Prospects for Inflation Targeting in the MENA Region: Feasibility, Desirability and Alternatives

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Abstract

Inflation targeting (IT) has recently become the dominant monetary policy prescription over the last decade. Emerging markets governments, in particular, are increasingly pressured to follow IT as part of their IMF-led stabilization packages and the routine rating procedures of the international finance institutions. However, the common expectation of IT promoters that price stability would ultimately lead to macroeconomic stability and sustained growth has failed to materialize. This paper is an attempt to assess the desirability of the IT regime for a select group of MENA countries. I also argue that modern central banking ought to have more policy space in balancing out various objectives and instruments, and that central bank `independence' should not be equivalent to central bank `irrelevance.'

I. Introduction

Inflation targeting (IT) is the new sanctimony of the mainstream macroeconomic thought. More properly ought to be referred as inflation forecast targeting, the approach has now been adopted as the basis for official monetary policy for a total of twenty four central banks (CBs). After its initial adoption by New Zealand in 1990, the conditionalities surrounding the IT regime were so powerful that the CBs of both the industrialized and the developing economies alike were compelled to declare that maintaining price stability at as low as possible rate of inflation is their *only* mandate and that they have no other macroeconomic objective to pursue, such as employment generation or output growth. It was generally believed that price stability is a pre-condition for sustained growth and employment, and that "high" inflation is damaging to the economy in the long run.[1]

The waves of this new approach to monetary economics had already reached the shores of the economies of the Middle East and North Africa (MENA). The quest for the possibility of adoption of the IT framework in the region has definitely gone beyond the simple rhetoric of "*we're being late; let's join the IT ranks*", and has been the subject matter of an international conference organized by the ERF and FEMISE.[2]

On the issue of "readiness", the rapidly burgeoning IT literature disclosed a series of "initial conditions" for adopting the framework. Notwithstanding the diversity of the accumulated experiences thus far, a quick checklist can nevertheless be numerated: (i) absence of other nominal anchors, such as exchange rates or nominal GDP; (ii) an institutional commitment to price stability; (iii) absence of fiscal dominance; (iv) policy (instrument) independence; and (v) policy transparency and accountability (Mishkin and Schmidt-Hebbel, 2001, p.3; Bernanke, *et. al.* 1999).

On many checkpoints the region clearly fails in meeting most of the requirements set above. The crucial question, however, is not whether the "*region is ready or not?*" nor "*how should it get prepared?*" The more important question should rather be "*how appropriate is the IT framework for the MENA region*" to begin with, especially in the light of the lessons of the unfolding 2007 global financial crisis. It is this in spirit that the current paper dwells on and an

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[1] Note, for instance, the *Bank of England*'s policy mandate: "One of the Bank of England's two core purposes is monetary stability (the "other" core purpose is financial stability –author's note). Monetary stability means stable prices —low inflation- and confidence in the currency. Stable prices are defined by the Government's inflation target, which the Bank seeks to meet through the decisions on interest rates taken by the Monetary Policy Committee. (*www.bankofengland.co.uk*).

[2] "Monetary Policy and Inflation Targeting: Is the MENA Region Ready?" ERF/FEMISE Conference, Tunisia, October, 2008.

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attempt is made to go beyond mechanistic assessments of feasibility and desirability of the IT framework to offer viable policy alternatives for the region.

To this end, the next section opens with a review of the macroeconomic conditions prevalent in the MENA region. This review is followed by a survey of the macroeconomic record of IT and its current structure in section III. Section IV focuses on the role of the exchange rate as one of the key macro prices, and discusses alternative theories of its determination. The importance for maintaining a *stable and competitive real exchange rate* is one of the clear messages of section IV. The section further notes an important contribution by Taylor (2004) on the irrelevance of the dualities implied by the mainstream Mundell-Fleming model and the infamous *tri-lemma*. Section V concludes.

II. The State of the Macro Economy in Selected MENA Countries

A bird's-eye-view of the macro indicators of selected MENA economies are presented in Table 1. Among the given set, only Republic of Turkey has adopted full-fledged inflation targeting (starting in 2006). Turkey's steps towards IT can be traced to its close ties and supervision with the IMF. It was, indeed, among the stated policy objectives of the failed 2000 disinflation program that Turkey would enact full-fledged inflation targeting by the end of that program (as early as 2003). The crisis conditions, however, delayed this program to January 2006 and the Turkish Central bank had followed an "implicit" inflation targeting framework between 2002 and 2006.

Interestingly enough, even though Turkey could have brought its ongoing high rates of inflation of the 80's and 90's back to single digit levels, countries such as Morocco, Jordan and Tunisia had already achieved significant success in maintaining a "low and stable" rates of inflation. Even though there is a slight trend of increased inflation towards the end of 2005, Morocco, Tunisia and to some extent Jordan had the lowest inflation rates in the region. Egypt had also maintained a relatively low inflation stance except for 2004 and 2006. Lebanon, on the other hand, continues to suffer from the war-torn economy in all its macroeconomic indicators.

Growth had been rapid in almost every region during this period, and the MENA countries had also capitalized on the expanding world volume of capital and trade. The fiscal performance of our list of countries had varied. The fiscal dominance, as disclosed by high budget deficits, was clearly visible in Turkey while Egypt virtually had a "balanced" budget performance over 2000-2007. On the other hand, Tunisia had a modest surplus and Morocco had a slight deficit. Jordan and Lebanon had significantly high deficits. Thus, in terms of the key indicator of fiscal dominance, Tunisia, Egypt and to some extent Morocco had already achieved favorable conditions for satisfying the "basic" requirements of

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the IT. As for indicators of financial-depth, the given M2/GDP ratios reveal that the region had also maintained a significant degree of financial activity. Given these findings, the real question is whether IT is the best choice for the MENA region, especially given the lessons of the ongoing current global crisis. To tackle this question, I now turn to the macroeconomic history of the inflation targeters.

