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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 aggregate supply are positively correlated with economic growth. The findings suggest that a combination of economic policies is more fruitful than a singular focus on inflation targeting. This conclusion is applicable to the case of the Philippines, where inflation is often driven by aggregate supply-linked factors rather than demand-linked factors.

1. INTRODUCTION

Whether or not inflation targeting promotes economic growth has produced a rather large body of literature. Bruno and Easterly (1998), Pollin and Zhu (2005), and Epstein and Yeldan (2007), for example, find that economic growth remains possible even when there is a moderate level of inflation in the range of 15-20 per cent. They thus argue that it is the way inflation targeting is pursued, which emphasizes a deflation stance that brings about lower economic growth and weak jobs generation. Inflation targeting thus brings about costs that exceed the purported benefits. The conclusion that one makes from such studies is that if inflation targeting leads to the realization of very low inflation (often, in the range of 1 to 3 per cent) that problems arise because the resulting policy stance does not engender broad-based economic performances, defined as stable and robust economic growth that produces increasing average incomes, equitable distribution of benefits and opportunities, as well as more jobs.

But Grier and Tullock (1989), Barro (1996), and Ghosh and Phillips [1998], among others, find a negative correlation between inflation and economic growth. They also 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 also bring about other adverse consequences on the economy. For example, the instabilities that emerge with the reduction in economic growth lead to the suppression of investments and jobs, in turn, further curtailing growth, thereby producing a vicious cycle of stagflation. The high levels of inflation necessitate significant economic adjustments that not only derail economic growth but also push the economy to lower growth trajectories; and these are ultimately costly to societies. Thus Feldstein (1997), Corbo et al. (2001), and Mishkin and Schmidt-Hebbel (2007), among others, stress that on balance the benefits of inflation targeting exceed the costs. They also indicate that if inflation targeting is applied well the economy is stabilized, thus contributing to a virtuous cycle of economic growth and jobs generation that ultimately results in the realization of broad-based economic performances.

Interestingly though, other proponents of inflation targeting like Blinder (1998), Bernanke et al. (1999), Dueker and Fisher (2006) 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 there are more policy instruments available to policy makers, they options on how to achieve stabilization and expansion, and so the situation becomes more favorable for realizing broad-based economic performances. Furthermore, Arestis and Sawyer (2005), Ball and Sheridan (2005), and Roger and Stone (2005), among others, argue that it is also possible that the success of inflation targeting is brought about by other factors but not inflation targeting itself. Global economic slowing down of inflation as favorable supply factors relieve pressures on prices or a global economic slowdown as demand factors weaken due to deflationary policies, or both, translate as reductions in domestic inflation and thus the success of inflation targeting.

The debate on whether or not inflation targeting brings more benefits than costs continues. The same can be said on the debate on the tradeoff between inflation and economic growth. This

paper addresses the latter debate. It specifically examines the relationship between inflation and economic growth among the inflation targeters. The sample of countries is further narrowed down to comprise those that have pursued inflation targeting for at least five years. Obviously, there are adjustments in the conduct of monetary policy in the run up to the adoption of inflation targeting.

The proposition of the paper is that inflation targeting is a desirable because it contributes to the realization of robust economic growth. And because inflation targeting is increasingly being included in stabilization and liberalization programs, the results have policy implications. Thus if the results suggest that inflation targeting contributes to the realization of robust economic growth, those that have not adopted inflation targeting may need to rethink the usefulness of targeting. But if the result does not support the purported relationship, those who are pursuing inflation targeting may need to reconsider the policy and, by extension, consider alternative strategies.

The next section presents the methodology and after that, the empirical results. Philippine inflation targeting is discussed in the fourth section, together with the implication of the results to the country. The last section concludes.

2. METHODOLOGY

This paper attempts to empirically verify the association between inflation and economic growth among the inflation targeters using the model $Y = \alpha + X\beta + \varepsilon$, 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). In addition, a region dummy is included to capture differences in economic performance between the emerging and industrialized economies, with a value of 1 for the former. There are period dummies to capture the trend in global economic growth. Interaction terms are included to capture other relationships that can also explain economic growth, albeit in a rudimentary manner. Except for the dummy variables, the rest of the variables in the model are in growth forms (in 2000 constant prices).

