

1. Why did Exchange Rate stay around the L.E. 5.7 value for almost two years since the second half of the fiscal year 2005-2006?
 2. Above all, is this stability sustainable?
- We have shown that the export response to devaluations indicates that the price elasticity of both exports and net exports are quite small. It is important for policy makers to take this into account and grasp its critical implication; namely: There is a limit to what Exchange Rate policy alone can do to improve exports and trade balance.
 - The above findings carry strong warnings to the Egyptian policy maker that there is a serious and urgent need to reconsider the present state of the economy for coherent reforms based on a strategy for robust future economic growth and development.
 - Indicators clearly show that Egypt's industrial sector – with its present structure and production standards and capabilities – is too far away from being able to take the lead towards a path of sustained economic and export growth.
 - Still, further studies are needed to update on the results obtained in this research.

5. Conclusions

- All over the 58 years from 1948-2004, the value of Egypt's exports (including petroleum) has been lagging behind the value of its counterpart imports; though negligible surpluses were recorded for the two years 1969 and 1973.
- The economy's heavy reliance on fuel exports – a mainly rent product – assures its inherent weakness as well as vulnerability vis à vis both internal strategic needs and external shocks. On the other hand, there is an increasing reliance on imports for satisfaction of domestic basic needs to agricultural and chemical products, machinery and transport equipment, as well as manufactured goods and ores and metals.
- The pattern of geographic distribution of Egypt's exports – together with its pattern of products' composition- are indicative: Future chances and potentials for the country's exports to various foreign markets largely depend on how policy maker's vision and strategy will promote various categories of exports and their competitive edges.
- The long period under study reveals Egypt's chronicle trade deficit, associated with a very modest contribution in world trade. The country's percentage share is both small and persistently declining. Furthermore, comparisons with other countries indicate serious weaknesses in the economy's production base and structure and poor policy making. An obvious trend of rising trade deficit starts in 1973, due to a much faster growth in imports compared to exports.
- The overall view is both dim and ironical: It shows a striking long run deterioration in trade balances for labor intensive product categories, in an economy suffering a very critical unemployment crisis, coupled with reform promises and claims for support of SME's. Meanwhile, deficits are even worse in the balances of capital intensive – non-fuel – product categories (manufactured, chemical and, in particular, machinery and transport equipment).
- Trade deficit is not only persistent but also worsening: The deterioration goes beyond its manifestation in absolute value terms to the diminishing relative ability of exports to cover imports.
- These direct deductions from observed data analysis apply to the whole period since 1948; i.e., including the later years which witnessed

semilogarithmic equations, given the estimated coefficient of a dummy variable and the estimated variance of that coefficient, the percentage impact of the dummy variable on the dependent variable is given by:^[19]

$$\Gamma = \exp\left(\hat{\delta} - \frac{\sigma_{\hat{\delta}}}{2}\right) - 1 \quad (3)$$

The estimated coefficient is 0.1849678 and its standard error is 0.0955488. Thus exports' response to the rather aggressive magnitude of changes over the period 2001-2005, which led to full Exchange Rate liberalization, is $\Gamma = 0.1977$, which is positive but less than 1%. In terms of the time variable, T , the tendency for the exports (and often the trade balance, as earlier shown) to improve over time and even initially worsen when the devaluation occurs is known as the **J-curve** (See Figure (10)). This is observed twice in the performance of Egyptian exports during the period 1991-2005. **The first J-curve** is less obviously observed over the period from 1991 to 2000. This is because of the small relative magnitude of changes in the Exchange Rate during the 1990's. **The second J-curve** seems observed more clearly over the period 2001-2005, when a sequence of large currency depreciations occurred. One can suspect some sort of a shift. However, without longer time-series, this suspicion is dubious.

The small enough price elasticities of both exports and imports are in accordance with the Marshall-Lerner Theorem for small open economy. It is important for policy makers to take also, among other factors, the lag effect into account.^[20] Some export contracts of Egyptian goods are denominated in foreign currencies, while some other export contracts of Egyptian goods are denominated in Egyptian Pound. In the former case, the price is not affected by devaluation; therefore, the demand for exporting such goods will not change,^[21] even though it may encourage exporters to increase their export efforts. Moreover, other factors besides Exchange Rate systematically influence export and trade balance performance but take time to adjust. For example as business contracts are renewed to reflect the new Exchange Rate, it will take time before exports (trade balance) begin to improve.

Table (9)
Regression Specifications & Estimates for log-transformed data, y

Variable y	(1.2') Coef. (t-value)	(2.2') Coef. (t-value)	(3. 2') Coef. (t-value)	(4. 2') Coef. (t-value)
y_{t-1}		.2599122 (0.84)		
v	-.6741624 (-2.87)	-.5563457 (-1.84)	-.6264465 (-2.75)	-.3877312 (-1.49)
T			.0132866 (1.45)	
D				.1849678 (1.94)
Constant	6.828168 (19.53)	4.975042 (2.23)	-19.64794 (-1.08)	7.189764 (19.51)
Number of obs	15	14	15	15
Prob > F	0.0132	0.0557	0.0200	0.0103
R-squared	0.3876	0.4085	0.4792	0.5334
Adj R-squared	0.3405	0.3009	0.3924	0.4556
Root MSE	.15781	.16622	.15148	.14339

The devaluation effect on export demand depends on price elasticity – the larger the elasticity, the larger the increase in exports. If the elasticity is greater than one, the devaluation brings about a more significant increase. The specifications above show that the coefficient of v is negative and ranges from -0.67 to -0.39, meaning that 1% devaluation in the Exchange Rate brings about an increase in exports by 0.39% up to 0.67%. The estimated elasticity is less than 1 showing that the export is inelastic during the period of study. However, this elasticity is larger than that of the trade balance, i.e. than the elasticity of net non-petroleum export coverage.

To measure the impact on exports of leveraging Exchange Rate reforms after 2000, we included the dummy variable in specification (4.2'). As Halverson and Palmquist (1980) and Kennedy (1981) have shown, in

Year	Baseline	Scenario 1	Scenario 2	Scenario 3
2006	-0.6772	-0.68205	-0.68205	-0.68205
2007	-0.6691	-0.64586	-0.58905	-0.39025
2008	-0.661	-0.63638	-0.57621	-0.36563
2009	-0.6529	-0.6269	-0.56337	-0.341
2010	-0.64479	-0.61742	-0.55052	-0.31638
2011	-0.63669	-0.57281	-0.50255	-0.29176
2012	-0.62859	-0.56165	-0.48802	-0.26713
2013	-0.62049	-0.55048	-0.47349	-0.24251
2014	-0.61239	-0.53932	-0.45896	-0.21788
2015	-0.60429	-0.52816	-0.44444	-0.19326
2016	-0.59618	-0.47345	-0.38636	-0.16864
2017	-0.58808	-0.46061	-0.37015	-0.14401
2018	-0.57998	-0.44776	-0.35394	-0.11939
2019	-0.57188	-0.43492	-0.33773	-0.09476
2020	-0.56378	-0.42208	-0.32152	-0.07014
2021	-0.55568	-0.35727	-0.25335	-0.04552
2022	-0.54757	-0.34274	-0.23546	-0.02089
2023	-0.53947	-0.32822	-0.21757	0.003732
2024	-0.53137	-0.31369	-0.19967	0.028356
2025	-0.52327	-0.29916	-0.18178	0.05298
2026	-0.51517	-0.22426	-0.10352	0.077603
2027	-0.50706	-0.20805	-0.08394	0.102227
2028	-0.49896	-0.19184	-0.06436	0.126851
2029	-0.49086	-0.17563	-0.04479	0.151475
2030	-0.48276	-0.15942	-0.02521	0.176099
2031	-0.47466	-0.07442	0.06315	0.200723
2032	-0.46656	-0.05653	0.084408	0.225347
2033	-0.45845	-0.03864	0.105666	0.249971
2034	-0.45035	-0.02075	0.126925	0.274595
2035	-0.44225	-0.00285	0.148183	0.299219

Run regressions for several specifications of equation (2') give the following results of estimation reported in Table (9) below:

For example, a real devaluation of e by \$0.01 say from US\$ 0.175 to US\$0.165 (i.e. from EGP 5.71 per dollar to EGP 6.06 dollar, which equals 34 Piasters) can improve the non-petroleum net exports to non-petroleum imports by 1.469452 percentage of coverage. For the most recent Exchange Rate of 0.175, and net non-petroleum export that is -0.67 of non-petroleum imports, simple calculation shows that the elasticity of net non-petroleum exports to Real Exchange Rate devaluation is 0.38, i.e. it is not elastic. Elasticity at means is 0.43.

Recall that e encompasses Nominal Exchange Rate; the domestic and foreign price levels. The fact that nx is all the time of the observation is in negative territories prevents using log, which is not defined on negative support. Recall also that e is defined on non-negative support, and thus the root of the first specification cannot be zero. **In fact, this non-negativity constraint shows the limit that an Exchange Rate alone can do to improve the non-petroleum trade balance.**

The rationale of specification (4.1), as mentioned above, is that it takes time for the impact of real devaluation to propagate in the economy. To further explore this, we consider various scenarios, illustrated in Table (8) below:

The baseline scenario assumes that no further real devaluation occurs. The first scenario prescribes 0.01 cent real devaluation quinquennially, the second 0.02 cents real devaluation quinquennially, and the third is a one-time 50% real devaluation to 0.10 cents.

