

## Forward-looking Macroeconomic Policies – Re-examining Inflation and Debt Limits

The world leaders gathered at the UN Conference on Sustainable Development (referred to as Rio+20) called for “adopting forward-looking macroeconomic policies that promote sustainable development and lead to sustained, inclusive and equitable economic growth...” (para. 150).

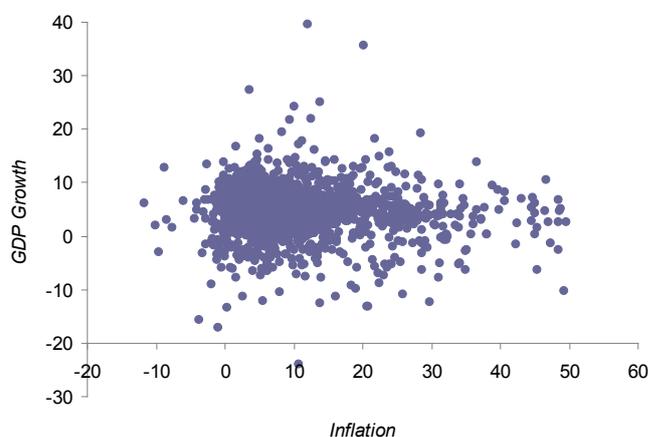
This is, in fact, a reaffirmation of their call for the same at the 2010 High-level Plenary Meeting of the United Nations General Assembly (commonly known as MDGs Summit) (para. 23b).

What then are “forward-looking” macroeconomic policies? The answer can be found in the UN Secretary-General’s report, *Keeping the Promise*,<sup>1</sup> for the 2010 MDGs Summit. Paragraph 50 of the Report states, “Macroeconomic policies should not focus narrowly on debt stabilization and curbing inflation, but should ultimately be supportive of growth of real output and employment. It is often necessary, therefore, to relax unnecessarily stringent fiscal and monetary restrictions and to use countercyclical fiscal and monetary policies to boost employment and incomes and to minimize the impact of external and other shocks on poverty. This requires countries to strengthen mobilization of domestic resources and adopt mechanisms that promote countercyclical policy responses. Enhanced international cooperation to strengthen tax revenue collection and increase sovereign debt sustainability can greatly buttress the fiscal capacities of all Governments.”

Therefore, in designing forward-looking macroeconomic policies policymakers need to examine the inflation-growth and debt-growth relationships. In particular, they need to know the inflation and debt tolerance levels beyond which they might harm growth and hence employment. Figures 1 and 2 below provide a quick and ready answer to this.

The correlation between inflation and growth for inflation rates of up to about 20% is zero or mildly positive, which is consistent with previous studies. For example, after rigorous econometric testing whether inflation is harmful for growth, former

Figure 1. Inflation-growth scatter plot: 40 developing countries



Source: World Bank, *World Development Indicators*.

World Bank economists, Michael Bruno and William Easterly (1998, p. 3) concluded: “The ratio of fervent beliefs to tangible evidence seems unusually high on this topic.”<sup>2</sup> And Nobel Laureate Milton Friedman (1973, p. 41) observed that “historically, all possible combinations have occurred: inflation with and without [economic] development, no inflation with and without [economic] development.”<sup>3</sup>

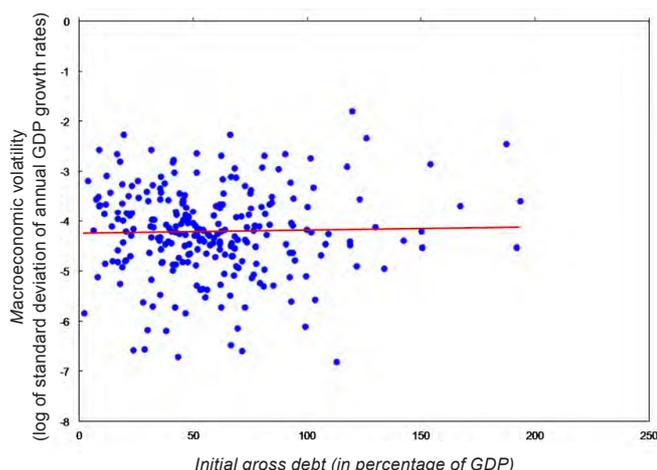
In fact, a large number of studies have shown that the relationship between inflation and growth is non-linear: it is positive up to a moderate level and negative thereafter. The threshold level beyond which inflation hurts growth varies between 5 and 18% depending on the level of development of a country. The threshold is found to be higher for

<sup>1</sup> Keeping the promise: a forward-looking review to promote an agreed actions agenda to achieve the Millennium Development Goals by 2015: Report of the Secretary-General, 12 February 2010 (A/64/665).

<sup>2</sup> Michael Bruno and William Easterly, “Inflation crises and long-run growth”, *Journal of Monetary Economics*, vol. 41 (1998), pp. 3-26.

