

Developing Policy Alternatives to Inflation Targeting, The New Façade of Neoliberal Conditionality: An Introduction*

Gerald Epstein
Professor of Economics
Co-Director, Political Economy Research Institute
University of Massachusetts, Amherst

and

Erinc Yeldan
Professor of Economics
Bilkent University, Ankara
Executive Committee Member
International Development Economics Associates (IDEAs), New Delhi

November 2006

*We are indebted to Hasan Comert and Lynda Pickbourn for their diligent research assistance, and to Roberto Frenkel, Jose Antonio Ocampo and Jomo, K.S. for their valuable comments and suggestions on previous versions of the paper. We are also grateful to colleagues at Bilkent and University of Massachusetts, Amherst, in particular, Robert Pollin, James Heintz, Leonce Ndikumana, and Arjun Jayadev for their encouragement and invaluable discussions. Research for this paper was completed when Yeldan was a visiting Fulbright scholar at the University of Massachusetts, Amherst for which he acknowledges the generous support of the J. William Fulbright Foreign Scholarship Board and the hospitality of the Political Economy Research Institute at UMass, Amherst. We are also grateful to the funders of the PERI/Bilkent *Alternatives to Inflation Targeting* project, including UN-DESA, Ford Foundation, Rockefeller Brothers Fund and PERI for their support. Needless to mention, the views expressed in the paper are solely those of the authors' and do not implicate in any way the institutions mentioned above.

Developing Policy Alternatives to Inflation Targeting, The New Façade of Neoliberal Conditionality: An Introduction

Inflation targeting (IT) has recently become the dominant monetary policy prescription for both the developing and the industrialized countries alike. Emerging market governments, in particular, are increasingly bounded to follow IT as part of their IMF-led stabilization packages and orthodox conditionalities. We argue in this paper that the expectations of the IT regime arguing that price stability would ultimately lead to higher employment and sustained growth failed to be materialized, and that the world economy is growing too slowly to generate sufficient capital investments and reduce unemployment. Cast in a deflationary environment where there had been a significant addition to the global labor supply, the IT central banks' exclusive focus on price stability alone fails to address the root causes of the macroeconomic instability which had been generated by the globalization of unregulated finance in the past two decades. Noting that the underlying causes of the current instability originate from the instabilities inherent in the global financial system and not from the product markets, we argue that the current inflation phobia is not warranted; and offer viable alternatives to inflation targeting central bank policies to promote employment, sustained growth and improved income distribution.

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 a total of twenty four central banks' (CBs') official monetary policy to-date. After the 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 a 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 the economy in the long run.¹

That being asserted, however, 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 (Heintz, 2006a, 2006b). The ILO estimates that in 2003, approximately 186 million people were jobless, the highest level ever recorded (ILO, 2004a). The employment to population ratio—a measure of unemployment—has fallen in the last decade, from 63.3% to 62.5% (ILO, 2004b). And as the quantity of jobs relative to need has fallen, there is also a significant global problem with respect to the quality of jobs. 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. The ILO estimates that on average, real GDP growth has to be maintained at 4.7% per year to reduce the share of \$1 a day poverty by half by 2015, and significantly more than that to reduce the share of \$2 a day poverty by half. According to the ILO: "...of the seven regions under consideration in this paper, only the three Asian Regions and the Middle East and North Africa region appear on track to meet the \$1 target, and East Asia is the only region on track to reduce \$2 working poverty by half. (Kapsos, 2004; Heintz, 2006a). In addition, the IMF economists estimate that economic growth needs to be sustained at 7% per year or more to reach the millennium development goal of reducing poverty by half by 2015 (Battini, *et. al.*, 2006, p. 8).

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, 2004; 2005; Akyuz, 2006). This means almost doubling of the global labor force and a reduction of the global capital-labor ratio by half. Concomitant with the emergence of the developing countries in the global manufacturing trade, 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 (Akyuz, 2006; 2003).

The massive labor surplus and informalization in the developing countries have their origins in their structural bottlenecks and rigidities. Since the 1980s a large number of developing countries have suffered de-industrialization, serious informalization, and consequent worsening of the position of wage-labor, resulting with deterioration of income distribution and increased poverty. Much of these phenomena have been in tandem with the onset of neoliberal conditionalities imposing rapid liberalization of trade and premature deregulation of the indigenous financial markets.

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 –authors' 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).

Similarly, the deterioration of the conditions in the labor markets of the industrialized countries have its origins not on the mere expansion of developing country manufacturing exports, but originated mainly from the macroeconomic and financial policies followed under the post-1980s' era of the so-called "Washington Consensus" (UNCTAD, 1995; Akyuz, Flassbeck and Kozul-Right, 2006).

With the ascendancy of finance over industry (UNCTAD, 1998), the globalization of finance has become the underlying source of instability and unpredictability in the world economy. The key problem is that the ongoing globalization serves primarily to redistribute shrinking investment funds and limited jobs across countries, rather than to accelerate capital accumulation across global scale (Akyuz, 2006). Simply put, the world economy is growing too slowly to generate sufficient jobs and it is allocating a smaller proportion of its income to fixed capital formation.

Under these adverse conditions, the so-called emerging market economies seek to rely on foreign direct investment (FDI) and are conditioned to adopt and maintain contractionary monetary policies in order to secure "investor confidence" and "international creditworthiness". Thus, the governments of these (emerging market) developing economies who seek to attract and maintain inflows of foreign capital have become constrained in the *ex ante* sense to adopt a series of restrictive monetary and fiscal policies (Grabel, 1995). Such efforts are restricted to a balanced budget, entrenched fiscal expenditures, and a relatively contractionary policy with an *ex ante* commitment to high real interest rates. All of this signify reduced political autonomy in the developing world in exchange for market access to industrialized North, and is itself a bad bargain as far as development is concerned (Rodrik, 2000).

Thus, the drastic shift towards inflation-focused monetary policy under the rubric of inflation targeting has emerged against this background where conditions against formal employment and labor in general have been worsening. The exclusive focus on *inflation phobia* (Stiglitz, 2002) surrenders much of the orthodox view on stabilization policy and, yet, it not only specifies the appropriate target of monetary policy, but also the appropriate tools or instruments. The orthodox approach has emphasized indirect, market based instruments of policy, such as short term interest rates, as the primary and often exclusive tool of monetary policy. (Masson, *et. al.*, 1997). This is in contrast to the "direct", quantitative tools often used by central banks which have involved credit allocation methods, interest rate ceilings, and other ways to direct credit to priority economic sectors and goals. In short, the orthodox approach has narrowed both the goals and the tools of monetary policy.

After several decades of experience with this inflation focused-market based approach, the policy record has been rather disappointing for many countries. In a number of countries, inflation has come down, to be sure, but it is questionable to what extent the drop in inflation is due to changes in domestic monetary policy, rather than the overall global fall in inflation. (Ball and Sheridan, 2003; Roger and Stone, 2005). Moreover, even if domestic monetary policy *has* reduced inflation, the hoped for gains in

employment have, generally, not materialized; and, for many countries following this orthodox approach, economic growth has not significantly increased.

Succinctly put, the overall macroeconomic performance of those developing countries which had been following the much celebrated advocacies of an exclusive focus on price stability via contractionary monetary policies often with high real interest rates; calls for reduced public expenditures to achieve rapid trade and financial liberalization; and a faithful reliance on foreign investments to fill the domestic savings deficit have been disappointing. The key point, then, is this: despite what the orthodox approach maintains, employment generation and economic growth are not revealed yet as automatic by-products of "price stability-focused" central bank policy.

