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the inflation targeters**

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WIN OR LOSE, IT'S THE POLICY WE CHOOSE: COMPARATIVE ECONOMIC PERFORMANCE OF THE INFLATION TARGETERS

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Abstract

The inflation-growth relationship for the inflation targeters is estimated for the period 2001-2006. The results show that inflation is negatively correlated with economic growth, while the indicators for aggregate demand and supply are positively correlated with economic growth. These findings suggest that rather than a singular focus on inflation targeting—especially aiming at too low rates of inflation—a positive combination of economic policies can be the more productive direction to pursue to achieve broad-based economic performance. Such a direction is possible when the authorities acknowledge the compatibility of orthodox targets (e.g., price stability) with unorthodox strategies (e.g., counter-cyclical and compensating actions) in economic management. It is also argued that this view applies to the case of the Philippines, where an upsurge in inflation is typically driven by external rather than domestic factors and achieving robust economic growth is very important.

INTRODUCTION

An interesting aspect to the current orthodoxy in mainstream economics is its partiality to assign specific form to a function, thus overlooking the large amount of empirical research and historical experience which reveal that successful economic management requires the adoption of multiple strategies, the encouragement of creativity and innovation, as well as serious institution-building (e.g., Chang, 2007; Rodrik, 2007). In central banking, for instance, this orthodoxy has defined the function of ensuring

price stability to mean focusing on inflation targeting, and articulated as *the* mandate of central banks. Accordingly, the central bank embarks to achieve that announced desirable rate of inflation using monetary tools.

Announcing a desired rate of inflation is very important in the orthodox view because it pacifies private business concerns such as the realization and control of profits, the protection of wealth and private property, etc. It also enhances the credibility of the central bank in the execution of monetary policy, at least in the view of private business and international finance. Likewise, there is increased confidence that the public sector will not be profligate in its spending. The central bank in the end is only able to steer the economy within the inflation target, while the government is limited in its delivery of public goods and services. Put another way, through the espousal of the orthodoxy—like inflation targeting—government withdrawal from pursuing its developmental role is facilitated, if not encouraged.

In inflation targeting, the target has to be sufficiently low—usually aiming at a rate of inflation from 1 to 3 percent—so that private business and finance need not have to worry about it when making everyday decisions. As suggested earlier, aiming at a very low rate of inflation and being able to show success in meeting a target bestow on the central bank credibility and transparency, suggesting “effective” and “sound” central banking. In a way, it becomes accountable (only) to private business and finance rather than to the public. In this way, inflation targeting, argues the orthodoxy, leads to increased economic stability and facilitates robust economic growth.¹ Accordingly, developments that jeopardize the inflation target necessitate serious actions such as contractionary interest rates, reduced money supply and credit, and the like, in order to ensure that the monetary aggregates are realigned to bring inflation within target.²

¹ The rise of neoliberal economics has meant the defense of finance capital to ensure its complete control and disposition of wealth and power at the expense of public welfare. In similar manner, inflation targeting is underpinned by a fear (by private interests) that inflation undermines wealth and power. Governments that manage the economy against adverse cycles, discipline speculative activities that undercut economic stability, employment generation, or other related interventions, are seen as unfriendly to market operations and anathema to finance. The private interest thus puts an aggressive opposition employing the threat of capital strike (i.e., flow stoppage or withdrawal). As such, economic management must be done in a way that is agreeable to finance. It is in this context and in other areas of the economy that inflation targeting is being pushed by neoliberal economics, in effect pushing central banks to move away from their traditional developmental role (e.g., Epstein, 2007). See also Harvey (2005) for a concise history of neoliberalism.

² It needs to be pointed out that some central banks have adopted escape clauses in

Whether or not inflation targeting promotes economic growth remains controversial. This debate has produced a rather large body of literature. Bruno & Easterly (1998), Pollin & Zhu (2005), and Epstein & Yeldan (2007), for example, find that economic growth remains possible even though the inflation rate is in the range of 15-20 percent. They argue that it is the manner in which inflation targeting is pursued by the central bank that really matters. What brings about low economic growth and weak jobs generation is the deflationary stance that authorities take up when adopting inflation targeting. In turn, targeting brings about costs that exceed the purported benefits. The conclusion that one can make from these studies is that it is the obsession to achieve a very low rate of inflation that causes problems, the result of a policy that discourages broad-based economic performance, which means stable and robust economic growth that leads to the creation of jobs, increases in average incomes, and equitable distribution of benefits and opportunities.³

There are studies that find a negative correlation between inflation and economic growth, such as Grier & Tullock (1989), Barro (1996), and Ghosh & Phillips (1998). Some even point out that there can be a nonlinear relationship between inflation and economic growth. Of course, the experiences of many countries indicate that in addition to curtailing economic growth, high levels of inflation bring about other adverse consequences on the economy. For example, the instabilities that emerge with the reduction in economic growth can lead to the suppression of incomes, jobs, investments, and so on, in turn further curtailing growth thereby producing a vicious cycle of stagflation. In the end, underdevelopment is produced. The high levels of inflation necessitate significant economic adjustments that not only derail economic growth but also push the economy to lower growth trajectories. These are ultimately costly to societies, and often, the poor suffer from such unfavorable developments. It is therefore very important that the authorities ensure price stability. Thus Feldstein (1997), Corbo et al., (2001), and Mishkin & Schmidt-Hebbel (2007), among others, stress that on balance the benefits

their inflation targeting policies like Czech Republic, New Zealand, Philippines, Poland, Romania, Slovakia, South Africa, and Sweden (e.g., Roger & Stone, 2005; Tuladhar, 2005; Heenan et al., 2006). See the discussion for the case of the Philippines below.