The baseline scenario does not lead to a trade balance, even in more than a quarter of a century; the first scenario leads to a trade balance after the year 2035, and the second scenario leads to a trade balance after 2031. Even with the third (aggressive) scenario, it is not until 15 years that the trade balance restores.

Table (8)

Real Exchange Rate devaluation Scenarios and Forecasting Trade Balance.

(A shaded cell indicates a year when the trade balance becomes weakly positive.)

$$nx = -83.29981 + 334.8923 e + 0.0414517 T - 0.1682772 eT$$

4.2 Estimation and Results

We run regressions for several specifications of equations (1) and (2'). The results of estimating specifications of equation (1) are reported in below Table (7). The coefficient of the time trend T is positive, showing that real value of exports has been generally moving upwards (positive trend). The coefficient of the Real Exchange Rate variable e is negative, meaning that Exchange Rate depreciations positively influence the real value of exports contemporaneously. Specification (2.1) interprets similarly, except that the trend effect is not too weak and in Specification (3.1) there is some dynamic inertia represented by the recursive momentum. However, when including the interaction term eT , in specification (4.1), we find that the coefficient on the e turns to be positive while that of the interaction term eT is negative. This indicates that as Exchange Rate depreciated, the real value of exports declined contemporaneously before rebounding over time.

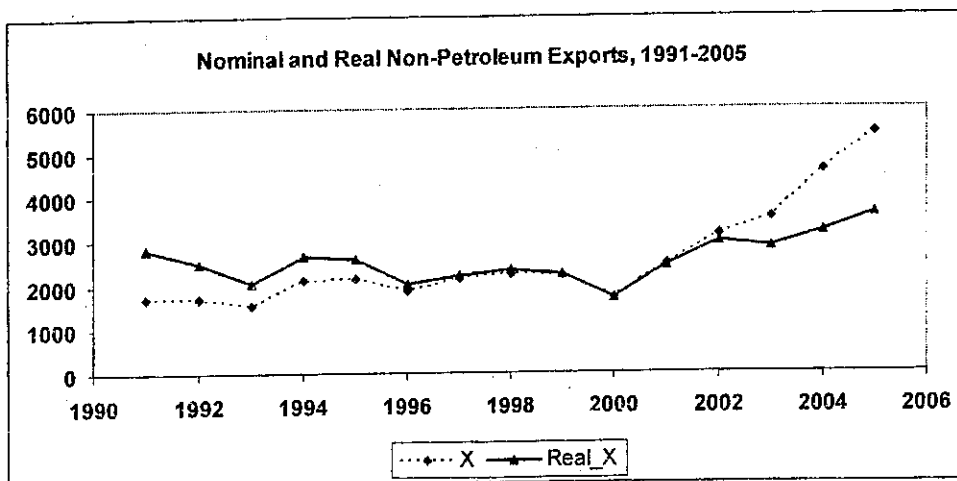
Table (7)
Regression Specifications & Estimates for non-logged data, nx

Variable nx	(1.1) Coef. (t-value)	(2.1) Coef. (t-value)	(3.1) Coef. (t-value)	(4.1) Coef. (t-value)
nx_{t-1}			.4389703 (2.26)	
T		.0075563 (3.71)		.0414517 (2.56)
e	-1.469452 (-4.79)	-1.365127 (-6.21)	-1.066903 (-2.98)	334.8923 (2.10)
eT				-1.682772 (-2.11)
Constant	-4.423176 (-6.14)	-15.56407 (-3.82)	-1.861233 (-1.61)	-83.29981 (-2.58)
Number of obs	15	15	14	15
Prob > F	0.0004	0.0000	0.0002	0.0000
R-squared	0.6386	0.8315	0.7936	0.8801
Adj R-squared	0.6108	0.8035	0.7561	0.8474
Root MSE	.0476	.03382	.0391	.02981

However, since T is not log-transformed and additionally we have a dummy variable D , the specification is a semilogarithmic.

It is tempting when working with time-series data to hunt for unit roots in order to avoid spurious correlations, when regressions pick only trends rather than causality in time-series data. This is not much a concern herein: On one hand the number of observations is not long enough and lag periods make it even shorter and there are not many leads after the full unified flexible Exchange Rate realization. On the other hand, visual inspection of Real Exchange Rate since 1991 until the transition to a unified flexible Exchange Rate regime, in Figure (9) above, shows that the degree of random walk is small enough that a mean reversion is a reasonable model for the data generating process. Moreover, the Exchange Rate, the exports and the net exports do not seem to be higher polynomials in time and a dummy (for policy interventions) that represents the recent sequence of changes will be included to measure any shift (a change in the intercept) in the behavior of exports and net exports. Furthermore, an interaction term is included to take into account the possibility that the impact of policy interventions may also depend on time, (i.e. a change in the slope parameter).

Figure (10)



While the above Figure illustrates that Egypt has steadily made the transition to a unified flexible Exchange Rate regime by the end of 2004, the rate has since been appreciating.

4. Econometric Analysis of the Impact of Exchange Rate Liberalization on Egypt's Exports

4.1 Model Specification

The following analysis for the data over the period 1991-2005 attempts to explore the relationship between Egypt's Exchange Rate policy and export performance. We selected this period as it covers the years since the start of the economic liberalization policy – ERSAP ^[17] - in 1991, during which Exchange Rate policy leveraged. ^[18]

We define the dependent variables to be the exports X and net exports as a ratio to imports, nx , such that the figures exclude petroleum exports from total exports and petroleum imports from total imports. The rationale is that according to the government's policy, Egypt's greater Exchange Rate flexibility is expected to more affect exporters of the non-petroleum products. Excluding the export category "petroleum products" is also important since Egypt recently witnessed a rise in petroleum exports due to increased export capacity of natural gas; both in liquefied form and via international gas pipeline network.

The independent variables that will be used in the analysis include the real effective Exchange Rate, e , one-period lagged value of real non-petroleum exports X_{t-1} or net exports nx_{t-1} , time trend denoted by T , and a dummy variable D . The dummy variable takes value 1 for the years after 2000 and 0 otherwise. An interaction term eT is used to interact both e and T to infer how the effect of the independent variable e on real non-petroleum exports and net exports depends on T . The general specifications are as follows:

$$nx_t = \Theta_0 + \Theta_1 e_t + \Theta_2 T_t + \Theta_3 X_{t-1} + \Theta_4 eT_t + \psi_t \quad (1)$$

$$X_t = \beta_0 + \beta_1 e_t + \beta_2 T_t + \beta_3 X_{t-1} + \beta_4 D + \varepsilon_t \quad (2)$$

Instead of applying specification (2) to non-logged data, we will employ it using log-transformed data. Thus, specification (2) can be rewritten as:

$$y_t = \delta_0 + \delta_1 v_t + \delta_2 T_t + \delta_3 y_{t-1} + \delta_4 D + \xi_t \quad (2')$$

Where y is the natural log of X , v is the natural log of e . The benefits from using logged-transformed data is that the coefficients are readily interpreted as elasticities.

local economy, which in turn led to improvements in the exchange market, the Central Bank recently announced plans for “an Exchange Rate flexibility with inflation-targeting monetary policy”, in order to promote sustained non-inflationary economic growth. ^[16] Greater Exchange Rate flexibility is evidently a critical part of Egypt's strategy for achieving the competitiveness of Egyptian exports in the international markets and supporting the higher growth rates.

In order to identify Egypt's international competitiveness in terms of its foreign Exchange Rate, we need to compute the real effective Exchange Rate, $e = E (P/P^*)$ which is the Nominal Exchange Rate, E, adjusted to incorporate inflation rate differences. The price index used for calculating the real effective Exchange Rate is the US Producer Price Index for Finished goods less food and energy, obtained from the U.S. Department of Labor, Bureau of Labor Statistics (2007) "Series Id: WPUSOP3500." The price index for domestic price movement is the Consumer price index. Both indices were re-based to 2000.

As Figure (9) illustrates, international competitiveness is affected not only due to exchange rates, but also by domestic and foreign price movements. For example, even when the nominal effective Exchange Rate of the Pound remained unchanged during the 1980s, the relative competitiveness of Egyptian traded goods decreases when the inflation rate of its trading partner (mainly the US) was lower than that of Egypt.