Yet, surprisingly, despite a disappointing record, this almost single minded focus on inflation is gaining a more secure foothold in monetary policy circles and the circles are widening to include an increasing number of developing countries. This is occurring even as inflation becomes less and less of a global problem while unemployment and underemployment become increasingly dire. According to a recent report by the International Monetary Fund (IMF), an increasing number of central banks in emerging markets are planning to adopt inflation targeting as their operating framework. (See Table 1). An IMF staff survey of 88 non-industrial countries found that more than half expressed a desire to move to explicit or implicit quantitative inflation targets (Battini, *et. al.*, 2006). More relevant to our concerns, nearly three-quarters of these countries expressed an interest in moving to "full-fledged" inflation targeting by 2010. To support and encourage this movement, the IMF is providing technical assistance to many of these countries and is willing to provide more (Table 1, and further discussion below). In addition, the IMF is considering altering its conditionality and monitoring structures to include inflation targets. In short, despite little evidence concerning the success of inflation targeting in its promotion of economic growth, employment creation and poverty reduction, and mixed evidence at best that it actually reduces inflation itself, a substantial momentum is building up for full fledged inflation targeting in developing countries. Promotion efforts by the IMF and western trained economists are at least partly responsible for this increasing popularity.

Table 1. Inflation Targeting Countries: Initial Conditions and Modalities

Developing Countries (in order of adoption)	IT Adoption Date	Inflation Rate at Start (%, per annum)	Current Inflation Target (%, per annum)	Officially Declared Policy Instrument
Israel	1997Q2	8.5	1-3	Headline O/N rate
Czech Rep.	1998Q1	13.1	3 (+/- 1)	2 week repo
Poland	1998Q4	9.9	2.5 (+/- 1)	28 day intervention
Brazil	1999Q2	3.3	4.5 (+/- 2)	Selic O/N rate
Chile	1999Q3	2.9	2-4	O/N rate
Colombia	1999Q3	9.3	5 (+/- 0.5)	Repo
South Africa	2000Q1	2.3	3-6	
Thailand	2000Q2	1.7	0-3.5	14 day repo
Korea	2001Q1	3.2	2.5-3.5	O/N call rate
Mexico	2001Q1	8.1	3 (+/- 1)	91-day Cetes
Hungary	2001Q2	10.5	3.5 (+/- 1)	2 week deposit
Peru	2002Q1	-0.8	2.5 (+/- 1)	
The Philippines	2002Q1	3.8	5-6	Reverse repo
Slovak Republic	2005Q1	3.2	3.5 (+/- 1)	
Indonesia	2005Q3	7.8	5.5 (+/- 1)	1-month SBI
Romania	2005Q3	8.8	7.5 (+/- 1)	
Turkey ^a	2006Q1	7.8	5 (+/- 2)	CB O/N rate
Turkey ^b	2001Q2	82.0	n.a	CB Net Domestic Assets
Industrial Countries				
New Zealand	1990Q1	7.0	1-3	cash rate
Canada	1991Q1	6.2	1-3	O/N funding rate
United Kingdom	1992Q4	3.6	2	Repo
Sweden	1993Q1	4.8	2 (+/- 1)	Repo
Australia	1993Q2	1.9	2-3	cash rate
Iceland	2001Q1	3.9	2.5	
Norway	2001Q1	3.7	2.5	
Candidate Countries				
Costa Rica, Egypt, Ukraine	Near Term (1-2 years)			
Albania, Armenia, Botswana, Dominican Rep., Guatemala, Mauritius, Uganda, Angola, Azerbaijan, Georgia, Moldova, Serbia, Sri Lanka, Vietnam, Zambia	Medium Term (3-5 years)			
Belarus, China, Kenya, Kyrgyz Rep., Moldova, Serbia, Sri Lanka, Vietnam, Zambia, Bolivia, Honduras, Nigeria, Papua New Guinea, Sudan, Tunisia, Uruguay, Venezuela	Long Term (> 5 years)			

Notes: a. Official adoption date for Turkey; b. Turkish CB declared "disguised inflation targeting" in the aftermath of the 2001 February crisis.

Source: Batini et. al. 2006.

While it might seem obvious that stabilization focused central bank policy represents the only proper role for central banks, in fact, looking at history casts serious doubt on this claim. Far from being the historical norm, this focus by central banks on stabilization to the exclusion of development represents a sharp break from historical practice, not just in the developing world but also in the now developed countries as well (Epstein, 2006). In many of the successful currently developed countries, as well as in many developing countries in the post-Second World War period, pursuing development objectives was seen as a crucial part of the central banks' tasks. Now, by contrast, development has dropped off the "to do" list of central banks in most developing countries

The theme of this special issue and this introductory paper is that there should be a return to the historical norm of central bank policy: in particular, employment creation and more rapid economic growth should join inflation and stabilization more generally as key goals of central bank policy. This paper outlines why a shift away from inflation targeting, the increasingly fashionable, but extremist and destructive approach to central bank policies, and a move back toward a more balanced approach is both feasible and desirable. Of course, the paper does not argue that stabilization, including a moderate inflation rate, is unimportant. Indeed, historically, some central banks went much too far in downplaying the stabilization role, sometimes with disastrous consequences. But this does not mean that the optimal policy is to go to the other extreme and ignore the developmental role entirely. As we try to show in this paper, balancing between the stabilization and developmental roles is both desirable and feasible for many central banks. In this context, for many countries, a focus on employment creation is a desirable goal of monetary policy.

The rest of the paper is organized as follows. In the next section, we briefly survey the macroeconomic record of IT and its current structure. Section III 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 III. 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*. In section IV we discuss various alternatives to inflation focused central banks, concentrating on the results of a multi-country research project undertaken with the support of UN-DESA, among other organizations. This section shows that there are viable, socially productive alternatives to inflation targeting, including those that focus on employment generation, and makes the case that these alternatives should be further developed. Section V concludes.

II. Macroeconomic Record of IT

As advocated, "full fledged" inflation targeting consists of five components: absence of other nominal anchors, such as exchange rates or nominal GDP; an institutional commitment to price stability; absence of fiscal dominance; policy (instrument)

independence; and policy transparency and accountability (Mishkin and Schmidt-Hebbel, 2001, p.3; Bernanke, *et. al.* 1999). In practice, while few central banks reach the "ideal" of being "full fledged" inflation targeters, many others still focus on fighting inflation to the virtual exclusion of other goals. The overriding announced goal of inflation targeting central banks is typically "price stability", for which many practitioners simply adopt the widely-cited definition of Alan Greenspan, the former Governor of the US Fed, as "a rate of inflation that is sufficiently low that households and businesses do not have to take into account in making every day decisions". In addition, inflation targeting is usually associated with changes in the CB law that enhances the independence of the central bank (Bernanke, *et. al.* 1999, p.102; Mishkin and Schmidt-Hebbel, 2001, p.8).

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 actually in response to 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 OT has not yield 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 Schmidt-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 ongoing 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, 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; Ho and McCauley, 2003; Mishkin and Schmidt-Hebbel, 2001).