³ If broad-based economic performance is expanded to mean standard of living (i.e., human development), then other dimensions have to be added like universal health care, quality education at all levels, social security, infrastructure development, clean environment, waste management, etc.

of inflation targeting exceed the costs. They further indicate that when inflation targeting is applied well the economic performance is going to be stabilized, in turn facilitating a virtuous cycle of robust economic growth, jobs generation, greater investments, and so on, which ultimately means the realization of broad-based economic performance.

Interestingly, though, there are proponents of inflation targeting such as Blinder (1998), Bernanke et al., (1999), Dueker & Fisher (2006) who point out that inflation targeting is not necessarily superior to other stabilization policies. In fact, they contend that the purported benefits of low levels of inflation can be achieved using some alternative economic strategies. The idea is that if the authorities have more policy instruments in their control, they have alternatives on how best to achieve stabilization and expansion that takes into consideration the local circumstances. Such a situation is going to be more favorable for realizing broad-based economic performance, even with inflation targeting.

Meanwhile, Arestis & Sawyer (2005), Ball & Sheridan (2005), and Roger & Stone (2005), among others, point out that the success of inflation targeting can be due to other factors, but not inflation targeting itself. Global economic slowdown induces a deflationary environment. Favorable global supply factors relieve pressures on prices. Such conditions translate as reductions in domestic inflation and thus contribute to successful inflation targeting. The reverse situation induces inflationary pressures and thus makes inflation targeting more challenging. In the same fashion, the perceived success of inflation targeting in the Philippines can be argued as not solely due to the Bangko Sentral ng Pilipinas inflation targeting policy because external factors like lower inflation in the Asian region and depressed external demand, especially from two of its biggest trade partners—Japan continuing on a decade-long economic stagnation and the United States going into an economic recession in 2001 and continuing to be relatively weak—contributed to successful targeting. On the other hand, the rise in oil prices contributed to inflationary pressures, thus undermining the inflation targets.

This debate—whether or not inflation targeting is a good policy to pursue, whether it is a strategy that brings more benefits than costs—continues. The same can be said about the debate on the tradeoff between inflation and economic growth. This paper specifically addresses the latter issue: it examines the relationship between inflation and economic growth among the inflation targeters.⁴ Obviously, the adjustments in the conduct

⁴ There is no attempt to compare the economic performance of inflation and non-

of monetary policy would have started in the run up to the adoption of inflation targeting, but the sample of countries is further narrowed down to comprise only those that have pursued inflation targeting for at least five years.

The proposition tested in this paper is that inflation targeting is a desirable policy because it contributes to the realization of robust economic growth. And because inflation targeting has increasingly been included in stabilization and liberalization programs, the results have important policy implications beyond targeting itself. If the results suggest that inflation targeting contributes to the realization of robust economic growth, those that have not adopted inflation targeting may have to recognize the usefulness of inflation targeting and take steps to adopt it. On the other hand, if the results do not support the purported relationship, those who are pursuing inflation targeting may have to reconsider their policy and by extension consider alternative strategies that can lead to robust economic growth.

The next section describes the methodology followed by a discussion of the cross-country results. Philippine inflation targeting is presented in the fourth section as a case study in order to juxtapose the cross-country empirics with in-country experience, thereby contextualizing the general debate in the local circumstances.

METHODOLOGY

This paper empirically verifies the correlation between inflation and economic growth among the inflation targeters using the model: $Y = \alpha + X\beta + \epsilon$, where Y is gross domestic product growth rate and X is a vector of control variables, including inflation, aggregate demand-linked indicators (e.g., government expenditures, and current account deficits), and aggregate supply-linked indicators (e.g., gross fixed capital formation, education expenditure per student, and labor force). To account for other factors, a region dummy is included in the regression to capture differences in economic performance between emerging and industrialized economies, taking a value of one for the former and zero otherwise. Period dummies are also included to capture the overall trend in global economic growth.

inflation targeters for the simple reason that the policy options available to both groups may not be the same, thus inferring that the latter performs better because of the absence of inflation targeting itself is tricky. Studies such as Dueker & Fisher (2006) and Mishkin & Schmidt-Hebbel (2007) compare both groups but have different conclusions.

There are also interaction terms to capture other possible relationships that can explain economic growth, albeit in a rudimentary manner. Except for the dummy variables, the rest of the variables in the model are expressed in growth forms in 2000 constant prices. Once again, inflation targeters refer to the countries that have employed inflation targeting in the period 2001-2006 (see the list of countries at the end of the paper). The raw data are taken from the *World Development Indicators 2007*. The regression was done using EViews.

WIN OR LOSE: EMPIRICS ON INFLATION TARGETERS

Table 1 summarizes the various regression runs. Column 1 is the basic result, where economic growth is regressed on inflation together with region and period dummies. Inflation is found to be strongly negatively correlated with economic growth, with an estimated impact of 15 basis points. That is to say, a unit increase in inflation can result in 15 basis points reduction in economic growth.