Table 1. Key Macroeconomic Indicators for Selected MENA Countries								
	2000	2001	2002	2003	2004	2005	2006	2007
EGYPT								
Growth Rate of GDP[a]	3.23	3.52	3.19	3.19	4.14	4.42	6.84	7.09
GDP (current US$)	99.8	97.6	87.9	82.9	78.8	89.7	107.5	128.1
Inflation, consumer prices (annual %)	2.68	2.27	2.74	4.51	11.27	4.87	7.64	9.32
Current account balance (% of GDP)	-0.97	-0.40	0.71	4.51	4.97	2.34	2.45	..
Money and quasi money (M2) as % of GDP	72.76	77.57	82.91	88.67	90.31	92.09	91.00	90.10
Budget Balance/GDP (%)	0.81	-2.25	-1.00	-0.12	-0.71	-1.17	-2.71	-0.52
JORDAN								
Growth Rate of GDP[a]	-6.84	5.27	5.79	4.18	8.56	7.07	6.30	5.96
GDP (current US$)	8.5	9.0	9.6	10.2	11.4	12.6	14.1	15.8
Inflation, consumer prices (annual %)	0.67	1.77	1.83	1.63	3.36	3.49	6.25	5.39
Current account balance (% of GDP)	0.71	0.05	5.68	12.21	0.78	-17.66	-13.54	..
Money and quasi money (M2) as % of GDP	108.52	110.33	112.02	118.72	120.21	126.40	131.94	132.34
Budget Balance/GDP (%)	-2.06	-2.29	-3.66	-6.22	-6.34	-6.92	-3.32	..
LEBANON								
Growth Rate of GDP[a]	-1.39	4.69	3.14	4.09	7.45	1.05	0.00	2.00
GDP (current US$)	16.8	17.2	18.7	19.8	21.5	21.6	22.8	24.0
Inflation, consumer prices (annual %)	21.01	18.85	19.88	19.93	..	..	..	..
Current account balance (% of GDP)	..	..	-23.59	-24.90	-19.01	-12.75	-4.82	-8.53
Money and quasi money (M2) as % of GDP	185.45	196.84	195.08	204.03	209.83	223.89	225.18	235.30
Budget Balance/GDP (%)	-14.86	-13.33	-9.93	-10.20	-4.83	..	..	..

Table 1. Continued								
MOROCCO								
Growth Rate of GDP[a]	-0.88	7.60	3.30	6.10	5.20	2.40	8.00	2.30
GDP (current US$)	37.1	37.8	40.5	49.8	56.4	59.0	65.4	73.3
Inflation, consumer prices (annual %)	1.89	0.62	2.80	1.17	1.49	0.98	3.28	2.04
Current account balance (% of GDP)	-1.28	4.27	3.65	3.18	1.72	1.88	2.83	..
Money and quasi money (M2) as % of GDP	71.46	73.41	77.29	77.77	80.26	85.26	89.55	99.97
Budget Balance/GDP (%)	..	..	-1.74	-1.33	-1.09	-2.21	-0.72	..
TUNISIA								
Growth Rate of GDP[a]	3.15	4.92	1.65	5.56	6.04	3.98	5.66	6.33
GDP (current US$)	19.4	20.0	21.0	25.0	28.1	29.0	31.0	35.0
Inflation, consumer prices (annual %)	2.93	1.98	2.72	2.71	3.63	2.02	4.49	3.15
Current account balance (% of GDP)	-4.23	-4.20	-3.54	-2.92	-1.96	-1.05	-2.05	..
Money and quasi money (M2) as % of GDP	51.89	54.00	55.74	54.61	54.69	56.69	57.54	59.22
Budget Balance/GDP (%)	1.61	2.02	1.66	1.56	0.81	0.00	0.64	0.01
TURKEY								
Growth Rate of GDP[a]	5.41	-5.70	6.16	5.27	9.36	8.40	6.89	4.45
GDP (current US$)	267.2	196.0	232.7	304.6	393.0	484.0	529.9	657.1
Inflation, consumer prices (annual %)	54.92	54.40	44.96	25.30	10.58	10.14	10.51	8.76
Current account balance (% of GDP)	-3.68	1.73	-0.65	-2.64	-3.97	-4.67	-6.18	..
Money and quasi money (M2) as % of GDP	29.52	34.40	35.34	32.98	31.61	33.55	37.11	40.32
Budget Balance/GDP (%)	-10.9	-16.2	-14.3	-11.2	-7.1	-3.60	-3.00	-2.40

Source: International Monetary Fund (IMF), International Financial Statistics; Summers and Heston, Penn World Tables, ver. 6.2, 2007

a. Annual rate of growth in real GDP, in constant 2000 US$.