For this paper, inflation targeters are countries that have employed inflation targeting in the period 2001-2006. These countries are listed at the end of the paper. The data are taken from the *World Development Indicators 2007*. The panel regression was estimated using EViews.

3. WIN OR LOSE?

Table 1 summarizes the regression runs. Column 1 is the basic result, where economic growth is regressed with inflation together with region and period dummies. Inflation is found to be strongly negatively correlated with economic growth. In fact, the results for the various specifications show that inflation and economic growth are negatively correlated. Economic growth is thus sensitive to inflation, at least for the inflation targeters. Columns 2 and 3 show that both quadratic and lagged inflation are not statistically significant, albeit the expected signs are obtained. In other words, the coefficients are not statistically different from zero. They are not pursued further in the analysis. But the results suggest that inflation does not have a nonlinear relationship with economic growth perhaps because its impact on the growth of inflation targeters is in the immediate period.

Columns 4 to 8 present the results using the aggregate demand-linked indicators. They show that the indicators for government and current account expenditures are strongly positively correlated with economic growth. The magnitude of each coefficient is small but their total is comparable to the magnitude of the coefficient on inflation. Altogether, columns 4 to 8 reveal that the aggregate demand-linked indicators can explain an average of 11 basis points of economic growth, while that of inflation is an average of 19 basis points. These findings are not surprising on closer review because inflation targeters typically carry out restrictive expenditure policies. How much of economic growth can be explained by the aggregate demand-linked indicators is limited as a result.

[Insert Table 1 Here]

The results suggest that aggregate demand-linked indicators can be important drivers of economic growth. 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 and agreeable spending targets, they can have more contribution to economic growth, leading to a cumulative process and thus realizing robust economic growth.

The next results are for the aggregate supply-linked indicators. Columns 9 to 12 indicate that the total of the coefficients explain between 12 and 13 basis points of economic growth and, again, these figure are comparable to inflation's. The results for the supply-linked indicators are to be expected. Standard growth theory contends that aggregate supply-linked indicators are inputs to economic growth. Thus the combination of adequate capital and well-educated labor force – by extension, labor that can productively utilize capital to generate more output – engender robust economic growth. The results thus support the proposition that supply-side policies remain 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 domestic productivity growth and set off industrialization. At the same time, policies are needed to ensure human capital formation to fully exploit capital. The enhancement of the supply-side factors to support economic growth in turn sustains production in a cumulative process, thus resulting in robust economic growth.

Finally, the lower half segment of Table 1 presents the results for other dummy indicators and the interaction terms. Thus emerging economies have higher average economic growth than industrialized economies. That simply suggests that the former are on the steeper segments of their growth trajectories, while the latter are on the flatter segments of their trajectories. The coefficient on the interaction terms such as capital formation in the emerging economies indicates that capital there has a lower contribution to economic growth than in the industrialized economies. Indeed, it is to be expected that the productivity of capital is higher in the latter than in the former. Lastly, the period dummies confirm the contention that the global trend in economic growth is increasing from 2001, shown by the progressively decreasing coefficients.

These results basically confirm the negative correlation between inflation and economic growth, as argued by Grier and Tullock (1989), Barro (1996), and Ghosh and Phillips (1998). But

the increase in economic growth with inflation targeting is not as big as argued by proponents of inflation targeting. As such, aiming for a lower level of inflation of, say, 1 per cent can lead to a potential economic growth of 5.7 per cent among the emerging economies and 4.3 per cent for the industrialized economies (Column 1), excluding the time trend. The reason for a limited outcome is that inflation targeters already have low levels of inflation at an average of 2.8 per cent among the emerging economies and 1 per cent among industrialized economies. Further gains in terms of economic growth cannot be had through inflation targeting alone.

The threshold at which inflation ceases economic growth in the inflation targeters is at an average of 24.10 per cent (averaging the results from Columns 1, 7, 8, 10, 11, and 12) which is comparable to the figures of Bruno and Easterly (1998) and Pollin and Zhu (2005). The point is that an increase in economic growth is possible if inflation targeting is relaxed. Taking up the empirical results that the aggregate demand- and supply-linked indicators contribute to raising economic growth by a comparable amount to inflation targeting, it can be argued that pursuing a combination of policies is a better strategy for achieving broad-based economic performances. This point is important because the mainstream approach generates fear of inflation, which can turn out to be a not healthy situation for the inflation targeters. Such a stance is especially problematic when there are unutilized domestic capacities and possibilities are available to create new capacities to support robust economic growth.