The results for the various specifications in Table 1 show that inflation and economic growth are indeed negatively correlated to each other. Economic growth is therefore sensitive to inflation, at least for the inflation targeters. This finding is consistent with the general view that inflation has adverse effects on the economy and so merits policy attention. At least for the inflation targeters, the results in Table 1 suggest that the real economy is not totally independent of inflation.

Columns 2 and 3 show that including the quadratic and lagged specifications of inflation do not give statistically significant results, even if the expected signs are still obtained. Because the results are not statistically different from zero, such specifications are not pursued further. These results basically suggest that inflation does not have a nonlinear relationship with economic growth, at least for the inflation targeters. The absence of such a relationship is perhaps due to the fact that the impact of inflation on economic growth is more in the immediate period.

Columns 4 to 8 present the results when aggregate demand-linked indicators are included in the regressions, which show that indicators for government and current account expenditures are strongly positively correlated with economic growth. The size of the individual coefficient is rather small; however, their aggregate impact is comparable to that of inflation. Altogether, columns 4 to 8 suggest that aggregate demand-linked indicators can explain an average of 11 basis points of economic

Table 1. *Regression Results on Inflation-Growth Tradeoff*

Dependent Variable: Growth	1	2	3	4	5	6
Constant	4.34 ^{hs}	4.27 ^{hs}	4.47 ^{hs}	4.44 ^{hs}	4.31 ^{hs}	3.98 ^{hs}
Inflation	-0.15 ^{hs}	-0.11	-0.15 ^{vs}	-0.21 ^{hs}	-0.19 ^{hs}	-0.18 ^{hs}
Inflation-Square		-0.00				
Inflation-Lagged			-0.00			
Government Expenditure				0.09 ^s	0.09 ^s	0.23 ^{ws}
Current Account Balance				-0.04 ^{vs}	-0.04 ^{vs}	-0.07 ^{hs}
Current Account-Lagged				-0.02		
Fixed Capital Formation						
Education Expenditure						
Labor Force						
Emerging Economy	1.38 ^{hs}	1.38 ^{hs}	1.33 ^{hs}	1.49 ^{hs}	1.39 ^{hs}	1.86 ^{hs}
Government Expenditure in Emerging Economy						-0.15
Current Account in Emerging Economy						0.14 ^{hs}
Fixed Capital Formation in Emerging Economy						
Education Expenditure in Emerging Economy						
Labor Force in Emerging Economy						
Dummy 2001	-2.18 ^{hs}	-2.19 ^{hs}	-2.28 ^{hs}	-2.26 ^{hs}	-2.16 ^{hs}	-2.21 ^{hs}
Dummy 2002	-1.78 ^{hs}	-1.78 ^{hs}	-1.88 ^{hs}	-1.94 ^{hs}	-1.83 ^{hs}	-1.89 ^{hs}
Dummy 2003	-1.53 ^{hs}	-1.51 ^{hs}	-1.62 ^{hs}	-1.82 ^{hs}	-1.69 ^{hs}	-1.69 ^{hs}
Dummy 2004	-0.21	-0.21	-0.31	-0.43	-0.30	-0.38
Dummy 2005	-0.68 ^{vs}	-0.68 ^{vs}	-0.78 ^{vs}	-1.09 ^{vs}	-0.93 ^{vs}	-0.94 ^s
Adjusted R-Square	0.31	0.31	0.31	0.35	0.34	0.39
F-Statistics	8.05	6.98	7.02	6.84	7.36	7.38

Note: hs = 1 percent significance; vs = 5 percent significance; s = 10 percent significance; and w = 15 percent significance.

Table 1. *Continued...*

Dependent Variable: Growth	7	8	9	10	11	12
Constant	3.92 ^{hs}	4.26 ^{hs}	3.61 ^{hs}	3.45 ^{hs}	3.51 ^{hs}	3.24 ^{hs}
Inflation	-0.20 ^{hs}	-0.18 ^{hs}	-0.12 ^{hs}	-0.13 ^{hs}	-0.13 ^{hs}	-0.13 ^{hs}
Inflation-Square						
Inflation-Lagged						
Government Expenditure	0.28 ^{vs}	0.09 ^s				
Current Account Balance	-0.03 ^s	-0.08 ^{hs}				
Current Account-Lagged						
Fixed Capital Formation			0.11 ^{hs}	0.14 ^{hs}	0.11 ^{hs}	0.13 ^{hs}
Education Expenditure			0.02	0.08 ^{vs}		
Labor Force					0.10 ^{vs}	0.24 ^{vs}
Emerging Economy	1.98 ^{hs}	1.44 ^{hs}	1.18 ^{hs}	1.61 ^{hs}	1.17 ^{hs}	1.63 ^{hs}
Government Expenditure in Emerging Economy	-0.21 ^s					
Current Account in Emerging Economy		0.15 ^{hs}				
Fixed Capital Formation in Emerging Economy				-0.05 ^{ws}		-0.03
Education Expenditure in Emerging Economy				-0.06 ^s		
Labor Force in Emerging Economy						-0.21
Dummy 2001	-2.34 ^{hs}	-2.08 ^{hs}	-1.61 ^{hs}	-1.78 ^{hs}	-1.59 ^{hs}	-1.60 ^{hs}
Dummy 2002	-1.99 ^{hs}	-1.77 ^{hs}	-1.26 ^{hs}	-1.42 ^{hs}	-1.24 ^{hs}	-1.23 ^{hs}
Dummy 2003	-1.78 ^{hs}	-1.63 ^{hs}	-1.44 ^{hs}	-1.54 ^{hs}	-1.35 ^{hs}	-1.36 ^{hs}
Dummy 2004	-0.43	-0.29	-0.44	-0.58 ^s	-0.45	-0.47
Dummy 2005	-1.01 ^{vs}	-0.88 ^{vs}	-1.00 ^{vs}	-1.08 ^{hs}	-0.89 ^{vs}	-0.89 ^{vs}
Adjusted R-Square	0.35	0.39	0.53	0.54	0.53	0.53
F-Statistics	6.87	8.01	14.50	12.61	14.48	12.07