Yet, little is known on the true costs of IT on potential output growth, employment, and on incidence of poverty and income distribution. Bernanke, *et. al.* (1999) and Epstein (2000), for instance, report evidence that inflation targeting central banks do not reduce inflation at any lower cost than other countries' central banks in terms of forgone output. That is, inflation targeting does not appear to increase the credibility of central bank policy and therefore, does not appear to reduce the sacrifice ratio. Per contra, based on an econometric study of a large sample of inflation targeters and non-targeters, Corbo *et. al.*, (2001) concluded that sacrifice ratios have declined in the emerging market economies after adoption of IT. They also report that output volatility has fallen in both emerging and industrialized economies after adopting inflation targeting. This position is recently complemented by a study of the IMF economists, who, using a complex econometric model and policy simulations, report findings that inflation targeting economies experience reductions in the *volatility* in inflation, without experiencing increased *volatility* in real variables such as real GDP (Batini, *et. al.*, 2006). According to these estimates, inflation targeting central banks do enhance economic "stability" relative to other monetary rules, such as pegged exchange rates and monetary rules.

While intriguing, these results are only as strong as the simulation model on which they are based and are only as relevant as the relevance of the questions they pose, moreover, they are only as broad as the alternatives they explore. On all these scores, these results are problematic. First, they do not simulate the impact of inflation targeting relative to other possible policy regimes, such as the real targeting regime discussed below. Second, the model is based on estimates of potential output that are themselves affected by monetary policy (see, e.g., Tobin, 1980). Hence, if monetary policy slows economic growth, it also lowers the rate of growth of potential output and, therefore reduces the gap between the two, thereby *appearing to stabilize the economy*. But in fact, it does so at the expense of slowing growth or even generating stagnation. This highlights the third key point: even if it could be shown that inflation targeting does a good job at stabilization, it is crucial to remember that the stabilization role of monetary policy is only one of the tasks facing central banks; the other task is to contribute directly to economic growth, employment creation and poverty reduction, and the IMF study fails to look at the impact of inflation targeting on the rate of growth of employment, or on the quality of employment.

An overall picture on the selected macroeconomic indicators of the inflation targeters can be obtained from tables 2 and 3. In table 2, we provide information on the observed behavior of selected macro aggregates as *annual average of 5 years before* the adoption of the IT *versus* the *annual average after* the adoption date to current period. Table 3 keeps the same calendar frames and reports data on key macro prices, *viz.*, the exchange rate and the interest rates.

As highlighted in the text, evidence on growth performance of the IT countries is mixed. Taking the numbers of Table 2 at face value, we see 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 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\$400 billion in 2006, surpassing their peak 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. Only three countries of our list (Chile, Mexico and Switzerland) report a modest decline in their rates of unemployment in comparison to the pre-IT averages. The 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.

Table 2. Selected Macroeconomic Aggregates in the IT Countries									
<i>Before</i> : annual average of 5 years prior to adoption of IT; <i>After</i> : annual average of adoption of IT to current									
	Year IT Started	Growth Rate		Unemployment Rate		Trade Balance (Mill US\$)		CB Foreign Reserves (Mill US\$)	
		Before	After	Before	After	Before	After	Before	After
New Zealand	1990	2.7	3.0	4.2	6.9	755.3	733.9	2,897.9	4,623.2
Canada	1991	2.9	2.8	8.4	8.7	8,254.9	28,643.9	11,964.0	24,256.0
UK	1992	2.2	2.7	7.4	5.2	-29.8	-52.4	39,666.5	37,408.5
Sweden	1993	0.8	2.7	2.8	6.1	5,075.4	16,810.5	15,399.0	18,521.8
Australia	1994	2.2	3.9	8.6	7.3	430.0	-5,842.6	13,777.9	20,337.1
Israel	1997	5.8	3.1	8.5	9.4	-6,054.3	-3,892.6	7,567.3	24,421.1
Czech Rep ^a	1998	4.5	3.2	4.0	8.9	-3,250.9	-1,601.2	9,172.5	21,686.5
Poland	1998	7.9	3.7	14.3	16.7	-4,567.0	-7,852.7	12,591.8	31,581.8
Brazil ^b	1999	3.2	2.3	7.0	9.8	-2,200.8	16,718.6	47,701.3	42,304.5
Colombia	1999	3.3	2.3	11.1	15.8	-2,390.7	1,245.9	7,567.3	24,421.1
Mexico	1999	1.7	4.8	2.7	1.9	-135.9	-7,625.3	20,630.9	51,396.6
South Africa ^c	2000	2.6	3.8	4.9	27.7	2,711.4	2,663.3	15,860.0	9,580.0
Switzerland	2000	1.4	1.7	4.1	3.1	1,929.8	6,342.3	38,277.1	40,646.5
Thailand	2000	1.5	1.7	1.9	2.4	2,873.3	9,074.5	32,556.1	40,474.8
Korea	2001	4.6	4.5	4.4	3.7	13,749.8	24,251.8	55,299.5	157,739.2
Hungary	2001	4.2	4.2	7.962	6.1	-1,993.7	-2,525.8	9,918.1	13,652.1
Peru ^d	2002	2.0	5.2	7.8	10.2	-1,075.2	2,270.7	9,264.8	11,222.9
Philippines	2002	3.1	5.1	10.2	11.5	-5,873.6	-6,152.8	11,281.6	14,006.6
Indonesia	2005	4.6	5.6	6.5	10.3	23,249.2	22,368.0	31,326.7	32,989.2
Turkey ^e	2006	4.5	7.8	9.9	10.4	-16,335.0	-27,980.0	33,237.4	56,990.4
Turkey ^e	2001Q2	4.0	4.5	6.6	10.0	-14,301.6	-16,335.0	20,083.4	33,237.4

Source: *IMF Statistics and Asian Development Bank*

a-The period before the inflation targeting refers the period of 94-97 for Growth and CPI in Czech growth

b-The period before the inflation targeting refers the period of 96-98 for reserves in Brazil

c- The period before the inflation targeting refers the period of 94-97 and after inflation targeting refers the period of 99-04 for unemployment rate in South Africa. The change method of unemployment rate after the apartheid regime can be seen here.

d-The period after the inflation targeting refers the period of 03-04 for unemployment rate in Peru.

e-Official adoption date for Turkey is 2006. However, Turkish CB declared "disguised inflation targeting" in the aftermath of the 2001 February crisis.

The adjustment patterns on the balance of foreign trade have been equally diverse. 10 of the 21 countries in Table 2 achieved higher (improved) trade surpluses (balances). While there have been large deficit registrars 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. This information is tabulated in Table 3.