Figure (9)

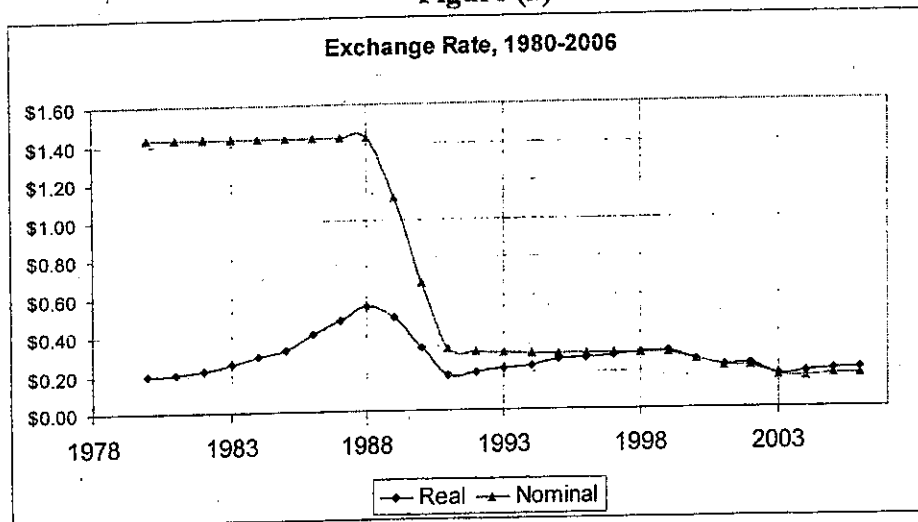
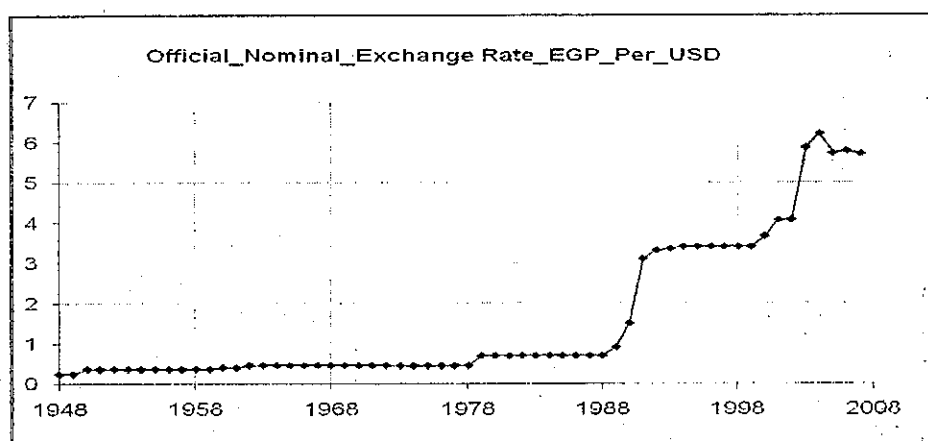


Figure (8)



The inter-bank market had a pronounced positive effect on the Egyptian pound; namely in the context of:

- Reversing the “dollarization” process,
- Contributing to the pound’s upturn, vis-à-vis the dollar. The pound appreciated by about 5¼ percent between December 2004 and February 2005 before leveling off thereafter.

These outcomes - in turn- are manifestations of market implications of the policy measures adopted toward a new market-determined equilibrium Exchange Rate. The CBE continues to tolerate short-term fluctuations in the Exchange Rate but intervenes in the market only to smooth out (partially sterilize) excessive volatility caused by short-term capital flows. Indeed, there has been no intra-day intervention in the inter-bank market. [15]

In any case, from a broad economic policy perspective, the current situation of Exchange Rate stability necessarily emphasizes the interest in the issue of equilibrium Real Exchange Rate. In particular, what will explain the degree of fixity or flexibility? Definitely, approaching an answer to this question must in principle have to do with the wider scope of monetary policy framework; in particular: (1) Exchange Rate anchor, (2) monetary aggregate target and (3) inflation targeting framework.

Historical review shows that in an economy of high currency substitution—e.g. dollarization, in the case of Egypt - the Central Bank had to consider switching to the Exchange Rate anchoring policy. With capital flow to the

allowed a stronger reserve position, coupled with a tighter monetary policy, helped the economy to make two achievements; namely:

- Streamline transactions in the foreign exchange market, and;
- Resolve the backlogs and businesses' and commercial banks' short positions.

Egypt steadily implemented the process of transitioning from a unified official Exchange Rate to a unified flexible Exchange Rate regime in December 2004.^[11] This process was accompanied by the establishment of a formal interbank market for foreign exchange and the elimination of the surrender requirement.^[12]

Shortly later, Egypt notified the International Monetary Fund that it has accepted the obligations of Article VIII, Section 2, 3, and 4 of the IMF Articles of Agreement, to be in effect from January 2, 2005.^[13]

During the 15 months span, ending in June 2006, the pound-dollar Exchange Rate stayed within a narrow ± 1.0 percentage range, while the CBE's net international reserves increased by five percent, to \$22.9 billion. Net reserves grew by 20 percent for the year ending June 2006, contributing to 15% growth in reserve money and 13 % growth in broad money (M2). The subsequent stabilization of the Exchange Rate should contribute to the orderly functioning of the monetary, financial and real sectors and markets. In this context, the CBE foreign exchange reserves increased from \$14.108 billion in 2004 to \$20.508 billion in 2005.^[14]

The following graph (8) summarizes Egypt's Exchange Rate developments over the period (1948 –present):

Source: IMF "De Facto Classification of Exchange Rate Regimes and Monetary Policy Framework," Data as of December 31, 2005. <http://www.imf.org/external/np/mfd/er/2005/eng/1205.htm#table>

*Includes countries that have no nominal anchor explicitly stated, but rather monitor various indicators in conducting monetary policy. The EMU countries of the Euro area become 13 as Slovenia has adopted the Euro since January 07.

The above Table (6) clearly shows on the last column - noted as *Total Number of Countries*- that the majority of the countries (53), have followed the sixth exchange rate regime, namely the "**managed floating with no predetermined path**." Most of the countries adopting this Exchange Rate regime (25 countries) set a monetary aggregate target, while others may have a specific inflation target. We also notice that 92 countries (almost 50 % of the total 187 countries) adopt "**Exchange Rate anchor**" for monetary policy framework. About half of them (45 countries) combine this monetary framework with "**other conventional fixed peg arrangements**" for their Exchange Rate regimes.

3.2 Liberalization measures (1991-)

After signing an agreement with the IMF in 1991, Egypt moved from the regime of **regular crawling peg** to the more liberalized one of **Exchange Rates within crawling bands**, and took several measures to leverage the Exchange Rate policy. Some major Exchange Rate depreciations occurred in 1991 and 1992, when the rate vis-à-vis the US dollar moved to L.E. 3.1 and L.E. 3.3 respectively.

The following period witnessed crawling the rate little by little until the end of the decade, reaching L.E. 3.4 in 1999, when it started to depreciate again more significantly.

In 2001, Egypt established a unified official rate (L.E. 4.9), with the trading band ± 1.5 percentage for the US dollar. Between 2002 and 2004, an improvement in the trade balance, and more generally in the favorable trends in the balance of payments, side by side with the conditions that

Table (5)

Period	Egypt's Exchange Rate Regime
September 29, 1931-1950	Peg to Pound Sterling
1950-May 7, 1962	Conventional fixed peg arrangements
May 7, 1962-July 25, 1971	Conventional fixed peg arrangements
July 25, 1971 -October 8, 1991	Crawling Peg
October 8, 1991-December 2001	Exchange Rates within crawling bands
2001-December 23, 2004	crawling bands---Experimental managed floating
2005-	Managed floating with no predetermined path

For 2005-, the classification is according to the IMF.

As IMF categorizes, exchange rate policies are - according to several regimes - ranging from no separate legal tender up to legal tender with an independent floating exchange rate. Those regimes have various intersections with the monetary policy frameworks to involve various policy targets.

Based on most current country statistics reported by the IMF, the following Table (6) summarizes various exchange rate regimes to monetary policy, and the frequency of countries to each:

Table (6)

Exchange Rate Regime	Monetary Policy Framework					
	Exchange rate anchor	Monetary aggregate target	Inflation targeting framework	IMF-supported or other monetary program	Others *	Total No. of countries
Exchange arrangements with no separate legal tender	29				13	41
Currency board arrangements	7					7
Other Conventional fixed peg arrangements	45					45
Crawling pegs	6					6
Exchange rates within crawling bands	5					5
Managed floating with no predetermined path		25	6	6	16	53
Independently floating		6	16	2	6	30
Total	92	31	22	8	35	187

import coverage (< 0), while Israel shows a positive trend (> 0). Indonesia, Malaysia and South Korea have improving trade balance(s). For both Indonesia and South Korea, this is also associated with an improving trend of import coverage, while Malaysia stands at a negative trend (as does Egypt).

3. Developments in Egypt's Exchange Rate Policy 1948-2004

An important instrument to an effective trade policy is a unified flexible Exchange Rate. When a macro economy is in a position of equilibrium, or near so, this means the existence of a relative stability. On the contrary, when disequilibrium occurs, a case of instability prevails whereby prices of goods and services, along with the supply and demand of foreign exchange, experience a process of changes to adjust towards equilibrium.

Thus, a unified flexible Exchange Rate offers an important contribution for adjusting the direction of economic policy framework, especially the general economic environment, causing the economy to be more integrated into international markets.¹⁰¹ On the other hand, multiple Exchange Rates, may it be official, dual or parallel, mean that a set percentage of trade transactions goes through the official market, while the remainder goes through the dual or parallel market, which often involves both consequent corruption and distorting influences.