Note: hs = 1 percent significance; vs = 5 percent significance; s = 10 percent significance; and w = 15 percent significance.

growth, while inflation can explain an average of 19 basis points.⁵ These findings are not surprising because inflation targeters typically carry out restrictive expenditure policies that limit the role of demand-linked indicators in inducing economic growth. That is to say, government spending tends to be restrictive because of fear that it induces a surge in inflation. Similarly, there can be a surplus in the current account as one consequence of a contractionary expenditure position rather than export competitiveness. How much of economic growth can be explained by aggregate demand-linked indicators under an inflation targeting regime is limited as a result.

The results suggest that aggregate demand-linked indicators can actually be important drivers of economic growth if they are allowed to do so. The more important point is that such findings support the contention that Keynesian policies remain useful in engendering economic growth. If aggregate demand-linked indicators are enhanced with appropriate policies that allow for greater public sector involvement, sensible spending, and so on, they can have a much stronger contribution to economic growth, in turn contributing to enabling a cumulative process and thus realizing long-term economic expansions.⁶

The next results are for the aggregate supply-linked indicators. Columns 9 to 12 suggest that on average the coefficients explain about 12 basis points of economic growth and, once again, these figures are comparable to inflation's, which is about 13 basis points.⁷ Again, the results for the supply-linked indicators are to be expected in light of what standard growth theory contends: capital and labor and human capital

⁵ These figures are simple averages of the regression results shown in Columns 4 to 8 (Table 1). As for the aggregate demand-linked indicators, absolute values of the coefficients of the current account balance are used since "deficit" spending is preferred to induce economic growth. It also needs to be pointed out that alternative measures for demand-linked indicators may produce stronger impacts on economic growth.

⁶ There is of course no guarantee that the benefits of economic growth are distributed evenly across society. Stimulating economic growth is a necessary first step to stimulate the creation of an environment that sustains growth and also creates conditions that facilitate poverty reduction and income distribution. Higher incomes provide a direct route to increase human capabilities and realize development. Where economic growth has not taken place or limited, poverty has persisted if not worsened. In those situations, the poor often carry the disproportionate burden of the economic contraction and maladjustments. Needless to say, policies that stimulate economic growth are different from those for economic development, the latter requiring efforts toward institutional building and deepening of reforms.

⁷ As in footnote 3, these figures are simple averages of the regression results shown in Columns 9 to 12 (Table 1).

together with technology are key inputs to economic growth. Thus the combination of capital formation with a well-educated labor force—by extension, labor that can productively utilize technology to generate more output—can engender robust economic growth. Thus such findings support the proposition that supply-side policies continue to be useful in engendering economic growth. It is for this reason that governments need policies that not only attract capital that bring in additional resources and technology to enhance domestic productivity growth and set off industrialization, but at the same time introduce policies that ensure human capital formation to enable it to fully exploit capital and technology, thereby relieving some of the constraints to economic growth and widening economic opportunities for all. The enhancement of the supply-side factors to support economic growth in turn sustains production in a cumulative process that leads not only to robust economic growth but also to real structural transformations.

Finally, the lower half of Table 1 presents the results for other dummy indicators and the interaction terms. As expected, the emerging economies have higher average economic growth than the industrialized economies. This simply suggests that the former are on the steeper segments of the growth trajectories, while the latter are on the flatter segments. The coefficients on the interaction terms such as capital formation in the emerging economies indicate that capital in these economies make relatively smaller contribution to economic growth than in industrialized economies. This finding is also to be expected given that the productivity of capital is relatively higher in the latter than in the former. Lastly, the period dummies confirm the contention that the global trends in economic growth have been increasing since 2001, as shown by the progressively decreasing magnitudes of the coefficients. Indeed, since the Asian financial crisis of the late 1990s and the United States recession in 2001, global economic performance has been on the uptrend, although this view needs to be qualified for the period 2007 onwards.

These results in Table 1 basically confirm the negative correlation between inflation and economic growth, as argued by Grier & Tullock (1989), Barro (1996), and Ghosh & Phillips (1998). But potential impact of inflation targeting on economic growth is not as big as argued by the proponents of inflation targeting. While aiming for a lower rate of inflation at, say, 1 percent can increase potential economic growth to 5.7 percent from 5.5 percent among emerging economies and 4.3 percent from 4.1 for the industrialized economies (Column 1), note that the reduction of inflation brings about negligible positive results to economic growth while

it can lead to greater adverse effects on the economy like reduced public expenditures on infrastructure and services, human capital formation, capital accumulation, and so on, which in the long-run undermine economic growth. In short, the adverse impacts from aggregate demand and supply contractions can outweigh the economic benefits of inflation targeting.