III. Macroeconomic Record of IT

There is an abundant literature on the impact of the IT framework in the developing world (see, *e.g.,* Epstein and Yeldan, 2009; Batini et. al. 2006; Mishkin, 2004; Bernanke, *et. al.* 1999, Mishkin and Schmidt-Hebbel, 2001). Much of the existing literature on the record of IT has focused mostly on whether IT economies behaved structurally different than non-targeters, and whether inflation has come down as a response to the adoption of the framework itself or due to a set of "exogenously welcome" factors. On the one side, there is fair amount of agreement that IT had been associated with reductions in inflation, even though the existing evidence suggests that IT has not yielded inflation below the levels attained by the industrial non-targeters that have adopted other monetary regimes (Ball and Sheridan, 2003; Bernanke, *et. al.* 1999; Mishkin and

Scmidt-Hebbel, 2001). On the "qualitative" policy front, it is generally argued that with the onset of central bank independence, communication, transparency, and accountability had improved. Notwithstanding the opportunity costs of scarce research time, the inflation targeters have started publication of inflation reports, CB meeting minutes, and inflation forecasts of CB econometric models. All these efforts were welcome by the financial community, domestic and international alike. It was perceived to help improve the expectation formation on future prices of assets. Furthermore, exchange rate *pass-through* effects were reportedly reduced and consumer prices have become less prone to shocks (Edwards 2005).

An overall picture on the selected macroeconomic indicators of the inflation targeters can be obtained from Table 2 and Figures 1a – 1d.. Table 2 provides information on the observed behavior of key macro prices: inflation, the exchange rate and the interest rates, as annual average of 5 years before the adoption of the IT versus the annual average after the adoption date to current period. The series of Figures, 1a through 1d, on the other hand portray the evolution of the crucial macro aggregates over the same time horizon.

Table 2 spells the macro prices under the IT experience. Focusing on the inflation-adjusted real exchange rate movements, we find a general tendency towards appreciated currencies in the aftermath of adoption of the IT regimes. Mexico, Indonesia and Turkey are the most significant currency appreciating countries, while Brazil, and to some extent Columbia, have pursued active export promotion strategies and maintained real depreciation. The Czech Republic, Switzerland and Hungary are observed to have experienced nominal currency appreciation, and Korea seems to have maintained a neutral path for its real exchange rate.

Clearly much of this generalized trend towards appreciation can be explained by the increased expansion of foreign capital inflows due to the global financial glut. With the IT central bankers announcing a "no-action" stance against exchange rate movements led by the "markets", a period of expansion in the global asset markets have generated strong tendencies for currency appreciation. The surge in foreign finance seems further conducive to the decline in interest rates. As can be seen from the third column of Table 2, interest rates as proxied by the CB overnight rates had decreased significantly. What is puzzling, however, is the rapid and very significant expansion in the foreign exchange reserves reported by the IT central banks. As reported in panel (c) of Figure 1 below, foreign exchange reserves held at the CBs rose significantly in the aftermath of the IT regimes. The rise of reserves was especially pronounced in Korea, The Philippines and Israel where almost a five-fold increase had been

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witnessed. Of all the countries surveyed in Figures 1c, UK and Brazil are the only two countries that had experienced a fall in their aggregate reserves.[3]

Table 2. Macroeconomic Prices in the IT Countries

Before : annual average of 5 years prior to adoption of IT;   *After* : annual average of adoption of IT to current

	Year IT Started	Inflation Rate (Variations in CPI)		Exchange Rate Real Depreciation[1,2]		CB Real Interest Rate[2,3]	
		Before	After	Before	After	Before	After
New Zealand	1990	11.6	2.2	-7.6	-0.6	7.0	5.5
Chile[a]	1991	19.7	7.2	-6.0	-4.0	..	0.0
Canada	1991	4.5	2.1	-7.5	-1.7	6.0	2.6
United Kingdom	1992	6.4	2.6	-2.4	-2.2	5.4	3.0
Sweden	1993	6.9	1.5	-8.5	1.2	2.8	1.7
Australia[b]	1994	4.2	2.5	-6.9	-1.1	7.1	3.2
Israel	1997	11.3	3.1	-4.2	0.9	2.0	5.0
Czech Republic[c]	1998	9.1	3.1	-6.6	-6.2	1.9	0.7
Poland[d]	1998	24.1	4.7	-4.5	-4.6	1.6	6.2
Brazil	1999	819.2	7.9	-428.0	5.5	-782.6	15.7
Colombia	1999	20.4	7.5	-9.5	0.5	18.4	6.6
Mexico	1999	24.5	7.2	2.8	-4.6	7.5	5.0
Thailand	2000	5.1	2.2	4.5	-1.0	4.9	1.6
South Africa[e]	2000	7.3	5.1	4.3	-2.5	8.6	4.4
Switzerland	2000	0.8	1.0	1.6	-3.7	0.2	0.1
Korea	2001	4.0	3.3	6.0	-5.0	-0.2	-1.0
Hungary	2001	15.2	5.9	2.5	-12.4	2.0	3.4
Peru	2002	5.0	1.9	-1.6	1.4	9.3	2.0
Philippines	2002	6.3	5.0	8.7	-3.0	5.1	0.9
Indonesia	2005	8.0	10.5	-6.2	-1.9	4.2	2.3
Turkey[f]	2006	28.3	10.5	-6.3	-8.2	11.7	7.5
Turkey[f]	2001Q2	74.1	28.3	-3.9	-6.3	-13.3	12.7

Source: *IMF Statistics*

1- A rise in value indicates depreciation. Annual average market rate is used for: United Kingdom, Canada, Turkey, Australia, New Zealand, Brazil, Peru, Israel, Indonesia, Korea, and Philippines; Annual average Official Rate is used for: Colombia, Thailand, Hungary, Poland and Switzerland;   Principle rate is used for: South Africa, Mexico and Czech Republic

2- Nominal values are deflated by the corresponding inflation averages (CPI column).