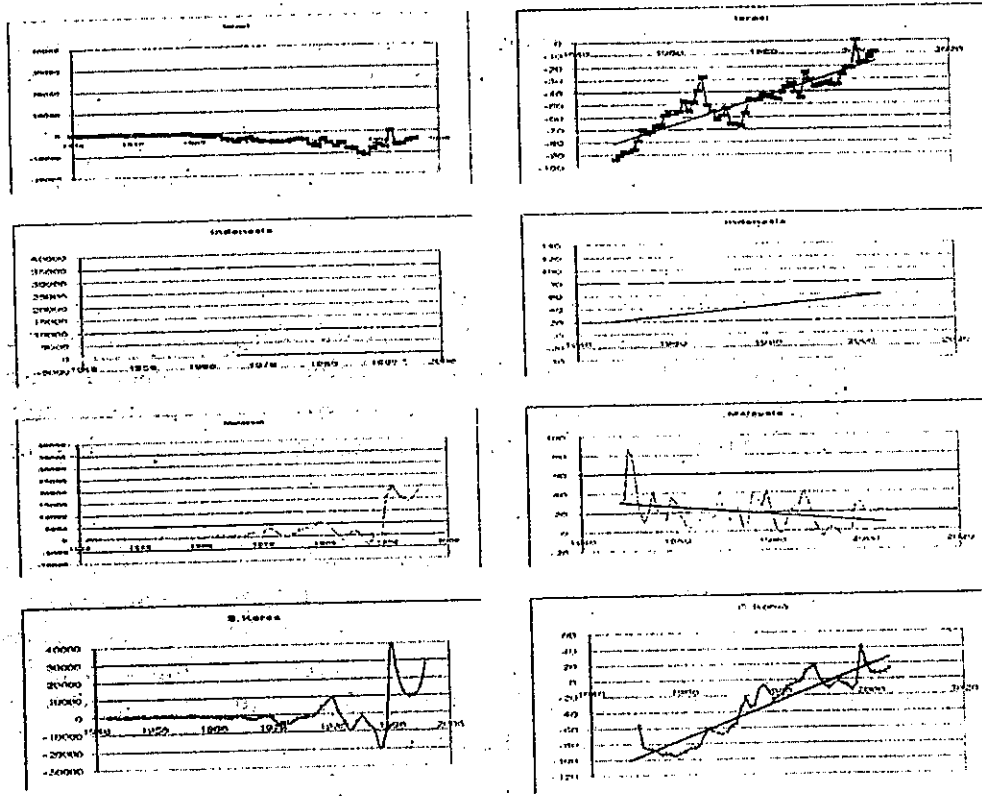
3.1 Historical Overview

Since the suspension of the Gold Standard in 1931, Egypt remained in the Sterling Area until July 14, 1947, and continued to link to the Sterling pound; until 1950, when Egypt linked or pegged to U.S. Dollar.

Initially, Egypt switched from a conventional pegged *Nominal Exchange Rate* regime during the sixties, to a regular crawling peg during the seventies and the eighties, and then to an exchange rate within crawling bands in the nineties before deciding to consider floating arrangements, unifying exchange rates.

A considerable *market-based rate* adjustment paved the way to the subsequent period of exchange rate stability.

The below Table (5) summarizes the above-mentioned historical phases, marking various exchange rate regimes adopted in Egypt since 1931:



Furthermore, **Table (4)** summarizes several remarks drawn from previous comparisons hereinabove:

Table (4)

COUNTRY	Trade Balance (NX)'s Dollar Value	Trend of Trade Balance Coverage of Imports $(dn_x/dt = d(NX/M)/dt$
EGYPT	< 0	< 0
ISRAEL	< 0	> 0
INDONESIA	> 0	> 0
MALAYSIA	> 0	< 0
S. KOREA	> 0	> 0

Worsening trade balance (< 0) occurs for both Egypt and Israel. However, worsening trade balance in Egypt is associated with a negative trend in

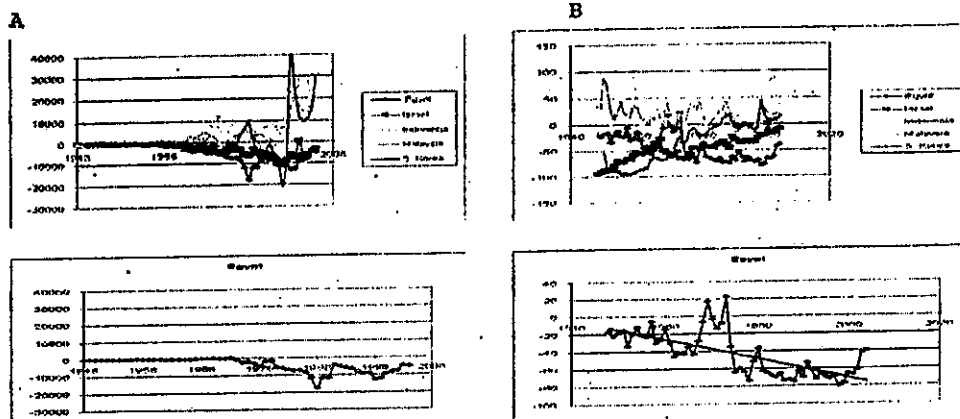
for a size of population standing at 220 million, which is more than three times bigger than Egypt's population.

4. In the cases of Indonesia, Malaysia and South Korea, the big surpluses in their trade balance are associated with a high capacity to import, both at total levels and at per capita levels.
5. Lastly, Israel - with a population of only 6.6 million compared to Egypt's 72.64 million - exports to the world market more than five times greater than Egypt (whose population is more than 11 times bigger than Israel's). As a result, against Egypt's score of only \$103.7 export per capita, Israel's reaches amounts over and beyond \$5836.4 (56 folds).

Using comparable data from 1948 to 2004, Tables (D) and (E) in the Appendix, further implications can be made to Egypt's *Trade Balance* (NX), focusing beyond the absolute to the relative sense. Thus comparisons are made for the trade balance coverage of imports and its overall trend for each country: $dNX / dt = d(NX/M)$: Shown in panel B of the following twelve illustrations of **Figure (7)**:

Figure (7)

Panel A: \$ Value of Trade Balances **Panel B: Coverage of Imports**



- (b) The growth in import shares is slower than that of export shares, reflecting an image featuring both an increasing activity in world trade and continuously improving trade surplus.

South Korea:

1. Trade performance shows clear growth in world exports shares, particularly during the 1980's where export growth was sustained.
2. Import shares have been growing even faster until 1984; thereafter, in 1997, growth in export shares keep ahead of import's, leaving trade balance with surplus ever since.

Moreover, the below Table (3) compares Egypt with previous countries on the basis of several population and trade indicators , in 2004:

Table (3)
Population and Foreign Trade indicators, 2004
Comparison Between Egypt and Other Countries

	Egypt	Israel	Indonesia	Malaysia	S. Korea
Population (m)	72.64	6.6	220	24	47.64
Total Exports	7530.3	38520.2	71261	125744	253845
Total Imports	12606	42380	52076	105298	224436
Trade Balance	-5075.7	-3859.8	19185	20446	29409
Per Capita Exports	103.7	5836.4	323.9	5239.3	5328.4
Per Capita Imports	173.5	6421.2	236.7	4387.4	4711.1

Drawing from the above indicators for 2004, the following are noted:

1. Among all the five countries, with greater or smaller population, Egypt has the lowest record in total value of exports, amounting to only 19.5 %, 10.6 %, 6 % and 3 % of those of Israel, Indonesia, Malaysia and South Korea respectively.
2. Additionally, Egypt has the biggest trade deficit.
3. Comparisons of per capita exports also place Egypt at the lowest level, namely 1.8%, 32 %, 2 % and 1.9 % of the other four countries respectively. Note that Indonesia's per capita exports is

capability to cover Egypt's growing needs to imports is deteriorating over time. The steep negative trend line to the **import coverage** highlights this dilemma, which should give a strong warning projecting the future unless rigorous and timely structural reforms take place.

2.2.3. Comparison with Other Countries

For deeper insight into Egypt's trade deficit, comparisons are made with other developing countries over the same long time horizon from 1984 to 2004. Data for compared economies are included in the previous Tables (D) and (E) in the Appendix. The selection of the four countries - Israel, Indonesia, Malaysia and South Korea - is based on both regional neighborhood and development level criteria ; with various sizes of population relative to Egypt:

Israel:

Here the pattern is interestingly different:

1. It started in 1948 with relative shares of exports and imports smaller than Egypt, but took a persistent path of increase in both sides as percentages of world levels. By 2004, Israel's shares of world exports were more than five times greater than Egypt's (0.43 % compared to only 0.08% for Egypt). Meanwhile, its share of world's imports in 2004 was 3.4 times greater than Egypt's.
2. Though Israel's balance of trade (Table E) has always been like Egypt, negative, it reflects several important differences:
 - (a) The increase in deficit is associated with increasing shares in world trade.
 - (b) Over the successive sub periods from 1948 to 2004, though the average value of deficit has been growing it has become less than Egypt's for the last two sub periods.