One reason for such limited outcome is that inflation targeters already have low levels of inflation, estimated at about 2.8 percent among emerging economies and about 1 percent among industrialized economies. That is to say, further gains in terms of economic growth cannot be had through inflation targeting alone. There is thus little space for considering policies that enhance the economic growth from price stabilization alone. Moreover, pushing policies to realize too low inflation risks the generation of a deflationary environment.

Following earlier studies, the threshold at which inflation stops economic growth among the inflation targeters is estimated at about 24.4 percent, a figure comparable to those presented in, for example, Bruno & Easterly (1998) and Pollin & Zhu (2005).⁸ However, the contention that a high level of inflation has to be tolerated since anyway the threshold is 24.4 percent must be avoided. Of course, inflation is going to be harmful when it undermines the purchasing power and standards of living. Yet the claim to moderate the responsibility to stabilize prices does not mean allowing inflation to go wayward because, obviously, that will produce economic problems. The contention is that with already low levels of inflations, it is possible to increase economic growth if authorities recognize that some room is possible to relax inflation targets a bit. Taking up the empirical results that reveal aggregate demand- and supply-linked indicators can contribute to raising economic growth by comparable amounts to what inflation targeting promises, it can therefore be argued that pursuing a positive combination of policies is a much better strategy for achieving broad-based economic performance. As long as the increases in prices with an upsurge in economic growth is outpaced by expansions in productivity, greater jobs creation, expenditures on capacity building, and the like, that enhance the public welfare, there need not be unnecessary inflationary pressures. This point is important because the mainstream approach

⁸ First, the aggregate demand and supply-linked indicators, the dummy variables, and interaction terms are all assumed zero, thus $\text{growth} = \hat{c} + \hat{a} \text{inflation}$, where \hat{c} and \hat{a} are the estimated values. To get the threshold, set growth to zero. The simple average for Columns 1, 7, 8, 10, 11, and 12 (Table 1) is reported. These six columns have the best regression results.

generates fear of inflation, which can turn out to be a not healthy position for the inflation targeters in the long-run. Such a stance is especially problematic when there are unutilized domestic capacities and there are possibilities to create new capacities, increase investments and enhance profitability. Overcoming the economic and political obstacles to pursue sound policies is key to succeed in introducing a positive combination of policies.

Incidentally, the verified negative correlation between inflation and economic growth can be the result of the fact that the inflation targeters have stabilized their inflations. Recent global trends in inflation can be additional support to the positive performance of the inflation targeters. Additionally, this verified negative correlation can exist because inflation targeters have taken up financial liberalization that has pushed governments to take up conservative fiscal and monetary policies, which has contributed to compromise productivity, incomes and social objectives, etc. that weaken economic performance. Of course, the proponents of inflation targeting stress that a financially liberalized economy is desirable in itself because where capital is highly regulated, inflation targeting cannot function well. They also point out that the non-financially liberalized economies mean that governments have too much space to respond to domestic demands at the expense of external considerations, particularly that of international capital. Nonetheless, it needs to be noted that where the external sector and private business and finance can impose on domestic policies, aggregate demand- and supply-enhancement policies are also difficult to pursue because capital can go on a strike against expansionary policies with the fear of inflation. Jobs targeting and industrial policy, for example, are frowned upon because they are seen as inflation-creating. In the end, inflation targeters can be pulled into a deflationary phase in which economic growth cannot be allowed to accelerate. Needless to say, high rates of inflation are harmful, but too low inflations are equally harmful as well.

Inflation targeting by itself explains little of broad-based economic performance. From a policy point of view, a positive combination of policies is a better strategy for carrying out various objectives: monetary, fiscal, exchange rate, productivity, incomes and social policies. This latter approach is to be preferred where there are excess capacities manifested by, for example, large unemployment and idle resources. Such a combination of policies is more constructive, progressive and brings about more desirable outcomes. Pursuing a broader mix of policies can be Pareto improving in the long-term. Accordingly, the present configuration of inflation targeting

needs to be modified to make it compatible with broad-based economic performance. If inflation targeting is to be pursued, aggregate demand- and supply-linked policies need to be introduced as well to minimize—if not avoid—adverse effects on the real economy.

The key point is that the gains to inflation targeting can be enlarged with demand- and supply-linked policies to support and enhance economic growth. This direction is possible if the authorities acknowledge the compatibility of various policy objectives like combining orthodox policies (i.e., inflation targeting) with unorthodox policies (i.e., countercyclical and compensating measures) to stimulate and sustain economic growth. At the same time, the effectiveness of a positive combination of policies is contingent on acknowledging that socio-economic and political characteristics differ from place to place and cannot be made a priori.⁹

There is one more item before proceeding to discuss Philippine inflation targeting. About 30 to 50 percent of economic growth is explained by the indicators used in the regressions (Table 1), so the model can have higher explanatory power if additional indicators are included. Feder (1983), Esfahani (1991) and Wacziarg (2001), for example, suggest that international trade is one important factor that can enhance economic growth. The impact of trade can be transmitted via its effect on productivity and other spillovers effects. Beck et al. (2000) and Bekaert et al. (2001), for example, suggest a similar effect for international finance, with better technology, for example, brought in through foreign direct investments and competition.