Moreover, the verified negative correlation between inflation and economic growth can be due to the fact that the inflation targeters have stabilized their inflations. Recent global trends in inflation can also be additional support to the positive performances of the inflation targeters. Additionally, this verified negative correlation can exist because inflation targeters have taken up financial liberalization that has made governments to take up conservative fiscal and monetary policies. This frugality has contributed to compromise productivity, incomes and social objectives that weaken economic performances. But, of course, proponents of inflation targeting stress that a financially liberalized economy is a desirable policy in itself because where capital and finance

remain regulated, inflation targeting cannot function well. Additionally, they point out that non-financially liberalized economies mean that governments have too much policy space to respond to domestic demands at the expense of external consideration, particularly capital. Nonetheless, it needs to be noted that where the external sector can impose on domestic policies, aggregate demand- and supply-enhancement policies are difficult to pursue because capital can go on strike against expansionary policies. Jobs targeting and industrial policy, for example, are frowned upon because they are seen as inflation-creating.

Inflation targeting by itself explains little of broad-based economic performances. From a policy point of view, a positive combination of policies it is argued that to be better for carrying out monetary, fiscal, exchange rate, productivity, incomes, and social objectives of economies. This latter approach is preferred where there are excess capacities manifested by 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 and thus a desirable situation. Accordingly, the present configuration of inflation targeting needs to be modified to make it compatible for broad-based economic performances. Needless to say, high levels of inflation are harmful, but too low inflations are equally harmful. But the point is that the gains to inflation targeting can be enlarged with demand- and supply-linked policies to support and enhance economic growth.

There is one more item before proceeding to discuss Philippine inflation targeting. About 30 to 50 per cent of economic growth is explained by the indicators used in the regressions. There can be a higher explanatory power if additional indicators are added in the model. Feder (1983), Esfahani (1991), and Wacziarg (2001), for example, suggest that international trade can enhance economic growth. The impact of trade can be transmitted via its effect on productivity increases and spillovers effects. Beck et al. (2000) and Bekaert et al. (2001), for example, suggest a similar effect for international finance, with foreign direct investments bringing in better technology and enhancing productivity, for example. Such studies stress the supply-side factors to growth. But an

alternative approach that emphasize the demand-side dimension to economic growth can also be adopted, specifically those by Kaldor (1967), Thirlwall (1979), and Thirlwall and Hussain (1982). At this point, however, data constraint does not allow us to estimate such extensions that embed a 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 expansion, which undermine the view that inflation targeting itself engenders economic growth.¹

4. PHILIPPINE INFLATION TARGETING

Inflation targeting was adopted in the Philippines in the beginning of 2002, but its genesis can be traced two years earlier.² This change is seen as a welcome development considering that the previous policy of the Bangko Sentral ng Pilipinas (henceforth, Bangko Sentral) was monetary targeting, which was evidently harmful to the economy evidenced by severe deflation in the early 1980s. Monetary targeting tended to be restrictive especially during periods of severe balance of payments imbalances and accelerations in inflation. In turn, monetary targeting contributed to worsen the economic problems, resulting in greater economic contractions that expected.

Philippine inflation targeting has important features that allow for flexibility.³ The first is an escape clause, which releases the Bangko Sentral from sticking to the letter in order achieve the inflation target. The reason for this innovation is that extenuating circumstances such as disruptions in the domestic supplies of goods (especially, food items), natural calamities, or shocks in international supplies (especially, oil and raw materials) that upset the domestic market result in an inflationary push. Policy change like the introduction of an expanded value added tax

¹ This dimension in the determinants of economic growth is the subject of another paper.

² Lim (2006) presents a comprehensive analysis of Philippine inflation targeting and discusses alternative policies for broad-based economic performances. Dumlao (2004), Dumlao (2005), and Bangko Sentral ng Pilipinas (2005) are debates published in this journal.