Indonesia:

1. Shares of world trade show increasing trends over the observed years and are remarkably higher than Egypt.
2. All over the period, Indonesia's trade balance has been positive.

Malaysia:

1. Again, compared to Egypt, better trade performance is observed; characterized by:
 - (a) A clear trend of stable growth in the percentile share in world exports; and

slowly declines from 1989, reaching the lowest value of \$4367M in 1991; but to rise again in 1992, recording another – yet lower – peak of \$13036M in 1998, followed by a continuous downturn until 2004.

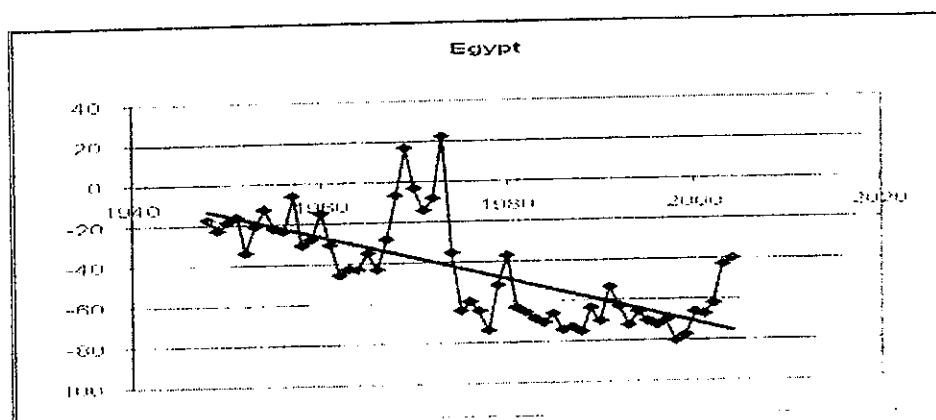
As shown in Table (E) found in the Appendix, while the trade deficit tended to decrease during the years following the beginning of the economic reform program from 1991 to 2004, its average value of \$7901M was still high, about 274% of the average deficit during the after-October-war period from 1974 – 1981. As previously mentioned, this deficit has been associated with phenomenon retreat in Egypt's relative share in world trade.

2.2.2. Trade Balance as a Percentage of Imports ¹⁹¹

The same behavior is also observed for the trade balance as a percentage of imports, $(X - M) / M$, as shown in below Figure (6):

Figure (6)

Egypt's Trade Balance (Percentage of Imports), 1948-2004



Source: UNCTAD Statistical Yearbook, Online database CCESSED, April, 2007

The above Figure shows two critical facts: 1) Egypt's trade balance suffers a chronic deficit; 2) The situation is so acute that the exports' relative

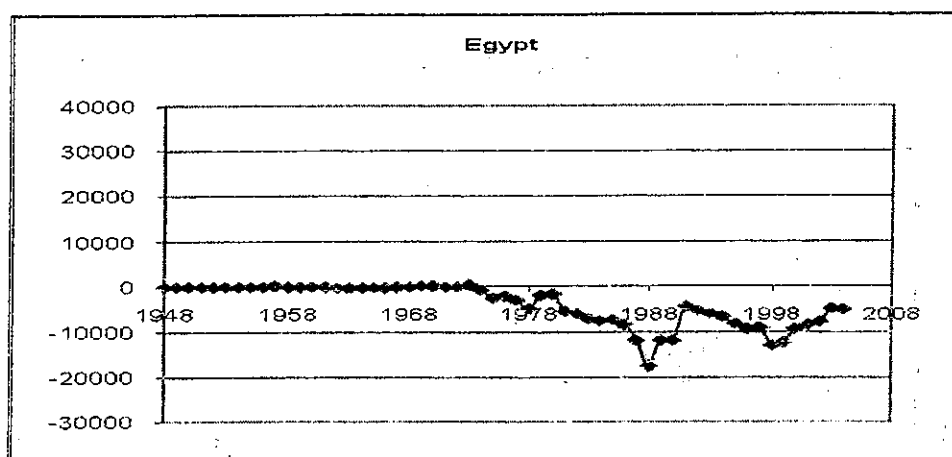
- The downward tendency is clearly persistent, particularly in contrast to other comparable countries. A specially striking observation is found from the comparison with the “much-smaller” neighboring Israel.

2.2. Implications for the Trade Balance

2.2.1. Trade Balance in Value Terms

Figure (5) below and Table (E), found in the Appendix, clearly show that for well over a half century (1948 – 2004), Egypt’s exports have been persistently lagging behind imports, with trade balance almost always negative:

Figure (5)
Egypt’s Trade Balance (Value \$ million), 1948-2004



Source: UNCTAD Statistical Yearbook, Online database accessed, April 2007

Noted is the negative trade balance that started widening sharply in 1975 and continued to increase ever since, reaching a peak of \$17592M in 1988 (with the highest average deficit of \$9989M from 1982 to 1990), then it

- Sharp decline in the % of imports , greater than the decline of exports', reflecting shortage of required foreign exchange.
- It is only in this period that the average balance of trade exhibits a positive - though (very) modest - value (\$6.6M).
- 5. The eight year span from 1974 to 1981 – from after the 1973 war through the economic crisis in 1981:
 - Persistent slow decline in % of exports – reaching the very low average 0.13% (about 14% of pre 1952 average).
 - Obvious rise in % of imports, reaching pre 1967 level, with clear upward turn. For the first time, observe the tendency of gradual decline in export percentage associated with the percentage of imports moving in the opposite (rising) direction.
 - The net effect is (explosive) trade deficits, averaging the unprecedented value \$2889M.
- 6. The nine years from 1982 to 1991, the year before launching the ERSAP:
 - Percentage of export continues to decline, averaging 0.15%, or about 17% of pre 1952 average.
 - Imports percentage keeps rising more than ever, recording the highest average trade deficit since 1973 (\$9989M).
- 7. The fourteen years from launching the ERSAP in 1991 to 2004:
 - Unprecedented decline in Egypt's share in world exports, with an average as low as .07 %, which is about only 8 % of pre 1952 average.
 - Percentage of imports declines sharply, compared to the preceding 17 years, to the exceptionally low level of interwar period (1967 – 1973).
 - The net result is still a very high trade deficit (averaging \$7901M), descending to about 80% from the previous period deficit.

From the previous data, analysis & graphs, we conclude that over the 58 observed years:

- Egypt's relative shares in world trade (exports and imports) have been (very) modest.
- These shares have also been steadily declining from 0.5% in 1952 to as low as 0.15% during 1974 – 1981 and further to only 0.07% during 1991 to 2004.
- The decline in the share of exports is faster than imports.

For further understanding, we analyse Egypt's percentile shares of world's merchandise exports and imports from 1948 to 2004- through the previous seven sub periods -as shown on Table (D) of the Appendix.

Also of interest will be the remarks based on comparisons with the parallel data- on the same Table (D)- of four other selected countries (namely; Israel, Indonesia, Malaysia and South Korea).

1. Pre 1952 period (1948 – 1952):
 - Egypt's % of world exports is 0.9 % on the average. Though at 1% in 1948 and 1949, it tended to decline reaching its lowest level (0.5 %) in 1952.
 - Imports had similar behavior but without sharp decline in 1952.
 - Percentages of both exports and imports show consistent fluctuations.
 - Average balance of trade deficit amounts to \$ 145.5M.
2. The period from 1953 to 61 (9 years from the revolution to the socialist laws):
 - Egypt's % share of world exports on continuous decline (from 0.505 % in 1953 to 0.35% in 1961), averaging a 0.38% or about 42% the average of the previous sub period.
 - In addition, the % of imports continues to decline (from 0.6% in 1953 to 0.49% in 1961).
 - Balance of trade in continuous deficit though at a lower average of \$127.4M.
3. From 1962 to 1967, six years following the socialist measures to pre 1967 war economy:
 - Further decline in export percentage, averaging roughly 0.3% or (almost) a third of pre 1952 average.
 - Imports' percentage still declining but slower than previous years.
 - Much greater trade deficits (average \$362M, or 278% of pre 1952 average).
4. The interwar years 1968 -1973:
 - More persistent decline in export % (averaging about 0.2%, or 20% of pre 1952).