Most studies stress the supply-side factors to economic growth, while an alternative approach that stress the demand-side dimension to economic growth can also be adopted, specifically those by Kaldor (1967), Thirlwall (1979), and Thirlwall & Hussain (1982). At this point, however, data constraint does not allow us to estimate such extensions in the model (Table 1) that incorporates cumulative causation of variables. For now, it is enough to argue that there are good reasons to expand the analysis to include other determinants of economic growth, particularly to capture the potential positive effects of sound execution of international trade and finance that can lead to a cumulative process of economic growth that can exceed the benefits of inflation targeting.¹⁰

⁹ By extension, there is room available to policy makers to introduce adaptation, innovation and experimentation in the design of policies to promote economic growth.

¹⁰ This dimension in the determinants of economic growth is the subject of another paper.

WIN OR LOSE: PHILIPPINE INFLATION TARGETING

Inflation targeting was adopted in the Philippines in the beginning of 2002, but its genesis can be traced two years earlier.¹¹ Inflation targeting is seen as a welcome development in view of the previous policy of the Bangko Sentral ng Pilipinas (henceforth, Bangko Sentral) that focused on monetary targeting. The experience with the policy was not at all positive because it supported deflationary periods especially during crises as in the early 1980s and 1990s. In turn, it contributed to worsening the economic problems, that led to much greater economic contractions than expected.

One interesting feature of Philippine inflation targeting is that it allows some degree of policy flexibility.¹² First, inflation targeting in the country includes an escape clause that releases the Bangko Sentral from sticking to its target when there are extenuating circumstances that make targeting detrimental to economic growth. This innovation acknowledges the problems that the country encounters: disruptions in domestic production (especially agriculture), natural disasters and tragedies that disturb production, shocks in international supplies (especially oil and other inputs) that upset domestic markets, and the like. These circumstances induce an inflationary push that monetary policy can not directly deal with. Policy changes like new taxes or adjustments like large devaluations have historically been inflationary, and like the supply-side shocks, they make monetary policy less effective. The escape clause thus gives the Bangko Sentral latitude to assess the situation in order to determine if an adjustment in monetary policy is necessary to bring economic growth within inflation targets. In effect, the Bangko Sentral says that it defends price stability only during “normal” economic conditions, but confers the responsibility of stabilization to other agencies during “abnormal” conditions. However, this direction leaves the economy much more vulnerable because under “abnormal” conditions, Philippine fiscal policy cannot or does not provide the needed counter-cyclical stimulus for the economy.

Another feature of Philippine inflation targeting is the core and

¹¹ Lim (2006) presents a comprehensive analysis of Philippine inflation targeting and alternative policies for broad-based economic performance. Dumlao (2004, 2005) and Bangko Sentral ng Pilipinas (2005) are earlier debates published in this journal.

¹² Canada, Czech Republic, New Zealand, and South Africa have included *escape clauses* in the design of inflation targeting. Note that the use of headline and core inflation in inflation targeting is not common among inflation targeters. Economies that employ core inflation are South Korea, Norway, and Thailand.

headline inflation setup.¹³ In the former, the factors that are directly connected to the extenuating circumstances as covered by the escape clause described above are excluded in the measure of inflation. The latter is the standard measure of inflation. This dual setup permits the Bangko Sentral flexibility to maintain monetary policy as long as the core inflation remains within target. In so doing, it has adopted an approach that is similar to that of the United States Federal Reserve System, which considers the robustness of the economy as the primary consideration when adjusting monetary policy. In effect, the Bangko Sentral allows itself discretionary policy actions. Incidentally, the Bangko Sentral yields some of its autonomy to the United States Federal Reserve System.

Inflation targeting in the Philippines as such has largely been accommodating, playing the supporting role to economic performance. The irony of the situation is that precisely because of the factors that are beyond the control of the Bangko Sentral the impact of inflation targeting has been on balance benign on the economy. In other words, monetary policy can be described to have been a passive-supporter to economic performance rather than an active-instigator, albeit the Bangko Sentral is bounded by the Bangko Sentral Act of 1993 that mandates it to focus on price stability.

After the adoption of inflation targeting in 2002, the Bangko Sentral has invoked the escape clause several times.¹⁴ Because of the extenuating circumstances, the Bangko Sentral has opted not to adjust monetary policy, except in 2005 when it raised interest rates perhaps to ward off speculation as the Philippines went into a fiscal bind and also partly because core inflation exceeded the target. In 2002 and 2003, inflation was 3 and 3.5 percent, respectively, below the target of 4.5 to 5.5 percent because of falling food prices (as agricultural production recovered in 2003) and subdued demand with a decline in global economic growth in 2001 (as the United States and European economies experienced economic slowdowns and Japan remained stagnant). An extended dry spell in 2001 induced inflationary pressures, but it was moderated with excess capacities as the economy was still picking up from the Asian financial crisis, while global oil prices were falling for the most part in this period. Meantime, the

¹³ The Primer on Inflation Targeting by the Bangko Sentral ng Pilipinas is downloadable from <http://www.bsp.gov.ph/downloads/Publications/FAQs/targeting.pdf>

¹⁴ The Open Letters of the Governor of the Bangko Sentral ng Pilipinas to the President of the Republic of the Philippines are downloadable from <http://www.bsp.gov.ph/monetary/open.asp> and Quarterly Reports on Inflation from http://www.bsp.gov.ph/publications/regular_inflation.asp

Bangko Sentral set inflation targets at 4.5 to 5.5 percent because of the perceived higher risks of an economic slowdown in the following year and oil prices increasing following the United States-Iraq War.