3- Sweden, New Zealand, Canada: Bank Rate; Mexico: Banker's Acceptance.

a- the period after the inflation targeting period refers the period of 93-05; the period before the inflation targeting refers the period of 87-90
b- Treasury Bill: the period after the inflation targeting refers the period of 94-00; CB Rate: the period after the inflation targeting refers the period of 94-95

c-the period before the inflation targeting refers the period of 94-97;

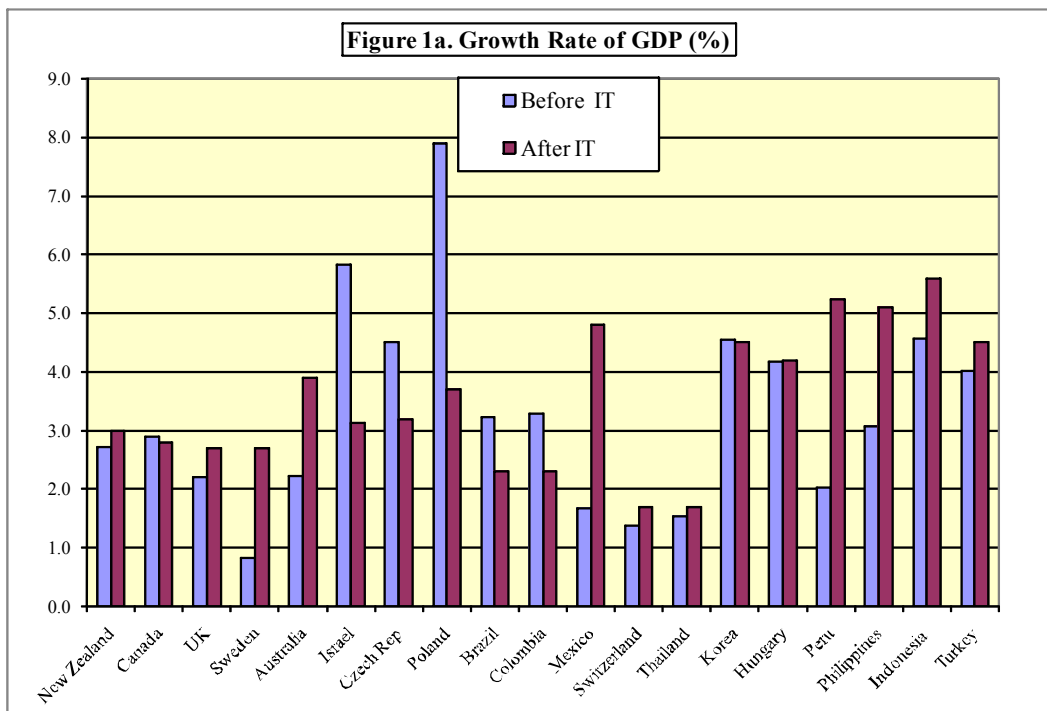**d**-Treasury Bill rates; the period after the inflation targeting refers the period of 98-00;