Table 3. 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	CPI		Exchange Rate Depreciation ¹		CB Interest Rate ²		Treasury Interest Rate ³	
		Before	After	Before	After	Before	After	Before	After
New Zealand	1990	11.6	2.2	4.0	1.6	18.6	7.7	13.7	7.3
Chile ^a	1991	19.7	7.2	13.7	3.2	..	7.2	3.6	2.6
Canada	1991	4.5	2.1	-3.1	0.4	10.5	4.7	10.3	4.6
United Kingdom	1992	6.4	2.6	4.1	0.4	11.9	5.6	11.4	5.4
Sweden	1993	6.9	1.5	-1.6	2.7	9.7	3.2	11.9	4.3
Australia ^b	1994	4.2	2.5	-2.8	1.5	11.3	5.8	10.4	6.6
Israel	1997	11.3	3.1	7.1	4.0	13.3	8.1	12.8	8.1
Czech Republic ^c	1998	9.1	3.1	2.5	-3.0	11.0	3.8	9.1	4.0
Poland ^d	1998	24.1	4.7	19.6	0.2	25.7	10.9	25.9	16.3
Brazil	1999	819.2	7.9	391.1	13.4	36.6	23.6	32.3	20.3
Colombia	1999	20.4	7.5	10.9	8.0	38.8	14.1	21.9	9.5
Mexico	1999	24.5	7.2	27.3	2.7	32.0	12.2	27.7	11.0
Thailand	2000	5.1	2.2	9.6	1.2	10.0	3.8	9.8	5.3
South Africa ^e	2000	7.3	5.1	11.7	2.6	15.9	9.6	14.6	9.3
Switzerland	2000	0.8	1.0	2.4	-2.7	1.0	1.1	1.7	1.3
Korea	2001	4.0	3.3	10.0	-1.6	3.8	2.3	10.5	5.4
Hungary	2001	15.2	5.9	17.6	-6.5	17.2	9.3	17.5	9.2
Peru	2002	5.0	1.9	3.4	3.3	14.3	3.9	8.8	1.4
Philippines	2002	6.3	5.0	15.0	2.0	11.4	6.0	11.5	6.2
Indonesia	2005	8.0	10.5	1.8	8.6	12.2	12.8	12.1	8.1
Turkey ^f	2006	28.3	10.5	22.0	9.3	40.0	18.0	43.1	21.0
Turkey ^f	2001Q2	74.1	28.3	64.2	22.0	60.8	41.0	98.0	43.8

Source: *IMF Statistics*

1- A rise in value indicates nominal distribution. 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- Sweden, New Zealand, Canada: Bank Rate; Mexico: Banker's Acceptance.

3-Colombia: Interbankaria TBS; Peru and Chile: Saving Rate; New Zealand Newly issued 3 months Treasury bill rates; Indonesia: 3 Months Deposit Rate; Korea:National Housing Bond Rate; Thailand: Government Bond Yield Rate

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 February crisis.

Table 3, as previously in Table 2 above, calculates the annual averages of the five-year period *before* the IT *versus* annual averages *after* IT to-date. Here, the more proper comparison should be made between the exchange rate depreciation *in real terms* after the CPI inflation (the first two columns of Table 3) are netted out. 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 reference to the increased expansion of foreign capital inflows due to the global financial glut mentioned above. 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. 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 the last two columns of Table 2 above, 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 witnessed. Of all the countries surveyed in Table 3, UK and Brazil are the only two countries that had experienced a fall in their aggregate reserves.²

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 rate of exchange. In the absence of any exchange rate target officially stated, the need for holding such sums of foreign reserves at the CBs should have been minimal. The contenders 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 at best in an era of prolonged unemployment and slow investment growth, and needs to be justified economically as well as socially.

We now turn to the issue of exchange rate policy more formally.

² 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.

III. 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 for price stability.

Thus, “exchange rate flexibility and floating exchange rate system” became the new *motto*, and to many advocates, central bank “policy” has typically been reduced to mean merely “setting the policy interest rate”. The exchange rate and macro prices are forged to the unfettered workings of the global finance markets. The role of the exchange rate as an adjustment variable has clearly increased over the last decade since the adoption of the floating exchange rate systems. In the meantime, however, the role of the interest rates and reserve movements have declined substantially as austerity instruments against shocks³ (see Table 2 above).

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?

To the contenders of the IT, the answer to these questions is simple and straightforward: the CB should not have any objective in mind with regards to the *level* of the exchange rate, yet it might interfere against the *volatility* of the exchange rate in so far as it affects the stability of prices. However, nuances remain. To what may be grouped under “strict conformists”, the CB should be concerned with the exchange rate only it affects its ability to forecast and target price inflation. Any other response to the foreign exchange market represents a departure from the IT system. Advocated in the seminal works by Bernanke *et. al.* (1994) and Fischer (2001), the approach argues that attending to inflation targeting and reacting to the exchange rate are mutually exclusive. Beyond this assertion, the conformist view also holds that intervention in the foreign exchange market could confuse the public regarding the ultimate objective of the central bank with respect to its priorities, distorting expectations. In a world of credibility game, such signals would be detrimental to the CB’s authority.

Yet, while maintaining the IT objective, one can also distill a more active role for the exchange rate in the literature. As outlined by Debelle (2001), this “flexible IT” view proposes that the exchange rate can also be a legitimate policy objective alongside the inflation target. The “flexible IT” view can also be said to partially respond to the

³ Though, note the one sided ever increase in the aggregate reserves of the CBs. The social desirability and economic optimality of this phenomenon in the aftermath of the adoption of floating exchange rate systems is another issue that warrants further research.

emerging market concerns of the *fear of floating* (Calvo and Reinhart, 2002). The argument is based on the contention that many emerging market economies that have adopted flexible exchange rate regimes are not “truly floating”. Based on an econometric study of the cross-country comparisons of the ratio of exchange rate volatility relative to the volatility of interest rates or international reserves, Calvo and Reinhart (2002) report that relative volatilities are lower in emerging market economies than in industrial countries. This finding, according to Calvo and Reinhart, is evidence that the emerging market economy CBs do not let their currencies to float in practice, even under an IT set-up.

More formally, an operational framework to the “flexible IT” view was envisaged within an expanded *Taylor rule*. Taylor (2000) argued, for instance, that an exchange rate policy rule can legitimately be embedded in a Taylor rule that is consistent with the broad objectives of targeted inflation rate and the output gap. As a test for the fear of floating assertion, Schmidt-Hebbel and Werner (2002) studied the econometrics of such an expanded-Taylor rule for Brazil, Chile and Mexico. They specify a Taylor rule for the real interest rate (R_t) over the deviation of expected inflation from its target ($\text{inf}^E - \text{inf}^T$)_t, the output gap ($Ygap_t$), the nominal exchange rate depreciation (dep_t), and the rate of long term government bonds denominated in foreign currency (B^G)_t.

$$R_t = \beta_1 + \beta_2 R_{t-1} + \beta_3 (\text{inf}^E - \text{inf}^T)_t + \beta_4 Ygap_t + \beta_5 dep_t + \beta_6 B_t^G$$

A robust finding is that the effect of exchange rate depreciations on real interest rates fails to be significant; that is, there is no evidence that central banks have consistently reacted to exchange rate movements above and beyond their effects on inflation. Schmidt-Hebbel and Werner interpret this finding as evidence that the CBs of these Latin American countries had not disclosed any fear of floating and that their monetary rules had in fact been on the conformist IT track.

III-1. The Case for a Stable and Competitive Real Exchange Rate

In contrast to all this, 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.*, Frenkel and Taylor 2005; Galindo and Ros, 2006 (this volume), Frenkel and Ros, 2006; Frenkel and Rapetti, 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 by affecting employment through its impact on investment and economic growth (*the development channel*) (Frenkel and Ros, pp. 634-637). While the size and even direction of these channel effects might differ from country to country, in many countries, including countries in Latin America, maintaining a competitive and stable real exchange rate is likely to have a positive employment impact through some combination of these effects. For example, Frenkel and

Ros find that in Latin America, in most of the Latin American countries experiencing increases in unemployment in the 1990's, these economies were characterized by significant appreciations of their real exchange rate.