Inflation in 2004 rose to 6 percent, higher than the target of 4 to 5 percent. The higher prices were induced by factors related to food and energy products, including record-breaking global oil prices that led to increases in domestic transportation and utilities costs. These increases in costs actually continued into 2005. Moreover, higher prices of meat products occurred because of higher external demand due to the avian flu scare in Asia that was met with some diversion of domestic supplies to the external markets. Weather-related disturbances like a series of typhoons in 2004 and the extended dry season in the first half of 2005 aggravated the situation. Inflation in the end was pushed outside the targets. Meanwhile, as the global economy continued its expansion and production capacities were being used up, demand for global oil and other inputs continued to rise. Prices increased which translated into higher domestic costs of production, transportation, and utilities, inducing some adjustments in domestic wages. It needs to be noted that within Asia, the continued robust economic growth of China has made it a key importer of global oil and production inputs and contributor to an inflationary environment. As for the Philippines, the convergence of various factors consequently meant that inflation reached 7.6 percent, exceeding the 5 to 6 percent target. In fact, the recovery of agriculture production and easing of oil prices late in 2005 were not enough to mitigate inflation in that year.

Inflation continued to increase early in 2006, in part the result of the introduction of the expanded value added tax (raising the previous value added tax from 10 to 12 percent) in 2005. Fortunately, the increase in inflation was largely a one-shot rise in prices and its impact dissipated starting in 2006. The recovery of agriculture production and the steady strengthening of the peso in 2006 contributed to ease the pressure on inflation. The latter mitigated the impact of high global oil prices. When oil prices eased up in the latter part of 2006 and as robust economic expansion continued, inflation was stabilized at 6.2 percent though still higher than the target of 4 to 5 percent for the year.

Inflation in mid-year of 2007 remained within the target of 4 to 5 percent despite once again an extended dry season plus the heavy spending during the national elections. Fortunately, strong economic growth in the first half of 2006 did not result in increases in prices. The peso continued to gain strength, while cost of inputs and global oil prices have temporarily

stopped increasing, albeit they are already at historically high levels. These developments sustained the downtrend in inflation in the early part of the year, dropping to an average of 2.7 percent. If the global demand remains steady, even with the housing sector crisis in the United States, inflation target for 2007 can still be met. If ever, an economic adjustment in the United States is going to occur in 2008. If so and if Japan remains unable to resolve its economic doldrums, it is possible to see another global deflation like that from 2001 to 2003 in 2008. A strong peso and robust economic growth in the second half of the year have helped mitigate inflationary pressures despite strong domestic consumption fueling growth. Nonetheless, inflation has edged up to 3.2 percent by end of 2007. In any case, the Bangko Sentral meets its inflation target not because it is successful in targeting but because it passively did so.

Strong from the Outside but Still Soft Inside

Historically, the Philippines tended to have higher and variable inflations principally due to supply shocks that translate into higher domestic prices. Additionally, swings in the exchange rate are linked to troubles in the external sector such as balance of payments problems that are connected to sudden and massive flows of finance or excessive current account deficits with imports often larger relative to export earnings, which in turn contribute to shortages in foreign exchange, then weakening the peso and increasing the cost of imports. Imported inflation thus feeds into the overall level of prices. With the subsequent economic adjustment, the resulting inflationary pressure is intensified.

There are also real sector shocks in the Philippines. Volatile food prices result from low agricultural productivity that recurring adverse weather conditions aggravate. The former is partly the consequence of limited agricultural support infrastructure. A related problem is the limited road and transportation network in the countryside for a cost-effective distribution of agricultural products to various parts of the country. Meanwhile, the existing roads, bridges and ports need to be improved in order to enhance access to markets and capacity. Because of all this, agricultural prices are misaligned. All these changes require comprehensive actions to raise agriculture productivity to address a key supply-side pressure on inflation.

Moreover, industries that provide key production inputs and services like transportation and utilities are characterized by oligopolistic structures,

which have important implications to prices. In this situation, the price mark up that sellers put on their goods contributes to an inflationary spiral, especially when such actions are done to preempt oligopolistic pricing.

Another important source of inflation is persistent large fiscal deficits, which in the past was financed through excessive money growth. This problem is less of an issue today because the Bangko Sentral can pursue monetary policy without undue pressures from the fiscal sector. Still, the fiscal position in the country has not been encouraging to support a much needed expansion in public infrastructure and social services. In fact, the government has been moving away from its role as facilitator of domestic investments as it progressively reduces public investments.