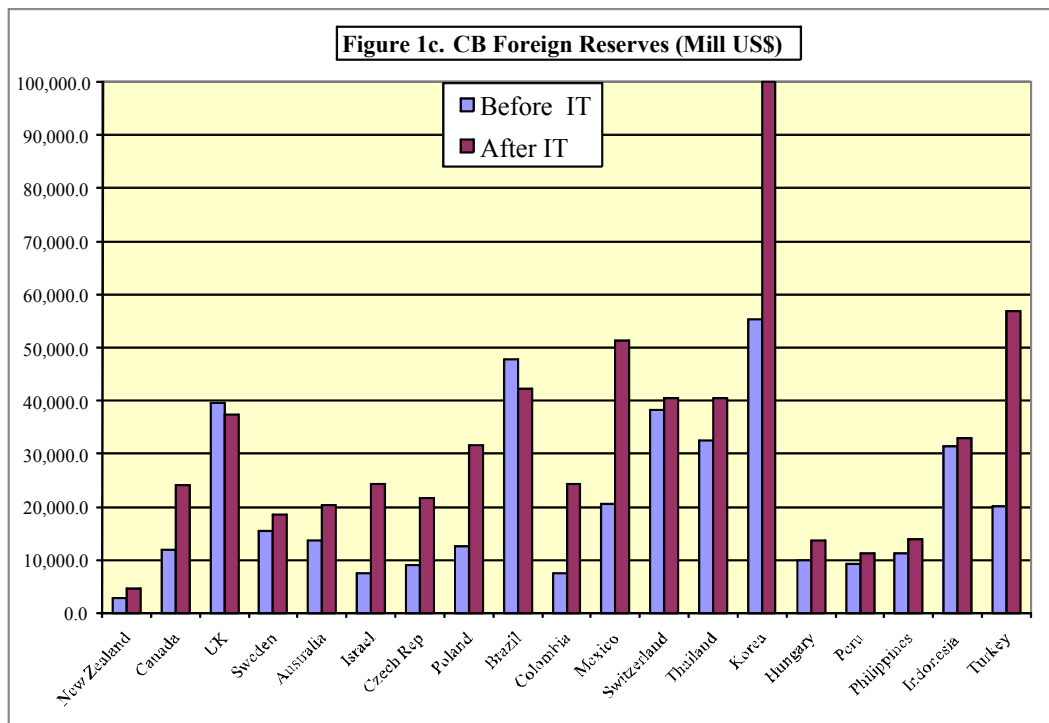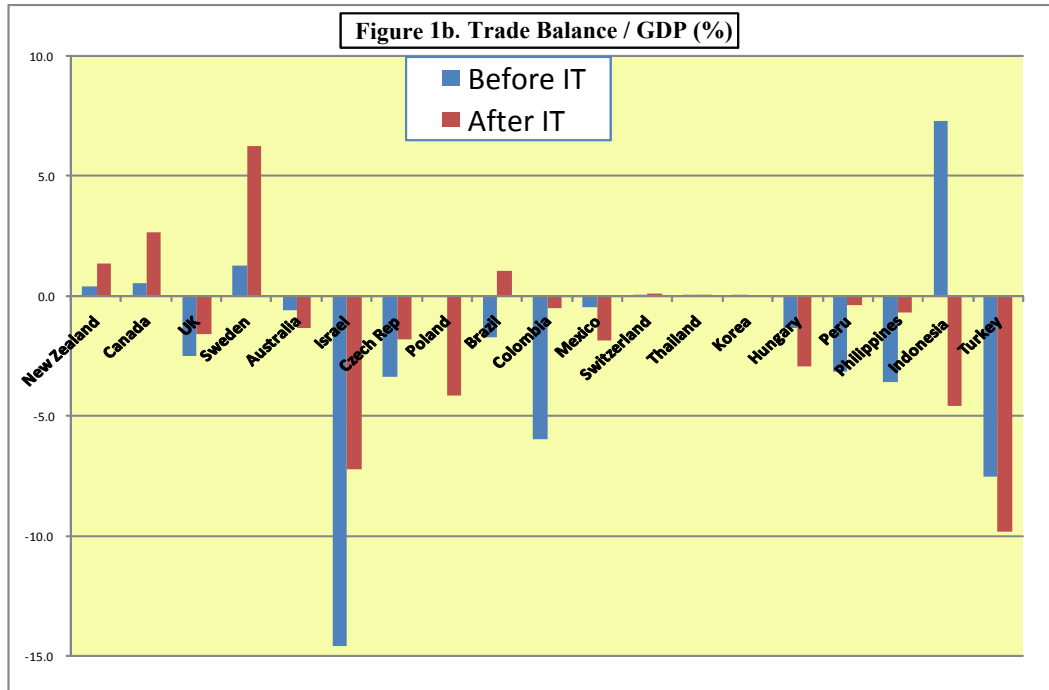**e**- Treasury Bill: the period before the inflation targeting refers the period of 94-00

f- Official adoption date for Turkey is 2006. However, Turkish CB declared "disguised inflation targeting" in the aftermath of the 2001 crisis.
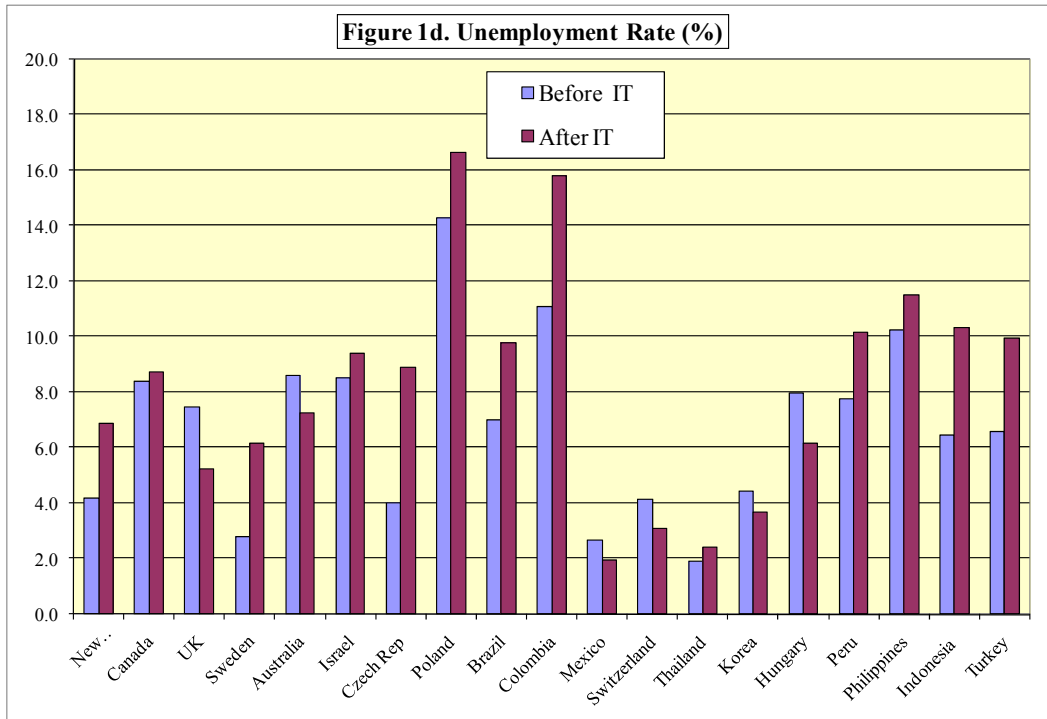
This phenomenon is puzzling because the so-called "flexible" exchange rate regimes were advocated as a concomitant component of the IT, with the argument that the CBs would be free in their monetary policies and would no longer need to hold reserves to defend a targeted exchange rate. In the absence of

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[3] Brazil's case is actually explained in part by the recent decision (late 2005) of the Lula government to close its debt arrears with the IMF with early payments out of its reserves.

any official exchange rate target, the need for holding such sums of foreign reserves at the CBs should have been minimal. The supporters of the IT regimes argue that the CBs need to hold reserves to maintain price stability against possible shocks. Yet, the acclaimed "defense of price stability" at the expense of massive and very costly funds that are virtually kept idle at the IT central banks' reserves is questionable. This reserve accumulation occurred in an era of prolonged unemployment and slow investment growth, and needs to be justified economically as well as socially.