In fact, one of the stylized facts of the capital account liberalization experiences is that the post-liberalization 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.⁴ This commitment stimulates further foreign inflows, and the domestic currency appreciates inviting an even higher level of hot money inflows into the often shallow domestic financial markets. The initial bonanza of debt-financed public (*e.g.* Turkey) or private (*e.g.* Mexico, Korea) spending escalate rapidly, and severe 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 severe entrenchment of aggregate demand, while the short term “hot money” flows have already rushed out of the country leaving it broke and deprived of the traditional tools of adjustment and austerity. Elements of this vicious cycle are further studied in Polanyi-Levitt (2001), Adelman and Yeldan (2000), Kaminsky and Reinhart (1999), Calvo and Vegh (1999), Dornbusch, Goldfajn and Valdés (1995), Diaz-Alejandro (1985), and more recently referred to as the *Neftci-Frenkel cycle* in Taylor (1998) (following Neftci (1998) and Frenkel (1998)).

III-2. Exchange Rate Determination

The gist of the structuralist case for SCRRER rests on a recent (and unfortunately not well understood and appreciated) paper by Taylor (2004). Resting his arguments on the system of social accounting identities, Taylor argues that the exchange rate can not 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 rests on an assumed duality between reserves (fixed exchange rate system) *versus* flexible exchange rate adjustments. The orthodox mainstream model, according to Taylor, 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” (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

⁴ See, *e.g.*, Calvo, Leiderman and Reinhart (1996), Adelman and Yeldan (2000), Polanyi-Levitt (2001). For further discussion of the empirics of the celebrated surge in capital inflows see Agenor and Montiel (1999); Rodrik and Velasco (2000) and Prasad *et al.* (2003).

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:

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

Re-arranging,

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

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, 2005). 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 2005, p.6) terms 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 *Frenkel-Neftci cycle* noted above. Consider a simple bond market equilibrium condition in its implicit form:

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

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).

In a practical setting, the fact that ε_t can be in “equilibrium” in the sense of meeting the demand for foreign exchange with its 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 (2003 and 2001). Accordingly, exchange rate is regarded as “mis-aligned” if its realized value exhibits a persistent departure from its long run equilibrium trend (Edwards, 2001, p.6). The long run equilibrating value, in turn, is taken to be that rate which, for a given set of “structural fundamentals” is compatible with simultaneous achievement of internal and external equilibrium⁵. It is clear that such an assessment has to go beyond the simple PPP calculations, which are wrought with issues of the choice of a relevant price index and a proper base year.

IV. Socially Responsible Alternatives to Inflation Targeting CB Policies

The preceding discussions clearly underscore that the real world behavior of exchange rates is quite complex and the obsession of the inflation targeting regime for 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 accounting for this perception. First, in an internationally financially integrated economy with high levels of international 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 says 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 turns out to be one leg of this 'tri-lemma', namely the fact that orthodox economists, by and large, have taken for granted that eliminating capital controls is the best policy, and that virtually complete financial liberalization with respect to 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, 2004; Epstein, Grabel and Jomo, K.S., 2005).

⁵ See also Fischer (2001) on the formal statement of the problem within the context of a finer classification of the exchange rate systems.

Secondly, many economists believe the Pre-Keynesian natural rate (or, alternatively, "Non-Accelerating Inflation Rate of Unemployment (NAIRU)) view of the labor market that claims that, left to their own devices, market forces will automatically bring the economy to full employment and, furthermore, any attempt to reduce unemployment further will only result in ever worsening inflation. However, there is substantial evidence that the NAIRU theory is not empirically well based. The natural rate or NAIRU, if it exists, does not seem to be constant; importantly, it seems to be affected by macroeconomic policy itself; in some countries its effects are asymmetric, with increases in unemployment reducing inflation, but reductions in employment not increasing inflation; and it no longer even seems central to the work of mainstream economics (see Eisner, 1997; Baker, 2000; Ball and Sheridan, 2001; Ball and Mankiw, 2002; Pollin, 2005; Hall, 2005).

In this section we report on a series of country studies undertaken by a team of researchers working on a Political Economy Research Institute (PERI) (University of Massachusetts, Amherst)/Bilkent project on alternatives to inflation targeting, as well as a United Nations Development Project (UNDP) sponsored study of employment targeting economic policy for South Africa. A range of alternatives were developed by the researchers, 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, to a much broader change in the overall mandate of the central bank to a focus on employment targeting, rather than inflation targeting. Some of the alternative policies focus exclusively on changes in central bank policy, while for other countries, changes in the broad policy framework and in the interactions of monetary, financial and fiscal policy are proposed. Some incorporate explicit goals and targets, while others prefer more flexibility and somewhat less transparency. But all of the studies agreed 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, or investment. They also agree that in many cases, central banks must broaden their available policy tools to allow them to reach multiple goals, including, if necessary, the implementation of capital management techniques (Ocampo, 2004; Epstein, Grabel and Jomo, 2006).

IV-1. Modest but Socially Responsible Adjustments to the Inflation Targeting Regime

Some of the country studies in the PERI/Bilkent project proposed only modest changes to the inflation targeting regime. In the case of Mexico, for example, the authors argue that the inflation targeting regime has allowed for more flexible monetary policy than had occurred under regimes with strict monetary targets or strict exchange rate targets (Galindo and Ros, 2006). They suggest modifying the IT framework to make it somewhat more employment friendly. In the case of Mexico, Galindo and Ros find that monetary policy was asymmetric with respect to exchange rate movements –tightening when exchange rates depreciated, but not loosening when exchange rates appreciated. This lent

a bias in favor of an over-valued exchange rate in Mexico. So Galindo and Ros propose a "neutral" monetary policy so that the central bank of Mexico responds symmetrically to exchange rate movements and thereby avoid the bias toward over-valuation without fundamentally changing the inflation targeting framework.⁶

In his study of Brazil, Nelson Barbosa-Filho also proposed extending the inflation targeting framework, but as we will see shortly, in a more dramatic way. Writes Barbosa-Filho: "...because of Brazil's past experience with high inflation, the best policy is to continue to target inflation while the economy moves to a more stable macroeconomic situation. So far the great gain from inflation targeting has been the increase in the transparency and accountability of monetary policy in Brazil." (Barbosa-Filho, 2005). But he goes on to say, "The crucial question is not to eliminate inflation targeting, but actually make it compatible with fast income growth and a stable public and foreign finance". (ibid.) As discussed in the next section, in order to do that, Barbosa-Filho joins a number of the country case study authors in proposing a monetary policy to maintain a stable and competitive real exchange rate (SCRER) which, they argue, will have a number of significant benefits for many of these economies and their peoples.

IV-2. A Competitive and Stable Real Exchange rate

As just indicated, a number of authors, following the lead of Frenkel and Taylor (2005), Frenkel and Ros (2005) and Frenkel and Rapetti (2006) argue that the central banks should maintain a moderate inflation rate and should maintain a competitive and stable real exchange rate. (See Frenkel and Rapetti, 2006 for Argentina; Barbosa-Filho, 2005 for Brazil; Galindo and Ros, 2006 for Mexico; Lim, 2006 for The Philippines; Packard, 2006 for Vietnam). In all of these cases, the authors argued that such a policy would help their economies pursue a more employment oriented growth path, while maintaining inflation in check. They all suggested that the countries they studies might need to impose short-term capital controls and other capital management techniques to help them manage the exchange rate will maintaining moderate inflation.