³ Inflation targeters such as Canada, Czech Republic, New Zealand, and South Africa have escape clauses. The use of headline and core inflation in inflation targeting is not common among inflation targeters. Other economies that employ core inflation are South Korea, Norway, and Thailand.

or large devaluation can be inflationary, which makes monetary policy less effective. The escape clause thus allows the Bangko Sentral some leeway to assess the situation to know if an adjustment in monetary policy is necessary.

Another feature of Philippine inflation targeting is the core and headline inflation setup.⁴ Core inflation excludes factors that are directly connected to the extenuating circumstances under the escape clause, while the latter is the standard measure of inflation. This setup basically allows the Bangko Sentral flexibility to not adjust monetary policy as long as core inflation remains within target. In so doing, it has adopted an approach that is similar to that of the United States Federal Reserve, which takes the robustness of the economy as the primary concern in adjusting monetary policy to allow for discretionary monetary policy.

Philippine inflation targeting, as such, has been benign to support economic performance. But the irony is that precisely because of variables beyond the control of the Bangko Sentral that inflation targeting has no significant consequence on economic performance. In other words, the character of the monetary policy has been passive-supporter to economic performance rather than active-instigator, albeit the Bangko Sentral is bounded by the Bangko Sentral Act of 1993 to focus on price stability.

The Bangko Sentral has invoked the escape clause since 2004.⁵ Because of extenuating circumstances, the Bangko Sentral has opted not to adjust monetary policies, except in 2005 when it raised interest rates perhaps to ward off speculations as the Philippines went into a fiscal bind and partly because core inflation exceeded the target. In 2002 and 2003, inflation was 3 and 3.5 per cent, respectively; both were below the target of 4.5 to 5.5 per cent. Falling food prices as agricultural production recovered in 2003 and subdued demand following the decline in global economic performance in 2001 as United States and Europe slowed down while Japan remained

⁴ The Bangko Sentral's primer on inflation targeting is available from: <http://www.bsp.gov.ph/downloads/Publications/FAQs/targeting.pdf>

⁵ The Open Letters of the Governor of the Bangko Sentral ng Pilipinas to the President are available from: <http://www.bsp.gov.ph/monetary/open.asp>, while the Quarterly Reports on Inflation from: http://www.bsp.gov.ph/publications/regular_inflation.asp

stagnant contributed to mild inflation. An extended dry spell increased the pressure on inflation, but it was moderated with excess capacities in the economy and falling global oil prices. Meantime, the Bangko Sentral set inflation targets at 4.5 to 5.5 per cent because of the perceived higher risks in the following year in consideration of an economic slowdown as the United States remained unstable, Japan stagnant, and oil prices increased following the United States - Iraq War.

Inflation in 2004 rose to 6 per cent, higher than the target of 4 to 5 per cent. Higher prices were caused by factors related to food and energy products, including record-breaking oil prices that led to increases in domestic transportation and utilities costs that actually continued into 2005. Increases in the prices of meat products were in part driven by increases in demand because of the avian flu scare in Asia. Weather-related disturbances, such as a series of typhoons in 2004 and the extended dry season in the first half of 2005, aggravated the situation. Surges in food prices seem to push inflation outside the targets. As the global economy expanded and production capacities were used up, demand increased global oil and inputs prices thereby increasing domestic cost of production and transportation and utility, inducing adjustments in domestic wages. Consequently, inflation reached 7.6 per cent, exceeding the 5 to 6 per cent target, even as agriculture production recovered and oil prices eased up late in 2005.

Inflation increased early in 2006 in part the result of the increase in value added tax from 10 to 12 per cent, which was imposed in 2005. But the increase in inflation was largely a one-shot rise in prices, and its impact dissipated from 2006. The recovery of agriculture production and the steady strengthening of the peso eased the pressure on inflation. The latter mitigated the impact of high oil prices and reduced inflation. As oil prices eased up in the latter part of 2006 and robust economic expansions continued, inflation reached 6.2 per cent, still higher than the target of 4 to 5 per cent.