Figure 1a. Growth Rate of GDP (%)

Figure 1b. Trade Balance / GDP (%)

Figure 1c. CB Foreign Reserves (Mill US$)

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Figure 1d. Unemployment Rate (%)

Note: For Figures 1a – 1d, *Before*: annual average of 5 years prior to adoption of IT;
After: annual average of adoption of IT to current

As highlighted above, evidence on the growth performance of the IT countries is mixed. Figure 1a shows that seven of the 21 countries report a decline in the average annual rate of real growth, while three countries (Canada, Hungary and Thailand) have not experienced much of a shift in their rates of growth. Yet, clearly it is virtually quite hard to disentangle the effects of the IT regime from other direct and indirect effects on growth. One such factor is the overall rise in the global rate of growth mostly fuelled by the recent surge in the household deficit spending bubble. As the excessive capital accumulation in telecommunications and the *dot.com* high tech industries phased out in late 1990s, the global financial markets have entered another phase of expansion. The *Institute of International Finance* data reveals, for instance, that the net capital inflows to the developing economies as a whole has increased from US$47 billion in 1998, to almost US$550 billion in 2007, surpassing their peak reached earlier before the Asian crisis of 1997.

Despite the inconclusive verdict on the growth front, the figures on unemployment indicate a significant increase in the post-IT era. (See Figure 1d). Only three countries of our list (Chile, Mexico and Switzerland) show a modest decline in their rates of unemployment in comparison to the pre-IT averages. The

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deterioration of employment performance is especially pronounced (and puzzling) in countries such as The Philippines, Peru, Turkey, and South Africa where rapid growth rates were attained. The increased severity of unemployment at the global scale seems to have affected the IT-countries equally strongly, perhaps even more so.

The adjustment patterns on the balance of foreign trade have been equally diverse. Ten of the twenty one countries in Figure 1b achieved higher (improved) trade surpluses (balances). While there have been large deficits registered in countries such as Turkey, Mexico, The Philippines, and Australia, there were also sizable surplus generators such as Brazil, Korea, Thailand, Canada, and Sweden. Not surprisingly much of the behavior of the trade balance could be explained by the extent of over-valuation of the exchange rates noted in table 2 above. It is this issue that I now turn to more formally.

IV. The Role of the Exchange Rate under IT

Part of the broader requirements surrounding the IT system is often argued to be the implementation of a "floating/flexible" exchange rate system in the context of free mobility of capital. Accordingly, the CBs should abandon their interventionist policies in the foreign exchange markets for all practical purposes other than pursuit of price stability.

Against this background a number of practical and conceptual questions are inevitable: what is the role of the exchange rate in the overall macroeconomic policy when an explicit inflation targeting regime is adopted? Under what conditions should the central bank, or any other authority, react to shocks in the foreign exchange market? And perhaps more importantly, if an intervention in the foreign exchange market is regarded necessary against, say, the disruptive effects of an external shock, what are the proper instruments?

In response to these concerns the structuralist tradition asserted that irrespective of the conditionalities of foreign capital and boundaries of IT, it is very important for the developing economies to maintain a *stable and competitive real exchange rate* (SCRER) (see, *e.g.*, Epstein and Yeldan, 2009; Galindo and Ros, 2009; Frenkel and Rapetti, 2009; Frenkel and Taylor 2006; Frenkel and Ros, 2006). They argue that the real exchange rate can affect employment, and the economy more generally, through a number of channels: (1) by affecting the level of aggregate demand (*the macroeconomic channel)*; (2) by affecting the cost of labor relative to other goods and thereby affecting the amount of labor hired per unit of output (*the labor intensity channel)*; and (3) by affecting employment through its impact on investment and economic growth (*the development channel)* (Frenkel and Ros, 2006). While the size and even direction of these channel effects might differ from country to country, maintaining a competitive and stable

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real exchange rate is likely to have a positive impact on growth and employment through some combination of these effects.

In retrospect, it is now a well-documented feature of the post-capital account liberalization experiences that in the newly emerging market economies the external adjustments intrinsically necessitated a higher rate of return on domestic assets in comparison to the rate of depreciation of the domestic currency against the foreign currencies. In these economies the aftermath of capital account deregulation often led to increased interest rates. Based on the motive to combat the "fear of capital flight", this commitment stimulated further foreign inflows, and the domestic currency appreciated inviting an even higher level of hot money inflows into the often shallow domestic financial markets. Under these conditions the initial bonanza of debt-financed public (*e.g.* Turkey) or private (*e.g.* Mexico, Korea) spending escalates rapidly and severs the fragility of the shallow financial markets in the home country. Eventually the bubble bursts and a series of severe and onerous macro adjustments are enacted through very high real interest rates, sizable devaluations, and a harsh entrenchment of aggregate demand accompanied by the short term "hot money" outflows. Elements of this vicious cycle are further studied in Adelman and Yeldan (2000), Calvo and Vegh (1999), Dornbusch, Goldfajn and Valdés (1995), Diaz-Alejandro (1985), and more recently referred to as the *Diaz-Alejandro-Frenkel cycle* in Taylor (1998) (following Diaz-Alejandro (1985) and Frenkel (1998)).