For the case of Brazil, Barbosa-Filho developed a more elaborate policy framework which includes a focus on maintaining a competitive and stable real exchange rate together with a targeted reduction in the real interest rate. Given Brazil's large public debt, Barbosa-Filho also proposes that the targeted reduction in the real interest rate would reduce the Brazilian debt service burdens and help increase productive investment. In terms of the familiar targets and instruments framework, Barbosa-Filho proposes that the Brazilian central bank choose exports, inflation and investment as ultimate targets, and focus on the inflation rate, a competitive and stable real exchange rate and the real interest rate as intermediate targets.

⁶ Galindo and Ros also propose shifting from a CPI target to a domestic inflation target which would purge the exchange rate impact on the "target" inflation rate and further reduce the basis for the monetary policy bias toward exchange rate appreciation.

Barbosa-Filho also elaborates on the monetary policy tools that can be used to reach these intermediate and ultimate targets. To maintain the SCRER, Barbosa-Filho proposes an asymmetric managed floating exchange rate regime in which the Brazilian central bank places a (moving) ceiling on the appreciation of the exchange rate, and, when necessary implements tight macroeconomic policy to prevent speculative attacks leading to excessive depreciations. Furthermore, in order to achieve these goals, the central bank can use direct manipulation of the policy interest rate, bank reserve requirements and bank capital requirements (Barbosa-Filho, 2005).

Brazil is not the only highly indebted country in our project sample. Turkey is another case with that problem. Here, too, the authors raise concerns to the conformist straightjacket of inflation targeting, and develop an alternative macroeconomic framework. Using a computable general equilibrium model (CGE) for the case of Turkey, Voyvoda and Yeldan simulate the impact of a shift in policy from a strict inflation targeting regime, to one that calls for revisions of the primary fiscal surplus targets in favor of a more relaxed fiscal stance on public investments on social capital, together with a direct focus on the competitiveness of the real exchange rate. They find that such a shift generates much more rapid growth and employment creation, but at the expense of some worsening of the government debt position, relative to the strict inflation targeting and fiscal surplus regime currently in place (Voyvoda and Yeldan, 2006).

Frenkel and Rapetti, in the case of Argentina, show that targeting a stable and competitive real exchange rate has been very successful in helping to maintain more rapid economic growth and employment generation. In the case of India, Jha also argues against an inflation targeting regime, and in favor of one that "errs on the side of undervaluation of the exchange rate" with possible help from temporary resort to capital controls (Jha, 2006, pp. 30-31). Jha argues, that, to some extent, such a policy would be a simple continuation of policies undertaken in India in the past. In Vietnam, Packard concludes: "...a strict inflation targeting (IT) regime is not appropriate for Vietnam. IT's rigid rules constrain policymakers to operate in a framework that requires inflation to take priority over more pressing development objectives. (Thus), a stable and competitive real exchange rate is (a) superior alternative, precisely because it sets as a target a key macroeconomic relative price that is realistic, sustainable, and growth enhancing." (Packard, 2006).

For Mexico, Galindo and Ros propose a more fundamental alternative to inflation targeting. They propose combining inflation targeting with real exchange rate targeting (Galindo and Ros, 2006). "More precisely, the central bank would promote a competitive exchange rate by establishing a sliding floor to the exchange rate in order to prevent excessive appreciation (an "asymmetric band"...). This would imply intervening in the foreign exchange market at times when the exchange rate hits the floor (i.e., an appreciated exchange rate) but allows the exchange rate to float freely otherwise." (Galindo and Ros, 2006). They point out that such a floor would work against excessive capital inflows by speculators because they would know the central bank will intervene to stop excessive appreciation. If need be, Galindo and Ros also propose temporary capital controls, as do some of the other authors from the PERI/Bilkent project.

IV-3. More Comprehensive Alternatives to Inflation Targeting

Other country case studies propose more comprehensive policy alternatives to simple inflation-focused monetary policy, including inflation targeting. Joseph Lim proposes a comprehensive alternative to inflation targeting for the case of the Philippines. Lim argues that the Philippine government has been seeking to achieve a record of dramatically higher economic growth, but that its monetary policy has been inadequate to achieving that goal. He therefore proposes an "alternative" that "clearly dictates much more than just a move from monetary targeting to inflation targeting". Lim argues that any viable alternative for the Philippines must take into account several key constraints or realities: 1) Easier monetary policy by itself will not stimulate investment or growth because it is accompanied by weak financial confidence and stricter financial requirements on banks. 2) Fiscal policy is highly constrained because of a large public debt. 3) High economic growth by itself will not necessarily enhance the quality of the growth – i.e., improving the growth of good jobs with good wages 4) Volatile external accounts and foreign exchange rates undermine rapid and high quality growth.

Lim's proposals include: 1) Maintenance of a stable and competitive real exchange rate (SCRER), either by pegging the exchange rate or intensively managing it as in South Korea. 2) To help manage the exchange rates, capital management techniques, as in China and Malaysia, are likely to be needed. This should include strong financial supervision to prevent excessive undertaking of short-term foreign debt, and tax based capital controls on short term capital flows, as was used, for example in Chile. 3) An explicit stating of output and employment goals, as the central bank transitions from a purely inflation-targeting regime. Lim argues that these policies can have beneficial impacts on the current Philippine problems of high fiscal deficits, lack of financial confidence and unemployment. 4) Incomes and anti-monopoly policies to limit inflation to moderate levels and 5) Targeted credit programs, especially for export oriented and small and medium sized enterprises that can contribute to productivity growth and employment.

These policy proposals in broad outlines are similar to those proposed by Epstein (2006) for the case of South Africa, which, in turn, have been developed in a much broader framework and in more detail by Pollin, *et. al.* (2006). Pollin, *et. al.* developed an "employment-targeted economic program" designed to accomplish this goal, with a focus on monetary policy, credit policy, capital management techniques, fiscal policy and industrial policy. The purpose of the program is to reduce unemployment rate by 50% in line with the government's pledge to reduce the official unemployment rate to 13% by 2014.⁷ Here, "employment targeting" replaces inflation targeting as the proposed operating principle behind central bank policy, and moderate inflation becomes an additional constraint which the central bank must take into account when formulating its policies. (Epstein, 2006).

⁷ As of March 2005, South Africa had an unemployment rate of anywhere from 26% to 40%, depending on exactly how it is counted.

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 a profound structural transformation 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, 2004; 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 (2003) reports that about 90% of the labor employed in world merchandise trade is low-skilled and unskilled, 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, 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 these had 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 clear 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*).