Inflation as of August 2007 is within the target of 4 to 5 per cent despite an extended dry season and heavy spending in the national elections. Fortunately, the rapid expansion in the first half of 2006 has not resulted in increases in prices. The peso continued to be strong, while inputs

and oil prices have remained stable. All these have sustained the downtrend in inflation, reaching an average of 2.7 per cent by mid year. If global demand will remain steady even with the housing sector problem in the United States, inflation target for 2007 will actually be met. If an economic adjustment will occur in the United States and if Japan remains unable to resolve its economic doldrums, a repeat of global deflation like 2001 to 2003 is possible. Even with the peso weakening in the second half of 2007, sustained domestic expansion can actually cancel out the pressures on inflation. Either way, the inflation target can be met not because the Philippines is successful in doing so but because it passively did so.

The Philippines has tended to have higher and variable inflations due to supply shocks and exchange rate fluctuations translate into higher domestic prices. Swings in the exchange rate are linked to shocks in the external sector like balance of payments problems, often connected to factors such as sudden and massive outflow of capital or excessive increases in imports relative to export earnings that contribute to foreign exchange shortages. The scarcity of foreign exchange in turn causes the peso to weaken, resulting in increases in the cost of imports. Imported inflation feeds into the overall level of consumer prices.

There are also real sector shocks. Volatile food prices are the result of low agricultural productivity and weather conditions. The former is partly the consequence of the lack of better agricultural support and development to ensure ample harvests. A related problem is the limited road and transportation network that facilitate the timely and cost-effective distribution of agricultural goods to various parts of the country. Meanwhile, the existing roads, bridges, ports are in need of improvements to enhance access to markets. These changes require comprehensive efforts to raise farm productivity.

In the monetary sector, an important source of high inflation is large fiscal deficits, which in the past was financed through excessive money growth, thus generating inflationary pressures. This situation is less of an issue today because the Bangko Sentral can pursue monetary policy without undue pressures coming from the fiscal sector.

Proponents of Philippine inflation targeting argue that since its implementation, economic performance has been significantly healthier because of price stability. Indeed, current trends are better compared to previous decades in Philippine economic history. But too much credit is given to inflation targeting rather than the role of other factors that contribute to inflation stabilization.⁶ Increasingly, actions that lead to an expansion of domestic demand and providing complementary policies to strengthen institutions and infrastructures are considered with caution and always seen to be inflationary.⁷ Perhaps because monetary policy in the Philippines does not anymore play an active developmental role that any demand-linked policy is not desirable, even though it can lead to cumulative process of robust economic growth, expansion of productive capacities, and further expansions. It needs to be pointed out that global economic trends have been important factors as well in the recent economic performances of the Philippines, including that on inflation targeting.

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 more open capital accounts, low investments because weak investor confidence plus uncertainties, and so on, are factors that inflation targeting cannot address. Even conceding the empirical results in Table 1 that low levels of inflation can bring about stronger economic growth, the contribution of inflation targeting is muted in the case of the Philippines because other

⁶ The net effect of inflation on economic growth is -2 basis points:

$$\text{Grow} = 4.38 - 0.163 \text{ Inflation} + 0.139 \text{ Inflation*Philippines} + 1.34 \text{ Emerging Country} - 2.21 \text{ Dummy 2001}$$

[0.00]	[0.01]	[0.22]	[0.00]	[0.00]
- 1.79	Dummy 2002	- 1.53	Dummy 2003	- 0.243
[0.00]	[0.00]	[0.61]	[0.13]	Dummy 2004 - 0.724
				[0.00]
				Dummy 2005

Adj. R² = 0.318 F-Stat. = 7.262

⁷ 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 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.

constraints are decisive in impinging on its economic performance. The irony in this case is that because of successful economic performances in recent years, inflation targeting is also successful, and not the other way around.

5. 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 confirmed that economic growth and inflation targeting reflect global trends and that aggregate demand- and supply-linked indicators can play positively roles in engendering economic growth. Their contributions to economic growth are comparable to that of inflation targeting.

The paper presented an analysis of Philippine inflation targeting in light of the empirical results. It was argued that the good economic performance of the Philippines in recent years has been important in the success of inflation targeting, not the other way around. The Philippines can achieve robust economic growth by inducing expansions through aggregate demand- and supply-linked factors. A broad set of economics policies complemented with strengthening of institutions and provision of infrastructures can generate a process of economic growth, enhanced capacities, and further expansions in a cumulative process that ultimately result in broad-based economic performances.