The general analysis of the SCRER within the context of IT central banking is investigated in Cordero (2009). The gist of the structuralist case for SCRER rests on a recent (and unfortunately not well understood and appreciated) paper by Taylor (2004). Basing his arguments on the system of social accounting identities, Taylor argues that the exchange rate cannot be regarded as a simple "price" determined by temporary macro equilibrium conditions. The mainstream case for exchange rate determination rests on the well-celebrated Mundell (1963) and Fleming (1962) model where the model assumes a duality between reserves (fixed exchange rate system) *versus* flexible exchange rate adjustments. The orthodox mainstream model, according to Taylor (2004), presupposes that a balance of payments exists with a potential disequilibrium that has to be cleared. In Taylor's (2004, p.212) words, "… the balance of payments is at most an accumulation rule for net foreign assets and has no independent status as an equilibrium condition. The Mundell-Fleming duality is irrelevant, and in temporary equilibrium, the exchange rate does not depend on how a country operates its monetary (especially international reserve) policy". Accordingly, the exchange rate "has to evolve over time subject to rules based on expectations about its values in the future.. (yet), in a world of shifting and perhaps unstable expectations, no simple dynamic theory is likely to emerge" (Taylor, 2004, p.223).

The literature has no shortage of stochastic models where expectations play a role in macro equilibrium. The standard arbitrage arguments as stated in the uncovered interest parity (UIP) theorems imply that the expected rate of depreciation of the spot exchange rate, $\dot{\varepsilon}^{EXP}$ is an increasing function of the gap between the domestic and foreign rates of interest, i and i^*.

Consider the *no-arbitrage* condition of the UIP:

$$1+i_t = (1+i_t^*) + \frac{\varepsilon_{t+k}^{EXP} - \varepsilon_i}{\varepsilon_i} \tag{1}$$

Re-arranging,

$$i_t = i_t^* + \frac{\varepsilon_{t+k}^{EXP} - \varepsilon_t}{\varepsilon_t} \tag{2}$$

where the second term on the right gives the k-period ahead expected rate of depreciation of the spot rate. As for the direction of the expected adjustments on the ε_t one must distinguish between an "operational" view and the "speculative" view (Frenkel and Taylor, 2006). Considering myopic perfect foresight, the expected change of ε_t will be equal to the observed change and hence a lower domestic interest rate will lead to an appreciation over time. Thus, $\dot{\varepsilon} \equiv \frac{d\varepsilon}{dt} < 0$ for $i < i^*$. This prognostication is what Frenkel and Taylor 2006, p.6) term the *operational* view of the Wall-Street arbitrageurs and contrast it with the *speculative* view which states that the exchange rate will *depreciate* when the national interest rate falls short of the foreign rate.

The speculative view rests on the *Diaz-Alejandro-Frenkel cycle* noted above. Consider a simple bond market equilibrium condition in its implicit form:

$$i = f(\varepsilon, \dot{\varepsilon}^{EXP}, M) \tag{3}$$

where all the variables stand as above, and *M* is an index of monetary expansion. A high (depreciated) ε_t means that national liabilities are cheap as seen from abroad. It should be associated with high domestic asset prices or low interest rates. If there is an increase in the *expected* rate of depreciation, $\dot{\varepsilon}^{EXP}$, foreign arbitrageurs will prefer to shift away from domestic liabilities and *i* will tend to increase. Recent macroeconomic evidence as narrated in the crisis episodes of the 1990s suggests that the speculative view is the more accurate description of how exchange rates behave in the so-called emerging market economies.

The bottom line is that a "floating exchange rate has no fundamentals such as real rate of return or a trade deficit that can make it self-stabilizing. ε_t can only float against its own expected future values and interest rates. In the real world such expectations are determined in part by intrinsically unpredictable and non-rational forces" (Taylor, 2004, p.226). This leads to the conclusion that the exchange rate, in fact, should not be taken as an "independent" price that needs to be balanced by the "market forces".

In a practical setting, the fact that ε_t can be in "equilibrium" in the sense of meeting the demand for foreign exchange with a corresponding supply in the spot market, and yet its level might still be "mis-aligned" with respect to overall macro equilibrium has been recently claimed in Edwards (2001). In this view, the exchange rate is regarded as "mis-aligned" if it's realized value exhibits a persistent departure from its long run equilibrium trend. The long-run equilibrating value, in turn, is taken to be that rate which, for a given set of "structural fundamentals", is compatible with the simultaneous achievement of internal and external equilibrium[4]. It is clear that such an assessment has to go beyond the simple PPP calculations, which are wrought with the issues of choice of a relevant price index and a proper base year.