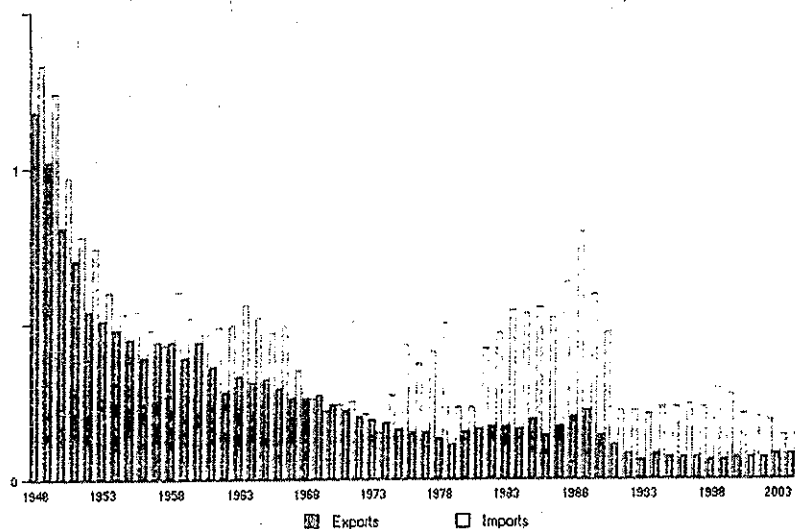
Also, Table(2)above “*Geographic Destination of Egypt’s Export*” over a quarter of a century (1980 – 2005) indicates the following main features:

1. Industrial countries provide a major destination, whereby absorbing more than half (roughly 57 % on the average) of Egypt’s exports. Within this group, US’s share(s) are clearly increasing, while Japan’s share(s) take the opposite direction.
2. The European Union receives a major , yet declining, share of Egypt’s exports. At its lowest level in the year 2005 , this share was over 38%.
3. One third goes to “Developing Countries ” within Africa, Asia and Europe.
4. Exports to the M.E. countries are fluctuating around a low average of about only 15%.

2.1.4. Egypt's Share in World Trade

The following Figure (4) briefly illustrates Egypt’s relative shares in world trade over a 58-year span from 1948 to 2004:

**Figure (4)
Egypt’s Exports and Imports as % of World Total, 1948 – 2004**



Source: UNCTAD Statistical Yearbook, Online database accessed, April 2007

Rate policy alone cannot tackle the task. In the future, emphasizing the labor-intensive product categories - that are based on achieving international levels of labor efficiency and productivity - would seem highly rewarding, though highly demanding for much more coherent policy vision and industrial strategy.

4. The present indicators thus obviously assure that the industrial sector – with its existing structure and capabilities – is far from taking the lead towards a path of sustained economic growth , based on a strong and internationally competitive economy.

2.1.3. Geographical Destination of Exports

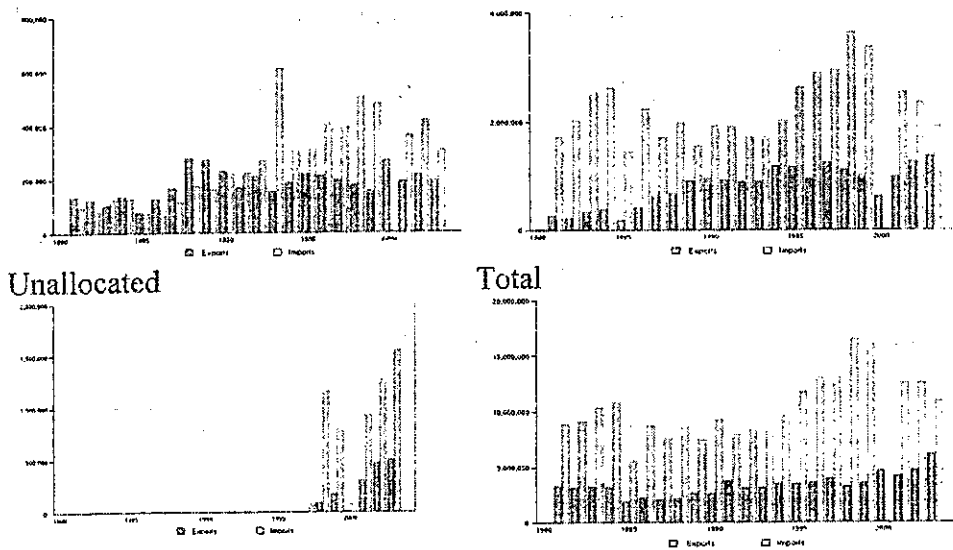
It is important to note that, after the 1952 revolution and before 1974, Egypt's exports were mostly tied to a sort of barter deals, where more than half of the economy's exports went to the (then) Eastern Bloc and the former Soviet Union. This specific geographic pattern started to change after adopting the "economic openness" policy after the October 1973 war.

The following Table (2) shows the distribution of Egypt's exports by geographical destination over the period 1980-2005: ¹⁸¹

Table (2)
Geographical Distribution of Exports, 1980-2005

	1980	1990	2000	2005
World Total	100.00%	100.00%	100.00%	100.00%
Industrial Countries	62.92%	51.90%	62.45%	51.80%
United States	7.68%	8.58%	12.80%	12.98%
Canada	0.29%	0.25%	0.39%	0.76%
Australia	0.00%	0.04%	0.14%	0.07%
Japan	2.35%	2.72%	2.04%	0.69%
Developing Countries	35.19%	46.28%	28.00%	37.62%
Africa	1.02%	2.05%	3.24%	6.48%
Asia	2.62%	6.58%	9.48%	7.94%
Europe	12.79%	21.73%	3.76%	3.93%
Middle East	17.07%	15.91%	10.68%	18.03%
European Union	53.51%	41.48%	48.07%	38.30%
Oil Exporting Countries	2.16%	7.47%	7.68%	9.61%
Non-Oil Developing Countries	33.03%	38.81%	20.33%	28.02%

Source: IMF (2007) Direction of Trade Statistics, Online Database



Conclusion:

1. In general, it is clear that Egypt's exports have been relying heavily on fuels. The export percentage of this category was exceptionally high from 1981 to 1985 (averaging 64%), to then decline recording a lower average (about 43%) from 1986 to 2003. It is also noteworthy that fuel exports have been the only source of foreign trade surplus for the Egyptian economy.
2. It is clear that Egypt has long been running trade deficits, with the exception to Fuels (SITC 3). Those deficits were not worsening recently, especially in Agricultural Raw Materials (SITC 2-22-27-28), Ores and Metals (SITC 27+28 + 68), nor within Other Manufactured Goods (SITC 6 + 8 - 68). Further, it is noteworthy that these product categories are labor-intensive.
3. On the other hand, the deficits worsened in the capital-intensive product categories, such as Manufactured Goods (SITC 5 to 8 less 68), Chemical Products (SITC 5), and (in particular) within Machinery and Transport Equipment (SITC 7). This shows that the capital-intensive industrial sectors are more internal- rather than external- oriented, which need improvements in order to make surplus for export. Also Egypt needs to be innovative with a "competitive edge" in certain industrial sectors, such as the automotive industry, where multinationals have control on the world market via licensing and partnership production agreements . In fact, for such issues, even in the long-run, flexible Exchange

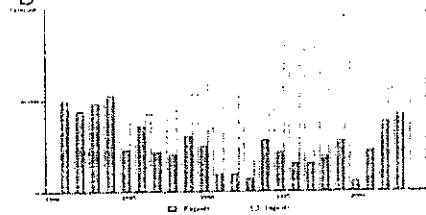
percentage of total imports (averaging roughly 50 % for the whole period).

7. Oars and Metals: Relatively weak contribution to total exports (though bigger than Machinery and Transport Equipment and Chemical Products, respectively). With bigger increases in the value of its imports relative to exports, the trade deficit of this product group exhibits accelerated growth (though its relative share in total imports is modest).

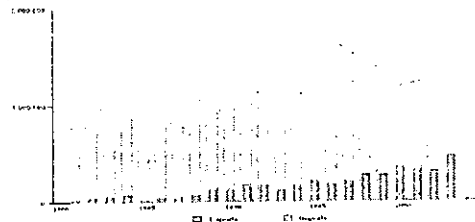
The following Figure (3) illustrates the \$ values of exports and imports aforementioned product groups over 1981-2003.^[7]

Figure (3): Product Composition of Exports and Imports

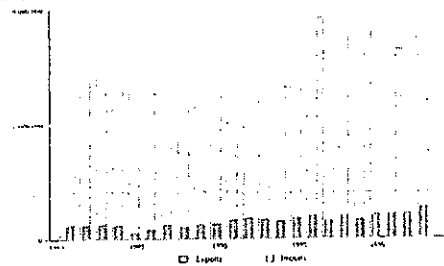
Agriculture Raw Materials



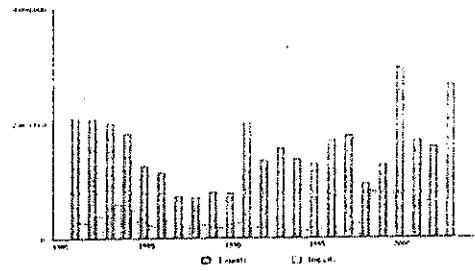
Chemical Products



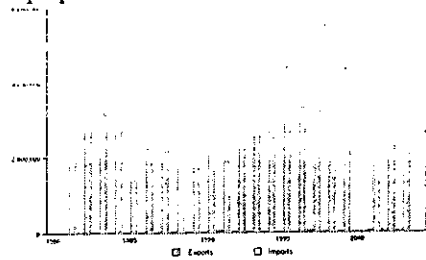
Food



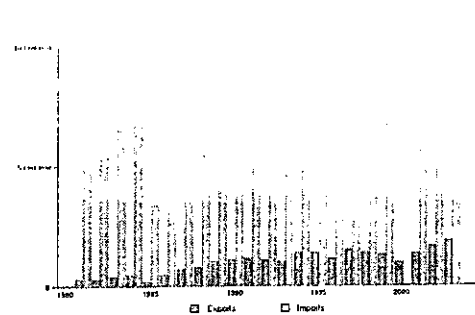
Fuel



Machinery and Transport Equipment



Manufactured Goods



Ores and Metals

Other Manufactured Goods

2.1.2. Product Composition of Exports

Using a 1-digit Standard International Trade Classification (SITC), for analysis of Egypt's exports and trade performance - according to product groups¹⁶¹, over the period from 1981 to 2003 in relative terms as presented in **Table (B)** of the Appendix, and in **Table (C)**, \$M values- certain conclusions can be made, such as:

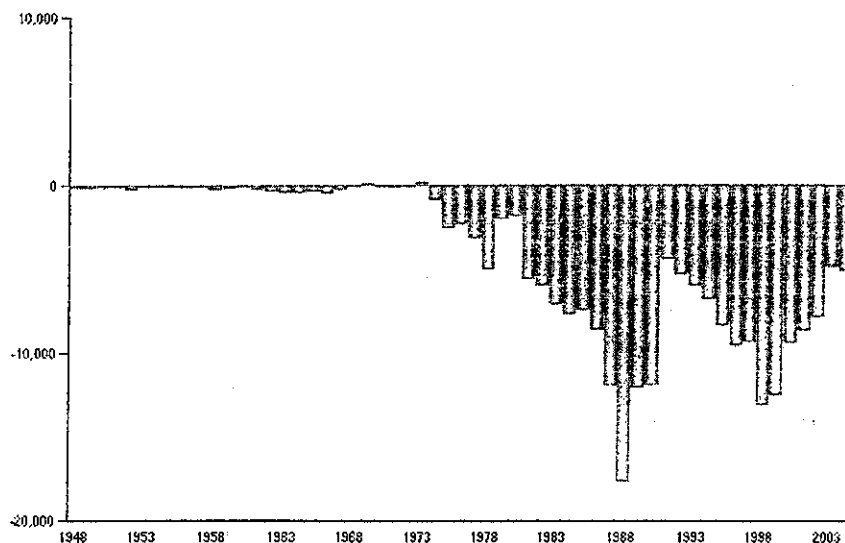
1. Exports of Agricultural Raw Materials: Show continuous decline in percentage contribution to total exports, with a sharp drop in 1991, followed by weak and unsteady revivals, never reaching pre 1991 average percentage. Average absolute value clearly declines after 1991, bringing down the average for the entire period, coupled with increasing values for imports and deficit.
2. Chemical Products: Contribution percentages to total exports are sustainably increasing but with much greater increase in imports and recorded deficits increase. In value terms, pre 1991 average deficit of \$866M increased to an average of \$1207M after 1991.
3. All Food Items: Export data on these products show a continuous increase, both in absolute value and relative to total exports, particularly over the sub period starting 1991. Concurrently, local import needs increased as well, (almost) ending with deficits on a fixed percentage but with increasing dollar value.
4. Fuel: Export on this commodity show a relative decline, commencing with a sharp percentile drop in 1987, followed by three years of slow decline, then a strong but brief revival in 1991, followed by a decade of narrow fluctuations. Though the data shows oscillations seemingly on downward trend, fuel is Egypt's single export category making trade surplus.
5. Machinery and Transport Equipment: Have (very) modest relative contribution to total exports (average < 1 % for the entire period) with slow tendency to limited increases. Contrarily, the very high level of comparable imports reflect a trade balance with a persistently big deficit, with no apparent- nor foreseen-tendency, to be significantly covered by domestic products.
6. Manufactured Goods: Clearly on the rise, starting with significant increase in 1987, reaching a plateau (almost) at a fixed percentile contribution to total exports, but with a big domestic demand. As a result, its deficit shows both a big value and a high

two exceptional years the surpluses were modest (\$107M and \$206M respectively).

2. The years beyond 1973 were generally characterized by a persistent and fast growing gap between exports and imports, allowing a rising trend to the trade deficit.
3. Taking the averages of 1968-73 as a base point ; the average value of exports from 1974 to 1981 increased 2.5 times, with an increase in imports totaling 6 times. For 1991-2004, recorded exports increased five folds while imports grew by 15.
4. The observed phenomenal nature of Egypt's trade deficit, coupled with weak contribution in foreign trade, indicates a deep-rooted weakness in the economy's production structure. This fundamental drawback, highlighted in below Figure (2), shows Egypt's persistent trade deficit, along with modest levels of exports and imports:

Figure (2)

Egypt's trade Balance (Value \$ million)



Source: UNCTAD Stat. Yearbook, Online Database accessed, Apr.2007

the period from the 1952 revolution, up to the socialist laws of 1961, the situation was more or less the same, with smaller average values (\$459M and \$587M) respectively, also permitting a slightly smaller average deficit (\$128M).

The six years from 1962 to 1967: The limited increases witnessed on both ends with faster growing imports (averaging values \$540M and \$901M respectively), resulting in an obviously greater average deficit of \$ 362M.

The six years following the 1967 war, up to 1973: Although unique in the slow down of imports (relative to the previous period), exports continued at a slow pace of increase. If the assumption is made that it was the economy's deterioration to such capabilities imposed by the aftermath of 1967 war losses - rather than it was an autonomous policy choice - that dictated imports decline, then the uniqueness of this sub period- having an average value of exports greater than imports (\$811M and \$804M respectively)- permitted the (once very meager) trade surplus to average \$7M .

The year 1974: Marks the start of a clearly new era taking both trade sides to much higher levels (averaging for the next eight years \$2000M and \$4889M respectively), with the highest average deficit of \$2880M.

The years (1982- 1990): During this sub period the economy moved along an explosive path of imports (averaging \$14,201M) against a much slower growth in exports (averaging \$4211M). The outcome deficit soared (averaging \$9989M).

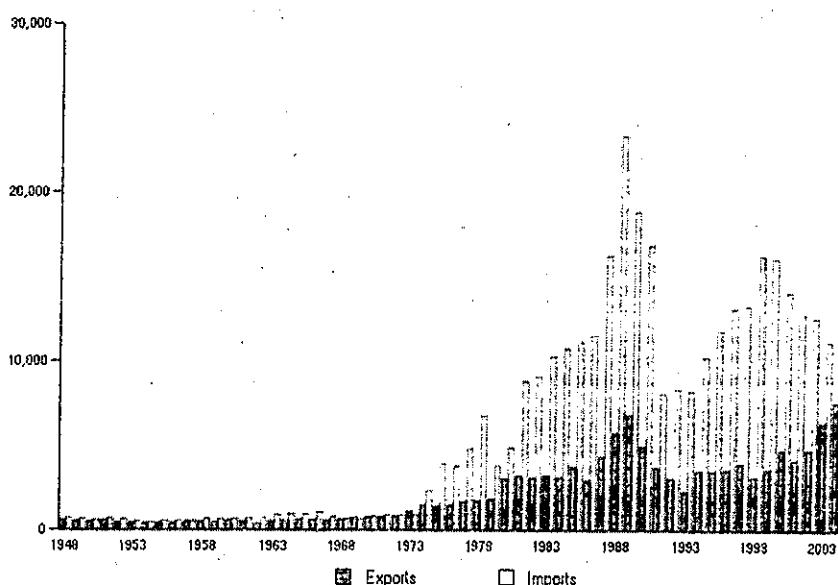
Upon commencement of the reform program in 1991: The economy seemed unable to make a remarkable improvement over a 14-year duration from 1991 to 2004 (averaging values of exports and imports recorded \$4104M and \$12005M respectively) where the average deficit increased up to \$790.

SUMMATION: Figure (1) and Table (1)

1. The entire 57 year duration, with exception to 1969 and 1973, the \$ value of exports consistently lagged behind imports . In the

The following **Figure (1)** and **Table (1)** show developments of the values of Egypt's exports and imports in a fixed \$ value (millions) over the extended period of 57 years 1948 – 2004:^[4]

Figure (1)
Egypt's Exports and Imports (USD Value), 1948 – 2004



Source: UNCTAD Statistical Yearbook, Online database accessed, April, 2007

Table (1)
Egypt Exports and Imports, (Value \$ million), 1948-2004^[5]

PERIOD	AV. X	AV. M	AV (X-M)
1948-1952	527	673	-146
1953-1961	459	587	-127
1962-1967	540	901	-362
1968-1973	811	804	7
1974-1981	2000	4889	-2889
1982-1990	4211	14201	-9989
1991-2004	4104	12005	-7901

The five years sub period from 1948 to 1952: The values of both exports and imports are very small and close (averaging about \$527M and \$673M respectively) with an average deficit of (\$146M). During

fixed rate. Maintaining a crawling peg can be implemented within crawling bands of certain fluctuation margins of at least ± 1 percent around a central rate.

Managed Floating with no Predetermined Path for the Exchange Rate: A regime in which the monetary authority attempts to influence the Exchange Rate without having a specific Exchange Rate path or target. Indicators for managing the rate are broadly judgmental (e.g., balance of payments position, international reserves, parallel market developments), and adjustments may not be automatic. Intervention may be direct or indirect.