The fact that between 30 to 50 per cent of economic growth is explained by the results suggests that there is good reason to expand the analysis to include other determinants of growth, particularly external factors like international trade and finance. As such, from a policy point-of-view, it can be concluded a singular focus on inflation targeting is weak in terms of generating economic growth. It is vulnerable to global economic performances. A positive combination of policies that cover a spectrum of goals – monetary, fiscal, exchange rate, trade and capital, and social – is argued to be more conducive for broad-based economic performances. The fear of inflation is not only limiting but also not healthy to inflation targeters.

LIST OF COUNTRIES (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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Table 1: Regression Results on Inflation-Growth Tradeoff

Dependent: Growth	1	2	3	4	5	6	7	8	9	10	11	12
Constant	4.345	4.272	4.474	4.449	4.318	3.985	3.922	4.267	3.616	3.450	3.516	3.249
	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Inflation	-0.154	-0.117	-0.150	-0.217	-0.196	-0.188	-0.201	-0.183	-0.124	-0.132	-0.139	-0.135
	-0.017	-0.447	-0.021	-0.002	-0.006	-0.008	-0.003	-0.013	-0.015	-0.009	-0.006	-0.006
Inflation-Square		-0.003										
		-0.792										
Inflation-Lagged			-0.004									
			-0.919									
Government Expenditure				0.099	0.093	0.230	0.287	0.090				
				0.070	0.080	0.154	0.030	0.094				
Current Account Balance				-0.045	-0.042	-0.078	-0.036	-0.084				
				-0.053	-0.075	-0.001	-0.109	0.000				
Current Account-Lagged				-0.027								
				-0.364								
Fixed Capital Formation									0.112	0.148	0.114	0.132
									0.000	0.000	0.000	0.000
Education Expenditure									0.020	0.081		
									0.449	0.020		
Labor Force											0.106	0.246
											0.168	0.118
Emerging Country	1.389	1.382	1.335	1.496	1.391	1.868	1.986	1.443	1.183	1.616	1.174	1.633
	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Government Exp. in Emerging							-0.154	-0.215				
							-0.328	-0.109				
Current Account in Emerging							0.145	0.152				
							0.001	0.000				
Fixed Capital Form in Emerging										-0.053		-0.033
										-0.116		-0.426
Education Exp. in Emerging										-0.068		
										-0.071		
Labor Force in Emerging												-0.212
												-0.275
Dummy 2001	-2.189	-2.195	-2.285	-2.269	-2.169	-2.217	-2.340	-2.088	-1.610	-1.785	-1.592	-1.606
	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Dummy 2002	-1.788	-1.780	-1.885	-1.945	-1.836	-1.894	-1.996	-1.776	-1.268	-1.420	-1.241	-1.234
	0.000	-0.001	0.000	0.000	-0.001	-0.001	-0.001	-0.001	0.000	-0.001	-0.004	-0.005
Dummy 2003	-1.531	-1.514	-1.627	-1.825	-1.698	-1.695	-1.782	-1.631	-1.441	-1.544	-1.355	-1.368
	0.000	-0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Dummy 2004	-0.215	-0.210	-0.311	-0.438	-0.307	-0.386	-0.435	-0.293	-0.442	-0.580	-0.457	-0.474
	-0.596	-0.609	-0.461	-0.224	-0.425	-0.409	-0.304	-0.493	-0.190	-0.095	-0.187	-0.189
Dummy 2005	-0.685	-0.685	-0.781	-1.092	-0.937	-0.941	-1.018	-0.880	-1.002	-1.087	-0.896	-0.891
	-0.154	-0.158	-0.115	-0.022	-0.053	-0.089	-0.040	-0.103	-0.020	-0.012	-0.038	-0.044
Adjusted R-Square	0.315	0.309	0.312	0.355	0.348	0.396	0.354	0.396	0.531	0.544	0.531	0.532
F-Statistics	8.049	6.983	7.028	6.841	7.368	7.381	6.878	8.016	14.500	12.613	14.489	12.074

Note: Numbers below the coefficients are p-values.