The preceding discussions clearly underscore that the real world behavior of exchange rates is quite complex and the obsession of the inflation targeting regime with floating exchange rate systems (in expectation of dropping it from the policy agenda altogether) is a *mirage*. In fact one reason that "inflation-focused monetary policy" has gained so many adherents is the common perception that there is no viable alternative monetary policy that can improve growth and employment prospects. There are two main factors that account for this perception. First, in a financially integrated international economy with high levels of capital flows, monetary policy can be extremely challenging. In particular it might be very difficult to gear monetary policy by targeting monetary aggregates, or by pegging an exchange rate along with trying to promote employment growth. This is often seen as the so-called "trilemma" which stipulates that central banks can only have two out of three of the following: open capital markets, a fixed exchange rate system, and an autonomous monetary policy geared toward domestic goals. While this so-called "trilemma" is not strictly true as a theoretical matter, in practice it does raise serious issues of monetary management (see the above arguments cited from Taylor, 2004 and Frenkel and Taylor, 2006). From our perspective, the real crux of the problem is that one leg of this 'tri-lemma' that orthodox economists, by and large, have taken for granted. Orthodox economists have claimed that eliminating capital controls is

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[4] See also Fischer (2001) on the formal statement of the problem within the context of a finer classification of the exchange rate systems.

the best policy, and that virtually complete financial liberalization of the foreign sector is the optimal policy. Yet recent evidence amply shows that open capital markets can create very costly problems for developing countries and that many successful developing countries have used a variety of capital management techniques to manage these flows in order, among other things, to help them escape this so-called "tri-lemma" (Ocampo, 2002; Epstein, Grabel and Jomo, 2005).

Recent literature on stabilization and monetary policy has already noted a range of alternatives to inflation targeting. Such alternatives ranged all the way from modest changes in the inflation targeting framework to allow for more focus on exchange rates and a change in the index of inflation used (Barbosa-Filho, 2008 for Brazil; Lim, 2009 for the Phillipines), to a much broader change in the overall mandate of the central bank to a focus on employment targeting, rather than inflation targeting (Epstein, 2009 and Pollin, Epstein, Heintz and Ndikumana, 2006 for South Africa). Some of the alternative policies focus exclusively on changes in central bank policy, while other policy alternatives propose changes in the broad policy framework and in the interactions of monetary, financial and fiscal policy are proposed. Given the lessons of the post 2007/2008 global crisis, there seems now an even more agreement that the responsibilities of central banks, particularly in developing countries, while including maintaining a moderate rate of inflation, must be broader than that, and should include other crucial "real" variables that have a direct impact on employment, poverty and economic growth, such as the real exchange rate, employment, and investment. Thus, central banks must broaden their available policy tools to allow them to achieve multiple goals, including, if necessary, the implementation of capital management techniques. It is pertinent that the MENA region should take stock of this literature before taking further steps in reforming its monetary system.

V. Concluding Comments

This paper has taken a critical look at the new orthodox conditionality on monetary policy, dubbed as "inflation targeting". The advocated framework maintains that under the pious conditions of *free mobility of capital* and *freely floating exchange rate* regimes, modern central banking necessitates a framework where the central banks should only try to achieve stability in the price level to the exclusion of any other macro policy objective. Leaving for a moment the futile task of assessing the theoretical soundness of this prognostication aside, this shift of focus, from the real macro economy to price stability as the sole objective of central banking, has occurred at a historical moment when the global economy

is going through profound structural transformations to the impediment of formal employment and labor at the global scale.

According to estimates, the total number of workers engaged in production of merchandise for the international markets alone rose from around 300 million in 1980, to almost 800 million at the turn of the new century. It is further acknowledged that with China's and India's opening up to the global markets and the collapse of the Soviet system together have added 1.5 billion new workers to the world's economically active population (Freeman, 2005; Akyuz, 2006). The International Labor Organization (ILO) estimates that in 2003, approximately 186 million people were jobless, the highest level ever recorded. The employment to population ratio has fallen in the last decade, from 63.3% to 62.5%, and as the *number* of available jobs has fallen, there is also a significant global problem with respect to the *quality* of jobs. Akyuz (2006) reports that about 90% of the labor employed in world merchandise trade is low-skilled and un-skilled, suffering from marginalization and exclusion of basic worker rights at informalized markets. The ILO estimates that 22% of the developing world's workers earn less than $1 a day and 1.4 billion (or 57% of the developing world's workers) earn less than $2 a day. To reach the Millennium Development Goal of halving the share of working poor by 2015, sustained, robust economic growth will be required.

Thus, interestingly enough, employment creation has dropped off the direct agenda of most central banks just as the problems of global unemployment, underemployment and poverty are taking center stage as critical world issues. All of this has been happening against the backdrop of intensified financial speculation together with *de*-industrialization at the North and informalization and exclusion at the South. In the words of the UNCTAD's 1998 *Trade and Development Report*, "the ascendancy of finance over industry together with the globalization of finance have become underlying sources of instability and unpredictability in the world economy. (…) In particular, financial deregulation and capital account liberalization appear to be the best predictor of crises in developing countries" (pp. v and 55). Almost all recent episodes of financial-cum-currency instability indicate that the observed sharp swings in capital flows are mostly a reflection of large divergences between domestic financial conditions and those in the rest of the world. Reversals of capital flows are often associated with deterioration of the macroeconomic fundamentals in the domestic country. However, "such deterioration often results from the effects of capital inflows themselves as well as from external developments, rather than from shifts in domestic macroeconomic policies". (*ibid*, p.56).

Under these conditions, it ought to be a clear lesson of the current global financial crisis that price stability on its own cannot maintain macroeconomic stability, as it is not sufficient to secure financial stability. For, in the words of

Akyuz (2006, p.46), "…the *source of macroeconomic instability* now is not instability in product markets but asset markets, and the main challenge for policy makers *is not inflation, but unemployment and financial instability*". (*emphasis* added).

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