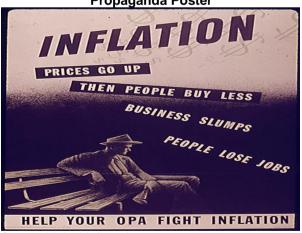
Deflation: The Flip Side of Inflation

By Faith Christian Q. Cacnio¹

∎igure 1 is an American propaganda poster from World War II that rallies support for the work of the Office of Price Administration (OPA), a wartime US Federal agency authorized to place ceilings on prices. except agricultural commodities, as well as rationing scarce supplies. The poster provides a simple argument against inflation. When prices increase, people buy less businesses sell less. Lower demand for their products cause firms to cut back on their production. This, in turn, implies less need for capital and labor. Thus, some workers may find themselves out of work. The end result is that of lower economic growth. Alternatively, falling prices will encourage people to spend more, resulting in higher production, more employment opportunities and higher growth for the economy.

Figure 1. World War II American Propaganda Poster



Source: Klein, M. (2015)

Rising prices (i.e., inflation) has been a commonly observed phenomenon in economies. People are therefore more familiar with inflation and its consequences. Recent global developments, however, have led to declining prices. Some economies are

now more concerned about deflationary pressures than inflation. This article provides a short overview of the concept of deflation or negative inflation rate. It addresses the question of why deflation, like inflation, may not be a good thing for the economy. The next section presents the shifts in inflation trends that occurred since the 1960s. The third section discusses deflation and its repercussions for the economy and the last section concludes.

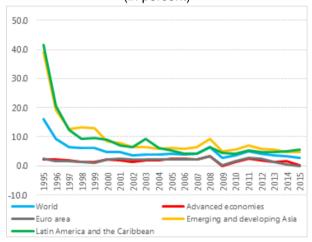
Shifts in inflation trends

In the 1960s, inflation in advanced and developed economies averaged at 2 to 3 percent. Things turned out differently in the 1970s when inflation climbed to double-digit levels, peaking at 13 percent in 1974. High inflation put a dent on growth in these economies resulting in stagflation - a period of stagnant growth and high inflation. The commonly cited reason for the rise in inflation in the 1970s was the soaring oil prices during the period. Others, however, argued that the rise in oil prices were not enough to have caused the increase in inflation. Accommodative monetary policy and loose credit conditions helped push inflation up. In the 1980s, significant reforms (e.g., increasing interest rates) were undertaken to address the problem of high inflation.

By the late 1990s, declining inflation characterized the global economy (Figure 2). Various reasons had been given for this observation. Globalization was a key one. Strong international competition, particularly from low cost Chinese manufacturing, constrained businesses from increasing prices when demand rose. Businesses chose to

narrow their mark-ups rather than increase prices to remain competitive and to retain their market shares. Technological innovations likewise improved the efficiency of production which, in turn, helped lower the cost. Another significant development was the adoption of inflation targeting as the monetary policy framework of many central banks in both and developing advanced economies. Inflation targeting facilitated the attainment of the price stability mandate of central banks by helping keep inflation low and stable and expectations properly anchored.

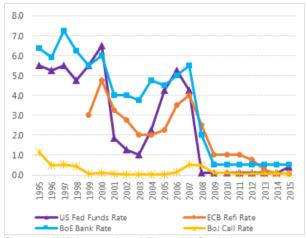
Figure 2. Year-on-year inflation: 1995 – 2015 (in percent)



Source: IMF International Financial Statistics.

In the post-GFC period (i.e., 2010 and onwards), the decline in inflation has been linked to both demand and supply side factors. Global economic slowdown has led to weak demand and excess production capacity. These, in turn, have resulted in falling commodity prices (e.g., oil and food prices). Inflation has likewise remained relatively low even as major central banks kept interest rates at near zero (Figure 3).

Figure 3. Policy rates in selected advanced economies: 1995 – 2015 (in percent)



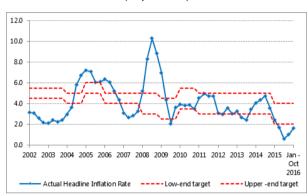
Source: IMF International Financial Statistics.

In 2015, average inflation in advanced economies was at 0.3 percent, which is its lowest since the GFC. The IMF projects inflation in advanced economies to pick up to about 0.8 percent in 2016, mainly on account of rising oil prices (IMF, 2016). Meanwhile, inflation in emerging and developing Asia continues to be below its 10-year (i.e., 2006–2015) average of about 4 percent (ADB, 2016). Inflation rates across the region are expected to remain benign on the back of continued low oil and food prices. The IMF projects inflation in emerging and developing Asia to be at 3.1 percent and 3.3 percent in 2016 and 2017, respectively.

In the Philippines, the BSP attained its inflation objective with headline inflation falling within the National Government's (NG) inflation target range for six consecutive years (i.e., 2009 – 2014; Figure 4). Inflation remained relatively stable even when the Philippine economy posted strong growth during this period. However, average inflation in 2015 stood at 1.4 percent which was lower than the set target range of 2.0 to 4.0 percent for the year. The below target inflation in 2015 was attributed to slower increases in the prices of food items caused by ample domestic supply and drop in oil and commodity prices. For 2016, BSP forecasts

show that inflation could again settle below target due to weak inflation pressures brought about by low international oil prices and subdued food price increases.

Figure 4. Inflation rate: 2002 – 2016M10 (in percent)



Source: BSP.

Over the last two decades, inflation across regions has stayed relatively low. It is expected to remain low with deflationary (i.e., negative inflation rate) pressures economies such as Japan and Euro area in the near to medium term. This is due in part to the continued weakness in global demand. Going by the argument in the OPA poster, this development should spell good news for economies. However. whv are some economies worried about the continuous decline in inflation? Why are below target inflation rates becoming a source of concern for many central banks?