<sup>3</sup> Milton Friedman, *Money and Economic Development* (Toronto, Lexington Books, 1973).

Figure 2. Government debt and macroeconomic instability



Source: IMF, *Fiscal Monitor*, May 2010.

countries at an early stage of development. For example, the Republic of Korea grew by 8% in the 1960s and 1970s when the inflation rates were at double digit levels. The same was true for Indonesia in the 1970s, when the country grew by 7.7% while the inflation rate was over 17%.

What about the impact of moderate inflation on poverty? In both Korea and Indonesia, poverty rates declined rapidly and in Indonesia it was about 11% just before the Asian crisis hit it in 1997. The impact of inflation on poverty depends on a number of factors. For instance, while inflation reduces real wage, that reduction would encourage firms to expand employment. The net effect of inflation on poverty depends, thus, on the relative elasticities of real wage and employment with respect to inflation. One IMF study found that the inflation elasticity of the income (real wage) of the poor was only 0.03, while the output (employment) elasticity was 0.94.<sup>4</sup> That is, one percentage increase in inflation causes real wage to decline by 0.03 percentage, but 0.94 percentage increase in employment.

The relationship between public debt and economic growth also displays similar ambiguity. As can be seen from Figure 2, the mild positive relationship is driven by outliers. In fact, there is no optimal debt-GDP ratio. A debt-to-GDP ratio of 60% is quite often noted as a prudential limit for developed countries. For developing and emerging economies, 40% is the suggested debt-to-GDP ratio that should not be breached on a long-term basis.

The 60% figure was one of a handful of targets European governments set at the start of the 1990s to prepare for economic and monetary union and the eventual formation of the euro zone. There was no

hint of optimality: this level was simply the median debt-to-GDP ratio. The authors of a September 2010 IMF study on fiscal space emphasize that the debt limit found in their research “is not an absolute and immutable barrier ... Nor should the limit be interpreted as being the optimal level of public debt.” Interestingly, the IMF study finds that the estimated debt limits range from about 150 to 260% of GDP, with a median of 192%.<sup>5</sup>

In its 2012 *World Economic Outlook* (October, Chapter 3, p. 109), the IMF clearly acknowledges that debt thresholds are not robust, “(T)here is no simple relationship between debt and growth. In fact, our ... analysis emphasizes that there are many factors that matter for a country’s growth and debt performance. Moreover, there is no single threshold for debt ratios that can delineate the ‘bad’ from the ‘good’.”

However, there should be some distinction between domestic and external debts. Countries should be more cautious about external debts due to additional risk of exchange rate changes. The IMF’s 2002 ‘sustainability framework’ notes “...an external debt ratio of about 40 percent provides a useful benchmark” (p. 25). In interpreting this benchmark, the authors of the report issue an important caveat: “... it bears emphasizing that a debt ratio above 40 percent of GDP by no means necessarily implies a crisis – indeed ... there is an 80 percent probability of not having a crisis (even when the debt ratio exceeds 40 percent of GDP).”<sup>6</sup>

The above discussion does not provide a reason for deliberately creating high inflation or high debt or deficit through irresponsible macroeconomic policies. Instead, it highlights the need for a balance between stabilization and development roles of macroeconomic policies.<sup>7</sup> Monetary expansion to support productive investment, especially in agriculture and SMEs, may not cause inflation in the long-run, and moderate inflation enhances fiscal space. The sustainability of a fiscal deficit itself depends on the productivity of the expenditure. An explicit focus on the composition of expenditure and their growth effects would allow both stabilization and growth objectives to be addressed in more sustainable ways. Therefore, there should be a fuller consideration of the growth effects of various kinds of government expenditure in designing fiscal policy.

<sup>4</sup> A. Cukierman, S. Webb and B. Neyapti, “Measuring the independence of central banks and its effect on policy outcomes”, *World Bank Economic Review*, vol. 6, No. 3 (1992), pp. 353-398.

<sup>5</sup> Jonathan D. Ostry and others, “Fiscal space”, Staff Position Paper, SPN/10/11 (Washington, D.C., IMF, 2010), p. 3.

<sup>6</sup> International Monetary Fund, *Assessing Sustainability*, Washington, D.C., 28 May 2002.

<sup>7</sup> For related discussion, see MPDD Policy Brief No. 13 on Developmental macro-economics.

The MPDD Policy Briefs Series aims at generating a forward-looking discussion among policy planners, researchers and other stakeholders to help forge political will and build a regional consensus on the needed policy actions and pressing reforms. Policy briefs are issued without formal editing. This issue has been prepared by Anis Chowdhury of the Macroeconomic Policy and Development Division, ESCAP. It is based on the *Economic and Social Survey of Asia and the Pacific 2013: Forward-Looking Macroeconomic Policies for Inclusive and Sustainable Development*. For further information on the policy brief, please contact Dr. Anis Chowdhury, Director, Macroeconomic Policy and Development Division, ESCAP (escap-mpdd@un.org)