References

- Adelman, Irma and Erinc Yeldan (2000) ‘The Minimal Conditions for a Financial Crisis: A multi-regional Inter-temporal CGE Model of the Asian crisis’ *World Development*, 28(6): 1087--1100.
- Akyuz, Yilmaz (2006) “From Liberalization to Investment and Jobs: Lost in Translation” Paper presented at the Carnegie Endowment for International Peace Conference, 14-15 April 2005, Washington DC.
- Akyuz, Yilmaz (2003) *The Developing Countries and World Trade. Performance and Prospects*, London: ZED Books.
- Akyuz, Yilmaz, Heiner Flassback and Richard Kozul-Wright (2006) “Globalization, Inequality and the Labour Market” in Ahmet Kose, Fikret Senses and Erinc Yeldan (eds) *Neoliberal Globalization as New Imperialism: Case Studies on Reconstruction of the Periphery*, New York: NOVA Science, forthcoming.
- Agenor, P. and Montiel, P. (1999) *Development Macroeconomics*, New Jersey: Princeton University Press.
- Amsden, Alice (2001) *The Rise of the Rest: Challenges to the West from late-Industrializing Economies*. Oxford: Oxford University Press.
- Baker, Dean (2000) "NAIRU: Dangerous Dogma at the Fed" *Financial Markets and Society*, Financial Markets Center, www.fmcenter.org, December.
- Ball, L. and Sheridan, N. (2003) "Does Inflation Targeting Matter?" *IMF Working Paper* No. 03/129.
- Ball, Laurence and N. Gregory Mankiw (2002) "The NAIRU in Theory and Practice", NBER, Working Paper, No. 8940.

- Barbosa, Nelson H. (2005) "Inflation Targeting and Monetary Policy In Brazil". Presented at the *Alternatives to Inflation Targeting Monetary Policy for Stable and Egalitarian Growth in Developing Countries* conference, Centro de Estudios de Estado Y Sociedad (CEDES), Buenos Aires, May 13-14, 2005.
- Batini, Nicoletta, Peter Breuer, Kalpana Kochhar and Skott Roger (2006) "Inflation Targeting and the IMF" IMF Staff Paper, Washington DC, March.
- Bernanke, Ben S., Thomas Laubach, Adam S. Posen and Frederic S. Mishkin (1999) *Inflation Targeting: Lessons from the International Experience*. Princeton, NJ: Princeton University Press.
- Bruno, Michael (1995) "Does Inflation Really Lower Growth?" *Finance and Development*, September, 35-38.
- Calvo, Guillermo and Carmen Reinhart (2002) "Fear of Floating" *Quarterly Journal of Economics*, 117(2): 379-408.
- Calvo, Guillermo and Carlos A. Vegh (1999) "Inflation Stabilization and BOP Crises in Developing Countries" in J. Taylor and M. Woodford (ed) *Handbook of Macroeconomics*, North Holland: 1531-1614.
- Calvo, G., Leiderman, L. and Reinhart, C. (1996) "Inflows of Capital to Developing Countries in the 1990s" *The Journal of Economic Perspectives*, 10(2): 123-139.
- Canales-Kriljenko and Karl Habermeir (2004) "Structural Factors Affecting Exchange Rate Volatility: A Cross-Section Study", IMF Working Paper, WP/04/147.
- Chang, Ha-Joon (2002) *Kicking Away the Ladder*. London: Anthem Press.
- Corbo, Vittorio, Osca Landerretche, and Klaus Schmidt-Hebbel (2001) "Does Inflation Targeting Make a Difference?" *Central Bank of Chile Working Papers, No. 106*. <http://www.bcentral.cl/Estudios/DTBC/doctrab.htm>
- Debelle, G. (2001) "The Case for Inflation targeting in East Asian Countries" pp. 65-87 in *Future Directions for Monetary Policies in East Asia*, Reserve Bank of Australia, Sydney
- Diaz-Alejandro, Carlos F. (1985) "Good-Bye Financial Repression, Hello Financial Crash" *Journal of Development Economics*, 19:1-24.
- Dornbusch, Rudiger, Ilan Godfajn and Rodrigo Valdés (1995) "Currency Crises and Collapses" *Brookings Papers on Economic Activity*, Vol 2: 219-270, June.
- Edwards, Sebastian (2005) "The Relationship Between Exchange Rates and Inflation Targeting Revisited" paper prepared for the *Banco Central de Chile Annual*

Research Conference, Santiago, October.

Edwards, Sebastian (2001), "Exchange Rate Regimes, Capital Flows and Crisis Prevention", NBER Working Paper No: 8529.

Eisner, Robert (1997) "A New View of the NAIRU", in P. Davidson and J. Kregel, eds. *Improving The Global Economy: Keynesianism and the Growth in Output and Employment*. Brookfield, VT: Edward Elgar Publishers.

Epstein, Gerald, (2006) "Employment Targeting Central Bank Policy in South Africa". Presented at the *Alternatives to Inflation Targeting Monetary Policy for Stable and Egalitarian Growth in Developing Countries* conference, Centro de Estudios de Estado Y Sociedad (CEDES), Buenos Aires, May 13-14, 2005.

Epstein, Gerald. (2006) "Central Banks as Agents of Economic Development", WIDER Working Paper, No. 2006-54.
<http://www.wider.unu.edu/publications/rps/rps2006/rp2006-54.pdf>

Epstein, Gerald, Ilene Grabel and Jomo, K.S., (2005) "Capital Management Techniques in Developing Countries: An Assessment of Experiences from the 1990's and Lessons for the Future". in Gerald Epstein, ed. 2005, *Capital Flight and Capital Controls in Developing Countries*. Northampton: Edward Elgar Press.

Fischer, Stanley (2001) "Distinguished Lecture on Economics in Government," *Journal of Economic Perspectives*, 15(2): 3-24.

Fleming, J. M. (1962) "Domestic Financial Policies under Fixed and Floating Exchange Rates" *IMF Staff Papers* 9: 369-79.

Freeman, Richard (2005) "What Really Ails Eurpoe (and America): The Doubling of the Global Workforce" *The Globalist*, June 3, 2005.

Freeman, Richard (2004) "Doubling the Global Workforce: The Challenges of Integrating China, India, and the former Soviet Block into the World Economy" Paper presented at the conference on "Doubling the Global Work Force", *Institute of International Economics*, November 8, Washington DC.

Frenkel, Roberto (2006) "An Alternative to Inflation Targeting in Latin America: Macroeconomic Policies Focused on Inflation", *Journal of Post Keynesian Economics*. Summer. Vol. 28, No. 4., pp. 574-591.

Frenkel, Robert (2004) "Real Exchange Rate and Employment in Argentina, Brazil, Chile and Mexico", paper prepared for the Group of 24, September. Washington, DC.