Deflation – a cause of concern?

While low inflation is a desirable feature of the economy, there are several reasons why the continuous negative inflation (i.e., deflation) can be a cause of concern to policymakers. The most commonly heard argument is that consumers and businesses could delay spending and investment if they expect that prices will be lower in the future. Lower demand, in turn, could lead to slower growth, higher unemployment and further price declines. Japan provides an evidence to this argument. During its "lost decade" (i.e.,

1991 – 2000), Japan experienced deflationary pressures that led to lower household consumption through delayed purchases, mainly of durable goods (Hori and Shimizutani, 2005).²

Deflation likewise results in higher cost for businesses in terms of wages. Unlike salary are considered increases. wage cuts unacceptable. Thus, with declining price levels, businesses and the economy as a whole face higher real wages. Consequently, higher real wages squeeze business profits and can adversely affect the demand for labor. Japan also exhibited these effects during the 1990s and 2000s when it was struggling with deflationary pressures. Another concern that is often raised about low is the greater difficulty inflation consumers, businesses and governments will face in repaying their debts. Inflation reduces the real value of debt and can make it easier to repay loans that were previously taken out at a fixed interest rate.

For central banks, particularly the inflation targeting ones, declining inflation can make the conduct of monetary policy more challenging given its potential impact on inflation expectations.³ It has been observed that under persistently low inflation, inflation expectations are not as well anchored as when inflation is around target (Ehrmann, 2015). Moreover, inflation expectations are revised in response to lower-than-expected inflation but do not respond to higher-than-expected inflation.

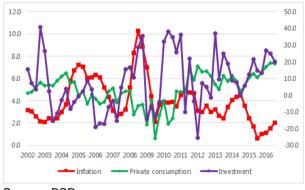
² Davis (2015) observed something similar for the US during one of its deflationary episodes. Using data for grocery and department store sales from 1919 to 1939, he found that department store sales (durable consumption) react negatively to the expectation of falling prices, but grocery store sales (non-durable consumption) do not react to expected price changes.

Inflation expectations are a key factor in the determination of inflation. It refers to the inflation rate that economic agents (e.g. consumers, workers, businesses and investors) think will prevail in the future and which they factor into their decisionmaking.

While these arguments have some merit, their impact has thus far been relatively muted. The current environment of low interest rates has kept debt-servicing ratios relatively low and loanable funds are easily accessible for credit-worthy borrowers. Moreover, domestic consumption and investment remained robust, averaging at 5.7 percent and 15.0 percent in the post-GFC years, respectively. Private consumption is an important driver of the Philippine economy. On average, it has the largest contribution to growth among the demand-side factors. Consumer spending in the Philippines has benefited from the growth in employment, largely in the services and construction sectors, and from remittances of Filipinos. Risina overseas income middle class have expanding likewise contributed to increasing consumption in the country.

These posted high growth during periods of low inflation (Figure 5).

Figure 5. Domestic inflation, consumption and investment: 2002 – 2016Q3 (growth rates; in percent)



Source: BSP.

Inflation expectations in the Philippines have also remained well-anchored. Guinigundo (2016) looked at the inflation expectations dynamics in the Philippines in the pre-GFC period (i.e., pre-2008) and post-GFC period (i.e., post-2009). Using a simple OLS regression of Philippine monthly data from 2002 – 2015, he identified the factors that feed into inflation expectations in the country.

Guinigundo (2016) observed that between the two periods the sign for the coefficient of the inflation gap has shifted from positive to negative and it has become more statistically significant. Thus. when actual inflation deviates from the target, agents expect that the BSP will undertake the necessary measures to bring inflation back to target. As the BSP achieved its inflation target, this led to the increase in the confidence of the market on the BSP's capacity to implement inflation targeting. This also indicates that inflation expectations in the country are well anchored to the inflation target. Moreover, results of the latest4 BSP survey of private economists show an inflation forecast with a mean of 2.9 percent in 2017 and 3.0 percent in 2018, within the NG's inflation target range of 2.0 - 4.0 percent over the policy horizon. For 2016, inflation is expected to settle below target at 1.8 percent.

Conclusion

Inflation and deflation are two sides of the coin that equally pose challenges to the conduct of monetary policy. While high inflation is undesirable, deflation is likewise unfavorable for the economy. High inflation has been the more common experience across regions but global developments in recent years have caused deflationary pressures to become prominent in some economies. For the Philippines, inflation has remained relatively low but the threat of deflation is not apparent. Nonetheless, going forward, the BSP maintains its commitment to ensure that inflation is neither too high nor too low but just right to support the attainment of a balanced, sustainable and inclusive growth.

⁴ As of November 2016.



References

- Allen, M, Rosenberg, C, Keller, C, Setser, B, & Roubini, N. 2002. A Balance Sheet Approach to Financial Crisis. *IMF Working Paper*, 4.
- European Commission, International Monetary Fund, Organisation for Economic Cooperation and Development, United Nations, and World Bank. 2009. *The* 2008 System of National Accounts. New York.
- Heath, R. 2013. Why are the G-20 Data Gaps Initiative and the SDDS Plus Relevant for Financial Stability Analysis. *IMF Working Paper*, 1-28.
- International Monetary Fund. 2013. Guide for Adherents and Users: The Special Data Dissemination Standard (SDDS) Plus. Washington, DC: International Monetary Fund.
- International Monetary Fund. 2015. Balance Sheet Analysis in Fund Surveillance. p.12.



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