With the Philippines constrained from spending on crucial public infrastructure and social services and creating an environment that facilitates capital accumulation and capacity expansion (despite relatively good economic performance in recent years), there is even less groundwork to provide conditions for long-term economic growth. Indeed, while domestic conditions have been quite favorable for stimulating robust economic growth in the short-term, the institutional prerequisites to sustain that growth have on the whole been ignored, if not downplayed, by the authorities. In the long-term, therefore, the weak foundations on which economic growth has been realized can be eventually exhausted. In the future, stimulus to growth could turn out to be the factor that induces inflationary pressures. In the end, inflation targeting can push the economy to a much lower growth path that is incapable of inducing sustained economic expansions.

Proponents of Philippine inflation targeting argue that since its implementation, economic performance has been significantly healthier because of price stability. While current trends are better compared to previous decades in Philippine economic history, it needs to be pointed out that too much credit is given to inflation targeting when other factors have also played out significantly to stabilize inflation.¹⁵ Increasingly, actions that lead to an expansion of domestic demand, provision of public infrastructure, and bringing in complementary policies that strengthen institutions are considered with great caution because they are perceived as inflationary actions.¹⁶ Perhaps because the Bangko Sentral does not

¹⁵ The net effect of inflation on economic growth is -2 basis points. The details are available from the author.

¹⁶ Adding the government expenditures and current account balance in the model in Footnote 3 improves the regression results. The sum of their coefficients indicates a

anymore play an active developmental role, any demand-linked policy is considered undesirable, even though such action can lead to a cumulative process and expansions in productive capacities that sustain economic growth. It needs to be pointed out once again that global economic trends, as well as the recent economic performance of the Philippines, have been important factors to the success of inflation targeting in the country but not the converse.

Ironically, inflation targeting can take policy away from addressing fundamental domestic issues that constrain the economy from realizing broad-based economic performance. Persistent unemployment, fiscal difficulties because of high public debt, volatile exchange rate and capital flows because of relatively open capital accounts and weak financial regulation, dismal domestic investments because of lack of investor confidence plus continuing political uncertainties, and so on, are issues that inflation targeting cannot or does not address. Even conceding the empirical results (presented in Table 1) that low rates of inflation can bring about stronger economic growth, how much inflation targeting contributes to growth is going to be muted in the Philippines since other constraints are more decisive in impinging upon economic performance. Policy therefore needs to identify and target the most binding constraints to economic growth, while realizing that new constraints arise when conditions have changed.

If inflation targeting does not address a binding constraint, the Bangko Sentral must relax its policy to support other objectives that contribute to secure sustained economic growth. It can mean that inflation targeting need to take a secondary role with regards to fiscal, income and social policies in the country. The responsibility to stabilize prices does not mean focusing on too low rates of inflation that compromises economic performance. Neither does it mean that inflation is allowed to go uncontrolled because it, too, will produce economic problems. If inflation targeting is needed, the challenge to the authorities is to identify the greatest constraint to economic

contribution of 17 basis points to economic growth, while the net effect of inflation to growth is 3 basis points. Results are available from the author.

Only fixed capital formation is statistically significant, while both education expenditure and labor force growth are not. The results on education, however, can be considered weakly significant. In the latter case, the sum of the coefficients indicates a contribution of 14 basis points while the net effect of inflation to growth is 13 basis points, implying that expansions in aggregate supply-linked factors can induce growth that in turn induce expansions in demand-linked factors, thus generating stronger expansions. Results are available from the author.

performance that keeps the economy on a low growth path that is unable to accelerate to catch up even with its Southeast Asian tiger neighbors and to use targeting to support the overall policy framework for robust and sustained economic growth. Pursuing a combination of policies is a better strategy for achieving broad-based economic performance and such an approach encourages creativity and innovation and institution-building. Yet the irony is that because of recent robust growth, inflation targeting has been successful and pushed by authorities as a fundamental policy.

CONCLUSION

This paper investigated the relationship between inflation and economic growth for the inflation targeters over the period 2001-2006. The findings confirmed that inflation is negatively correlated with economic growth, but the results also confirmed that economic growth and inflation targeting reflect global trends. With already low levels of inflation, it is possible to induce economic growth if the inflation targets are relaxed a bit. Thus raising growth can be had if aggregate demand- and supply-linked indicators are allowed to play bigger roles in the economy.

The paper went on to present an analysis of Philippine inflation targeting and argued that the good economic performance in recent years has been important to the success of inflation targeting, but not the other way around. More importantly, the Philippines can engender a robust economy through the application of aggregate demand- and supply-linked factors, thereby raising the economy to a higher growth path. The authorities need to be a lot bolder than what they are currently doing to explore alternative approaches that can achieve these goals.

Among the inflation targeters, too low inflation can lead to a limited amount of economic growth. Allowing for some inflation is therefore sensible, as it opens some space for creativity and innovation to achieve broad-based economic performance. The findings, however, do not mean that inflation is allowed to go wayward because that, too, can mean serious economic problems that could erase years of hard work. The results are fortunately compelling that a positive combination of policies is a better approach than a singular focus on inflation targeting.

LIST OF COUNTRIES AND YEAR OF ADOPTION OF
INFLATION TARGETING:

Australia (1993), Brazil (1999), Canada (1991), Chile (1999), Colombia (1999), Czech Republic (1998), Hungary (2001), Iceland (2001), Mexico (2001), New Zealand (1990), Peru (2002), Philippines (2002), Norway (2001), South Africa (2000), South Korea (2001), Sweden (1993), Thailand (2000), United Kingdom (1992)

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