- Frenkel, Roberto (1998) "Capital Market Liberalization and Economic Performance in Latin America" Center for Policy Analysis, New School for Social Research, Working Paper Series III No 1, May.
- Frenkel, Roberto and Martin Rapetti (2006) "Monetary and Exchange Rate Policies in Argentina after the Convertibility Regime Collapse", *University of Massachusetts, Amherst, PERI Working Paper*, www.peri.umass.edu .
- Frenkel, Roberto and Jaime Ros (2006) "Unemployment and the Real Exchange Rate in Latin America". *World Development*. Vol 34, No. 4, pp. 631-646.
- Frenkel, R. and L. Taylor (2006) "Real Exchange Rate, Monetary Policy, and Employment: Economic Development in A Garden of Forking Paths", Working Paper No. 19, Department of Economic and Social Affairs (DESA), United Nations, New York, February, 2006.
- Frey, Maxwell J. (1995) *Money, Interest and Banking In Economic Development*. Baltimore: The Johns Hopkins University Press, 2nd Edition.
- Galindo, L.M. and Ros J. (2005) "Inflation Targeting Mexico: An Empirical Appraisal" Presented at the *Alternatives to Inflation Targeting Monetary Policy for Stable and Egalitarian Growth in Developing Countries* conference, Centro de Estudios de Estado Y Sociedad (CEDES), Buenos Aires, May 13-14, 2005.
- Ghosh, A. and Phillips, S. (1998) "Warning: Inflation May Be Harmful to Your Growth". *IMF Staff Papers*, 45 (4), 672-686.
- Grabel, Ilene (2000) "Savings, Investment and Functional Efficiency: A Comparative Examination of National Financial Complexes", in Robert Pollin, ed. *The Macroeconomics of Saving, Finance and Investment*. Ann Arbor: University of Michigan Press, pp. 251-298.
- Grabel, Ilene (1995) "Speculation-Led Economic Development: A Post-Keynesian Interpretation of Financial Liberalization Programmes in The Third World" *International Review of Applied Economics* 9(2): 127-249.
- Hall, Robert E. (2005) "Separating The Business Cycle from Other Economic Fluctuations", NBER Working Paper, No. 11651, September. www.nber.org
- Heintz, James (2006a) "Growth, Employment and Poverty Reduction", DFID Discussion Paper, available at: www.umass.edu/peri.
- Heintz, James (2006b) "Globalization, economic policy and employment: Poverty and Gender Implications". Employment Strategy Department. Employment Strategy Papers. 2006/3. Geneva: ILO.

- Ho, Corrinne and Robert N. McCauley (2003) "Living with Flexible Exchange Rates: Issues and Recent Experience in Inflation Targeting Emerging Market Economies". *Bank for International Settlements (BIS)*, Working Paper No. 130.
- International Labor Office (ILO) (2004) *Global Employment Trends 2004*. Geneva: International Labor Office.
- International Monetary Fund (IMF) (2004) *International Financial Statistics*. CD Rom.
- Jha, Raghendra (2006) "Inflation Targeting in India: Issues and Prospects" PERI Working Paper, www.peri.umass.edu .
- Kaminsky, G. L. and Reinhart, C. M. (1999) "The Twin Crises: The Causes of Banking and Balance of Payments Problems" *American Economic Review* 89(3): 473-500.
- Kapsos, Steven (2004) "Estimating growth requirements for reducing working poverty: can the world halve working poverty by 2015?" Employment Strategy Papers, No. 2004/14, Employment Strategy Department, Geneva: ILO.
- Lim, Joseph (2006) "Philippine Monetary Policy: A Critical Assessment and Search for Alternatives Joseph Lim", PERI Working Paper, (www.peri.umass.edu)
- Masson, Paul R. Miguel A. Savastano and Sunil Sharma (1997) "The Scope for Inflation Targeting in Developing Countries", Washington, DC: *IMF Working Papers* WP/97/130.
- Maxfield, Sylvia (1997) *Gatekeepers of Growth; The International Political Economy of Central Banking in Developing Countries*. Princeton: Princeton University Press.
- Mishkin, Frederic S. and Klaus Schmidt-Hebbel (2001) "One Decade of Inflation Targeting in the World: What Do We Know and What Do We Need to Know?" *NBER Working Papers*, No 8397, July. (www.nber.org/papers/w8397)
- Mundell, R.A. (1963) "Capital Mobility and Stabilization Policy under Fixed and Flexible Exchange Rates" *Canadian Journal of Economics and Political Science* No 29: 475-85.
- Neftçi, Salih (1998) "FX Short Positions, Balance Sheets, and Financial Turbulence: An Interpretation of the Asian Financial Crisis" Center for Policy Analysis, New School for Social Research, Working Paper Series III No 4, June.
- Ocampo, Jose Antonio (2002) "Capital-Account and Counter-Cyclical Prudential Regulations in Developing Countries". WIDER, Discussion Paper, August.
- Packard, Tu Anh (2005) "Monetary Policy in Vietnam: Alternatives to Inflation Targeting" Presented at the *Alternatives to Inflation Targeting Monetary Policy for*

Stable and Egalitarian Growth in Developing Countries conference, Centro de Estudios de Estado Y Sociedad (CEDES), Buenos Aires, May 13-14, 2005.

Polanyi-Lewitt, Kari (2001) "Reclaiming the Right to Development" Paper presented at the UNRISD Conference on the *Need to Rethink Development Economics*" Cape Town, September.

Pollin, Robert. 2005. *Contours of Descent*. London: Verso Press.

Pollin, Robert (1995) "Financial Structures and Egalitarian Economic Policy", in *New Left Review*, 214, pp. 26-61.

Pollin, Robert N., Gerald Epstein, James Heintz and Leonce Ndikumana (2006) *An Employment-Targeted Economic Program for South Africa; A Study Sponsored by the United Nations Development Program (UNDP), UNDP and Political Economy Research Institute (PERI)*. www.peri.umass

Pollin, Robert and Andong Zhu, (2006) "Inflation and Economic Growth: A Cross-Country Nonlinear Analysis". *Journal of Post Keynesian Economics*. Summer. Vol. 28, No. 4., pp. 593-614.

Prasad, E., Rogoff, K., Wei, S., and Kose, A. (2003) "Effects of Financial Globalization on Developing Countries: Some Empirical Evidence" IMF Report, Washington D.C. www.imf.org.

Rodrik, D. (2000) "The Global Governance of Trade As if Development Really Mattered" Paper presented at the UNDP Meetings New York, Oct 13-14.

Rodrik, D. and Velasco, A. (2000) "Short-Term Capital Flows" *Annual World Bank Conference on Development Economics, 1999*, December: 59-90.

Roger, Scott and Mark Stone (2005) "On Target? The International Experience with Achieving Inflation Targets", Washington, D.C.: *IMF, Working Paper*, WP/05/163.

Saad-Filho, Alfredo (2004) "Pro-Poor Monetary and Anti-Inflation Policies: Developing Alternatives to the New Monetary Policy Consensus", Mimeo, SOAS.

Stiglitz, Joseph (2002) "Financial Market Stability and Monetary Policy" *Pacific Economic Review* 7(1):13-30.

Taylor, J. B. (2000) "Low Inflation, Pass-through and the Pricing Power of Firms" *European Economic Review*, 7(44): 1389-1408.

Taylor, Lance (2004) *Reconstructing Macroeconomics*. Cambridge, MA: Harvard University Press.

- Taylor, Lance (1998) "Lax Public Sector, Destabilizing Private Sector: Origins of Capital Market Crises" Center for Policy Analysis, New School for Social Research, Working Paper Series III No 6 July.
- Tobin, James (1980) "Stabilization Policy Ten Years After". *Brookings Papers on Economic Activity* (1): 19-71.
- UNCTAD (United Nations Trade and Development) (1998) *Trade and Development Report*, Geneva.
- UNCTAD (United Nations Trade and Development) (1995) *Trade and Development Report*, Geneva.
- Velasco, Andres (1987) "Financial Crises and Balance of Payments Crises: A Simple Model of Southern Cone Experience" *Journal of Development Economics*, 27(1-2): 263-283, October.
- Vernango, Matias (2006) "The Political Economy of Monetary Institutions in Brazil: The Limits of the Inflation Targeting Strategy, 1999-2005" University of Utah, *mimeo*.
- Voyvoda, Ebru and Erinc Yeldan (2006) "Macroeconomics of Twin-Targeting in Turkey: A General Equilibrium Analysis" PERI Working Paper, (www.peri.umass.edu)