Independently Floating: The most liberalized Exchange Rate regime, and also the most preferred by the IMF. This Exchange Rate is market-determined, with any official foreign exchange market intervention aimed at moderating the rate of change and also preventing undue fluctuations in the Exchange Rate, rather than at establishing a specific level for it.

2. Profile of Egypt's Export Performance, 1948-2004

2.1. Major Characteristics

To understand the impact of Exchange Rate policy and its later liberalization in particular, the focus shall be on certain aspects of Egypt's foreign trade as such and in comparison with some other countries:

2.1.1. Values of Exports and Imports:

The values of exports and imports are to project or forecast (at least) what is to come, along with certain remarks of definitely important implications. When data for both imports and exports are presented and compared over the same period, claims made are better understood as situations are based on conclusions that are more indicative. Later inspections made on other aspects are needed for further coherent understanding and recommendations.

Egyptian Pound when foreign exchange from exports is surrendered to the monetary authorities). Therefore, incorporated in those prices are the effects of change(s) in the Nominal Exchange Rate. Thus the rise in Real Exchange Rate will also affect exporters returns, making exporting from the country less profitable, and may induce cut back on their exports. The opposite holds true in the case of Real Exchange Rate decline, which would affect exporters' returns in such a way that makes the country's exports more profitable, inducing companies to boost their exports.

Under a *Flexible Exchange Rate* regime the current account balance (CA) will be mirrored in the capital account (KA), such that:

$$CA-KA=0$$

Accordingly, the changes in the supply and demand in the foreign exchange market will restore the imbalances.

1.2. About Exchange Rates and Regimes

There are various Exchange Rate terminologies, regimes and arrangements. For the limited purpose of clarity of exposition, below are brief descriptions of a few:^[3]

Conventional Fixed Peg Arrangement: The country pegs its currency within margins of ± 1 percent or less vis-à-vis another currency. The monetary authority maintains the fixed parity through direct intervention (i.e., via sale/purchase of foreign exchange in the market) or indirect intervention (e.g., via the use of interest rate policy, imposition of foreign exchange regulations, exercise of constraints over foreign exchange activity, or through intervention by other public institutions). Pegged Exchange Rates can also be within wider bands and the value of the currency is maintained within certain margins of fluctuation of more than ± 1 percent around a fixed central rate.

Crawling Peg Regime: The currency is adjusted periodically in small amounts at a fixed rate or in response to changes in selected quantitative indicators, (i.e., past inflation differentials vis-à-vis major trading partners, differentials between the inflation target and expected inflation). The rate of crawl may be set at a preannounced

1. Exchange Rate and Export Performance: A Theoretical Perspective

1.1 Overview

The world market share for its product(s) determines the demand for a country's export(s). The market share is determined by several factors which include - and are not limited to - country's income and its population growth, and how well the product(s) compete or sustain within the world market. Foreign demand is also a major determinant of the foreign price for a small country's exports, such as, ores and fuel commodities, agricultural products and manufactured products. Changes in international supply conditions, trade barriers, input costs as well as consumer preferences also have impacts on the foreign price of exports.

A country's competitiveness or sustainability can be measured by:

- *Real Exchange Rate* ("e"), defined as the *Nominal Exchange Rate* ("E") of the domestic currency in terms of a specified foreign currency (e.g., one Egyptian Pound in terms of US Dollar);
- Multiplied by the Ratio of Domestic Price ("P") to Foreign Price ("P*")^[1]

$$e = E (P/P^*)$$

In effect, the Real Exchange Rate is the price of domestic goods relative to the price of foreign goods. The following open-economy equation explains the relation between real exports and its determinants:

- "NX" denotes *net exports*;
- "Y" domestic income;
- Y* foreign income; and
- "Θ" is a vector of a set of other factors, such as, international trade policy, regional economic agreements, international factor movements, etc.^[2]

$$NX = f(e, Y, Y^*, \Theta)$$

A rise in the value of the currency is referred to as **appreciation**. Analogously, a decline in the value of the currency is referred to as **depreciation**. A rise in a country's Real Exchange Rate - other things equal - means domestic products' costs are higher compared to those sold in other countries, thus less competitive. Domestic export prices are the prices that exporters receive in domestic currency (e.g.,

Table of Contents

1. Exchange Rate and Export Performance: A Theoretical Perspective
 - 1.1. Overview
 - 1.2. About Exchange Rates and Regimes

2. Profile of Egypt's Export Performance, 1948-2004
 - 2.1. Major Characteristics
 - 2.1.1. Values of Exports and Imports
 - 2.1.2. Product Composition of Exports
 - 2.1.3. Geographical Destination of Exports
 - 2.1.4. Egypt's Share in World Trade
 - 2.2. Implications for the Balance of Trade
 - 2.2.1. Trade Balance in Value Terms
 - 2.2.2. Trade Balance as a Percentage of Imports
 - 2.2.3. Comparison with Other Countries

3. Developments in Egypt's Exchange Rate Policy; 1948-2004
 - 3.1. Historical Overview
 - 3.2. Liberalization (1991-)

4. Econometric Analysis of the Impact of Exchange Rate Liberalization on Egypt's Exports
 - 4.1. Model Specification
 - 4.2. Estimation and Results

5. Conclusions

6. References

7. Appendix

أثر تحرير سعر الصرف علي أداء الصادرات المصرية

ملخص

تتناول هذه الدراسة أثر تحرير سعر الصرف على الصادرات المصرية - لاسيما فيما يتعلق باتجاهها العام ، وأداء تجارة مصر الخارجية ككل - معتمدة على سلسلة بيانات تتجاوز نصف قرن مضى (1948-2005) . وبينما لم يكن لسعر الصرف دوركأداة خلال الجزء الأول من هذه الفترة ، فقد لعب هذا الدور بوضوح في الجزء الأخير منها ، مواكبا لإجراءات التحرر الاقتصادي . ويتحرى مقولة " أثر سعر الصرف وسياساته على تنمية الصادرات " من حيث مدى انطباقها على حالة مصر وكيفية ذلك ، فقد اتفقت استنتاجات كل من التحليل الاستنباطي لبيانات الفترة بكاملها ، والتحليل القياسي لمرحلتها الأخيرة 1991-2005 على ضعف أداء الصادرات المصرية - لاسيما مع استبعاد الصادرات البترولية - وعلى التراجع المستمر في أهمية مصر النسبية في التجارة العالمية . لقد كان للإتجاه إلى تغيير سعر الصرف منذ 1991 أثر إيجابي طفيف على الصادرات حتى عام 2000 ، نظرا للضالة النسبية لهذه التغيرات خلال التسعينيات ، مقارنة بالتغيرات الكبيرة خلال الفترة 2001-2005 والتي أدت إلى التحرير الكامل لسعر الصرف. لقد تركت المعالم الجديدة لسياسة سعر الصرف منذ نهاية 2004 أثرا إيجابيا واضحا على كل من إجمالي وصادفي الصادرات ، مع ملاحظة ضالة مرونة كل من الصادرات والواردات. وإذا جاز تصور حدوث قدر من التغير الهيكلي ، فإن مثل هذا التصور يتعذر تأكيده أو قياسه قبل أن تتوفر سلسلة زمنية أطول من البيانات بعد التحرر الكامل لسعر الصرف . كذلك يجب إدراك أن أداة سعر الصرف لا يمكن أن تضطلع وحدها بعبء تحقيق المهمة الضخمة المتمثلة في الوصول بالصادرات المصرية إلى مستوى التنافسية العالمية . فدون ذلك ضرورة توفر الشرط المسبق وهو تحقيق إصلاح إقتصادي جذري بعيد المدى .

Abstract

This study investigates *The Impact of Exchange Rate Liberalization on Egypt's Export Performance*, focusing on two main junctures: 1) **General Export Trend** ; 2) **Foreign Trade** performance, using data set well over half a century ago (1948-2005). In the early part of this period, Exchange Rate was not an active policy tool as it was enhanced under liberalization measures during the later part of this era. Based on the conventional wisdom that Exchange Rate(s) and their policies can exert significant effects on exports, this study attempts to ascertain if this holds true, and how so, in the case of Egypt.

General analysis for the period 1948 to 2005 - along with econometric analysis for the sub period 1991 to 2005 - consistently show weak export performance , particularly when petroleum exports are excluded. When Exchange Rate leveraged in 1991, exports showed a slightly more positive trend until 2000, which may be attributed to the small relative magnitude of changes during the 1990's. Within 2001 to 2005 a rather aggressive change occurred , leading to a full Exchange Rate liberalization. The new policy configuration since the end of 2004 seemed to have exerted clear positive effects on exports and net exports; though price elasticities of both exports and imports were quite small. While some structural changes are suspected, these suspicions are dubious without analysis of a longer-enough post full-liberalization time-series. Besides , exchange Rate alone cannot undertake the huge task of achieving international levels of competitiveness for Egyptian exports: The primary necessary pre-condition is the fulfillment of a robust and far-reaching structural economic reform.

**THE IMPACT OF EXCHANGE RATE
LIBERALIZATION
ON EGYPT'S EXPORT PERFORMANCE**

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